

**TRANSACTIONS OF SOCIETY OF ACTUARIES
1969 REPORTS**

REPORT OF THE COMMITTEE ON GROUP ANNUITIES

GROUP ANNUITY MORTALITY

THIS report continues an annual series of reports covering mortality experience since 1924 with retired lives under group deferred annuity and deposit administration contracts. Experience for 1968 has been added to the study, and corrections for delayed reporting have been made in the data for earlier years. The section immediately following describes the format of the study, and the balance of the report states our principal conclusions.

FORMAT OF STUDY

The data gathered from contributing companies each year include exposures and deaths in the latest experience year and corrections of data submitted for prior years. (Companies contributing to this current study are listed at the end of this report.) These data are combined for all companies and are compiled as shown in Tables 1-9. The data are confined to single life annuities (joint and survivor annuities are excluded from the study). The data are divided into three major classifications:

1. *Retirement on or after normal retirement date.*—This class consists of employees who retire on or after the normal retirement date specified by the plan under which they are covered. Where the contract allows deferred commencement of already purchased annuities, the data include exposures and deaths for employees in a deferred commencement status.

2. *Retirement prior to normal retirement date.*—This class consists of employees who have elected to retire before the normal retirement date under a plan.

3. *Retirement under a plan having no stated normal retirement date.*—This class consists of retirements under contracts where the available information does not permit determination of whether a given retirement is normal, early, or late. This class should be analogous to a combination of the preceding two classes, except that exposure for employees remaining active after normal retirement date is excluded.

There are three sets of three tables each.

Tables 1, 2, and 3 display 1968 detailed data for each of the three retirement classifications. These include, in five-year age groups and in total, exposures and actual deaths, plus expected deaths and mortality ratios, both by number of lives and by amount of annual income. These tables also display in parentheses corrected mortality ratios for 1967 experience. Expected mortality for men is based on the *Ga*-1951 Table without pro-

jection and, alternatively, the *Ga*-1951 Table with Projection Scale C to 1968. Expected mortality for women is based on the above male tables with ages set back five years. Prior reports showed data with respect to women in relation to the *Ga*-1951 Female Table; as announced last year, this practice has been discontinued.

Tables 4, 5, and 6 summarize the studies of all years and are the most convenient quick reference for trends. They eliminate the age breakdown but show, for each year 1961-1968 and for indicated calendar-year periods before 1966, exposures and deaths by lives and annual income and the corresponding mortality ratios based on the *Ga*-1951 Table without projection (set back five years for women).

Tables 7, 8, and 9 display by age groups for selected five-year periods the mortality ratios by lives and amounts and, as an indication of statistical significance, the corresponding numbers of actual deaths. Also, these tables show at the bottom of each page adjusted aggregate mortality ratios. The adjustment removes the effect of a shift in age distribution over time by conforming the relative weight for each age group to that in 1968. By reducing the visible effect of year-to-year fluctuations, these tables reveal long-term trends more clearly.

It appears that underreporting of deaths in current-year data is increasing, to the degree that these data are becoming of doubtful validity. The Committee intends to investigate the causes of this and to take some form of corrective action. If delayed reporting is an unavoidable fact of life, we will consider a change in the cycle of reports. The conclusions that follow give relatively little weight to 1968 results.

PRINCIPAL CONCLUSIONS

Over half the exposure is on lives retiring on or after normal retirement date. There has been little or no shift in mortality on this class in the 1960's. Mortality levels for men, based on the *Ga*-1951 Table without projection, are about 106 per cent by numbers of lives and about 100 per cent by amount of annual income. The mortality levels for women (a small fraction of the exposure), based on the same table with ages set back five years, are slightly above 90 per cent by lives and about 90 per cent by amounts.

The corrected Table 1 ratios for 1967 based on the *Ga*-1951 Table with Projection Scale C are about 122 per cent by lives and 116 per cent by amounts for men. The corresponding ratios for women (using the male table set back five years) are 110 and 108 per cent. These results may be compared with the margins originally intended to be included in the *Ga*-1951 Table of 10 per cent for men and $12\frac{1}{2}$ per cent for women.

TABLE 1

INTERCOMPANY GROUP ANNUITY MORTALITY - MATURED LIFE EXPERIENCE FOR 1968
RETIREMENT ON OR AFTER NORMAL RETIREMENT DATE

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)*				COMPARISON WITH GA-1951 TABLE (WITH PROJECTION C TO 1968)*			
	Exposed	Actual Deaths	Exposed	Actual Deaths	By Number of Lives		By Amount of Annual Income		By Number of Lives		By Amount of Annual Income	
					Expected Deaths	Ratio Act./Exp. †	Expected Deaths	Ratio Act./Exp. †	Expected Deaths	Ratio Act./Exp. †	Expected Deaths	Ratio Act./Exp. †
Males												
50 and under...	87 01	4	\$ 110,176	\$ 2,888	33	‡ (‡)	\$ 566	‡ (‡)	27	‡ (‡)	\$ 458	‡ (‡)
51-55	392 84	10	671,359	4,967	3 84	‡ (‡)	6,451	‡ (‡)	3 08	‡ (‡)	5,210	‡ (‡)
56-60	1,814 43	50	2,976,958	52,766	25 37	197 1% (226 5%)	42,300	124 2% (120 6%)	20 49	244 0% (277 5%)	34,147	154 5% (147 5%)
61-65	27,165 89	675	39,706,452	881,522	635 06	106 3 (114 3)	920,213	95 8 (117 0)	512 76	131 6 (139 8)	743,075	118 6 (143 1)
66-70	107,512 49	3,632	133,574,892	4,189,173	3,539 57	102 6 (105 7)	4,368,281	95 9 (96 7)	2,858 65	127 1 (129 2)	3,527,912	118 7 (118 2)
71-75	89,790 21	4,887	95,382,303	4,729,167	4,652 09	105 0 (107 9)	4,910,112	96 3 (100 6)	3,852 19	126 9 (128 9)	4,063,191	116 4 (120 2)
76-80	51,794 20	4,173	45,948,390	3,306,129	4,205 89	99 2 (103 9)	3,702,860	89 3 (96 9)	3,665 56	113 8 (118 3)	3,224,048	102 5 (110 4)
81-85	20,689 55	2,463	15,111,203	1,802,311	2,557 01	96 3 (97 5)	1,858,576	97 0 (94 6)	2,354 38	104 6 (105 4)	1,711,404	105 3 (102 3)
86-90	4,987 50	802	3,468,473	528,737	852 82	94 0 (104 6)	593,416	89 1 (105 6)	828 46	96 8 (107 5)	577,455	91 6 (108 4)
91-95	798 26	173	592,086	121,550	183 16	94 5 (100 9)	136,573	89 0 (94 0)	183 16	94 5 (100 9)	136,573	89 0 (94 0)
96 and over	89 67	18	87,481	18,048	29 36	61 3 (91 7)	30,216	59 7 (58 5)	29 36	61 3 (91 7)	30,216	59 7 (58 5)
All ages	305,122 05	16,887	\$337,629,773	\$15,637,258	16,684 50	101 2% (105 2%)	\$16,569,564	94 4% (99 0%)	14,308 36	118 0% (121 8%)	\$14,053,689	111 3% (115 9%)
Females												
50 and under...	37 74		\$ 26,878		.06	‡ (‡)	\$ 72	‡ (‡)	.05	‡ (‡)	\$ 57	‡ (‡)
51-55	394 39	3	215,018	2,309	2 43	‡ (‡)	1,291	‡ (‡)	1 92	‡ (‡)	1,041	‡ (‡)
56-60	3,334 81	26	2,411,370	17,997	31 75	81 9% (147 2%)	24,325	77 2% (137 7%)	25 71	101 1% (180 7%)	18,977	94 8% (168 4%)
61-65	15,788 66	161	11,240,293	97,747	222 49	72 4 (86 9)	157,681	62 0 (79 0)	179 67	89 6 (106 3)	127,284	76 8 (96 6)
66-70	32,642 90	500	19,614,843	290,637	655 93	76 2 (75 5)	391,611	74 2 (77 1)	529 60	94 4 (92 3)	316,199	91 9 (94 3)
71-75	22,035 59	570	11,082,100	288,292	716 68	79 5 (91 4)	358,591	80 4 (82 2)	378 73	98 5 (111 8)	289,588	99 6 (100 5)
76-80	11,858 29	581	5,026,102	251,596	602 33	96 5 (89 4)	254,444	98 2 (99 0)	497 96	116 7 (107 0)	210,189	119 7 (118 5)
81-85	4,079 09	324	1,664,807	126,399	324 96	99 7 (106 6)	132,389	95 5 (106 0)	282 43	114 7 (121 7)	115,086	109 8 (121 0)
86-90	861 98	121	371,858	47,579	104 28	116 0 (129 6)	45,016	105 7 (161 9)	95 75	126 4 (140 4)	41,314	115 2 (175 5)
91-95	172 48	48	83,580	19,883	29 41	163 2 (137 6)	11,289	139 1 (136 7)	28 48	168 5 (142 1)	13,881	143 2 (140 7)
96 and over	20 67	5	13,142	2,668	4 91	‡ (‡)	3,130	‡ (‡)	4 91	‡ (‡)	3,130	‡ (‡)
All ages	91,226 60	2,339	\$ 51,749,991	\$ 1,145,107	2,695 23	86 8% (91 3%)	\$ 1,381,839	82 9% (99 0%)	2,225 21	105 1% (109 5%)	\$ 1,136,746	100 7% (108 2%)

* Set back five years for females.

† Percentages in parentheses are for the year 1967 as adjusted in 1968 for late reporting of deaths.

‡ Less than ten deaths (actual or expected).

TABLE 2

INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE FOR 1968
RETIREMENT PRIOR TO NORMAL RETIREMENT DATE

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)*				COMPARISON WITH GA-1951 TABLE (WITH PROJECTION C TO 1968)*			
	Exposed	Actual Deaths	Exposed	Actual Deaths	By Number of Lives		By Amount of Annual Income		By Number of Lives		By Amount of Annual Income	
					Expected Deaths	Ratio Act./Exp. †	Expected Deaths	Ratio Act./Exp. †	Expected Deaths	Ratio Act./Exp. †	Expected Deaths	Ratio Act./Exp. †
Males												
50 and under...	1,102.12	20	\$ 250,009	\$ 5,211	4.58	†	\$ 1,181	†	3.66	†	\$ 955	†
51-55.....	2,494.69	55	2,017,790	28,279	24.19	227.4% (229.1%)	19,425	145.6% (171.3%)	19.60	280.6% (280.9%)	15,677	180.4% (209.6%)
56-60.....	17,998.38	455	16,134,251	352,012	249.83	182.1 (213.6)	225,969	155.8 (193.8)	201.63	225.7 (261.2)	182,425	193.0 (237.0)
61-65.....	56,150.95	1,657	63,509,872	1,464,600	1,170.84	141.5 (151.4)	1,323,954	110.6 (136.8)	945.42	175.3 (185.1)	1,068,996	137.0 (167.3)
66-70.....	44,302.50	1,761	44,636,964	1,604,173	1,429.02	123.2 (122.3)	1,435,021	111.8 (110.1)	1,154.04	152.6 (157.6)	1,158,918	138.4 (134.6)
71-75.....	18,930.25	1,123	16,560,462	880,719	958.91	117.1 (122.3)	831,582	105.9 (114.3)	792.26	141.7 (146.3)	686,432	128.3 (136.8)
76-80.....	6,820.74	529	4,998,729	329,749	548.94	96.4 (105.4)	399,246	82.6 (87.6)	477.85	110.7 (120.1)	347,265	95.0 (99.9)
81-85.....	2,449.25	293	1,426,885	167,804	301.23	97.3 (106.7)	175,140	95.8 (102.0)	277.18	105.7 (115.5)	161,088	104.2 (110.3)
86 and over...	537.17	103	330,655	64,695	98.59	104.5 (106.8)	60,627	106.7 (125.4)	96.30	107.0 (109.2)	59,618	108.5 (127.8)
All ages.....	150,786.05	5,996	\$149,865,617	\$4,897,242	4,786.13	125.3% (134.2%)	\$4,472,145	109.5% (121.7%)	3,967.94	151.1% (160.2%)	\$ 3,681,374	133.0% (146.2%)
Females												
50 and under...	220.24	4	\$ 73,422	\$ 706	.59	†	\$ 218	†	.47	†	\$ 175	†
51-55.....	1,504.03	7	645,291	2,592	8.51	†	3,688	†	6.85	†	2,977	†
56-60.....	6,303.88	64	2,958,528	29,221	57.44	111.4% (151.6%)	27,055	108.0% (139.0%)	46.44	137.8% (185.6%)	21,838	133.8% (170.0%)
61-65.....	15,444.99	172	8,012,930	75,866	210.16	81.8 (122.3)	108,992	69.6 (112.9)	169.69	101.4 (149.5)	87,988	86.2 (138.1)
66-70.....	11,415.35	233	5,057,735	101,973	226.08	103.1 (106.5)	99,425	102.6 (91.7)	182.57	127.6 (130.2)	80,275	127.0 (112.1)
71-75.....	4,744.50	159	1,837,173	51,957	151.18	105.2 (108.1)	58,498	88.8 (105.9)	122.12	130.2 (132.2)	47,247	110.0 (129.5)
76-80.....	1,546.92	76	561,072	26,619	78.47	96.9 (125.6)	28,361	93.8 (116.6)	64.84	117.2 (150.3)	23,447	113.5 (139.6)
81-85.....	519.25	45	193,549	15,467	41.03	109.7 (111.5)	15,436	100.2 (89.3)	35.61	126.4 (127.5)	13,421	115.2 (101.9)
86 and over...	122.00	22	60,251	12,086	16.00	137.5 (131.4)	8,163	148.1 (107.7)	14.90	147.7 (141.0)	7,644	158.1 (115.0)
All ages.....	41,821.16	782	\$ 19,399,951	\$ 316,487	789.46	99.1% (119.0%)	\$ 349,856	90.5% (108.5%)	643.49	121.5% (144.3%)	\$ 285,012	111.0% (131.5%)

* Set back five years for females.

† Percentages in parentheses are for the year 1967 as adjusted in 1968 for late reporting of deaths.

‡ Less than ten deaths (actual or expected).

TABLE 3
 INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE FOR 1968
 RETIREMENT UNDER A PLAN HAVING NO STATED RETIREMENT DATE

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)*				COMPARISON WITH GA-1951 TABLE (WITH PROJECTION C TO 1968)*			
	Exposed	Actual Deaths	Exposed	Actual Deaths	By Number of Lives		By Amount of Annual Income		By Number of Lives		By Amount of Annual Income	
					Expected Deaths	Ratio Act./Exp. †	Expected Deaths	Ratio Act./Exp. †	Expected Deaths	Ratio Act./Exp. †	Expected Deaths	Ratio Act./Exp. †
Males												
50 and under	54 50	3	\$ 50,728	\$ 2,864	25	† (‡)	\$ 267	† (‡)	15	† (‡)	\$ 218	† (‡)
51-55	345 01	9	339,302	8,766	3 43	† (‡)	3,311	† (‡)	2 78	† (‡)	2,674	† (‡)
56-60	2,419 46	80	2,456,196	92,981	33 63	237 9% (233 7%)	34,652	268 3% (193 9%)	27 17	294 4% (286 0%)	27,972	332 4% (237 2%)
61-65	13,446 46	420	17,540,126	456,877	293 46	143 1 (156 4)	383,857	119 0 (157 4)	236 97	177 2 (191 3)	309,947	147 4 (192 5)
66-70	30,443 17	1,107	34,261,615	1,052,359	1,006 75	110 0 (117 3)	1,123,000	93 7 (106 7)	813 05	136 2 (143 5)	906,927	116 0 (130 5)
71-75	27,529 75	1,587	23,510,058	1,268,549	1,424 87	111 4 (117 2)	1,205,245	105 3 (109 3)	1,179 71	134 5 (140 0)	996,941	127 2 (130 7)
76-80	15,379 81	1,292	10,604,454	845,628	1,241 50	104 1 (106 2)	847,549	99 8 (107 5)	1,081 28	119 5 (121 0)	737,229	114 7 (122 6)
81-85	5,367 32	602	3,188,480	353,185	658 99	91 4 (96 2)	390,297	90 5 (92 4)	606 22	99 3 (104 0)	358,834	98 4 (99 9)
86-90	1,297 28	224	740,762	126,449	221 31	101 2 (93 5)	126,375	100 1 (92 8)	214 86	104 3 (96 1)	122,709	103 0 (95 4)
91 and over	190 69	48	105,643	24,289	45 71	105 0 (108 3)	25,022	97 1 (107 3)	45 71	105 0 (108 3)	25,022	97 1 (107 3)
All ages	96,473 45	5,372	\$92,797,364	\$4,231,947	4,929 90	109 0% (113 7%)	\$4,139,575	102 2% (111 1%)	4,207 90	127 7% (132 2%)	\$3,488,473	121 3% (130 6%)
Females												
50 and under	47 59		\$ 38,468		05	† (‡)	\$ 94	† (‡)	05	† (‡)	\$ 76	† (‡)
51-55	206 69	4	135,962	\$ 1,417	1 17	† (‡)	779	† (‡)	04	† (‡)	630	† (‡)
56-60	1,081 81	16	735,431	6,567	9 86	† (‡)	6,761	† (‡)	7 98	† (‡)	5,456	† (‡)
61-65	3,852 30	54	2,971,925	40,549	53 51	100 9 (132 2)	41,336	98 1% (119 0%)	43 15	125 1% (161 5%)	33,368	121 5% (145 5%)
66-70	7,538 94	151	5,258,374	102,303	151 74	99 5 (77 9)	105,125	97 3 (74 6)	122 48	123 3 (95 3)	84,885	120 5 (91 3)
71-75	5,073 70	141	3,052,540	73,970	164 02	86 0 (89 7)	97,459	75 4 (82 8)	132 52	106 4 (109 7)	79,238	93 4 (101 3)
76-80	2,053 45	91	1,111,882	44,961	103 24	88 1 (102 9)	55,349	80 9 (94 4)	85 31	106 7 (123 2)	45,832	98 1 (113 2)
81-85	586 34	52	328,346	32,615	46 46	111 9 (122 5)	25,900	125 9 (104 6)	40 29	129 1 (139 7)	22,493	145 0 (119 3)
86-90	143 25	17	73,728	10,393	17 04	99 8 (68 1)	8,711	119 3 (97 3)	15 65	108 6 (†)	7,971	130 4 (†)
91 and over	26 08	7	18,219	3,963	4 85	† (‡)	3,206	† (‡)	4 69	† (‡)	3,121	† (‡)
All ages	20,610 15	533	\$13,724,875	\$ 316,738	551 94	96 6% (97 4%)	\$ 344,920	91 8% (91 2%)	453 06	117 6% (117 4%)	\$ 283,070	111 9% (110 2%)

* Set back five years for females.

† Percentages in parentheses are for the year 1967 as adjusted in 1968 for late reporting of deaths.

‡ Less than 10 deaths (actual or expected).

TABLE 4
INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE TO DECEMBER 31, 1968
RETIREMENT ON OR AFTER NORMAL RETIREMENT DATE

CALENDAR YEARS	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)*			
	Exposed	Actual Deaths	Exposed	Actual Deaths	By Number of Lives		By Amount of Annual Income	
					Expected Deaths	Ratio Act./Exp.	Expected Deaths	Ratio Act./Exp.
Males								
1924-40	56,524.68	2,928	\$ 59,687,110	\$ 2,967,078	2,296.75	127.5%	\$ 2,493,537	119.0%
1941-45	115,221.08	5,951	87,852,576	4,821,971	4,794.84	124.1	3,896,211	123.9
1946-50	258,760.83	12,104	173,324,312	8,332,368	10,629.09	113.9	7,452,628	111.8
1951-55	520,730.27	24,371	360,131,444	16,326,579	21,868.91	111.4	15,141,858	107.8
1956-60	875,782.23	41,901	709,045,419	30,801,038	39,136.83	107.1	29,992,222	102.7
1961-65	1,233,838.88	64,992	1,186,091,140	53,848,029	60,808.63	106.9	53,560,636	100.5
1961	221,631.42	11,239	197,863,914	8,685,052	10,393.24	108.1	8,551,934	101.6
1962	233,068.17	11,758	217,739,687	9,469,644	11,196.58	105.0	9,571,729	98.9
1963	246,267.94	13,212	237,109,741	10,770,764	12,099.66	109.2	10,677,500	100.9
1964	259,799.71	13,875	256,090,142	11,894,090	13,057.33	106.3	11,785,309	100.9
1965	273,071.64	14,908	277,287,656	13,028,479	14,061.82	106.0	12,974,164	100.4
1966	282,191.86	15,663	295,747,741	14,089,164	14,833.60	105.6	14,070,596	100.1
1967	294,131.29	16,654	315,500,798	15,158,322	15,831.26	105.2	15,304,240	99.0
1968	305,122.05	16,887	337,629,773	15,637,258	16,684.50	101.2	16,569,564	94.4

* Set back five years for females.

TABLE 4—Continued

CALENDAR YEARS	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)*			
	Exposed	Actual Deaths	Exposed	Actual Deaths	By Number of Lives		By Amount of Annual Income	
					Expected Deaths	Ratio Act./Exp.	Expected Deaths	Ratio Act./Exp.
	Female.							
1924-40.....	9,900.88	278	\$ 5,854,024	\$ 154,398	192.80	144.2%	\$ 111,590	138.4%
1941-45.....	17,727.66	497	8,984,482	242,094	368.26	135.0	190,353	127.2
1946-50.....	39,360.68	918	17,273,132	428,881	843.51	108.8	387,006	110.8
1951-55.....	88,107.62	1,996	36,345,714	864,792	1,989.48	100.3	843,099	102.6
1956-60.....	173,564.10	3,943	75,775,662	1,699,794	4,214.18	93.6	1,806,856	94.1
1961-65.....	296,869.08	7,521	147,433,800	3,393,058	7,979.77	94.3	3,719,873	91.2
1961.....	48,413.94	1,191	22,536,290	510,841	1,240.81	96.0	550,356	92.8
1962.....	53,586.34	1,316	25,659,694	600,931	1,403.62	93.8	636,475	94.4
1963.....	58,891.84	1,615	29,274,841	728,635	1,576.54	102.4	733,582	99.3
1964.....	64,519.48	1,581	32,625,007	712,925	1,764.42	89.6	833,265	85.6
1965.....	71,457.48	1,818	37,337,968	839,726	1,994.38	91.2	966,195	86.9
1966.....	77,698.59	1,949	41,768,269	923,916	2,225.68	87.6	1,106,351	83.5
1967.....	83,610.91	2,229	46,268,403	1,101,582	2,440.63	91.3	1,224,365	90.0
1968.....	91,226.60	2,339	51,749,991	1,145,107	2,695.23	86.8	1,381,839	82.9

* Set back five years for females.

TABLE 5
 INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE TO DECEMBER 31, 1968
 RETIREMENT PRIOR TO NORMAL RETIREMENT DATE

CALENDAR YEARS	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)*			
	Exposed	Actual Deaths	Exposed	Actual Deaths	By Number of Lives		By Amount of Annual Income	
					Expected Deaths	Ratio Act./Exp.	Expected Deaths	Ratio Act./Exp.
Males								
1924-40	16,775.35	740	\$ 14,785,231	\$ 606,943	405.75	182.4%	\$ 354,243	171.3%
1941-45	26,194.85	1,460	18,011,650	776,627	725.93	201.1	527,637	147.2
1946-50	65,027.09	3,461	37,503,199	1,796,531	1,767.21	195.8	1,124,018	159.8
1951-55	133,883.99	6,795	78,380,333	3,672,377	3,805.53	178.6	2,345,931	156.5
1956-60	251,149.30	12,048	173,159,062	7,219,517	7,477.92	161.1	5,057,401	142.8
1961-65	463,658.93	20,673	385,306,007	14,831,549	14,004.70	147.6	11,102,281	133.6
1961	71,783.24	3,182	54,993,208	2,178,757	2,147.41	148.2	1,582,277	137.7
1962	83,389.19	3,691	66,834,823	2,585,940	2,500.11	147.6	1,913,481	135.1
1963	91,699.76	4,268	75,665,784	3,033,804	2,757.27	154.8	2,172,436	139.6
1964	102,588.79	4,530	87,142,274	3,297,269	3,104.46	145.9	2,512,981	131.2
1965	114,197.95	5,002	100,669,918	3,735,779	3,495.45	143.1	2,921,106	127.9
1966	127,961.63	5,416	117,497,234	4,175,356	3,929.06	137.8	3,404,870	122.6
1967	138,913.19	5,836	132,465,937	4,752,811	4,347.50	134.2	3,906,792	121.7
1968	150,786.05	5,996	149,865,617	4,897,242	4,786.13	125.3	4,472,145	109.5

* Set back five years for females.

TABLE 5—Continued

CALENDAR YEARS	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)*			
	Exposed	Actual Deaths	Exposed	Actual Deaths	By Number of Lives		By Amount of Annual Income	
					Expected Deaths	Ratio Act./Exp.	Expected Deaths	Ratio Act./Exp.
	Females							
1924-40.....	1,939.50	44	\$ 816,004	\$ 20,273	21.73	202.5%	\$ 9,612	210.9%
1941-45.....	3,848.90	103	1,466,495	38,755	52.82	195.0	21,817	177.6
1946-50.....	10,162.24	231	3,390,152	80,824	147.38	156.7	55,072	146.8
1951-55.....	23,086.84	527	7,422,091	191,059	359.81	146.5	127,616	149.7
1956-60.....	50,847.59	1,151	17,528,124	394,109	848.99	135.6	303,414	129.9
1961-65.....	108,890.50	2,278	42,360,152	811,221	1,923.26	118.4	740,733	109.5
1961.....	15,916.09	339	5,798,299	117,206	272.13	124.6	100,120	117.1
1962.....	18,501.07	403	6,944,163	136,641	321.49	125.4	120,795	113.1
1963.....	21,347.89	468	8,395,498	181,039	374.80	124.9	146,088	123.9
1964.....	24,455.11	463	9,524,474	152,987	436.76	106.0	168,073	91.0
1965.....	28,670.34	605	11,697,718	223,348	518.08	116.8	205,657	108.6
1966.....	32,823.42	684	13,992,433	259,454	604.79	113.1	248,658	104.3
1967.....	36,749.17	817	16,315,647	317,359	686.69	119.0	292,518	108.5
1968.....	41,821.16	782	19,399,951	316,487	789.46	99.1	349,856	90.5

* Set back five years for females.

TABLE 6

INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE TO DECEMBER 31, 1968
RETIREMENT UNDER A PLAN HAVING NO STATED NORMAL RETIREMENT DATE

CALENDAR YEARS	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GQ-1951 TABLE (WITHOUT PROJECTION)*			
	Exposed	Actual Deaths	Exposed	Actual Deaths	By Number of Lives		By Amount of Annual Income	
					Expected Deaths	Ratio Act./Exp.	Expected Deaths	Ratio Act./Exp.
Males								
1956-60.....	127,666.53	6,210	\$ 79,500,974	\$ 3,548,566	5,522.70	112.4%	\$3,247,754	109.3%
1961-65.....	303,268.40	16,026	239,973,306	11,109,764	15,931.03	115.0	9,959,159	111.6
1961.....	45,977.76	2,354	32,451,095	1,497,642	2,043.29	115.2	1,328,409	112.7
1962.....	54,627.80	2,877	40,927,668	1,908,010	2,430.81	118.4	1,662,121	114.8
1963.....	61,461.81	3,356	48,671,728	2,390,730	2,767.17	121.3	1,983,251	120.5
1964.....	68,038.44	3,579	55,735,049	2,481,552	3,154.33	113.5	2,317,612	107.1
1965.....	73,162.59	3,860	62,187,766	2,831,830	3,535.43	109.2	2,667,766	106.1
1966.....	82,427.15	4,504	71,927,945	3,340,601	4,132.02	109.0	3,177,498	105.1
1967.....	90,555.76	5,248	83,091,314	4,128,054	4,617.53	113.7	3,716,769	111.1
1968.....	96,473.45	5,372	92,797,364	4,231,947	4,929.90	109.0	4,139,575	102.2
Females								
1956-60.....	13,883.35	276	\$ 6,745,838	\$ 130,228	319.42	86.4%	\$ 152,310	85.5%
1961-65.....	47,008.48	1,117	26,389,384	592,108	1,158.21	96.4	627,869	94.3
1961.....	6,131.31	107	3,125,295	47,788	144.51	74.0	72,353	66.0
1962.....	7,607.09	190	4,097,365	91,987	181.64	104.6	94,928	96.9
1963.....	9,300.33	249	5,171,804	139,412	224.86	110.7	121,280	115.0
1964.....	11,202.15	267	6,408,790	137,721	278.47	95.9	153,178	89.9
1965.....	12,767.60	304	7,586,130	175,200	328.73	92.5	186,130	94.1
1966.....	15,244.55	381	9,477,203	229,660	403.80	94.4	236,818	97.0
1967.....	18,116.09	466	11,695,666	265,429	478.34	97.4	291,016	91.2
1968.....	20,610.15	533	13,724,875	316,738	551.94	96.6	344,920	91.8

* Set back five years for females.

TABLE 7

INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE TO DECEMBER 31, 1968
 RETIREMENT ON OR AFTER NORMAL RETIREMENT DATE
 COMPARISON WITH Ga-1951 TABLE (WITHOUT PROJECTION)*

MALE

Attained Ages	1946-50	1951-55	1956-60	1960-64	1964-65	1962-66	1963-67	1964-68
Actual Deaths—by Number of Lives								
60 and under	46	53	96	202	235	266	297	319
61-65	1,213	2,145	2,869	3,208	3,312	3,367	3,387	3,401
66-70	4,792	9,668	14,431	17,726	18,156	18,514	18,678	18,610
71-75	3,169	6,774	12,689	18,416	19,602	20,670	21,990	22,801
76-80	1,731	3,554	7,482	12,712	14,244	15,719	17,375	18,681
81-85	855	1,568	3,142	5,815	6,839	7,833	9,008	10,103
86-90	232	494	957	1,825	2,113	2,470	2,902	3,284
91-95	60	104	214	362	448	526	606	710
96 and over	6	11	21	41	43	51	69	78
Total	12,104	24,371	41,901	60,307	64,992	69,416	74,312	77,987
Ratio: Actual/Expected—by Number of Lives								
60 and under	189.4	189.3	153.1	174.8	196.7	212.8	228.6	235.5
61-65	118.1	117.1	112.8	112.9	114.9	115.8	115.5	113.2
66-70	113.3	113.2	107.1	107.9	107.7	107.9	107.4	106.3
71-75	113.5	110.2	107.7	109.4	108.5	107.6	107.9	106.4
76-80	110.1	106.6	105.7	104.3	104.2	103.9	104.6	103.1
81-85	118.6	107.8	102.3	102.4	102.4	100.9	100.3	98.6
86-90	108.0	110.6	103.6	103.6	103.1	103.5	104.4	101.8
91-95	153.9	133.8	122.2	103.9	105.6	105.0	102.2	101.5
96 and over	†	103.9	79.0	76.6	68.3	66.4	73.7	71.5
Total	113.9	111.4	107.1	107.2	106.9	106.4	106.3	104.7

* Set back five years for females.

† Less than ten deaths (actual or expected).

TABLE 7—Continued

MALE—Continued

Attained Ages	1946-50	1951-55	1956-60	1960-64	1961-65	1962-66	1963-67	1964-68
	Ratio: Actual/Expected—by Amount of Annual Income							
60 and under.....	199.0	158.4	125.0	112.6	115.8	130.6	127.0	127.4
61-65.....	114.3	115.9	109.3	103.4	100.3	100.5	104.7	102.7
66-70.....	114.1	108.0	101.1	100.5	100.9	101.0	99.8	99.0
71-75.....	112.2	108.0	103.6	101.4	100.7	101.0	101.3	100.0
76-80.....	100.4	140.2	101.2	100.8	100.2	98.4	98.9	96.1
81-85.....	121.1	99.0	101.4	100.8	101.2	99.8	98.2	97.6
86-90.....	90.3	108.4	104.9	101.1	97.4	96.4	98.4	97.2
91-95.....	169.1	157.2	108.2	83.7	89.6	101.2	101.1	99.7
96 and over.....	†	78.3	62.8	87.2	78.4	71.1	70.9	74.0
Total.....	111.8	107.8	102.7	101.0	100.5	100.3	100.2	98.7
	Adjusted Aggregate Ratio							
By lives.....	113.8	110.4	106.5	106.8	106.5	106.1	106.2	104.7
By income.....	111.2	107.2	102.5	100.9	100.5	100.2	100.2	98.7

TABLE 7 *Continued*

FEMALE

Attained Ages	1946-50	1951-55	1956-60	1960-64	1964-68	1962-66	1963-67	1964-68
Actual Deaths by Number of Lives								
60 and under	42	69	77	121	145	153	179	179
61-65	164	325	461	615	675	680	718	738
66-70	259	647	1,257	1,858	1,966	2,068	2,159	2,214
71-75	233	424	1,007	1,853	2,125	2,310	2,548	2,703
76-80	128	293	666	1,308	1,492	1,735	1,972	2,204
81-85	63	173	312	608	764	895	1,083	1,244
86-90	25	53	127	244	270	338	401	463
91-95	4	12	29	62	75	88	114	148
96 and over			7	10	9	12	18	23
Total	918	1,996	3,943	6,679	7,521	8,279	9,192	9,916
Ratio: Actual/Expected—by Number of Lives								
60 and under	90.0	94.3	73.8	86.8	98.4	99.5	115.0	111.9
61-65	90.1	88.5	79.7	79.7	81.1	76.5	76.3	73.9
66-70	97.0	93.4	85.8	87.0	85.6	83.5	81.3	77.6
71-75	127.2	96.5	91.3	91.7	92.5	89.8	89.6	87.1
76-80	119.4	116.2	114.5	105.0	101.2	99.4	97.3	94.2
81-85	163.7	155.3	123.5	122.3	125.1	119.6	116.2	108.9
86-90	151.7	122.0	126.3	113.7	107.5	113.6	116.8	116.3
91-95	†	†	120.8	127.9	133.4	127.9	132.0	142.1
96 and over	†	†	†	†	†	80.2	103.2	111.2
Total	108.9	100.3	93.6	94.3	94.3	92.4	91.9	89.2

* Set back five years for females.

† Less than ten deaths (actual or expected).

TABLE 7—Continued

FEMALE—Continued

Attained Ages	1946-50	1951-55	1956-60	1960-64	1961-65	1962-66	1963-67	1964-68
	Ratio: Actual/Expected—by Amount of Annual Income							
60 and under.....	78.9	84.1	80.8	91.5	102.2	105.4	119.1	115.1
61-65.....	96.5	92.1	84.7	82.2	81.5	75.1	73.2	68.7
66-70.....	96.3	97.8	86.4	84.7	84.8	82.1	80.3	76.1
71-75.....	127.5	94.0	87.8	89.0	87.7	86.7	85.4	83.9
76-80.....	113.2	122.0	119.8	105.0	99.4	98.0	97.9	96.2
81-85.....	164.9	138.6	113.7	109.0	113.4	108.2	107.5	102.1
86-90.....	167.6	112.4	123.3	123.2	113.0	113.3	117.9	116.9
91-95.....	†	†	121.3	140.3	143.6	145.6	147.7	140.4
96 and over.....	†	†	†	†	†	63.5	88.0	91.0
Total.....	110.8	102.6	94.1	92.1	91.2	89.0	88.5	85.7
	Adjusted Aggregate Ratio							
By lives.....	118.9	106.3	98.5	96.4	95.9	93.4	92.4	89.2
By income.....	115.9	104.1	96.4	93.1	92.0	89.5	88.8	85.7

TABLE 8

INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE TO DECEMBER 31, 1968
 RETIREMENT PRIOR TO NORMAL RETIREMENT DATE
 COMPARISON WITH G-1951 TABLE (WITHOUT PROJECTION)*

MALES

Attained Ages	1946-50	1951-55	1956-60	1960-64	1961-65	1962-66	1963-67	1964-68
	Actual Deaths—by Number of Lives							
60 and under.....	651	1,136	1,543	2,281	2,422	2,635	2,754	2,767
61-65.....	1,239	2,311	3,858	5,694	6,286	6,963	7,535	7,846
66-70.....	843	1,856	3,220	5,062	5,719	6,342	6,935	7,525
71-75.....	470	886	2,015	3,043	3,378	3,707	4,142	4,598
76-80.....	218	422	905	1,091	1,895	2,108	2,316	2,465
81-85.....	36	160	389	610	714	837	1,011	1,173
86-90.....	4	22	103	183	215	256	294	330
91-95.....		2	14	32	42	54	60	69
96 and over.....			1		2	5	5	7
Total.....	3,461	6,795	12,048	18,596	20,673	22,907	25,052	26,780
	Ratio: Actual/Expected—by Number of Lives							
60 and under.....	333.8	309.1	251.6	239.4	234.6	234.3	228.5	216.6
61-65.....	243.3	228.9	198.4	174.6	171.3	168.9	165.1	156.9
66-70.....	166.1	156.3	151.0	142.4	141.6	138.5	135.6	130.7
71-75.....	138.0	129.3	127.9	127.7	127.3	125.0	123.8	121.4
76-80.....	126.4	111.1	117.9	114.5	112.4	111.0	109.7	106.1
81-85.....	94.4	108.5	113.6	107.6	106.2	104.4	105.5	103.5
86-90.....	†	82.3	113.3	103.2	105.2	109.5	111.6	110.6
91-95.....	†	†	124.2	91.7	100.4	107.9	103.1	106.2
96 and over.....	†	†	†	†	†	†	†	†
Total.....	195.8	178.6	161.1	149.8	147.6	145.1	142.1	136.2

* Set back five years for females.

† Less than ten deaths (actual or expected).

TABLE 8—Continued

MALES—Continued

Attained Ages	1946-50	1951-55	1956-60	1960-64	1961-65	1962-66	1963-67	1964-68
	Ratio: Actual/Expected—by Amount of Annual Income							
60 and under.....	250.8	248.8	194.5	199.0	196.4	189.2	183.6	174.9
61-65.....	206.9	207.9	164.6	147.5	145.5	145.0	144.0	134.3
66-70.....	144.4	140.7	137.1	130.3	126.5	122.7	117.4	114.2
71-75.....	130.9	120.0	121.7	118.1	117.6	112.6	113.4	109.8
76-80.....	115.0	102.1	118.2	115.2	111.7	106.1	101.4	94.9
81-85.....	78.3	93.6	104.7	115.5	117.4	112.5	107.9	104.7
86-90.....	†	150.1	93.1	100.3	102.4	101.9	112.0	106.9
91-95.....	†	†	105.8	36.7	88.5	100.0	113.7	125.6
96 and over.....	†	†	†	†	†	†	†	†
Total.....	159.8	156.5	142.8	135.7	133.6	130.2	127.3	121.1
	Adjusted Aggregate Ratio							
By lives.....	180.6	169.9	158.4	147.9	146.2	144.0	141.5	136.2
By income.....	161.7	158.8	142.8	135.0	132.9	129.6	127.0	121.1

TABLE 8 *Continued*

FEMALES

Attained Ages	1946-50	1951-55	1956-60	1960-64	1961-65	1962-66	1965-67	1964-68
Actual Deaths—by Number of Lives								
60 and under	64	117	193	304	333	361	404	409
61-65	59	155	327	596	672	735	840	871
66-70	54	126	292	497	567	674	786	913
71-75	34	71	186	327	373	461	518	595
76-80	16	40	99	182	225	244	304	334
81-85	3	13	47	65	71	100	128	158
86-90	1	4	6	20	29	41	51	62
91-95		1	1	6	8	7	6	9
96 and over								
Total	231	527	1,151	1,997	2,278	2,623	3,037	3,351
Ratio: Actual/Expected by Number of Lives								
60 and under	192.2	188.5	163.2	160.8	159.0	156.7	160.0	147.6
61-65	142.5	154.5	139.3	129.0	124.8	117.9	117.2	105.9
66-70	154.5	131.5	129.5	111.5	106.3	105.7	104.9	104.7
71-75	139.1	120.1	120.1	113.2	111.0	117.2	112.1	108.3
76-80	†	132.0	128.9	112.3	115.4	104.7	111.5	106.9
81-85	†	†	152.1	97.4	86.4	97.8	103.5	106.0
86-90	†	†	†	104.1	114.5	128.2	133.2	139.2
91-95	†	†	†	†	†	†	†	†
96 and over	†	†	†	†	†	†	†	†
Total	156.7	146.5	135.6	122.0	118.4	116.3	115.9	110.4

* Set back five years for females.

† Less than ten deaths (actual or expected).

TABLE 8—Continued

FEMALES—Continued

Attained Ages	1946-50	1951-55	1956-60	1960-64	1961-65	1962-66	1963-67	1964-68
	Ratio: Actual/Expected—by Amount of Annual Income							
60 and under.....	194.2	191.7	170.6	154.0	138.5	137.5	143.7	131.3
61-65.....	136.4	181.1	124.2	112.9	114.9	108.7	108.3	96.1
66-70.....	164.5	134.7	132.0	107.2	102.5	102.8	99.8	97.7
71-75.....	115.5	103.2	107.0	107.9	104.3	104.7	101.8	95.6
76-80.....	†	119.1	124.9	98.6	94.4	89.6	99.0	95.2
81-85.....	†	†	152.1	108.1	96.5	100.5	96.2	98.4
86-90.....	†	†	†	72.2	84.6	92.4	102.8	131.3
91-95.....	†	†	†	†	†	†	†	†
96 and over.....	†	†	†	†	†	†	†	†
Total.....	146.8	149.7	129.9	113.1	109.5	107.2	106.9	100.4
	Adjusted Aggregate Ratio							
By lives.....	150.3	143.1	133.9	120.5	117.5	115.9	115.6	110.4
By income.....	143.3	152.1	128.3	112.7	109.8	107.3	106.7	100.4

TABLE 9
INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED
LIFE EXPERIENCE TO DECEMBER 31, 1968
RETIREMENT UNDER A PLAN HAVING NO STATED RETIREMENT DATE
COMPARISON WITH Ga-1951 TABLE (WITHOUT PROJECTION)*
MALE

Attained Ages	1956-60	1960-64	1961-65	1962-66	1963-67	1964-68
Actual Deaths—by Number of Lives						
60 and under	60	165	190	204	236	284
61-65	526	1,208	1,400	1,560	1,700	1,781
66-70	2,412	4,717	4,994	5,207	5,414	5,473
71-75	1,802	4,283	4,813	5,440	6,224	6,858
76-80	944	2,487	2,936	3,604	4,307	4,992
81-85	342	994	1,236	1,572	1,938	2,275
86-90	104	331	385	492	595	733
91-95	15	52	65	88	124	153
96 and over	5	8	7	9	9	14
Total	6,210	14,245	16,026	18,176	20,547	22,563
Ratio: Actual/Expected—by Number of Lives						
60 and under	302.3	250.4	240.7	226.5	224.7	226.0
61-65	147.9	149.6	154.5	155.7	156.8	150.4
66-70	117.8	122.4	121.5	118.9	118.1	115.5
71-75	107.8	113.3	110.6	109.2	110.7	110.6
76-80	101.9	108.4	105.8	106.0	105.2	103.8
81-85	92.8	97.8	98.8	99.2	98.0	94.9
86-90	94.9	108.4	102.5	103.2	99.1	97.8
91-95	84.1	99.9	97.0	99.1	106.9	107.8
96 and over	†	†	†	†	†	59.9
Total	112.4	116.9	115.0	113.5	112.9	110.8
Ratio: Actual/Expected—by Amount of Annual Income						
60 and under	169.0	203.0	196.1	189.6	185.7	206.0
61-65	127.8	136.1	143.7	141.8	145.9	136.0
66-70	107.4	113.1	112.6	111.0	109.2	104.4
71-75	110.5	110.2	106.4	104.5	106.1	104.8
76-80	103.6	108.0	104.0	102.0	102.0	100.3
81-85	105.4	91.9	94.9	95.1	93.7	92.2
86-90	101.8	111.7	103.5	104.3	98.7	95.8
91-95	52.8	98.0	94.0	109.1	113.8	119.1
96 and over	†	†	†	†	†	97.6
Total	109.3	112.8	111.6	109.7	109.4	106.2
Adjusted Aggregate Ratio						
By lives	109.8	115.1	113.5	112.6	112.5	110.8
By income	109.3	112.1	110.7	109.2	109.3	106.2

*Set back five years for females.

†Less than ten deaths (actual or expected).

TABLE 9—Continued

FEMALE

Attained Ages	1956-60	1960-64	1961-65	1962-66	1963-67	1964-68
Actual Deaths—by Number of Lives						
60 and under	11	31	37	45	57	66
61-65.....	50	119	135	170	211	239
66-70.....	119	297	350	396	449	510
71-75.....	54	240	309	397	471	550
76-80.....	22	141	184	241	291	344
81-85.....	15	63	77	103	143	178
86-90.....	5	19	23	34	38	50
91-95.....			2	4	6	13
96 and over..				1	1	1
Total.....	276	910	1,117	1,391	1,667	1,951
Ratio: Actual/Expected—by Number of Lives						
60 and under	†	158.6	156.4	160.5	172.7	168.3
61-65.....	101.3	91.3	89.2	97.5	106.8	108.6
66-70.....	94.5	87.9	89.0	86.9	85.1	85.0
71-75.....	65.4	95.2	95.8	97.2	93.4	90.5
76-80.....	56.8	105.3	107.3	109.4	104.3	98.0
81-85.....	113.8	115.5	103.9	103.7	110.6	110.2
86-90.....	†	134.4	122.9	132.7	108.5	103.9
91-95.....	†	†	†	†	†	119.7
96 and over..	†	†	†	†	†	†
Total.....	86.4	96.4	96.4	98.1	97.2	95.6
Ratio: Actual/Expected—by Amount of Annual Income						
60 and under	†	152.3	140.0	148.3	168.8	142.8
61-65.....	79.3	85.9	89.1	92.3	102.3	103.7
66-70.....	94.0	83.4	89.7	89.2	86.2	85.1
71-75.....	64.3	85.7	86.0	92.3	88.4	83.3
76-80.....	65.5	108.8	108.5	112.1	103.5	96.6
81-85.....	156.9	133.3	119.9	119.1	114.2	114.7
86-90.....	†	163.9	112.8	128.9	116.5	111.2
91-95.....	†	†	†	†	†	139.3
96 and over..	†	†	†	†	†	†
Total.....	85.5	92.8	94.3	97.7	95.9	92.8
Adjusted Aggregate Ratio						
By lives.....	83.9	97.5	97.4	98.8	97.4	95.6
By income....	85.9	94.4	95.0	98.5	96.2	92.8

* Set back five years for females.

† Less than ten deaths (actual or expected).

Mortality for optional early retirements has traditionally run a good deal higher than mortality on normal retirements, reflecting retirement of persons in poor health. The excess mortality has been decreasing, however, and this trend continues in the current report. The trend is doubtless caused by an increase in the proportion of early retirements in good health. From 1961 to 1968, the exposure on optional retirements has increased from one-third to one-half of the exposure on normal retirements. This increase can only indicate an increase in the proportion of early retirements, without a corresponding increase in the bad health cases in the total population.

Experience for lives retiring under plans with no stated retirement age has run somewhat higher than that for lives retiring on or after normal retirement age. There has been a slow downtrend in mortality ratios for this class.

Mortality ratios by amount are generally lower than ratios by number. For men the differences are about 5 per cent for lives retiring on or after normal retirement date, about 4 per cent for lives under plans with no stated retirement age, and about 15 per cent for optional early retirements. The corresponding differences for women are 3, 2, and 9 per cent.

CONTRIBUTING COMPANIES

The following companies have contributed experience for the investigation covered by this report:

Aetna Life Insurance Company
Bankers Life Company
Canada Life Assurance Company
Confederation Life Association
Connecticut General Life Insurance Company
Equitable Life Assurance Society
Great-West Life Assurance Company
John Hancock Mutual Life Insurance Company
Massachusetts Mutual Life Insurance Company
Metropolitan Life Insurance Company
North American Life Assurance Company
Occidental Life Insurance Company
Pacific Mutual Life Insurance Company
Prudential Insurance Company of America
Sun Life Assurance Company of Canada
The Travelers Insurance Company