

SECTION IV

a(55) MORTALITY TABLES FOR ANNUITANTS

MORTALITY FUNCTIONS AND MONETARY FUNCTIONS

Although figures in these tables are only for ages from 60 upwards, the original published tables contain functions for ages down to 20.

a(55)

a(55) MORTALITY TABLES

MORTALITY FUNCTIONS

FEMALES

Age [x]	SELECT				ULTIMATE			Age x
	$q_{[x]}$	$e_{[x]}$	$l_{[x]}$	l_x	μ_x	d_x	q_x	
60	-005 13	21.144	893 918	897 001	-008 19	7 669	-008 55	60
61	-005 63	20.330	885 969	889 332	-009 00	8 351	-009 39	61
62	-006 19	19.526	877 320	880 981	-009 89	9 092	-010 32	62
63	-006 82	18.733	867 895	871 889	-010 88	9 913	-011 37	63
64	-007 52	17.953	857 616	861 976	-012 00	10 809	-012 54	64
65	-008 31	17.185	846 412	851 167	-013 26	11 789	-013 85	65
66	-009 19	16.430	834 193	839 378	-014 66	12 851	-015 31	66
67	-010 17	15.690	820 865	826 527	-016 23	14 010	-016 95	67
68	-011 26	14.965	806 345	812 517	-017 99	15 251	-018 77	68
69	-012 48	14.256	790 549	797 266	-019 95	16 583	-020 80	69
70	-013 84	13.563	773 377	780 683	-022 14	18 010	-023 07	70
71	-015 35	12.887	754 741	762 673	-024 59	19 517	-025 59	71
72	-017 03	12.229	734 568	743 156	-027 31	21 098	-028 39	72
73	-018 91	11.590	712 785	722 058	-030 35	22 752	-031 51	73
74	-020 99	10.970	689 313	699 306	-033 75	24 462	-034 98	74
75	-023 29	10.370	664 120	674 844	-037 53	26 191	-038 81	75
76	-026 09	9.788	637 350	648 653	-041 72	27 931	-043 06	76
77	-029 23	9.226	608 873	620 722	-046 39	29 646	-047 76	77
78	-032 72	8.686	578 715	591 076	-051 58	31 297	-052 95	78
79	-036 60	8.167	546 961	559 779	-057 32	32 837	-058 66	79
80	-040 92	7.669	513 739	526 942	-063 69	34 225	-064 95	80
81	-045 91	7.192	479 326	492 717	-070 73	35 397	-071 84	81
82	-051 44	6.736	443 850	457 320	-078 50	36 302	-079 38	82
83	-057 55	6.302	407 594	421 018	-087 05	36 881	-087 60	83
84	-064 31	5.890	370 897	384 137	-096 46	37 092	-096 56	84
85	-071 74	5.500	334 132	347 045	-106 79	36 884	-106 28	85
86	-079 88	5.131	297 722	310 161	-118 10	36 221	-116 78	86
87	-088 76	4.782	262 120	273 940	-130 43	35 086	-128 08	87
88	-098 43	4.455	227 785	238 854	-143 87	33 490	-140 21	88
89	-108 90	4.147	195 163	205 364	-158 45	31 454	-153 16	89
90	-120 20	3.859	164 670	173 910	-174 24	29 033	-166 94	90
91	-130 69	3.596	136 407	144 877	-191 26	26 297	-181 51	91
92	-141 72	3.352	110 965	118 580	-209 53	23 341	-196 84	92
93	-153 28	3.126	88 535	95 239	-229 08	20 275	-212 89	93
94	-165 31	2.916	69 190	74 964	-249 91	17 212	-229 60	94
95	-177 75	2.723	52 896	57 752	-272 00	14 258	-246 88	95
96	-190 55	2.544	39 512	43 494	-295 30	11 511	-264 65	96
97	-203 62	2.379	28 803	31 983	-319 76	9 045	-282 80	97
98	-216 89	2.228	20 467	22 938	-345 31	6 910	-301 24	98
99	-230 28	2.087	14 164	16 028	-371 83	5 126	-319 83	99
100				10 902	-399 22	3 690	-338 46	100
101				7 212	-427	2 575	-357	101
102				4 637	-456	1 744	-376	102
103				2 893	-488	1 146	-396	103
104				1 747	-521	728	-417	104

a(55) MORTALITY TABLES

MORTALITY FUNCTIONS

MALES

Age [<i>x</i>]	SELECT				ULTIMATE			Age <i>x</i>
	$q_{[x]}$	$e_{[x]}$	$l_{[x]}$	l_x	μ_x	d_x	q_x	
60	·008 41	17·520	855 051	859 916	·013 44	12 056	·014 02	60
61	·009 28	16·773	842 571	847 860	·014 82	13 108	·015 46	61
62	·010 24	16·041	829 000	834 752	·016 37	14 241	·017 06	62
63	·011 30	15·323	814 262	820 511	·018 08	15 450	·018 83	63
64	·012 48	14·622	798 279	805 061	·019 98	16 745	·020 80	64
65	·013 78	13·936	780 970	788 316	·022 09	18 108	·022 97	65
66	·015 23	13·268	762 269	770 208	·024 43	19 548	·025 38	66
67	·016 82	12·617	742 101	750 660	·027 02	21 041	·028 03	67
68	·018 58	11·984	720 415	729 619	·029 89	22 589	·030 96	68
69	·020 52	11·370	697 156	707 030	·033 07	24 180	·034 20	69
70	·022 66	10·774	672 300	682 850	·036 58	25 784	·037 76	70
71	·025 02	10·199	645 825	657 066	·040 47	27 400	·041 70	71
72	·027 61	9·643	617 745	629 666	·044 78	28 977	·046 02	72
73	·030 45	9·107	588 112	600 689	·049 52	30 485	·050 75	73
74	·033 57	8·592	556 999	570 204	·054 74	31 903	·055 95	74
75	·036 98	8·098	524 517	538 301	·060 50	33 181	·061 64	75
76	·041 12	7·622	491 034	505 120	·066 84	34 277	·067 86	76
77	·045 67	7·166	456 555	470 843	·073 81	35 139	·074 63	77
78	·050 67	6·731	421 330	435 704	·081 43	35 723	·081 99	78
79	·056 15	6·317	385 645	399 981	·089 79	35 990	·089 98	79
80	·062 12	5·923	349 829	363 991	·098 91	35 893	·098 61	80
81	·068 98	5·547	314 365	328 098	·108 87	35 418	·107 95	81
82	·076 45	5·192	279 519	292 680	·119 73	34 530	·117 98	82
83	·084 58	4·856	245 697	258 150	·131 51	33 234	·128 74	83
84	·093 39	4·539	213 296	224 916	·144 28	31 540	·140 23	84
85	·102 91	4·241	182 695	193 376	·158 07	29 482	·152 46	85
86	·113 14	3·961	154 234	163 894	·172 93	27 110	·165 41	86
87	·124 12	3·698	128 198	136 784	·188 89	24 498	·179 10	87
88	·135 81	3·453	104 795	112 286	·205 99	21 723	·193 46	88
89	·148 24	3·223	84 158	90 563	·224 21	18 881	·208 49	89
90	·161 37	3·009	66 318	71 682	·243 60	16 066	·224 13	90
91	·173 03	2·818	51 090	55 616	·264 14	13 366	·240 32	91
92	·185 03	2·640	38 519	42 250	·285 80	10 858	·256 99	92
93	·197 32	2·477	28 391	31 392	·308 52	8 603	·274 05	93
94	·209 83	2·326	20 436	22 789	·332 25	6 641	·291 43	94
95	·222 50	2·186	14 351	16 148	·356 95	4 990	·309 03	95
96	·235 25	2·058	9 823	11 158	·382 56	3 646	·326 73	96
97	·248 00	1·941	6 548	7 512	·408 96	2 588	·344 45	97
98	·260 70	1·832	4 249	4 924	·435 94	1 783	·362 09	98
99	·273 25	1·731	2 682	3 141	·463 33	1 192	·379 52	99
100				1 949	·491 06	773	·396 68	100
101				1 176	·519	487	·414	101
102				689	·550	298	·432	102
103				391	·582	176	·450	103
104				215	·620	101	·469	104

a(55) MORTALITY TABLES

4 per cent

MONETARY FUNCTIONS

FEMALES					MALES				
Age <i>x</i>	SELECT		ULTIMATE		Age <i>x</i>	SELECT		ULTIMATE	
	<i>a_[x]</i>	<i>D_x</i>	<i>N_x</i>	<i>a_x</i>		<i>a_[x]</i>	<i>D_x</i>	<i>N_x</i>	<i>a_x</i>
60	13.340	85 269	1 218 809	13.294	60	11.691	81 744	1 032 009	11.625
61	12.994	81 289	1 133 540	12.945	61	11.333	77 498	950 265	11.262
62	12.643	77 428	1 052 251	12.590	62	10.972	73 365	872 767	10.896
63	12.286	73 682	974 823	12.230	63	10.610	69 340	799 402	10.529
64	11.926	70 042	901 141	11.866	64	10.246	65 418	730 062	10.160
65	11.562	66 504	831 099	11.497	65	9.883	61 593	664 644	9.791
66	11.194	63 060	764 595	11.125	66	9.520	57 864	603 051	9.422
67	10.824	59 707	701 535	10.750	67	9.158	54 226	545 187	9.054
68	10.452	56 437	641 828	10.372	68	8.799	50 679	490 961	8.688
69	10.079	53 248	585 391	9.994	69	8.442	47 221	440 282	8.324
70	9.705	50 135	532 143	9.614	70	8.088	43 852	393 061	7.963
71	9.332	47 095	482 008	9.235	71	7.739	40 573	349 209	7.607
72	8.960	44 124	434 913	8.857	72	7.395	37 386	308 636	7.255
73	8.590	41 223	390 789	8.480	73	7.057	34 294	271 250	6.910
74	8.224	38 388	349 566	8.106	74	6.726	31 301	236 956	6.570
75	7.861	35 621	311 178	7.736	75	6.402	28 414	205 655	6.238
76	7.501	32 921	275 557	7.370	76	6.083	25 637	177 241	5.914
77	7.146	30 292	242 636	7.010	77	5.773	22 978	151 604	5.598
78	6.798	27 736	212 344	6.656	78	5.472	20 445	128 626	5.291
79	6.457	25 257	184 608	6.309	79	5.180	18 047	108 181	4.994
80	6.124	22 861	159 351	5.971	80	4.898	15 791	90 134	4.708
81	5.798	20 554	136 490	5.641	81	4.625	13 687	74 343	4.432
82	5.482	18 344	115 936	5.320	82	4.363	11 740	60 656	4.167
83	5.175	16 238	97 592	5.010	83	4.111	9 956.5	48 916	3.913
84	4.879	14 246	81 354	4.711	84	3.871	8 341.0	38 960	3.671
85	4.594	12 375	67 108	4.423	85	3.642	6 895.6	30 619	3.440
86	4.320	10 635	54 733	4.147	86	3.423	5 619.5	23 723	3.222
87	4.058	9 031.4	44 098	3.883	87	3.217	4 509.6	18 104	3.015
88	3.808	7 571.8	35 067	3.632	88	3.021	3 559.5	13 594	2.819
89	3.570	6 259.8	27 495	3.393	89	2.836	2 760.5	10 034	2.635
90	3.344	5 097.1	21 235	3.167	90	2.662	2 100.9	7 274	2.463
91	3.137	4 082.9	16 138	2.953	91	2.505	1 567.3	5 173	2.301
92	2.941	3 213.2	12 055	2.753	92	2.358	1 144.9	3 606	2.150
93	2.758	2 481.5	8 842	2.564	93	2.222	817.9	2 461	2.009
94	2.587	1 878.1	6 360	2.388	94	2.095	570.9	1 643	1.879
95	2.428	1 391.2	4 482	2.224	95	1.977	389.0	1 072	1.757
96	2.280	1 007.5	3 091	2.071	96	1.868	258.5	683	1.645
97	2.142	712.3	2 084	1.929	97	1.767	167.3	424	1.541
98	2.014	491.2	1 371	1.797	98	1.674	105.5	257	1.444
99	1.895	330.0	880	1.674	99	1.587	64.7	152	1.355
100		215.9	550	1.560	100		38.6	87	1.271
101		137.3	334	1.453	101		22.4	48	1.190
102		84.9	197	1.350	102		12.6	26	1.113
103		50.9	112	1.249	103		6.9	13	1.037
104		29.6	61	1.151	104		3.6	6	.961

a(55) MORTALITY TABLES

JOINT LIFE ANNUITIES, $a_{\overline{xy}}$

4 per cent

MALE AND FEMALE

ULTIMATE

Age of female <i>y</i>	Age of male <i>x</i>											Age of female <i>y</i>
<i>y</i>	60	62	64	66	68	70	72	74	76	78	80	<i>y</i>
60	9.852	9.380	8.875	8.343	7.790	7.223	6.651	6.080	5.519	4.976	4.458	60
62	9.547	9.111	8.641	8.141	7.619	7.080	6.531	5.982	5.440	4.912	4.406	62
64	9.203	8.804	8.371	7.907	7.418	6.910	6.389	5.865	5.344	4.834	4.344	64
66	8.818	8.459	8.064	7.639	7.186	6.712	6.223	5.726	5.229	4.741	4.269	66
68	8.396	8.076	7.722	7.336	6.922	6.484	6.029	5.563	5.095	4.631	4.179	68
70	7.938	7.657	7.343	6.998	6.625	6.226	5.808	5.376	4.938	4.501	4.073	70
72	7.451	7.208	6.933	6.629	6.296	5.937	5.558	5.162	4.758	4.351	3.949	72
74	6.940	6.732	6.496	6.231	5.938	5.621	5.281	4.923	4.554	4.179	3.806	74
76	6.413	6.238	6.037	5.810	5.556	5.279	4.978	4.660	4.327	3.987	3.645	76
78	5.878	5.732	5.564	5.372	5.156	4.916	4.655	4.375	4.080	3.774	3.465	78
80	5.345	5.225	5.085	4.925	4.743	4.540	4.315	4.073	3.814	3.544	3.267	80
82	4.821	4.724	4.609	4.477	4.326	4.156	3.966	3.759	3.535	3.300	3.056	82
84	4.316	4.237	4.145	4.037	3.913	3.772	3.614	3.439	3.249	3.046	2.834	84
86	3.836	3.774	3.700	3.613	3.512	3.396	3.266	3.120	2.960	2.788	2.606	86
88	3.388	3.339	3.280	3.210	3.129	3.035	2.928	2.808	2.675	2.530	2.376	88
90	2.977	2.938	2.891	2.836	2.771	2.695	2.608	2.510	2.400	2.280	2.150	90
92	2.604	2.574	2.537	2.493	2.441	2.381	2.310	2.231	2.141	2.041	1.933	92
94	2.272	2.248	2.219	2.184	2.143	2.094	2.038	1.973	1.900	1.818	1.728	94
96	1.980	1.961	1.938	1.910	1.877	1.839	1.793	1.741	1.681	1.614	1.539	96
98	1.725	1.710	1.692	1.670	1.644	1.613	1.576	1.533	1.485	1.430	1.368	98
100	1.504	1.492	1.477	1.460	1.439	1.414	1.384	1.350	1.310	1.265	1.214	100

Age of female y	Age of male x											Age of female y
	80	82	84	86	88	90	92	94	96	98	100	
60	4.458	3.969	3.515	3.099	2.723	2.387	2.090	1.831	1.606	1.413	1.246	60
62	4.406	3.928	3.483	3.074	2.703	2.371	2.077	1.821	1.598	1.407	1.240	62
64	4.344	3.879	3.443	3.043	2.678	2.351	2.062	1.808	1.589	1.399	1.234	64
66	4.269	3.818	3.395	3.004	2.648	2.327	2.043	1.793	1.576	1.389	1.226	66
68	4.179	3.746	3.337	2.958	2.611	2.298	2.019	1.774	1.561	1.377	1.216	68
70	4.073	3.660	3.268	2.903	2.567	2.263	1.991	1.752	1.543	1.362	1.203	70
72	3.949	3.559	3.186	2.837	2.514	2.220	1.957	1.724	1.520	1.343	1.189	72
74	3.806	3.441	3.090	2.759	2.451	2.169	1.916	1.691	1.493	1.321	1.170	74
76	3.645	3.307	2.980	2.669	2.377	2.110	1.868	1.652	1.461	1.295	1.149	76
78	3.465	3.156	2.854	2.565	2.293	2.041	1.811	1.605	1.423	1.263	1.123	78
80	3.267	2.989	2.714	2.449	2.197	1.962	1.746	1.552	1.379	1.227	1.092	80
82	3.056	2.808	2.561	2.320	2.090	1.873	1.673	1.491	1.328	1.185	1.057	82
84	2.834	2.616	2.397	2.181	1.973	1.775	1.591	1.423	1.271	1.137	1.017	84
86	2.606	2.417	2.225	2.034	1.847	1.669	1.502	1.348	1.208	1.084	.972	86
88	2.376	2.214	2.048	1.881	1.716	1.557	1.407	1.267	1.140	1.025	.922	88
90	2.150	2.013	1.870	1.726	1.582	1.442	1.308	1.183	1.068	.964	.869	90
92	1.933	1.817	1.696	1.572	1.448	1.325	1.207	1.096	.993	.899	.814	92
94	1.728	1.632	1.529	1.424	1.317	1.210	1.107	1.009	.917	.833	.757	94
96	1.539	1.459	1.373	1.283	1.192	1.100	1.010	.924	.843	.768	.700	96
98	1.368	1.301	1.229	1.153	1.075	.996	.918	.843	.771	.705	.644	98
100	1.214	1.158	1.098	1.034	.967	.899	.832	.766	.704	.646	.591	100

a(55) MORTALITY TABLES

6 per cent

MONETARY FUNCTIONS

FEMALES

MALES

Age x	SELECT		ULTIMATE			Age x	SELECT		ULTIMATE			Age x
	$a_{[x]}$	D_x	N_x	a_x			$a_{[x]}$	D_x	N_x	a_x		
60	11.034	27 192	326 186	10.996		60	9.869	26 068	281 869	9.813		60
61	10.797	25 433	298 994	10.756		61	9.610	24 247	255 801	9.550		61
62	10.553	23 769	273 561	10.509		62	9.346	22 521	231 554	9.282		62
63	10.303	22 192	249 792	10.256		63	9.078	20 884	209 033	9.009		63
64	10.047	20 698	227 600	9.997		64	8.807	19 331	188 149	8.733		64
65	9.786	19 281	206 902	9.731		65	8.533	17 857	168 818	8.454		65
66	9.518	17 938	187 621	9.460		66	8.257	16 460	150 961	8.171		66
67	9.246	16 663	169 683	9.183		67	7.978	15 134	134 501	7.887		67
68	8.970	15 454	153 020	8.902		68	7.699	13 877	119 367	7.602		68
69	8.690	14 305	137 566	8.617		69	7.419	12 686	105 490	7.315		69
70	8.406	13 215	123 261	8.328		70	7.139	11 559	92 804	7.029		70
71	8.120	12 179	110 046	8.036		71	6.860	10 493	81 245	6.743		71
72	7.832	11 196	97 867	7.742		72	6.583	9 486.1	70 752	6.458		72
73	7.543	10 262	86 671	7.446		73	6.308	8 537.3	61 266	6.176		73
74	7.253	9 376.4	76 409	7.149		74	6.036	7 645.4	52 729	5.897		74
75	6.964	8 536.2	67 033	6.853		75	5.769	6 809.0	45 083	5.621		75
76	6.674	7 740.4	58 496	6.558		76	5.503	6 027.6	38 274	5.350		76
77	6.386	6 987.9	50 756	6.264		77	5.242	5 300.6	32 247	5.083		77
78	6.100	6 277.5	43 768	5.973		78	4.987	4 627.4	26 946	4.823		78
79	5.818	5 608.6	37 491	5.685		79	4.739	4 007.5	22 319	4.569		79
80	5.540	4 980.8	31 882	5.401		80	4.497	3 440.5	18 311	4.322		80
81	5.266	4 393.6	26 901	5.123		81	4.261	2 925.7	14 871	4.082		81
82	4.998	3 847.2	22 508	4.851		82	4.032	2 462.1	11 945	3.851		82
83	4.736	3 341.3	18 660	4.585		83	3.812	2 048.7	9 483	3.628		83
84	4.482	2 876.0	15 319	4.327		84	3.600	1 683.9	7 434	3.414		84
85	4.235	2 451.2	12 443	4.077		85	3.397	1 365.9	5 750	3.209		85
86	3.996	2 066.7	9 992	3.836		86	3.202	1 092.1	4 384	3.014		86
87	3.766	1 722.0	7 925	3.603		87	3.017	859.9	3 292	2.827		87
88	3.545	1 416.5	6 203	3.381		88	2.840	665.9	2 432	2.651		88
89	3.334	1 148.9	4 787	3.168		89	2.673	506.7	1 766	2.484		89
90	3.132	917.9	3 638	2.965		90	2.515	378.3	1 260	2.327		90
91	2.945	721.4	2 720	2.773		91	2.372	276.9	881	2.179		91
92	2.769	557.0	1 999	2.591		92	2.237	198.5	604	2.040		92
93	2.603	422.1	1 442	2.420		93	2.112	139.1	406	1.910		93
94	2.448	313.4	1 019	2.259		94	1.995	95.3	267	1.789		94
95	2.302	227.8	706	2.108		95	1.886	63.7	172	1.676		95
96	2.166	161.8	478	1.968		96	1.785	41.5	108	1.572		96
97	2.039	112.3	316	1.836		97	1.691	26.4	66	1.475		97
98	1.921	76.0	204	1.714		98	1.604	16.3	40	1.384		98
99	1.811	50.1	128	1.600		99	1.523	9.8	24	1.300		99
100		32.1	78	1.493		100		5.7	14	1.221		100
101		20.1	46	1.393		101		3.3	8	1.146		101
102		12.2	26	1.296		102		1.8	5	1.072		102
103		7.2	14	1.202		103		1.0	3	1.001		103
104		4.1	6	1.109		104		.5	2	.929		104

a(55) MORTALITY TABLES

JOINT LIFE ANNUITIES, a_{xy}

6 per cent

MALE AND FEMALE

ULTIMATE

Age of female y	Age of male x											Age of female y
	60	62	64	66	68	70	72	74	76	78	80	
60	8.507	8.145	7.753	7.335	6.894	6.436	5.966	5.492	5.019	4.555	4.106	60
62	8.275	7.938	7.571	7.176	6.757	6.320	5.868	5.410	4.952	4.500	4.062	62
64	8.011	7.700	7.360	6.991	6.596	6.181	5.751	5.312	4.871	4.434	4.008	64
66	7.713	7.430	7.117	6.776	6.409	6.020	5.613	5.196	4.774	4.354	3.943	66
68	7.381	7.127	6.843	6.532	6.193	5.832	5.452	5.059	4.659	4.259	3.864	68
70	7.018	6.792	6.538	6.257	5.949	5.618	5.267	4.900	4.525	4.147	3.772	70
72	6.626	6.428	6.204	5.953	5.677	5.377	5.056	4.719	4.370	4.016	3.663	72
74	6.209	6.038	5.843	5.623	5.378	5.110	4.820	4.514	4.194	3.867	3.538	74
76	5.774	5.628	5.460	5.270	5.056	4.819	4.562	4.286	3.997	3.698	3.395	76
78	5.327	5.204	5.061	4.898	4.714	4.508	4.282	4.039	3.780	3.510	3.235	78
80	4.874	4.772	4.653	4.515	4.358	4.182	3.987	3.774	3.546	3.306	3.059	80
82	4.424	4.340	4.242	4.127	3.996	3.847	3.680	3.497	3.299	3.088	2.869	82
84	3.985	3.917	3.836	3.742	3.633	3.508	3.368	3.212	3.042	2.860	2.668	84
86	3.563	3.508	3.443	3.366	3.277	3.174	3.057	2.926	2.782	2.626	2.460	86
88	3.165	3.121	3.068	3.006	2.934	2.849	2.753	2.644	2.524	2.392	2.250	88
90	2.795	2.760	2.718	2.668	2.609	2.541	2.462	2.373	2.272	2.162	2.043	90
92	2.457	2.429	2.396	2.356	2.309	2.254	2.189	2.116	2.033	1.942	1.842	92
94	2.153	2.131	2.105	2.073	2.035	1.990	1.938	1.879	1.811	1.735	1.651	94
96	1.884	1.866	1.845	1.820	1.789	1.753	1.711	1.662	1.607	1.544	1.475	96
98	1.647	1.633	1.616	1.596	1.572	1.543	1.508	1.469	1.423	1.371	1.314	98
100	1.441	1.429	1.416	1.399	1.380	1.356	1.329	1.296	1.259	1.216	1.168	100

Age of female y	Age of male x											Age of female y
	80	82	84	86	88	90	92	94	96	98	100	
60	4.106	3.678	3.276	2.904	2.564	2.258	1.985	1.745	1.536	1.355	1.198	60
62	4.062	3.643	3.248	2.881	2.546	2.243	1.973	1.736	1.529	1.349	1.193	62
64	4.008	3.599	3.213	2.854	2.524	2.225	1.959	1.724	1.519	1.342	1.186	64
66	3.943	3.546	3.170	2.819	2.496	2.204	1.942	1.710	1.508	1.332	1.179	66
68	3.864	3.483	3.119	2.778	2.463	2.177	1.920	1.693	1.494	1.321	1.169	68
70	3.772	3.407	3.057	2.728	2.423	2.144	1.894	1.672	1.477	1.307	1.158	70
72	3.663	3.317	2.984	2.669	2.375	2.106	1.862	1.646	1.456	1.290	1.144	72
74	3.538	3.213	2.898	2.598	2.318	2.059	1.825	1.615	1.431	1.269	1.127	74
76	3.395	3.093	2.799	2.516	2.251	2.004	1.780	1.579	1.401	1.244	1.106	76
78	3.235	2.958	2.686	2.423	2.173	1.941	1.728	1.536	1.365	1.215	1.082	78
80	3.059	2.808	2.559	2.317	2.085	1.868	1.667	1.486	1.324	1.180	1.053	80
82	2.869	2.644	2.420	2.199	1.986	1.785	1.599	1.429	1.276	1.140	1.020	82
84	2.668	2.470	2.270	2.071	1.878	1.694	1.523	1.365	1.222	1.095	.981	84
86	2.460	2.288	2.111	1.935	1.762	1.596	1.439	1.295	1.163	1.045	.939	86
88	2.250	2.102	1.948	1.793	1.640	1.491	1.350	1.219	1.098	.990	.892	88
90	2.043	1.916	1.784	1.649	1.515	1.383	1.257	1.139	1.030	.931	.841	90
92	1.842	1.734	1.622	1.506	1.389	1.273	1.162	1.057	.959	.869	.788	92
94	1.651	1.561	1.465	1.366	1.265	1.165	1.067	.974	.887	.807	.733	94
96	1.475	1.399	1.318	1.234	1.147	1.060	.975	.893	.816	.745	.679	96
98	1.314	1.251	1.182	1.111	1.037	.962	.887	.816	.748	.684	.626	98
100	1.168	1.116	1.058	.997	.934	.870	.805	.743	.683	.627	.575	100

a(55) MORTALITY TABLES

8 per cent

MONETARY FUNCTIONS

FEMALES

MALES

SELECT					ULTIMATE					SELECT					ULTIMATE				
Age					Age					Age					Age				
x	$a_{[x]}$	D_x	N_x	a_x	x	$a_{[x]}$	D_x	N_x	a_x	x	$a_{[x]}$	D_x	N_x	a_x	x	$a_{[x]}$	D_x	N_x	a_x
60	9.326	8 858.7	91 195	9.294	60	8.480	8 492.4	80 097	8.432	60	8.480	8 492.4	80 097	8.432	60	8.480	8 492.4	80 097	8.432
61	9.159	8 132.3	82 336	9.124	61	8.287	7 753.1	71 604	8.236	61	8.287	7 753.1	71 604	8.236	61	8.287	7 753.1	71 604	8.236
62	8.985	7 459.2	74 204	8.948	62	8.090	7 067.8	63 851	8.034	62	8.090	7 067.8	63 851	8.034	62	8.090	7 067.8	63 851	8.034
63	8.805	6 835.4	66 744	8.764	63	7.887	6 432.6	56 784	7.827	63	7.887	6 432.6	56 784	7.827	63	7.887	6 432.6	56 784	7.827
64	8.618	6 257.1	59 909	8.574	64	7.681	5 844.0	50 351	7.616	64	7.681	5 844.0	50 351	7.616	64	7.681	5 844.0	50 351	7.616
65	8.425	5 721.0	53 652	8.378	65	7.469	5 298.5	44 507	7.400	65	7.469	5 298.5	44 507	7.400	65	7.469	5 298.5	44 507	7.400
66	8.226	5 223.9	47 931	8.175	66	7.254	4 793.4	39 208	7.180	66	7.254	4 793.4	39 208	7.180	66	7.254	4 793.4	39 208	7.180
67	8.022	4 762.8	42 707	7.967	67	7.036	4 325.7	34 415	6.956	67	7.036	4 325.7	34 415	6.956	67	7.036	4 325.7	34 415	6.956
68	7.812	4 335.3	37 944	7.752	68	6.815	3 893.0	30 089	6.729	68	6.815	3 893.0	30 089	6.729	68	6.815	3 893.0	30 089	6.729
69	7.597	3 938.8	33 609	7.533	69	6.592	3 493.0	26 196	6.500	69	6.592	3 493.0	26 196	6.500	69	6.592	3 493.0	26 196	6.500
70	7.377	3 571.2	29 670	7.308	70	6.367	3 123.7	22 703	6.268	70	6.367	3 123.7	22 703	6.268	70	6.367	3 123.7	22 703	6.268
71	7.154	3 230.4	26 099	7.079	71	6.140	2 783.1	19 580	6.035	71	6.140	2 783.1	19 580	6.035	71	6.140	2 783.1	19 580	6.035
72	6.926	2 914.5	22 868	6.846	72	5.914	2 469.5	16 797	5.802	72	5.914	2 469.5	16 797	5.802	72	5.914	2 469.5	16 797	5.802
73	6.696	2 622.0	19 954	6.610	73	5.687	2 181.3	14 327	5.568	73	5.687	2 181.3	14 327	5.568	73	5.687	2 181.3	14 327	5.568
74	6.463	2 351.3	17 332	6.371	74	5.462	1 917.2	12 146	5.335	74	5.462	1 917.2	12 146	5.335	74	5.462	1 917.2	12 146	5.335
75	6.229	2 101.0	14 980	6.130	75	5.238	1 675.9	10 229	5.103	75	5.238	1 675.9	10 229	5.103	75	5.238	1 675.9	10 229	5.103
76	5.992	1 869.9	12 879	5.888	76	5.014	1 456.1	8 553	4.874	76	5.014	1 456.1	8 553	4.874	76	5.014	1 456.1	8 553	4.874
77	5.755	1 656.8	11 010	5.645	77	4.792	1 256.7	7 097	4.647	77	4.792	1 256.7	7 097	4.647	77	4.792	1 256.7	7 097	4.647
78	5.518	1 460.8	9 353	5.402	78	4.574	1 076.8	5 840	4.423	78	4.574	1 076.8	5 840	4.423	78	4.574	1 076.8	5 840	4.423
79	5.282	1 281.0	7 892	5.161	79	4.360	915.3	4 763	4.204	79	4.360	915.3	4 763	4.204	79	4.360	915.3	4 763	4.204
80	5.048	1 116.5	6 611	4.921	80	4.151	771.2	3 848	3.989	80	4.151	771.2	3 848	3.989	80	4.151	771.2	3 848	3.989
81	4.815	966.7	5 495	4.684	81	3.945	643.7	3 077	3.780	81	3.945	643.7	3 077	3.780	81	3.945	643.7	3 077	3.780
82	4.585	830.8	4 528	4.450	82	3.744	531.7	2 433	3.576	82	3.744	531.7	2 433	3.576	82	3.744	531.7	2 433	3.576
83	4.360	708.2	3 697	4.221	83	3.550	434.2	1 901	3.379	83	3.550	434.2	1 901	3.379	83	3.550	434.2	1 901	3.379
84	4.139	598.3	2 989	3.996	84	3.362	350.3	1 467	3.188	84	3.362	350.3	1 467	3.188	84	3.362	350.3	1 467	3.188
85	3.923	500.5	2 391	3.777	85	3.180	278.9	1 117	3.005	85	3.180	278.9	1 117	3.005	85	3.180	278.9	1 117	3.005
86	3.713	414.1	1 890	3.564	86	3.006	218.8	838	2.829	86	3.006	218.8	838	2.829	86	3.006	218.8	838	2.829
87	3.510	338.7	1 476	3.358	87	2.839	169.1	619	2.661	87	2.839	169.1	619	2.661	87	2.839	169.1	619	2.661
88	3.313	273.4	1 137	3.160	88	2.679	128.5	450	2.500	88	2.679	128.5	450	2.500	88	2.679	128.5	450	2.500
89	3.124	217.7	864	2.969	89	2.527	96.0	321	2.348	89	2.527	96.0	321	2.348	89	2.527	96.0	321	2.348
90	2.943	170.7	646	2.786	90	2.382	70.4	225	2.204	90	2.382	70.4	225	2.204	90	2.382	70.4	225	2.204
91	2.775	131.7	476	2.612	91	2.251	50.5	155	2.068	91	2.251	50.5	155	2.068	91	2.251	50.5	155	2.068
92	2.615	99.8	344	2.447	92	2.128	35.6	105	1.940	92	2.128	35.6	105	1.940	92	2.128	35.6	105	1.940
93	2.464	74.2	244	2.290	93	2.012	24.5	69	1.820	93	2.012	24.5	69	1.820	93	2.012	24.5	69	1.820
94	2.322	54.1	170	2.143	94	1.904	16.4	45	1.707	94	1.904	16.4	45	1.707	94	1.904	16.4	45	1.707
95	2.188	38.6	116	2.004	95	1.803	10.8	28	1.602	95	1.803	10.8	28	1.602	95	1.803	10.8	28	1.602
96	2.062	26.9	77	1.874	96	1.709	6.9	17	1.505	96	1.709	6.9	17	1.505	96	1.709	6.9	17	1.505
97	1.945	18.3	50	1.752	97	1.622	4.3	10	1.414	97	1.622	4.3	10	1.414	97	1.622	4.3	10	1.414
98	1.836	12.2	32	1.638	98	1.540	2.6	6	1.329	98	1.540	2.6	6	1.329	98	1.540	2.6	6	1.329
99	1.733	7.9	20	1.532	99	1.464	1.5	3	1.250	99	1.464	1.5	3	1.250	99	1.464	1.5	3	1.250
100		5.0	12	1.432	100		0.9	2	1.175	100		0.9	2	1.175	100		0.9	2	1.175
101		3.0	7	1.338	101		0.5	1	1.104	101		0.5	1	1.104	101		0.5	1	1.104
102		1.8	4	1.247	102		0.3	1	1.034	102		0.3	1	1.034	102		0.3	1	1.034
103		1.0	2	1.158	103		0.1	0	0.967	103		0.1	0	0.967	103		0.1	0	0.967
104		0.6	1	1.070	104		0.1	0	0.899	104		0.1	0	0.899	104		0.1	0	0.899

a(55) MORTALITY TABLES

JOINT LIFE ANNUITIES, a_{xy}

8 per cent

MALE AND FEMALE

ULTIMATE

Age of female y	Age of male x											Age of female y
	60	62	64	66	68	70	72	74	76	78	80	
60	7.445	7.163	6.854	6.519	6.162	5.786	5.396	4.996	4.593	4.193	3.802	60
62	7.266	7.001	6.709	6.392	6.051	5.690	5.314	4.927	4.536	4.146	3.763	62
64	7.059	6.813	6.541	6.242	5.920	5.576	5.217	4.845	4.467	4.089	3.716	64
66	6.824	6.598	6.346	6.068	5.766	5.442	5.101	4.746	4.384	4.019	3.659	66
68	6.559	6.354	6.124	5.868	5.588	5.286	4.965	4.630	4.285	3.937	3.590	68
70	6.266	6.082	5.874	5.641	5.385	5.106	4.808	4.494	4.169	3.839	3.509	70
72	5.946	5.783	5.598	5.389	5.157	4.902	4.628	4.338	4.035	3.725	3.413	72
74	5.602	5.460	5.297	5.111	4.904	4.675	4.426	4.161	3.882	3.593	3.301	74
76	5.238	5.115	4.974	4.812	4.629	4.426	4.203	3.963	3.709	3.444	3.174	76
78	4.859	4.755	4.633	4.494	4.335	4.157	3.960	3.746	3.518	3.278	3.031	78
80	4.472	4.384	4.281	4.162	4.026	3.872	3.700	3.512	3.310	3.096	2.873	80
82	4.082	4.009	3.923	3.823	3.708	3.577	3.429	3.266	3.089	2.900	2.701	82
84	3.697	3.637	3.566	3.483	3.387	3.276	3.151	3.011	2.858	2.693	2.519	84
86	3.324	3.275	3.217	3.148	3.068	2.976	2.871	2.753	2.623	2.481	2.330	86
88	2.967	2.928	2.880	2.825	2.759	2.683	2.596	2.497	2.387	2.266	2.137	88
90	2.633	2.601	2.563	2.518	2.465	2.402	2.331	2.249	2.157	2.055	1.945	90
92	2.325	2.300	2.269	2.233	2.189	2.139	2.080	2.012	1.936	1.851	1.758	92
94	2.046	2.025	2.001	1.972	1.937	1.895	1.847	1.792	1.729	1.658	1.580	94
96	1.796	1.780	1.760	1.737	1.708	1.675	1.636	1.591	1.539	1.480	1.415	96
98	1.576	1.563	1.547	1.528	1.505	1.478	1.446	1.409	1.366	1.318	1.263	98
100	1.382	1.372	1.359	1.344	1.325	1.303	1.277	1.247	1.211	1.171	1.126	100

Age of female y	Age of male x											Age of female y
	80	82	84	86	88	90	92	94	96	98	100	
60	3.802	3.424	3.066	2.731	2.422	2.141	1.889	1.666	1.471	1.302	1.153	60
62	3.763	3.393	3.040	2.710	2.405	2.128	1.879	1.658	1.464	1.296	1.148	62
64	3.716	3.354	3.009	2.685	2.385	2.112	1.866	1.647	1.456	1.289	1.143	64
66	3.659	3.307	2.971	2.654	2.360	2.092	1.849	1.634	1.445	1.280	1.135	66
68	3.590	3.251	2.925	2.617	2.330	2.067	1.830	1.618	1.432	1.269	1.126	68
70	3.509	3.184	2.870	2.572	2.293	2.037	1.805	1.598	1.416	1.256	1.116	70
72	3.413	3.104	2.804	2.518	2.249	2.002	1.776	1.575	1.396	1.240	1.102	72
74	3.301	3.011	2.727	2.454	2.197	1.959	1.741	1.546	1.373	1.220	1.086	74
76	3.174	2.903	2.637	2.380	2.136	1.908	1.700	1.512	1.345	1.197	1.067	76
78	3.031	2.782	2.535	2.294	2.065	1.849	1.651	1.472	1.311	1.169	1.043	78
80	2.873	2.646	2.419	2.197	1.983	1.782	1.595	1.425	1.272	1.137	1.016	80
82	2.701	2.497	2.292	2.089	1.892	1.705	1.531	1.372	1.227	1.099	0.984	82
84	2.519	2.338	2.154	1.971	1.792	1.621	1.460	1.311	1.177	1.056	0.948	84
86	2.330	2.171	2.009	1.845	1.684	1.529	1.382	1.245	1.121	1.008	0.908	86
88	2.137	1.999	1.857	1.713	1.570	1.431	1.298	1.174	1.060	0.956	0.863	88
90	1.945	1.827	1.704	1.579	1.453	1.329	1.210	1.098	0.994	0.900	0.815	90
92	1.758	1.658	1.553	1.444	1.334	1.226	1.120	1.020	0.927	0.842	0.764	92
94	1.580	1.496	1.406	1.313	1.218	1.123	1.030	0.942	0.858	0.782	0.711	94
96	1.415	1.344	1.268	1.188	1.106	1.024	0.942	0.864	0.791	0.722	0.659	96
98	1.263	1.204	1.139	1.071	1.001	0.930	0.859	0.790	0.725	0.664	0.608	98
100	1.126	1.076	1.022	0.964	0.903	0.842	0.780	0.720	0.663	0.609	0.559	100