

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.021469272	0.978530728	100000	2146.92722	98024.82696	6755569.689	67.55569689
1	0.001687123	0.998312877	97853.07278	165.0901338	97770.52771	6657544.862	68.03613492
2	0.000944606	0.999055394	97687.98265	92.27661125	97641.84434	6559774.335	67.15026922
3	0.00089601	0.99910399	97595.70603	87.44669533	97551.98269	6462132.49	66.21328696
4	0.000670857	0.999329143	97508.25934	65.41408197	97475.5523	6364580.508	65.27221951
5	0.000653423	0.999346577	97442.84526	63.67136762	97411.00957	6267104.955	64.31570156
6	0.000558843	0.999441157	97379.17389	54.41963468	97351.96407	6169693.946	63.35742746
7	0.000513725	0.999486275	97324.75426	49.99812212	97299.75519	6072341.982	62.39257451
8	0.000496283	0.999503717	97274.75613	48.27576132	97250.61825	5975042.226	61.42438659
9	0.000469673	0.999530327	97226.48037	45.66464363	97203.64805	5877791.608	60.45463731
10	0.000439344	0.999560656	97180.81573	42.69584099	97159.46781	5780587.96	59.48280961
11	0.000402689	0.999597311	97138.11989	39.11645955	97118.56166	5683428.492	58.50873477
12	0.000365856	0.999634144	97099.00343	35.52430117	97081.24128	5586309.931	57.53210366
13	0.000356059	0.999643941	97063.47913	34.56034016	97046.19896	5489228.689	56.55297686
14	0.00043984	0.99956016	97028.91879	42.67719351	97007.58019	5392182.49	55.57294215
15	0.000624667	0.999375333	96986.24159	60.58413096	96955.94953	5295174.91	54.59717609
16	0.000907285	0.999092715	96925.65746	87.93915093	96881.68789	5198218.961	53.63098994
17	0.001134536	0.998865464	96837.71831	109.8659115	96782.78536	5101337.273	52.67923865
18	0.001390071	0.998609929	96727.8524	134.4585378	96660.62313	5004554.487	51.73850513
19	0.00158839	0.99841161	96593.39386	153.4279753	96516.67987	4907893.864	50.80982941
20	0.00171364	0.99828636	96439.96589	165.2634089	96357.33418	4811377.184	49.88986817
21	0.001798356	0.998201644	96274.70248	173.1361409	96188.13441	4715019.85	48.97464992
22	0.001763799	0.998236201	96101.56634	169.503805	96016.81443	4618831.716	48.06198163
23	0.001628202	0.998371798	95932.06253	156.1968141	95853.96412	4522814.901	47.14601961
24	0.001523936	0.998476064	95775.86572	145.9563148	95702.88756	4426960.937	46.22209263
25	0.001527888	0.998472112	95629.9094	146.1118175	95556.85349	4331258.05	45.29187653
26	0.00150875	0.99849125	95483.79759	144.0611926	95411.76699	4235701.196	44.36041824
27	0.001623927	0.998376073	95339.73639	154.8248157	95262.32398	4140289.429	43.42669265
28	0.001687587	0.998312413	95184.91158	160.6328611	95104.59515	4045027.105	42.49651587
29	0.001534793	0.998465207	95024.27872	145.8425797	94951.35743	3949922.51	41.56750847
30	0.001497265	0.998502735	94878.43614	142.0581877	94807.40704	3854971.153	40.63063547
31	0.001613897	0.998386103	94736.37795	152.8947449	94659.93058	3760163.746	39.69081178
32	0.001722624	0.998277376	94583.4832	162.9318019	94502.0173	3665503.815	38.75416395
33	0.00195616	0.99804384	94420.5514	184.7016742	94328.20056	3571001.798	37.82017521
34	0.002104711	0.997895289	94235.84973	198.3392275	94136.68011	3476673.597	36.89332252
35	0.00199495	0.99800505	94037.5105	187.6001076	93943.71045	3382536.917	35.9700815
36	0.002194799	0.997805201	93849.91039	205.9816747	93746.91955	3288593.207	35.04098398
37	0.00243629	0.99756371	93643.92872	228.1437978	93529.85682	3194846.287	34.11696125
38	0.002659618	0.997340382	93415.78492	248.450258	93291.55979	3101316.43	33.19906195
39	0.002775633	0.997224367	93167.33466	258.598334	93038.03549	3008024.87	32.28626086
40	0.002933518	0.997066482	92908.73633	272.5494637	92772.4616	2914986.835	31.37473342
41	0.003081467	0.996918533	92636.18686	285.4553815	92493.45917	2822214.373	30.46557149
42	0.003678958	0.996321042	92350.73148	339.7544699	92180.85425	2729720.914	29.55819483
43	0.004088131	0.995911869	92010.97701	376.1528878	91822.90057	2637540.06	28.66549346
44	0.004536162	0.995463838	91634.82412	415.6704447	91426.9889	2545717.159	27.78111033
45	0.004866803	0.995133197	91219.15368	443.9456931	90997.18083	2454290.17	26.9054258
46	0.004974955	0.995025045	90775.20799	451.6025601	90549.40671	2363292.99	26.03456431
47	0.005126845	0.994873155	90323.60543	463.0750847	90092.06788	2272743.583	25.16223753
48	0.005598453	0.994401547	89860.53034	503.0799818	89608.99035	2182651.515	24.28932376
49	0.006130184	0.993869816	89357.45036	547.7776223	89083.56155	2093042.525	23.423257
50	0.006862057	0.993137943	88809.67274	609.4170401	88504.96422	2003958.963	22.56464754
51	0.007900511	0.992099489	88200.2557	696.8271279	87851.84213	1915453.999	21.71710256
52	0.008776606	0.991223394	87503.42857	767.9831049	87119.43702	1827602.157	20.8860634
53	0.0101173721	0.989826279	86735.44547	882.4222003	86294.23437	1740482.72	20.06656806
54	0.01139756	0.98860244	85853.02326	978.5150022	85363.76576	1654188.485	19.26767891
55	0.013075263	0.986924737	84874.50826	1109.756542	84319.62999	1568824.72	18.48405077
56	0.014682419	0.985317581	83764.75172	1229.869198	83149.81712	1484505.09	17.7223123
57	0.016718923	0.983281077	82534.88252	1379.894342	81844.93535	1401355.273	16.9789455
58	0.018322132	0.981677868	81154.98818	1486.93239	80411.52199	1319510.337	16.25914028
59	0.020558547	0.979441453	79668.05579	1637.85944	78849.12607	1239098.815	15.55327042
60	0.022738193	0.977261807	78030.19635	1774.265692	77143.0635	1160249.689	14.86923965
61	0.025500295	0.974499705	76255.93066	1944.548754	75283.65628	1083106.626	14.20357232
62	0.028695726	0.971304274	74311.3819	2132.419083	73245.17236	1007822.969	13.56216159
63	0.031991457	0.968008543	72178.96282	2309.110172	71024.40774	934577.797	12.94806354
64	0.034787038	0.965212962	69869.85265	2430.565247	68654.57003	863553.3892	12.35945628
65	0.038305825	0.961694175	67439.2874	2583.317511	66147.62865	794898.8192	11.78688046
66	0.041690066	0.958309934	64855.96989	2703.849634	63504.04508	728751.1906	11.23645505
67	0.045433203	0.954566797	62152.12026	2823.769878	60740.23532	665247.1455	10.70353099
68	0.049549098	0.950450902	59328.35038	2939.666229	57858.51727	604506.9102	10.18917442
69	0.053210512	0.946789488	56388.68415	3000.470771	54888.44877	546648.3929	9.694292413
70	0.057885062	0.942114938	53388.21338	3090.380063	51843.02335	491759.9442	9.211020804
71	0.062744947	0.937255053	50297.83332	3155.93491	48719.86586	439916.9208	8.746239983
72	0.068234304	0.931765696	47141.89841	3216.694643	45533.55108	391197.0549	8.298288108
73	0.072579352	0.927420648	43925.20376	3188.062812	42331.17236	345663.5039	7.869365973
74	0.078443841	0.921556159	40737.14095	3195.577816	39139.35204	303332.3315	7.44608788
75	0.083873334	0.916126666	37541.56313	3148.736048	35967.19511	264192.9795	7.037346274
76	0.090197704	0.909802296	34392.82709	3102.154025	32841.75007	228225.7843	6.63585415
77	0.098649493	0.901350507	31290.67306	3086.809037	29747.26854	195384.0343	6.244162083
78	0.108018155	0.891981845	28203.86402	3046.529356	26680.59935	165636.7657	5.872839466

79	0.118873099	0.881126901	25157.33467	2990.530341	23662.0695	138956.1664	5.523485227
80	0.12999685	0.87000315	22166.80433	2881.614741	20725.99696	115294.0969	5.201205153
81	0.138809539	0.861190461	19285.18959	2676.968282	17946.70545	94568.09993	4.90366452
82	0.149520011	0.850479989	16608.2213	2483.261424	15366.59059	76621.39448	4.613461796
83	0.160341524	0.839658476	14124.95988	2264.817587	12992.55109	61254.80389	4.336635602
84	0.175151593	0.824848407	11860.14229	2077.322816	10821.48088	48262.25281	4.069281094
85	0.184418125	0.815581875	9782.819476	1804.129221	8880.754866	37440.77192	3.827196445
86	0.200567431	0.799432569	7978.690255	1600.265408	7178.557551	28560.01706	3.579537009
87	0.215244047	0.784755953	6378.424847	1372.917975	5691.965859	21381.4595	3.352153552
88	0.232430998	0.767569002	5005.506871	1163.434958	4423.789392	15689.49365	3.13444653
89	0.249662902	0.750337098	3842.071913	959.2228235	3362.460501	11265.70425	2.932195052
90	0.267922372	0.732077628	2882.84909	772.3797663	2496.659206	7903.243752	2.741469812
91	0.287231802	0.712768198	2110.469323	606.1939077	1807.372369	5406.584545	2.561792529
92	0.30760705	0.69239295	1504.275416	462.7257237	1272.912554	3599.212176	2.392655054
93	0.329056095	0.670943905	1041.549692	342.7282744	870.1855546	2326.299622	2.23349845
94	0.35157759	0.64842241	698.8214174	245.6899498	575.9764425	1456.114068	2.083671209
95	0.375159333	0.624840667	453.1314676	169.9964989	368.1332182	880.137625	1.942344966
96	0.399776672	0.600223328	283.1349687	113.1907556	226.5395909	512.0044069	1.808340415
97	0.425390902	0.574609098	169.9442131	72.29272217	133.797852	285.464816	1.679756026
98	0.45194768	0.54805232	97.6514909	44.1333648	75.5848085	151.666964	1.553145401
99	0.479375545	0.520624455	53.5181261	25.65528086	40.69048567	76.08215552	1.421614714
100	0.507584607	0.492415393	27.86284523	14.14275136	20.79146956	35.39166985	1.270210187
101	0.536465509	0.463534491	13.72009388	7.360357145	10.03991531	14.60020029	1.064147259
102	0.565888754	0.434111246	6.359736734	3.598903497	4.560284986	4.560284986	0.717055623
103	0.595704534	0.404295466	2.760833237	2.760833237	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.01617787	0.98382213	100000	1617.786996	98511.63596	7365525.193	73.65525193
1	0.001474252	0.998525748	98382.213	145.0401663	98309.69292	7267013.557	73.8651158
2	0.000833891	0.999166109	98237.17284	81.91904745	98196.21331	7168703.864	72.97343416
3	0.000463922	0.999536078	98155.25379	45.53638683	98132.4856	7070507.65	72.0339195
4	0.000473397	0.999526603	98109.7174	46.44485037	98086.49498	6972375.165	71.06712107
5	0.000445861	0.999554139	98063.27255	43.72259034	98041.41126	6874288.67	70.10054316
6	0.000418013	0.999581987	98019.54996	40.97345998	97999.06323	6776247.258	69.13158917
7	0.000336665	0.999663335	97978.5765	32.98596532	97962.08352	6678248.195	68.16029007
8	0.000292175	0.999707825	97945.59054	28.61728355	97931.2819	6580286.112	67.1830766
9	0.000268258	0.999731742	97916.97325	26.2670453	97903.83973	6482354.83	66.20256544
10	0.000268773	0.999731227	97890.70621	26.31036669	97877.55102	6384450.99	65.22019543
11	0.000225312	0.999774688	97864.39584	22.04998678	97853.37085	6286573.439	64.23759514
12	0.000218105	0.999781895	97842.34585	21.33988143	97831.67591	6188720.068	63.2519592
13	0.000252321	0.999747679	97821.00597	24.68232739	97808.66481	6090888.392	62.26564869
14	0.000274929	0.999725071	97796.32365	26.88706237	97782.88011	5993079.728	61.28123741
15	0.000348666	0.999651334	97769.43658	34.08891318	97752.39213	5895296.847	60.29795254
16	0.000426817	0.999573183	97735.34767	41.7151024	97714.49012	5797544.455	59.31880935
17	0.000472982	0.999527018	97693.63257	46.20730612	97670.52891	5699829.965	58.34392493
18	0.000484479	0.999515521	97647.42526	47.30814174	97623.77119	5602159.436	57.371297
19	0.000498216	0.999501784	97600.11712	48.62595009	97575.80415	5504535.665	56.39886332
20	0.000462786	0.999537214	97551.49117	45.14543362	97528.91845	5406959.861	55.42672691
21	0.000449337	0.999550663	97506.34574	43.8132554	97484.43911	5309430.942	54.45215798
22	0.000496646	0.999503354	97462.53248	48.40433311	97438.33031	5211946.503	53.47641161
23	0.000559653	0.999440347	97414.12815	54.51814776	97386.86907	5114508.173	52.50273518
24	0.000544834	0.999455166	97359.61	53.04479133	97333.0876	5017121.304	51.53185499
25	0.000576168	0.999423832	97306.56521	56.06495872	97278.53273	4919788.216	50.55967401
26	0.0005795	0.9994205	97250.50025	56.35668338	97222.32191	4822509.684	49.58853344
27	0.000541577	0.999458423	97194.14357	52.63806756	97167.82453	4725287.362	48.61699675
28	0.000616602	0.999383398	97141.5055	59.89765765	97111.55667	4628119.537	47.6430699
29	0.000688738	0.999311262	97081.60784	66.8637484	97048.17597	4531007.981	46.67215636
30	0.000695224	0.999304776	97014.74409	67.44694734	96981.02062	4433959.805	45.70397877
31	0.000798187	0.999201813	96947.29715	77.38207957	96908.60611	4336978.784	44.73542751
32	0.000945474	0.999054526	96869.91507	91.5880056	96824.12106	4240070.178	43.77076386
33	0.000976674	0.999023326	96778.32706	94.5208354	96731.06664	4143246.057	42.81171397
34	0.000987294	0.999012706	96683.80623	95.45536743	96636.07854	4046514.99	41.8530791
35	0.001087558	0.998912442	96588.35086	105.045404	96535.82816	3949878.912	40.89394711
36	0.001047411	0.998952589	96483.30545	101.0576898	96432.77661	3853343.083	39.93792569
37	0.001120987	0.998879013	96382.24776	108.0432122	96328.22616	3756910.307	38.97927672
38	0.001352998	0.9988647002	96274.20455	130.2588521	96209.07513	3660582.081	38.02245989
39	0.001444895	0.9988555105	96143.9457	138.9179396	96074.48673	3564373.006	37.0732965
40	0.001551255	0.9988448745	96005.02776	148.92282517	95930.56363	3468298.519	36.12621755
41	0.001864499	0.998135501	95856.09951	178.7235886	95766.73771	3372367.955	35.18156875
42	0.002093263	0.997906737	95677.37592	200.2779299	95577.23695	3276601.217	34.24635329
43	0.002324332	0.997675668	95477.09799	221.9205067	95366.13774	3181023.98	33.31714147
44	0.00250063	0.99749937	95255.17748	238.1979887	95136.07849	3085657.843	32.39359712
45	0.002551054	0.997448946	95016.97949	242.3934291	94895.78278	2990521.764	31.47355115
46	0.002628307	0.997371693	94774.58607	249.0966725	94650.03773	2895625.981	30.55276843
47	0.002935232	0.997064768	94525.48939	277.4542653	94386.76226	2800975.944	29.63196448
48	0.003393322	0.996606678	94248.03513	319.8139076	94088.12817	2706589.181	28.71772529
49	0.003720479	0.996279521	93928.22122	349.4580128	93753.49221	2612501.053	27.81380313
50	0.004018887	0.995981113	93578.76321	376.0824625	93390.72198	2518747.561	26.91580306
51	0.004434832	0.995565168	93202.68074	413.3382133	92996.01164	2425356.839	26.02239356
52	0.005048808	0.994951192	92789.34253	468.4755696	92555.10475	2332360.827	25.13608529
53	0.005701168	0.994298832	92320.86696	526.3367938	92057.69856	2239805.723	24.26109932
54	0.006499821	0.993500179	91794.53017	611.9474951	91496.20617	2147748.024	23.39734209
55	0.007064002	0.992935998	91197.88217	644.2220351	90875.77116	2056251.818	22.5471444
56	0.007571406	0.992428594	90553.66014	685.6185444	90210.85087	1965376.047	21.70399345
57	0.008140245	0.991859755	89868.04159	731.5478596	89502.26766	1875165.196	20.86576232
58	0.008955654	0.991044346	89136.49373	798.2756105	88737.35593	1785662.928	20.03290519
59	0.009973641	0.990026359	88338.21812	881.0536582	87897.69129	1696925.572	19.20941591
60	0.011151786	0.988848214	87457.16446	975.3035484	86969.51269	1609027.881	18.39789674
61	0.01241106	0.98758894	86481.86092	1073.331556	85945.19514	1522058.368	17.59974117
62	0.013661859	0.986338141	85408.52936	1166.839306	84825.10971	1436113.173	16.81463414
63	0.01524448	0.98475552	84241.69005	1284.220724	83599.57969	1351288.064	16.04060962
64	0.017218253	0.982781747	82957.46933	1428.382716	82243.27797	1267688.484	15.28118558
65	0.019320869	0.980679131	81529.08661	1575.212796	80741.48022	1185445.206	14.5401507
66	0.021376097	0.978623903	79953.87382	1709.101792	79099.32292	1104703.726	13.816763
67	0.023705239	0.976294761	78244.77203	1854.811017	77317.36652	1025604.403	13.10764127
68	0.026326237	0.973673763	76389.96101	2011.060206	75384.43091	948287.0362	12.41376516
69	0.029532234	0.970467766	74378.9008	2196.575102	73280.61325	872902.6053	11.7358901
70	0.033635742	0.966364258	72182.3257	2427.906054	70968.37267	799621.9921	11.07780865
71	0.038168399	0.961831601	69754.41965	2662.414506	68423.21239	728653.6194	10.44598497
72	0.0429649	0.9570351	67092.00514	2882.601258	65650.70451	660230.407	9.84067186
73	0.047622279	0.952377721	64209.40388	3057.798132	62680.50482	594579.7025	9.260009695
74	0.0526979	0.9473021	61151.60575	3222.561181	59540.32516	531899.1977	8.698041387
75	0.058452847	0.941547153	57929.04457	3386.11758	56235.98578	472358.8725	8.154093961
76	0.065241528	0.934758472	54542.92699	3558.462319	52763.69503	416122.8867	7.62927319
77	0.072868953	0.927131047	50984.46308	3715.184431	49126.87086	363359.1917	7.1268612
78	0.081327227	0.918672773	47269.27865	3844.27934	45347.13898	314232.3208	6.647707133

79	0.090511342	0.909488658	43424.99931	3930.454943	41459.77184	268885.1819	6.191944413
80	0.100748503	0.899251497	39494.54437	3979.016221	37505.03625	227425.41	5.758400652
81	0.111648387	0.888351613	35515.52814	3965.251415	33532.90244	189920.3738	5.347530607
82	0.123883805	0.876116195	31550.27673	3908.568319	29595.99257	156387.4713	4.956770195
83	0.137450456	0.862549544	27641.70841	3799.365432	25742.0257	126791.4788	4.586962458
84	0.152361056	0.847638944	23842.34298	3632.644542	22026.02071	101049.4531	4.238235024
85	0.168717	0.831283	20209.69844	3409.719691	18504.83859	79023.43236	3.910173752
86	0.186619574	0.813380426	16799.97875	3135.204876	15232.37631	60518.59377	3.602301805
87	0.206167662	0.793832338	13664.77387	2817.234482	12256.15663	45286.21746	3.31408466
88	0.227454873	0.772545127	10847.53939	2467.32569	9613.876543	33030.06083	3.044935782
89	0.250565999	0.749434001	8380.213698	2099.796619	7330.315389	23416.18429	2.794222812
90	0.275572761	0.724427239	6280.417079	1730.711875	5415.061142	16085.8689	2.561273988
91	0.302528784	0.697471216	4549.705204	1376.416784	3861.496813	10670.80776	2.345384432
92	0.331463825	0.668536175	3173.288421	1051.830316	2647.373263	6809.310943	2.145821634
93	0.362377287	0.637622713	2121.458104	768.7682317	1737.073989	4161.937681	1.961828835
94	0.39523117	0.60476883	1352.689873	534.6252005	1085.377273	2424.863692	1.792623528
95	0.429942671	0.570057329	818.0646723	351.7209104	642.2042171	1339.486419	1.637384506
96	0.466376809	0.533623191	466.3437619	217.4919156	357.5978041	697.2822024	1.495210742
97	0.504339563	0.495660437	248.8518463	125.5058314	186.0989307	339.6843983	1.365006542
98	0.543572211	0.456427789	123.346015	67.04746608	89.82228193	153.5854676	1.245159543
99	0.583747696	0.416252304	56.2985489	32.86414823	39.86647478	63.76318567	1.132590216
100	0.624469998	0.375530002	23.43440067	14.63408015	16.1173606	23.89671089	1.019727845
101	0.665277574	0.334722426	8.800320524	5.854655886	5.872992581	7.77935029	0.883984881
102	0.705651903	0.294348097	2.945664638	2.078613857	1.906357709	1.906357709	0.647174049
103	0.745031999	0.254968001	0.867050781	0.867050781	0	0	0