

Appendix I

LIFE TABLES FOR TURKEY, 1970-2000

1970-1975

MALES

Age-groups	nmx (adjusted)	nqx	npx	lx	ndx	nLx	Tx	ex
0-1		0.1105	0.8895	100000	11050	92265	6335413	63.35
1-4		0.0454	0.9546	88950	4039	346106	6243148	70.19
5-9	0.00070	0.0035	0.9965	84911	297	423813	5897042	69.45
10-14	0.00062	0.0031	0.9969	84614	262	422415	5473229	64.68
15-19	0.00087	0.0043	0.9957	84352	367	420843	5050814	59.88
20-24	0.00112	0.0056	0.9944	83985	471	418748	4629972	55.13
25-29	0.00134	0.0067	0.9933	83514	559	416173	4211224	50.43
30-34	0.00176	0.0088	0.9912	82955	729	412953	3795052	45.75
35-39	0.00208	0.0104	0.9896	82226	852	409000	3382099	41.13
40-44	0.00332	0.0165	0.9835	81374	1341	403518	2973099	36.54
45-49	0.00511	0.0252	0.9748	80033	2018	395120	2569582	32.11
50-54	0.00729	0.0358	0.9642	78015	2794	383090	2174462	27.87
55-59	0.01143	0.0556	0.9444	75221	4181	365653	1791372	23.81
60-64	0.01872	0.0894	0.9106	71040	6353	339318	1425719	20.07
65-69	0.02362	0.1115	0.8885	64687	7213	305403	1086402	16.79
70-74	0.03747	0.1713	0.8287	57474	9846	262755	780999	13.59
75-79	0.05367	0.2366	0.7634	47628	11269	209968	518244	10.88
80-84	0.06193	0.2681	0.7319	36359	9750	157420	308277	8.48
85+	0.17639	1.0000	0.0000	26609	26609	150857	150857	5.67

1970-1975

FEMALES

Age-groups	nmx (adjusted)	nqx	npx	lx	ndx	nLx	Tx	ex
0-1		0.0950	0.9050	100000	9500	93350	6417154	64.17
1-4		0.0300	0.9700	90500	2715	355484	6323804	69.88
5-9	0.00098	0.0049	0.9951	87785	430	437850	5968320	67.99
10-14	0.00057	0.0028	0.9972	87355	249	436153	5530470	63.31
15-19	0.00083	0.0041	0.9959	87106	361	434628	5094318	58.48
20-24	0.00123	0.0061	0.9939	86745	532	432395	4659690	53.72
25-29	0.00138	0.0069	0.9931	86213	593	429583	4227295	49.03
30-34	0.00177	0.0088	0.9912	85620	755	426213	3797713	44.36
35-39	0.00227	0.0113	0.9887	84865	958	421930	3371500	39.73
40-44	0.00278	0.0138	0.9862	83907	1159	416638	2949570	35.15
45-49	0.00458	0.0226	0.9774	82748	1874	409055	2532933	30.61
50-54	0.00587	0.0289	0.9711	80874	2340	398520	2123878	26.26
55-59	0.01135	0.0552	0.9448	78534	4334	381835	1725358	21.97
60-64	0.01632	0.0784	0.9216	74200	5818	356455	1343523	18.11
65-69	0.03073	0.1427	0.8573	68382	9758	317515	987068	14.43
70-74	0.04757	0.2126	0.7874	58624	12462	261965	669553	11.42
75-79	0.1005	0.4016	0.5984	46162	18539	184463	407588	8.83
80-84	0.10674	0.4213	0.5787	27623	11638	109020	223125	8.08
85+	0.14009	1.0000	0.0000	15985	15985	114105	114105	7.14

1975-1980**MALES**

Age-groups	nmx (adjusted)	nqx	npx	lx	ndx	nLx	Tx	ex
0-1		0.0954	0.9046	100000	9540	93322	6486559	64.87
1-4		0.0382	0.9618	90460	3456	353546	6393237	70.67
5-9	0.00059	0.0029	0.9971	87004	255	434383	6039692	69.42
10-14	0.00043	0.0022	0.9978	86749	188	433275	5605309	64.62
15-19	0.00078	0.0039	0.9961	86561	336	431965	5172034	59.75
20-24	0.00112	0.0056	0.9944	86225	482	429920	4740069	54.97
25-29	0.00127	0.0064	0.9936	85743	545	427353	4310149	50.27
30-34	0.00147	0.0073	0.9927	85198	626	424425	3882797	45.57
35-39	0.00211	0.0105	0.9895	84572	888	420640	3458372	40.89
40-44	0.00302	0.0150	0.9850	83684	1255	415283	3037732	36.30
45-49	0.00454	0.0225	0.9775	82429	1852	407515	2622449	31.81
50-54	0.00763	0.0374	0.9626	80577	3018	395340	2214934	27.49
55-59	0.00924	0.0452	0.9548	77559	3503	379038	1819594	23.46
60-64	0.02034	0.0968	0.9032	74056	7169	352358	1440557	19.45
65-69	0.02569	0.1207	0.8793	66887	8073	314253	1088199	16.27
70-74	0.03588	0.1646	0.8354	58814	9683	269863	773947	13.16
75-79	0.05695	0.2493	0.7507	49131	12248	215035	504084	10.26
80-84	0.06086	0.2641	0.7359	36883	9742	160060	289049	7.84
85+	0.21107	1.0000	0.0000	27141	27141	128586	128989	4.75

1975-1980**FEMALES**

Age-groups	nmx (adjusted)	nqx	npx	lx	ndx	nLx	Tx	ex
0-1		0.0832	0.9168	100000	8320	94176	6542846	65.43
1-4		0.0292	0.9708	91680	2678	360293	6448670	70.34
5-9	0.00085	0.0042	0.9958	89002	378	444065	6088377	68.41
10-14	0.00052	0.0026	0.9974	88624	231	442543	5644312	63.69
15-19	0.00075	0.0037	0.9963	88393	331	441138	5201770	58.85
20-24	0.00102	0.0051	0.9949	88062	448	439190	4760632	54.06
25-29	0.00122	0.0061	0.9939	87614	533	436738	4321442	49.32
30-34	0.00160	0.0080	0.9920	87081	694	433670	3884705	44.61
35-39	0.00199	0.0099	0.9901	86387	856	429795	3451035	39.95
40-44	0.00244	0.0121	0.9879	85531	1038	425060	3021240	35.32
45-49	0.00387	0.0192	0.9808	84493	1620	418415	2596180	30.73
50-54	0.00635	0.0313	0.9687	82873	2591	407888	2177765	26.28
55-59	0.00984	0.0480	0.9520	80282	3856	391770	1769877	22.05
60-64	0.01567	0.0754	0.9246	76426	5763	367723	1378107	18.03
65-69	0.03060	0.1421	0.8579	70663	10044	328205	1010385	14.30
70-74	0.04553	0.2044	0.7956	60619	12390	272120	682180	11.25
75-79	0.09849	0.3952	0.6048	48229	19058	193500	410060	8.50
80-84	0.11279	0.4399	0.5601	29171	12833	113773	216560	7.42
85+	0.15895	1.0000	0.0000	16338	16338	102787	102787	6.29

1980-1985

MALES

Age-groups	nmx (adjusted)	nqx	npq	lx	ndx	nLx	Tx	ex
0-1		0.0779	0.9221	100000	7790	94547	6643723	66.44
1-4		0.0282	0.9718	92210	2601	362598	6549176	71.02
5-9	0.00050	0.0025	0.9975	89609	222	447490	6186579	69.04
10-14	0.00041	0.0020	0.9980	89387	182	446480	5739089	64.20
15-19	0.00062	0.0031	0.9969	89205	277	445333	5292609	59.33
20-24	0.00083	0.0041	0.9959	88928	367	443723	4847276	54.51
25-29	0.00096	0.0048	0.9952	88561	425	441743	4403554	49.72
30-34	0.00129	0.0064	0.9936	88136	568	439260	3961811	44.95
35-39	0.00174	0.0087	0.9913	87568	761	435938	3522551	40.23
40-44	0.00288	0.0143	0.9857	86807	1240	430935	3086614	35.56
45-49	0.00410	0.0203	0.9797	85567	1736	423495	2655679	31.04
50-54	0.00795	0.0390	0.9610	83831	3267	410988	2232184	26.63
55-59	0.01221	0.0593	0.9407	80564	4774	390885	1821196	22.61
60-64	0.01803	0.0863	0.9137	75790	6539	362603	1430311	18.87
65-69	0.02510	0.1181	0.8819	69251	8179	325808	1067709	15.42
70-74	0.04633	0.2076	0.7924	61072	12679	273663	741901	12.15
75-79	0.05177	0.2292	0.7708	48393	11091	214238	468239	9.68
80-84	0.07722	0.3236	0.6764	37302	12073	156328	254001	6.81
85+	0.25830	1.0000	0.0000	25229	25229	97674	97674	3.87

1980-1985

FEMALES

Age-groups	nmx (adjusted)	nqx	npq	lx	ndx	nLx	Tx	ex
0-1		0.0701	0.9299	100000	7012	95092	6833918	68.34
1-4		0.0262	0.9738	92988	2437	366103	6738827	72.47
5-9	0.00059	0.0029	0.9971	90551	267	452088	6372724	70.38
10-14	0.00044	0.0022	0.9978	90284	199	450923	5920636	65.58
15-19	0.00059	0.0029	0.9971	90085	266	449760	5469714	60.72
20-24	0.00068	0.0034	0.9966	89819	305	448333	5019954	55.89
25-29	0.00084	0.0042	0.9958	89514	376	446630	4571621	51.07
30-34	0.00119	0.0059	0.9941	89138	529	444368	4124991	46.28
35-39	0.00160	0.0080	0.9920	88609	707	441278	3680624	41.54
40-44	0.00224	0.0111	0.9889	87902	980	437060	3239346	36.85
45-49	0.00314	0.0156	0.9844	86922	1355	431223	2802286	32.24
50-54	0.00550	0.0271	0.9729	85567	2322	422030	2371064	27.71
55-59	0.00914	0.0447	0.9553	83245	3720	406925	1949034	23.41
60-64	0.01376	0.0665	0.9335	79525	5290	384400	1542109	19.39
65-69	0.02284	0.1080	0.8920	74235	8020	351125	1157709	15.60
70-74	0.04545	0.2041	0.7959	66215	13513	297293	806584	12.18
75-79	0.07240	0.3065	0.6935	52702	16155	223123	509291	9.66
80-84	0.10886	0.4279	0.5721	36547	15637	143643	286169	7.83
85+	0.14671	1.0000	0.0000	20910	20910	142526	142526	6.82

1985-1990

MALES

Age-groups	nmx (adjusted)	nqx	npq	lx	ndx	nLx	Tx	ex
0-1		0.0613	0.9387	100000	6130	95709	6794689	67.95
1-4		0.0245	0.9755	93870	2300	369960	6698980	71.36
5-9	0.00043	0.0021	0.9979	91570	195	457363	6329020	69.12
10-14	0.00033	0.0017	0.9983	91375	152	456495	5871657	64.26
15-19	0.00053	0.0026	0.9974	91223	241	455513	5415162	59.36
20-24	0.00076	0.0038	0.9962	90982	344	454050	4959650	54.51
25-29	0.00086	0.0043	0.9957	90638	389	452218	4505600	49.71
30-34	0.00121	0.0061	0.9939	90249	547	449878	4053382	44.91
35-39	0.00178	0.0089	0.9911	89702	797	446518	3603505	40.17
40-44	0.00272	0.0135	0.9865	88905	1200	441525	3156987	35.51
45-49	0.00467	0.0231	0.9769	87705	2024	433465	2715462	30.96
50-54	0.00751	0.0369	0.9631	85681	3159	420508	2281997	26.63
55-59	0.01231	0.0597	0.9403	82522	4928	400290	1861490	22.56
60-64	0.01906	0.0910	0.9090	77594	7059	370323	1461200	18.83
65-69	0.02223	0.1053	0.8947	70535	7427	334108	1090877	15.47
70-74	0.04809	0.2146	0.7854	63108	13546	281675	756770	11.99
75-79	0.05906	0.2573	0.7427	49562	12753	215928	475095	9.59
80-84	0.07600	0.3193	0.6807	36809	11755	154658	259167	7.04
85+	0.23973	1.0000	0.0000	25054	25054	104510	104510	4.17

1985-1990

FEMALES

Age-groups	nmx (adjusted)	nqx	npq	lx	ndx	nLx	Tx	ex
0-1		0.0599	0.9401	100000	5993	95805	7000113	70.00
1-4		0.0197	0.9803	94007	1852	371583	6904308	73.44
5-9	0.00045	0.0022	0.9978	92155	208	460255	6532725	70.89
10-14	0.00033	0.0016	0.9984	91947	152	459355	6072470	66.04
15-19	0.00045	0.0022	0.9978	91795	207	458458	5613115	61.15
20-24	0.00056	0.0028	0.9972	91588	257	457298	5154658	56.28
25-29	0.00071	0.0035	0.9965	91331	324	455845	4697360	51.43
30-34	0.00104	0.0052	0.9948	91007	473	453853	4241515	46.61
35-39	0.00140	0.0070	0.9930	90534	632	451090	3787663	41.84
40-44	0.00202	0.0100	0.9900	89902	904	447250	3336573	37.11
45-49	0.00338	0.0168	0.9832	88998	1492	441260	2889323	32.47
50-54	0.00506	0.0250	0.9750	87506	2187	432063	2448063	27.98
55-59	0.00821	0.0402	0.9598	85319	3432	418015	2016000	23.63
60-64	0.01444	0.0697	0.9303	81887	5707	395168	1597985	19.51
65-69	0.02240	0.1061	0.8939	76180	8080	360700	1202818	15.79
70-74	0.03866	0.1763	0.8237	68100	12004	310490	842118	12.37
75-79	0.07754	0.3247	0.6753	56096	18218	234935	531628	9.48
80-84	0.10124	0.4040	0.5960	37878	15302	151135	296693	7.83
85+	0.15510	1.0000	0.0000	22576	22576	145558	145558	6.45

1990-1995

MALES

Age-groups	nmx (adjusted)	nqx	npq	lx	ndx	nLx	Tx	ex
0-1		0.0532	0.9468	100000	5320	96276	6859926	68.60
1-4		0.0191	0.9809	94680	1809	374378	6763650	71.44
5-9	0.000379	0.0019	0.9981	92871	176	463915	6389272	68.80
10-14	0.000335	0.0017	0.9983	92695	156	463085	5925357	63.92
15-19	0.000545	0.0027	0.9973	92539	252	462065	5462272	59.03
20-24	0.000716	0.0036	0.9964	92287	330	460610	5000207	54.18
25-29	0.000830	0.0041	0.9959	91957	381	458833	4539597	49.37
30-34	0.001226	0.0061	0.9939	91576	560	456480	4080764	44.56
35-39	0.001757	0.0087	0.9913	91016	796	453090	3624284	39.82
40-44	0.002927	0.0145	0.9855	90220	1311	447823	3171194	35.15
45-49	0.004761	0.0235	0.9765	88909	2092	439315	2723372	30.63
50-54	0.007814	0.0383	0.9617	86817	3328	425765	2284057	26.31
55-59	0.011403	0.0554	0.9446	83489	4629	405873	1858292	22.26
60-64	0.020605	0.0980	0.9020	78860	7727	374983	1452419	18.42
65-69	0.029273	0.1364	0.8636	71133	9702	331410	1077437	15.15
70-74	0.040320	0.1831	0.8169	61431	11251	279028	746027	12.14
75-79	0.054701	0.2406	0.7594	50180	12074	220715	466999	9.31
80-84	0.096511	0.3888	0.6112	38106	14814	153495	246284	6.46
85+	0.251021	1.0000	0.0000	23292	23292	92789	92789	3.98

1990-1995

FEMALES

Age-groups	nmx (adjusted)	nqx	npq	lx	ndx	nLx	Tx	ex
0-1		0.0482	0.9518	100000	4820	96626	7140549	71.41
1-4		0.0153	0.9847	95180	1459	377218	7043923	74.01
5-9	0.00040	0.0020	0.9980	93721	188	468135	6666705	71.13
10-14	0.00033	0.0016	0.9984	93533	155	467278	6198570	66.27
15-19	0.00049	0.0024	0.9976	93378	229	466318	5731292	61.38
20-24	0.00060	0.0030	0.9970	93149	280	465045	5264975	56.52
25-29	0.00067	0.0033	0.9967	92869	311	463568	4799930	51.68
30-34	0.00092	0.0046	0.9954	92558	425	461728	4336362	46.85
35-39	0.00126	0.0063	0.9937	92133	579	459218	3874635	42.05
40-44	0.00195	0.0097	0.9903	91554	889	455548	3415417	37.30
45-49	0.00308	0.0153	0.9847	90665	1386	449860	2959870	32.65
50-54	0.00475	0.0235	0.9765	89279	2096	441155	2510010	28.11
55-59	0.00797	0.0391	0.9609	87183	3407	427398	2068855	23.73
60-64	0.01382	0.0668	0.9332	83776	5596	404890	1641457	19.59
65-69	0.02470	0.1163	0.8837	78180	9094	368165	1236567	15.82
70-74	0.03888	0.1772	0.8228	69086	12241	314828	868402	12.57
75-79	0.05685	0.2489	0.7511	56845	14148	248855	553575	9.74
80-84	0.11075	0.4337	0.5663	42697	18517	167193	304720	7.14
85+	0.17582	1.0000	0.0000	24180	24180	137527	137527	5.69

1995-2000

MALES

Age-groups	nmx (adjusted)	nqx	npq	lx	ndx	nLx	Tx	ex
0-1		0.0412	0.9588	100000	4120	97116	6998408	69.98
1-4		0.0156	0.9844	95880	1497	379927	6901292	71.98
5-9	0.000358	0.0018	0.9982	94383	169	471493	6521365	69.09
10-14	0.000337	0.0017	0.9983	94214	159	470673	6049872	64.21
15-19	0.000607	0.0030	0.9970	94055	286	469560	5579200	59.32
20-24	0.000758	0.0038	0.9962	93769	355	467958	5109640	54.49
25-29	0.000844	0.0042	0.9958	93414	394	466085	4641682	49.69
30-34	0.001162	0.0058	0.9942	93020	539	463753	4175597	44.89
35-39	0.001617	0.0081	0.9919	92481	745	460543	3711845	40.14
40-44	0.002841	0.0141	0.9859	91736	1294	455445	3251302	35.44
45-49	0.004658	0.0230	0.9770	90442	2083	447003	2795857	30.91
50-54	0.007265	0.0357	0.9643	88359	3153	433913	2348855	26.58
55-59	0.011815	0.0574	0.9426	85206	4889	413808	1914942	22.47
60-64	0.019561	0.0932	0.9068	80317	7490	382860	1501135	18.69
65-69	0.028393	0.1326	0.8674	72827	9654	340000	1118275	15.36
70-74	0.041297	0.1872	0.8128	63173	11824	286305	778275	12.32
75-79	0.047884	0.2138	0.7862	51349	10980	229295	491970	9.58
80-84	0.097624	0.3924	0.6076	40369	15840	162245	262675	6.51
85+	0.244240	1.0000	0.0000	24529	24529	100430	100430	4.09

1995-2000

FEMALES

Age-groups	nmx (adjusted)	nqx	npq	lx	ndx	nLx	Tx	ex
0-1		0.0361	0.9639	100000	3610	97473	7414031	74.14
1-4		0.0140	0.9860	96390	1350	382320	7316558	75.91
5-9	0.00034	0.0017	0.9983	95040	163	474793	6934238	72.96
10-14	0.00029	0.0014	0.9986	94877	137	474043	6459445	68.08
15-19	0.00044	0.0022	0.9978	94740	209	473178	5985403	63.18
20-24	0.00052	0.0026	0.9974	94531	245	472043	5512225	58.31
25-29	0.00059	0.0029	0.9971	94286	276	470740	5040183	53.46
30-34	0.00078	0.0039	0.9961	94010	368	469130	4569443	48.61
35-39	0.00106	0.0053	0.9947	93642	498	466965	4100313	43.79
40-44	0.00165	0.0082	0.9918	93144	768	463800	3633348	39.01
45-49	0.00262	0.0130	0.9870	92376	1204	458870	3169548	34.31
50-54	0.00398	0.0197	0.9803	91172	1796	451370	2710678	29.73
55-59	0.00693	0.0341	0.9659	89376	3044	439270	2259308	25.28
60-64	0.01174	0.0570	0.9430	86332	4925	419348	1820038	21.08
65-69	0.02084	0.0990	0.9010	81407	8062	386880	1400690	17.21
70-74	0.03271	0.1512	0.8488	73345	11089	339003	1013810	13.82
75-79	0.04743	0.2120	0.7880	62256	13200	278280	674808	10.84
80-84	0.09402	0.3806	0.6194	49056	18672	198600	396528	8.08
85+	0.15351	1.0000	0.0000	30384	30384	197928	197928	6.51

Appendix II

Note on Bennett and Horiuchi (1981) Method

[This section is based on (Gjonca, 2006) and Bennet and Horiuchi (1981)]

- The method assumes a population with zero net migration,
- Expected deaths are calculated using census data and completeness coefficients for deaths that are calculated with comparing expected deaths and observed deaths.
- Bennet and Horiuchi (1981), use the following formula:

$\hat{N}(a-5) = \hat{N}(a)\exp[5r_{a-5}] + {}_5D_{a-5}\exp[2.5r_{a-5}]$. Estimated number of people at age a-5 is equal to estimated number of people at age a and the deaths of the cohort. Growth rate r is also taken into account.

- Age category 0-5 is not used in the model. Number of births affect this category. Therefore, adjusted ${}_n m_x$ values in abridged life tables in Appendix I do not include ${}_1 m_0$ and ${}_4 m_1$. DSA data provided by Hacettepe Institute of Population Studies is used for death rates under 1 and 1-5.
- The coefficients for five years periods is calculated and average death rates are corrected with the coefficients.
- With comparison of corrected/adjusted death rates and Bennet-Horiuchi method, final results are achieved considering best fit.