

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.023485236	0.976514764	100000	2348.523611	97839.35828	6694817.428	66.94817428
1	0.00203734	0.99796266	97651.47639	198.9492992	97552.00174	6596978.07	67.55635771
2	0.001210941	0.998789059	97452.52709	118.0092844	97393.52245	6499426.068	66.69325324
3	0.000748937	0.999251063	97334.51781	72.8974349	97298.06909	6402032.546	65.77350656
4	0.000624877	0.999375123	97261.62037	60.77650289	97231.23212	6304734.476	64.82242895
5	0.000685612	0.999314388	97200.84387	66.64210539	97167.52282	6207503.244	63.86264766
6	0.000740154	0.999259846	97134.20176	71.89425666	97098.25463	6110335.722	62.90611968
7	0.00072366	0.99927634	97062.30751	70.24009618	97027.18746	6013237.467	61.95234403
8	0.000671623	0.999328377	96992.06741	65.14208539	96959.49637	5916210.279	60.99684683
9	0.000552997	0.999447003	96926.92532	53.60026836	96900.12519	5819250.783	60.0375052
10	0.000432665	0.999567335	96873.32506	41.91367777	96852.36822	5722350.658	59.07044746
11	0.000420135	0.999579865	96831.41138	40.68222957	96811.07026	5625498.29	58.0957998
12	0.000393051	0.999606949	96790.72915	38.04365449	96771.70732	5528687.219	57.12000796
13	0.000455403	0.999544597	96752.68549	44.06150397	96730.65474	5431915.512	56.14227124
14	0.000505646	0.999494354	96708.62399	48.9003063	96684.17384	5335184.857	55.16762246
15	0.000629256	0.999370744	96659.72368	60.82369082	96629.31184	5238500.683	54.1952789
16	0.000926742	0.999073258	96598.89999	89.52224438	96554.13887	5141871.372	53.22908824
17	0.001226341	0.998773659	96509.37775	118.3533683	96450.20106	5045317.233	52.27799982
18	0.00144222	0.99855778	96391.02438	139.0170709	96321.51585	4948867.032	51.34157525
19	0.001631448	0.998368552	96252.00731	157.0301464	96173.49224	4852545.516	50.41500589
20	0.00165449	0.99834551	96094.97716	158.988157	96015.48308	4756372.024	49.4965727
21	0.001643975	0.998356025	95935.98901	157.7163599	95857.13083	4660356.541	48.57777137
22	0.001689144	0.998310856	95778.27265	161.7832738	95697.38101	4564499.41	47.65694018
23	0.001753966	0.998246034	95616.48937	167.7081114	95532.63532	4468802.029	46.73672981
24	0.001731695	0.998268305	95448.78126	165.2882172	95366.13715	4373269.393	45.81796997
25	0.001728738	0.998271262	95283.49304	164.7202041	95201.13294	4277903.256	44.89658302
26	0.001677677	0.998322323	95118.77284	159.5786071	95038.98354	4182702.123	43.973466
27	0.001614647	0.998385353	94959.19423	153.325581	94882.53144	4087663.14	43.04652301
28	0.001513741	0.998486259	94805.86865	143.5115721	94734.11287	3992780.608	42.11533173
29	0.001561013	0.998438987	94662.35708	147.7691626	94588.4725	3898046.495	41.17842209
30	0.001553647	0.998446353	94514.58792	146.8422626	94441.16679	3803458.023	40.24202091
31	0.001652077	0.998347923	94367.74565	155.9027853	94289.79426	3709016.856	39.30386204
32	0.001765718	0.998234282	94211.84287	166.3515643	94128.66709	3614727.062	38.36807509
33	0.001866272	0.998133728	94045.4913	175.51447	93957.73407	3520598.395	37.43505772
34	0.001968165	0.998031835	93869.97683	184.7515992	93777.60103	3426640.661	36.50411746
35	0.00207537	0.99792463	93685.22524	194.4315067	93588.00948	3332863.06	35.57511925
36	0.002169095	0.997830905	93490.79373	202.7903956	93389.39853	3239275.05	34.64806449
37	0.002235151	0.997664849	93288.00333	217.8415666	93179.08255	3145885.652	33.72229589
38	0.002496093	0.997503907	93070.16177	232.3118177	92954.00586	3052706.569	32.80005655
39	0.002673119	0.997326881	92837.84995	248.1666506	92713.76662	2959752.563	31.88088226
40	0.003037399	0.996962601	92589.6833	281.2318224	92449.06739	2867038.797	30.96499194
41	0.003194644	0.996805356	92308.45148	294.892667	92161.00514	2774589.729	30.0578082
42	0.003415602	0.996584398	92013.55881	314.2816685	91856.41797	2682428.724	29.15253751
43	0.003600935	0.996399065	91699.27714	330.2031726	91534.17555	2590572.306	28.25073858
44	0.003848164	0.996151836	91369.07397	351.603178	91193.27238	2499038.131	27.35102833
45	0.004368601	0.995631399	91017.47079	397.6190093	90818.66128	2407844.858	26.45475465
46	0.004931778	0.995068222	90619.85178	446.9169545	90396.3933	2317026.197	25.56863812
47	0.005356169	0.994643831	90172.93483	482.9814371	89931.44411	2226629.804	24.69288382
48	0.005914788	0.994085212	89689.95339	530.4970427	89424.70487	2136698.36	23.82316278
49	0.00665376	0.99334624	89159.45635	593.2455873	88862.83355	2047273.655	22.96193515
50	0.007468184	0.992531816	88566.21076	661.428716	88235.4964	1958410.821	22.11239257
51	0.00866745	0.99133255	87904.78204	761.910339	87523.82687	1870175.325	21.27501236
52	0.009752746	0.990247254	87142.8717	849.8822685	86717.93057	1782651.498	20.45665311
53	0.011039983	0.988960017	86292.98943	952.6731761	85816.65285	1695933.567	19.65320217
54	0.012309772	0.987690228	85340.31626	1050.51983	84815.05634	1610116.914	18.86701368
55	0.013695234	0.986304766	84289.79643	1154.368527	83712.61217	1525301.858	18.09592528
56	0.015157456	0.984842544	83135.4279	1260.12155	82505.36713	1441589.246	17.34025171
57	0.017028903	0.982971097	81875.30635	1394.24666	81178.18302	1359083.879	16.59943565
58	0.019263925	0.980736075	80481.05969	1550.381102	79705.86914	1277905.696	15.87834083
59	0.021792487	0.978207513	78930.67859	1720.095758	78070.63071	1198199.827	15.18040701
60	0.024379291	0.975620709	77210.58283	1882.339249	76269.41321	1120129.196	14.50745681
61	0.027033255	0.972966745	75328.24358	2036.367648	74310.05976	1043859.783	13.85748204
62	0.029549108	0.970450892	73291.87593	2165.709532	72209.02117	969549.723	13.22861109
63	0.032140168	0.967859832	71126.1664	2286.006913	69983.16295	897340.7018	12.61618258
64	0.035207051	0.964792949	68840.15949	2423.658982	67628.33	827357.5389	12.01853024
65	0.038225858	0.961774142	66416.50051	2538.827746	65147.08663	759729.2089	11.43886238
66	0.042337003	0.957662997	63877.67276	2704.389193	62525.47816	694582.1222	10.87362911
67	0.045825039	0.954174961	61173.28357	2803.268108	59771.64951	632056.6441	10.33223341
68	0.050161235	0.949838765	58370.01546	2927.912037	56906.05944	572284.9945	9.804434521
69	0.053837384	0.946162616	55442.10342	2984.857789	53949.67453	515378.9351	9.29580415
70	0.058966995	0.941033005	52457.24563	3093.246127	50910.62257	461429.2606	8.7962922
71	0.0639016	0.9360984	49363.99951	3154.438553	47786.78023	410518.638	8.316154325
72	0.070232961	0.929767039	46209.56095	3245.434308	44586.8438	362731.8578	7.849714438
73	0.076420126	0.923579874	42964.12664	3283.323963	41322.46466	318145.014	7.404898897
74	0.08379522	0.91620478	39680.80268	3325.061604	38018.27188	276822.5493	6.976233609
75	0.09218642	0.90781358	36355.74108	3351.505613	34679.98827	238804.2774	6.568543794
76	0.100780675	0.899219325	33004.23547	3326.189122	31341.1409	204124.2892	6.184790718
77	0.10913793	0.89086207	29678.04634	3239.00054	28058.54607	172783.1483	5.821917867
78	0.119002438	0.880997562	26439.0458	3146.310912	24865.89035	144724.6022	5.473896572

79	0.12750064	0.87249936	23292.73489	2969.838599	21807.81559	119858.7118	5.145755206
80	0.138022894	0.861977106	20322.89629	2805.024959	18920.38381	98050.89625	4.824651705
81	0.149426529	0.850573471	17517.87133	2617.634703	16209.05398	79130.51244	4.517130588
82	0.162399077	0.837600923	14900.23663	2419.784677	13690.34429	62921.45845	4.22284961
83	0.176365144	0.823634856	12480.45195	2201.116707	11379.8936	49231.11416	3.944657961
84	0.191358279	0.808641721	10279.33525	1967.0359	9295.817297	37851.22056	3.682263459
85	0.20718377	0.79281623	8312.299347	1722.173516	7451.212589	28555.40326	3.435319407
86	0.224127484	0.775872516	6590.125831	1477.028324	5851.611669	21104.19067	3.202395708
87	0.242233572	0.757766428	5113.097507	1238.563872	4493.815571	15252.57901	2.983040903
88	0.261541136	0.738458864	3874.533635	1013.349928	3367.858671	10758.76343	2.776789273
89	0.282082643	0.717917357	2861.183707	807.0902631	2457.638576	7390.904763	2.583163306
90	0.303882131	0.696117869	2054.093444	624.2022931	1741.992298	4933.266187	2.40167564
91	0.326953214	0.673046786	1429.891151	467.5075069	1196.137398	3191.27389	2.231829946
92	0.351296909	0.648703091	962.3836442	338.0823993	793.3424445	1995.136492	2.07311197
93	0.376899311	0.623100689	624.3012449	235.2987088	506.6518905	1201.794048	1.925022667
94	0.403729155	0.596270845	389.0025361	157.0516653	310.4767034	695.1421572	1.786986183
95	0.431735351	0.568264649	231.9508708	100.1413907	181.8801754	384.6654538	1.658391937
96	0.460844561	0.539155439	131.8094801	60.74368204	101.4376391	202.7852783	1.538472636
97	0.490958959	0.509041041	71.06579806	34.89039021	53.62060295	101.3476393	1.426109915
98	0.521954303	0.478045697	36.17540784	18.88190978	26.73445295	47.72703631	1.319322688
99	0.553678512	0.446321488	17.29349806	9.575038269	12.50597893	20.99258336	1.21390035
100	0.585950933	0.414049067	7.718459794	4.522638715	5.457140436	8.486604428	1.099520455
101	0.618562533	0.381437467	3.195821079	1.97681518	2.207413489	3.029463991	0.947945431
102	0.651277236	0.348722764	1.219005899	0.793910793	0.822050502	0.822050502	0.674361382
103	0.683834637	0.316165363	0.425095106	0.425095106	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.018077394	0.981922606	100000	1807.739359	98336.87979	7289417.184	72.89417184
1	0.001650548	0.998349452	98192.26064	162.0710465	98111.22512	7191080.304	73.23469546
2	0.000822786	0.999177214	98030.18959	80.65789652	97989.86065	7092969.079	72.35494605
3	0.000583377	0.999416623	97949.5317	57.14148575	97920.96095	6994979.219	71.414116
4	0.000462337	0.999537663	97892.39021	45.25932185	97869.76055	6897058.258	70.4555098
5	0.000435017	0.999564983	97847.13089	42.56515561	97825.84831	6799188.497	69.48786781
6	0.00039237	0.99960763	97804.56573	38.37559104	97785.37794	6701362.649	68.51789176
7	0.000351048	0.999648952	97766.19014	34.32063025	97749.02983	6603577.271	67.54459043
8	0.00032952	0.99967048	97731.86951	32.20459055	97715.76722	6505828.241	66.56813457
9	0.000311205	0.999688795	97699.66492	30.40460899	97684.46262	6408112.474	65.5899125
10	0.000300467	0.999699533	97669.26031	29.34638608	97654.58712	6310428.011	64.61017511
11	0.000281445	0.999718555	97639.91393	27.48028497	97626.17379	6212773.424	63.62944388
12	0.00027893	0.99972107	97612.43364	27.2270696	97598.82011	6115147.25	62.64721637
13	0.000267162	0.999732838	97585.20657	26.07108769	97572.17103	6017548.43	61.66455595
14	0.000314678	0.999685322	97559.13549	30.69973763	97543.78562	5919976.259	60.68090118
15	0.000321516	0.999678484	97528.43575	31.35699158	97512.75725	5822432.474	59.69984476
16	0.000378429	0.999621571	97497.07876	36.89576948	97478.63087	5724919.716	58.7188846
17	0.00043581	0.99956419	97460.18299	42.47412392	97438.94592	5627441.085	57.74092468
18	0.000469794	0.999530206	97417.70886	45.76626045	97394.82573	5530002.14	56.76588173
19	0.000467603	0.999532397	97371.9426	45.53140283	97349.1769	5432607.314	55.79232753
20	0.000488897	0.999511103	97326.4112	47.58256277	97302.61992	5335258.137	54.81819448
21	0.000501507	0.999498493	97278.82864	48.7859968	97254.43564	5237955.517	53.84476345
22	0.000557526	0.999442474	97230.04264	54.20823926	97202.93852	5140701.081	52.87152964
23	0.000617002	0.999382998	97175.8344	59.95772924	97145.85554	5043498.143	51.9007444
24	0.000623279	0.999376721	97115.87667	60.53029809	97085.61152	4946352.287	50.93247836
25	0.000596519	0.999403481	97055.34637	57.89539114	97026.39868	4849266.676	49.96393148
26	0.000552261	0.999447739	96997.45098	53.56787347	96970.66705	4752240.277	48.99345528
27	0.000590151	0.999409849	96943.88311	57.21153035	96915.27734	4655269.61	48.02025111
28	0.000599665	0.999400335	96886.67158	58.09959099	96857.62178	4558354.333	47.04831179
29	0.000643545	0.999356455	96828.57199	62.31355379	96797.41521	4461496.711	46.07624195
30	0.000747489	0.999252511	96766.25843	72.3317385	96730.09256	4364699.296	45.10559121
31	0.000850954	0.999149046	96693.92669	82.28204694	96652.78567	4267969.203	44.13895835
32	0.00102647	0.99897353	96611.64465	99.1689281	96562.06018	4171316.417	43.17612471
33	0.001135531	0.998864469	96512.47572	109.5928959	96457.67927	4074754.357	42.21997547
34	0.001246217	0.998753783	96402.88282	120.1388939	96342.81338	3978296.678	41.26740365
35	0.001357038	0.998642962	96282.74393	130.6593854	96217.41424	3881953.865	40.31827206
36	0.001426261	0.998573739	96152.08454	137.1380032	96083.51554	3785736.45	39.37238042
37	0.0015004	0.9984996	96014.94654	144.0608001	95942.91614	3689652.935	38.42790178
38	0.00166168	0.99833832	95870.88574	159.3067311	95791.23238	3593710.019	37.4848943
39	0.001656327	0.998343673	95711.57901	158.5296274	95632.3142	3497918.786	36.54645365
40	0.001887451	0.998112549	95553.04938	180.3517131	95462.87353	3402286.472	35.60625741
41	0.001979723	0.998020277	95372.69767	188.8114987	95278.29192	3306823.599	34.67264405
42	0.001986598	0.998013402	95183.88617	189.092078	95089.34013	3211545.307	33.74043061
43	0.002050768	0.997949232	94994.79409	194.8122816	94897.38795	3116455.967	32.80659742
44	0.002240011	0.997759989	94799.98181	212.3529873	94693.80532	3021558.579	31.8729869
45	0.002415182	0.997584818	94587.62882	228.4463489	94473.40565	2926864.773	30.94342051
46	0.002733391	0.997266609	94359.18248	257.9205779	94230.22219	2832391.368	30.01712492
47	0.003035387	0.996964613	94101.2619	285.6337767	93958.44501	2738161.145	29.09802791
48	0.003508757	0.996491243	93815.62812	329.1762415	93651.04	2644202.7	28.1850983
49	0.00392068	0.99607932	93486.45188	366.5304503	93303.18665	2550551.66	27.28258062
50	0.004334975	0.995665025	93119.92143	403.6725378	92918.08516	2457248.474	26.38799986
51	0.004762292	0.995237708	92716.24889	441.541894	92495.47794	2364330.389	25.5007123
52	0.005048248	0.994951752	92274.707	465.8255711	92041.79421	2271834.911	24.62034272
53	0.005610087	0.994389913	91808.88143	515.0557835	91551.35353	2179793.117	23.742726
54	0.006146359	0.993853641	91293.82564	561.1246401	91013.26332	2088241.763	22.87385536
55	0.006845228	0.993154772	90732.701	621.0859976	90422.158	1997228.5	22.01222357
56	0.007370704	0.992629296	90111.61501	664.1860352	89779.52199	1906806.342	21.16049459
57	0.008066566	0.991933434	89447.42897	721.5335897	89086.66217	1817026.82	20.31390774
58	0.009100091	0.990899909	88725.89538	807.4136994	88322.18853	1727940.157	19.4750377
59	0.010498782	0.989501218	87918.48168	923.0370083	87456.96318	1639617.969	18.64929805
60	0.011704631	0.988295369	86995.44467	1018.249536	86486.3199	1552161.006	17.8418653
61	0.01296383	0.98703617	85977.19514	1114.593734	85419.89827	1465674.686	17.04724937
62	0.014376514	0.985623486	84862.6014	1220.028336	84252.58723	1380254.788	16.26458257
63	0.015808385	0.984191615	83642.57307	1322.25397	82981.44608	1296002.2	15.49452812
64	0.01773397	0.98226603	82320.3191	1459.866044	81590.38607	1213020.754	14.73537478
65	0.019992638	0.980007362	80860.45305	1616.613771	80052.14617	1131430.368	13.99238225
66	0.022447222	0.977552778	79243.83928	1778.804018	78354.43727	1051378.222	13.26763357
67	0.024860344	0.975139656	77465.03526	1925.807457	76502.13153	973023.7848	12.56081252
68	0.028222305	0.971777695	75539.22781	2131.891111	74473.28225	896521.6532	11.86829253
69	0.031489526	0.968510474	73407.3367	2311.562237	72251.55558	822048.371	11.19844975
70	0.035682939	0.964317061	71095.77446	2536.906161	69827.32138	749796.8154	10.54629225
71	0.040425446	0.959574554	68558.8683	2771.522804	67173.10689	679969.494	9.918038482
72	0.045516858	0.954483142	65787.34549	2994.43324	64290.12887	612796.3871	9.314806405
73	0.051507484	0.948492516	62792.91225	3234.304939	61175.75978	548506.2583	8.735161957
74	0.057106109	0.942893891	59558.60731	3401.160339	57858.02714	487330.4985	8.182368938
75	0.064408324	0.935591676	56157.44697	3617.007057	54348.94345	429472.4713	7.647649501
76	0.072318275	0.927681725	52540.43992	3799.633994	50640.62292	375123.5279	7.139710449
77	0.080428252	0.919571748	48740.80592	3920.137828	46780.73701	324482.905	6.657315135
78	0.089674203	0.910325797	44820.6681	4019.25771	42811.03924	277702.168	6.195850704

79	0.099885532	0.900114468	40801.41039	4075.470581	38763.6751	234891.1287	5.756936501
80	0.109795514	0.890204486	36725.93981	4032.34343	34709.76809	196127.4536	5.340297748
81	0.123715247	0.876284753	32693.59637	4044.696363	30671.24819	161417.6855	4.937287525
82	0.137688715	0.862311285	28648.90001	3944.630237	26676.58489	130746.4373	4.563750695
83	0.152100419	0.847899581	24704.26977	3757.529776	22825.50489	104069.8525	4.212626133
84	0.167845755	0.832154245	20946.74	3515.821381	19188.82931	81244.34757	3.878615363
85	0.186107246	0.813892754	17430.91862	3244.020255	15808.90849	62055.51826	3.56008307
86	0.20771664	0.79228336	14186.89836	2946.854856	12713.47093	46246.60977	3.259811172
87	0.231304753	0.768695247	11240.04351	2599.875492	9940.10576	33533.13884	2.983363794
88	0.255550956	0.744449044	8640.168015	2208.003195	7536.166417	23593.03308	2.730622025
89	0.281833508	0.718166492	6432.16482	1812.799578	5525.765031	16056.86666	2.49633943
90	0.310206119	0.689793881	4619.365242	1432.955365	3902.887559	10531.10163	2.279772453
91	0.340693598	0.659306402	3186.409877	1085.589445	2643.615154	6628.214069	2.080151118
92	0.373284043	0.626715957	2100.820432	784.2027452	1708.719059	3984.598915	1.896687054
93	0.407920403	0.592079597	1316.617687	537.0752169	1048.080078	2275.879856	1.72858065
94	0.444491732	0.555508268	779.5424696	346.5001826	606.2923783	1227.799778	1.575026154
95	0.48282467	0.51717533	433.042287	209.0834994	328.5005373	621.5073994	1.435211798
96	0.522675829	0.477324171	223.9587875	117.0578448	165.4298651	293.0068621	1.308307057
97	0.563726024	0.436273976	106.9009427	60.26284343	76.76952099	127.576997	1.193413208
98	0.605577485	0.394422515	46.63809928	28.24298288	32.51660784	50.80747599	1.089398513
99	0.647755309	0.352244691	18.3951164	11.9155343	12.43734925	18.29086815	0.99433283
100	0.689714511	0.310285489	6.479582097	4.469061801	4.245051197	5.853518906	0.903379079
101	0.730853878	0.269146122	2.010520297	1.469396556	1.275822019	1.608467709	0.800025601
102	0.77053744	0.22946256	0.541123741	0.416956102	0.33264569	0.33264569	0.61473128
103	0.808123721	0.191876279	0.124167639	0.124167639	0	0	0