

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.008846379	0.991153621	100000	884.6378791	99186.13315	6971960.876	69.71960876
1	0.00060436	0.99939564	99115.36212	59.90136099	99085.41144	6872774.743	69.34116565
2	0.00040456	0.99959544	99055.46076	40.07389673	99035.42381	6773689.332	68.38279565
3	0.00035912	0.99964088	99015.38686	35.55837449	98997.60768	6674653.908	67.41026945
4	0.000285476	0.999714524	98979.82849	28.25635455	98965.70031	6575656.3	66.43430687
5	0.00025476	0.99974524	98951.57213	25.20895161	98938.96766	6476690.6	65.4531349
6	0.000261799	0.999738201	98926.36318	25.89884257	98913.41376	6377751.632	64.46968661
7	0.000278237	0.999721763	98900.46434	27.51775821	98886.70546	6278838.218	63.48643821
8	0.000251825	0.999748175	98872.94658	24.89868477	98860.49724	6179951.513	62.50396824
9	0.000222873	0.999777127	98848.0479	22.03057888	98837.03261	6081091.016	61.51958632
10	0.000250446	0.999749554	98826.01732	24.75057594	98813.64203	5982253.983	60.53318899
11	0.000207899	0.999792101	98801.26674	20.50469076	98790.9964	5883440.341	59.54822782
12	0.000213525	0.999786475	98780.72605	21.09215107	98770.17998	5784649.345	58.560426976
13	0.000249279	0.999750721	98759.6339	24.61866954	98747.32457	5685879.165	57.57290646
14	0.000305372	0.999694628	98735.01523	30.15094718	98719.93976	5587131.84	56.58713707
15	0.000404761	0.999595239	98704.86428	39.95184559	98684.88836	5488411.9	55.60426976
16	0.000655444	0.999344556	98664.91244	64.66929899	98632.57779	5389727.012	54.62658283
17	0.000915883	0.999084117	98600.24314	90.30625389	98555.09001	5291094.434	53.66208303
18	0.001031859	0.998968141	98509.93689	101.6483672	98459.1127	5192539.344	52.7108179
19	0.00108445	0.99891555	98408.28852	106.7188767	98354.92908	5094080.231	51.76474775
20	0.001107522	0.998892478	98301.56964	108.8711484	98247.13407	4995725.302	50.82040216
21	0.0010784	0.9989216	98192.69849	105.8910489	98139.75297	4897478.168	49.8761949
22	0.001116663	0.998883337	98086.80744	109.5298802	98032.0425	4799338.415	48.9294997
23	0.00123318	0.99876682	97977.27756	120.8236576	97916.86573	4701306.373	47.98363957
24	0.001238499	0.998761501	97856.45391	121.1951632	97795.85632	4603389.507	47.04226776
25	0.001195777	0.998804223	97735.25874	116.8695947	97676.82395	4505593.651	46.09998182
26	0.001202969	0.998797031	97618.38915	117.431882	97559.67321	4407916.827	45.15457451
27	0.001161522	0.998838478	97500.95727	113.2494949	97444.33252	4310357.154	44.20835728
28	0.001129127	0.998870873	97387.70777	109.9630854	97332.72623	4212912.821	43.25918453
29	0.001190586	0.998809414	97277.74469	115.8175664	97219.8359	4115580.095	42.30751965
30	0.001316918	0.998683082	97161.92712	127.954298	97097.94997	4018360.259	41.35735445
31	0.001393964	0.998606036	97033.97282	135.2619044	96966.34187	3921262.309	40.41123119
32	0.001521442	0.998478558	96898.71092	147.4257991	96824.99802	3824295.967	39.46694369
33	0.001618914	0.998381086	96751.28512	156.6320303	96672.9691	3727470.969	38.52631998
34	0.001788848	0.998211152	96594.65309	172.7931698	96508.2565	3630798	37.58798116
35	0.001865754	0.998134246	96421.85992	179.8994656	96331.91019	3534289.743	36.65444482
36	0.00201654	0.99798346	96241.96045	194.0757579	96144.92257	3437957.833	35.7220262
37	0.002213868	0.997786132	96047.88469	212.6373327	95941.56603	3341812.911	34.79319635
38	0.002544558	0.997455442	95835.24736	243.8583054	95713.31821	3245871.345	33.8692854
39	0.002739723	0.997260277	95591.38906	261.8939363	95460.44209	3150158.026	32.95441208
40	0.003054059	0.996945941	95329.49512	291.1419021	95183.92417	3054697.584	32.04357246
41	0.003345682	0.996654318	95038.35322	317.9681256	94879.36916	2959513.66	31.14020351
42	0.003676362	0.996323638	94720.38509	348.2264365	94546.27187	2864634.291	30.24306002
43	0.004075902	0.995924098	94372.15866	384.6516614	94179.83283	2770088.019	29.35280975
44	0.004518747	0.995481253	93987.50699	424.7057964	93775.1541	2675908.186	28.47089227
45	0.004960349	0.995039651	93562.8012	464.1041104	93330.74914	2582133.032	27.5978594
46	0.005495606	0.994504394	93098.69709	511.6337743	92842.8802	2488802.283	26.73294429
47	0.006186376	0.993813624	92587.06331	572.7783944	92300.67412	2395959.403	25.87790688
48	0.006818941	0.993181059	92014.28492	627.439969	91700.56493	2303658.729	25.03588145
49	0.007592438	0.992407562	91386.84495	693.8489604	91039.92047	2211958.164	24.20433887
50	0.008155431	0.991844569	90692.99599	739.6404538	90323.17576	2120918.243	23.38568949
51	0.009155453	0.990844547	89953.35554	823.5637093	89541.57368	2030595.068	22.57386682
52	0.010388211	0.989611789	89129.79183	925.8991257	88666.84226	1941053.494	21.77783044
53	0.011346979	0.988653021	88203.8927	1000.847739	87703.46883	1852386.652	21.00118935
54	0.012444424	0.987555576	87203.04496	1085.191707	86660.44911	1764683.183	20.23648582
55	0.013477475	0.986522525	86117.85326	1160.651181	85537.52766	1678022.734	19.48519001
56	0.014434562	0.985565438	84957.20207	1226.319995	84344.04208	1592485.206	18.74445805
57	0.015703274	0.984296726	83730.88208	1314.848971	83073.45759	1508141.164	18.0117673
58	0.017225355	0.982774645	82416.03311	1419.645446	81706.21039	1425067.706	17.29114655
59	0.018788746	0.981211254	80996.38766	1521.820563	80235.47738	1343361.496	16.58544948
60	0.020912585	0.979087415	79474.5671	1662.018648	78643.55778	1263126.019	15.89346208
61	0.022806277	0.977193723	77812.54845	1774.614503	76925.2412	1184482.461	15.22225508
62	0.025023311	0.974976689	76037.93395	1902.720901	75086.5735	1107557.22	14.56585105
63	0.02756249	0.97243751	74135.21305	2043.351036	73113.53753	1032470.646	13.92685883
64	0.030299705	0.969700295	72091.86201	2184.362149	70999.68094	959357.1087	13.30742586
65	0.032835224	0.967164776	69907.49986	2295.428395	68759.78567	888357.4277	12.70761262
66	0.035391604	0.964608396	67612.07147	2392.899676	66415.62163	819597.6421	12.12206081
67	0.03844819	0.96155181	65219.17179	2507.559105	63965.39224	753182.0204	11.5484757
68	0.041140347	0.958859653	62711.61269	2579.977491	61421.62394	689216.6282	10.99025521
69	0.045283006	0.954716994	60131.6352	2722.941225	58770.16458	627795.0042	10.44034479
70	0.050505821	0.949494179	57408.69397	2899.473239	55958.95735	569024.8397	9.911823459
71	0.056076419	0.943923581	54509.22073	3056.681892	52980.87979	513065.8823	9.412460413
72	0.060682073	0.939317927	51452.53884	3122.246703	49891.41549	460085.0025	8.941930037
73	0.068084515	0.931915485	48330.29214	3290.544517	46685.01988	410193.587	8.487297901
74	0.071781281	0.928218719	45039.74762	3233.010791	43423.24222	363508.5671	8.070839344
75	0.076140297	0.923859703	41806.73683	3183.177368	40215.14815	320085.3249	7.656309705
76	0.081735143	0.918264857	38623.55946	3156.902165	37045.10838	279870.1768	7.246100066
77	0.086885421	0.913114579	35466.6573	3081.535446	33925.88957	242825.0684	6.846573286
78	0.093687299	0.906312701	32385.12185	3034.074599	30868.08455	208899.1788	6.450467588

79	0.104676272	0.895323728	29351.04725	3072.358194	27814.86815	178031.0943	6.065578947
80	0.113788944	0.886211056	26278.68906	2990.224277	24783.57692	150216.2261	5.716275488
81	0.124358802	0.875641198	23288.46478	2896.125591	21840.40198	125432.6492	5.386041991
82	0.134359974	0.865640026	20392.33919	2739.914168	19022.38211	103592.2472	5.079959011
83	0.143982221	0.856017779	17652.42502	2541.635363	16381.60734	84569.86511	4.790835537
84	0.154354332	0.845645668	15110.78966	2332.415839	13944.58174	68188.25777	4.512554229
85	0.165893958	0.834106042	12778.37382	2119.855005	11718.44632	54243.67603	4.244959242
86	0.178422182	0.821577818	10658.51881	1901.716183	9707.660722	42525.22972	3.98978793
87	0.191748248	0.808251752	8756.802631	1679.101565	7917.251848	32817.569	3.747665715
88	0.205905003	0.794094997	7077.701066	1457.334062	6349.034034	24900.31715	3.518136315
89	0.220923637	0.779076363	5620.367003	1241.671919	4999.531044	18551.28311	3.300724508
90	0.236833049	0.763166951	4378.695084	1037.019708	3860.18523	13551.75207	3.094929382
91	0.253659134	0.746340866	3341.675376	847.6464829	2917.852135	9691.56684	2.900211944
92	0.271423975	0.728576025	2494.028894	676.9392355	2155.559276	6773.714705	2.715972827
93	0.290144946	0.709855054	1817.089658	527.2193799	1553.479968	4618.155429	2.541512142
94	0.30983373	0.69016627	1289.870278	399.6453197	1090.047618	3064.675461	2.375956337
95	0.330495255	0.669504745	890.2249584	294.2151243	743.1173963	1974.627842	2.218122311
96	0.352126546	0.647873454	596.0098341	209.8708844	491.0743919	1231.510446	2.066258601
97	0.374715534	0.625284466	386.1389497	144.6922629	313.7928183	740.4360542	1.917537857
98	0.398239812	0.601760188	241.4466868	96.1536831	193.3698453	426.643236	1.767028745
99	0.422665387	0.577334613	145.2930037	61.41032357	114.5878419	233.2733907	1.60553767
100	0.44794546	0.55205454	83.88268014	37.57486573	65.09524728	118.6855488	1.41489934
101	0.474019275	0.525980725	46.30781442	21.95079663	35.3324161	53.59030151	1.157262596
102	0.500811095	0.499188905	24.35701778	12.19826476	18.25788541	18.25788541	0.749594452
103	0.528229369	0.471770631	12.15875303	12.15875303	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.006425766	0.993574234	100000	642.5766365	99408.82949	7663158.645	76.63158645
1	0.000726705	0.999273295	99357.42336	72.20349108	99321.32162	7563749.816	76.12667035
2	0.000307477	0.999692523	99285.21987	30.52790256	99269.95592	7464428.494	75.18166857
3	0.000182027	0.999817973	99254.69197	18.06706231	99245.65844	7365158.538	74.20463851
4	0.000150511	0.999849489	99236.62491	14.93620481	99229.15681	7265912.88	73.21805721
5	0.000197167	0.999802833	99221.6887	19.56321883	99211.90709	7166683.723	72.22900372
6	0.000229279	0.999770721	99202.12548	22.74495582	99190.75301	7067471.816	71.24314909
7	0.000245614	0.999754386	99179.38053	24.35981874	99167.20062	6968281.063	70.25937272
8	0.000216897	0.999783103	99155.02071	21.50641035	99144.2675	6869113.862	69.27651079
9	0.000223303	0.999776697	99133.5143	22.13683522	99122.44588	6769969.595	68.29143143
10	0.000192759	0.999807241	99111.37746	19.10460449	99101.82516	6670847.149	67.30657286
11	0.000187944	0.999812056	99092.27286	18.62376714	99082.96098	6571745.324	66.31945291
12	0.000188897	0.999811103	99073.64909	18.71470432	99064.29174	6472662.363	65.33182558
13	0.000205906	0.999794094	99054.93439	20.3960079	99044.73638	6373598.071	64.34407443
14	0.00022794	0.99977206	99034.53838	22.57395523	99023.2514	6274553.334	63.35722302
15	0.00030079	0.99969921	99011.96442	29.78180485	98997.07352	6175530.083	62.37155397
16	0.000372865	0.999627135	98982.18262	36.90698179	98963.72913	6076533.009	61.39016991
17	0.000400736	0.999599264	98945.27564	39.65096926	98925.45015	5977569.28	60.41288219
18	0.000398201	0.999601799	98905.62467	39.38435319	98885.93249	5878643.83	59.43690109
19	0.000378429	0.999621571	98866.24032	37.413869	98847.53338	5779757.898	58.46037919
20	0.000334125	0.999665875	98828.82645	33.02115925	98812.31587	5680910.364	57.48232139
21	0.000332458	0.999667542	98795.80529	32.84543007	98779.38257	5582098.464	56.50136696
22	0.000358528	0.999641472	98762.95986	35.40931003	98745.2552	5483318.666	55.51999124
23	0.000368675	0.999631325	98727.55055	36.39840426	98709.35135	5384573.411	54.53972453
24	0.000392047	0.999607953	98691.15214	38.6915741	98671.80636	5285864.059	53.55965499
25	0.0003828	0.9996172	98652.46057	37.76418263	98633.57848	5187192.253	52.58046503
26	0.000387019	0.999612981	98614.69639	38.1657592	98595.61351	5088558.675	51.60040908
27	0.000385438	0.999614562	98576.53063	37.99513169	98557.53306	4989963.061	50.62019356
28	0.000400312	0.999599688	98538.5355	39.44620329	98518.81239	4891405.528	49.63951923
29	0.000435622	0.999564378	98499.08929	42.90841919	98477.63508	4792886.716	48.65919827
30	0.000502417	0.999497583	98456.18087	49.46606101	98431.44784	4694409.08	47.68018665
31	0.000538928	0.999461072	98406.71481	53.03409529	98380.19776	4595977.633	46.70390269
32	0.000626149	0.999373851	98353.68072	61.58409778	98322.88867	4497597.435	45.72881668
33	0.000613882	0.999386118	98292.09662	60.33978401	98261.92673	4399274.546	44.75715442
34	0.000608656	0.999391344	98231.75683	59.78938439	98201.86214	4301012.619	43.78433979
35	0.000670704	0.999329296	98171.96745	65.84430957	98139.0453	4202810.757	42.81070112
36	0.00082052	0.99917948	98106.12314	80.49805425	98065.87411	4104671.712	41.83909812
37	0.000986434	0.999013566	98025.62509	96.69585169	97977.27716	4006605.838	40.87304554
38	0.001150391	0.998849609	97928.92923	112.6565671	97872.60095	3908628.561	39.91291022
39	0.001194431	0.998805569	97816.27267	116.8347417	97757.8553	3810755.96	38.9583027
40	0.001331309	0.998668691	97699.43793	130.0681573	97634.40385	3712998.105	38.00429341
41	0.001476119	0.998523881	97569.36977	144.0239781	97497.35778	3615363.701	37.05428978
42	0.001640358	0.998359642	97425.34579	159.8124103	97345.43959	3517866.343	36.10832802
43	0.001787077	0.998212923	97265.53338	173.8209687	97178.6229	3420520.903	35.16683438
44	0.001912684	0.998087316	97091.71241	185.7057487	96998.85954	3323342.28	34.22889758
45	0.002103692	0.997896308	96906.00666	203.8604016	96804.07646	3226343.421	33.29353393
46	0.002400636	0.997599364	96702.14626	232.1466454	96586.07294	3129539.344	32.36266686
47	0.002660849	0.997339151	96469.99962	256.692056	96341.65359	3032953.271	31.43934159
48	0.002795864	0.997204136	96213.30756	268.9993376	96078.80789	2936611.618	30.52188613
49	0.003127891	0.996872109	95944.30822	300.103346	95794.25655	2840532.81	29.60605858
50	0.003383603	0.996616397	95644.20488	323.6220043	95482.39387	2744738.553	28.69738482
51	0.004005446	0.995994554	95320.58287	381.8014192	95129.68216	2649256.16	27.7931175
52	0.00453541	0.99546459	94938.78145	430.5862974	94723.4883	2554126.477	26.90287824
53	0.004811602	0.995188398	94508.19516	454.7357971	94280.82726	2459402.989	26.02317169
54	0.005091788	0.994908212	94053.45936	478.900299	93814.00921	2365122.162	25.14657279
55	0.005547448	0.994452552	93574.55906	519.0999759	93315.00907	2271308.153	24.27271018
56	0.006022404	0.993977596	93055.45908	560.4175743	92775.2503	2177993.144	23.40532372
57	0.006872617	0.993127383	92495.04151	635.6830006	92177.20001	2085217.893	22.54410463
58	0.007813836	0.992186164	91859.35851	717.7739484	91500.47153	1993040.693	21.69665373
59	0.008496815	0.991503185	91141.58456	774.4131726	90754.37797	1901540.222	20.86358528
60	0.009499706	0.990500294	90367.17139	858.4615815	89937.9406	1810785.844	20.03809366
61	0.009935489	0.990064511	89508.70981	889.3127727	89064.05342	1720847.903	19.22547992
62	0.01076419	0.98923581	88619.39703	953.9160026	88142.43903	1631783.85	18.41339373
63	0.012113245	0.987886755	87665.48103	1061.913414	87134.52432	1543641.411	17.60831507
64	0.013831233	0.986168767	86603.56762	1197.83408	86004.65058	1456506.886	16.81809337
65	0.015497113	0.984502887	85405.73354	1323.542265	84743.9624	1370502.236	16.0469582
66	0.017480098	0.982519902	84082.19127	1469.764919	83347.30881	1285758.273	15.2916837
67	0.018914442	0.981085558	82612.42635	1562.567975	81831.14237	1202410.965	14.55484384
68	0.020767568	0.979232432	81049.85838	1683.20841	80208.25417	1120579.822	13.82580852
69	0.023121175	0.976878825	79366.64997	1835.050166	78449.12488	1040371.568	13.10842235
70	0.026004754	0.973995246	77531.5998	2016.190204	76523.5047	961922.4432	12.40684373
71	0.029184039	0.970815961	75515.4096	2203.844667	74413.48726	885398.9385	11.72474523
72	0.032372577	0.967627423	73311.56493	2373.284293	72124.92278	810985.4512	11.06217623
73	0.037724982	0.962275018	70938.28064	2676.145356	69600.20796	738860.5284	10.41554041
74	0.04250678	0.95749322	68262.13528	2901.603562	66811.3335	669260.3204	9.80426876
75	0.046852845	0.953147155	65360.53172	3062.326864	63829.36829	602448.9869	9.217320776
76	0.052883434	0.947116566	62298.20485	3294.542994	60650.93336	538619.6187	8.645828879
77	0.057528458	0.942471542	59003.66186	3394.389675	57306.46702	477968.6853	8.100661387
78	0.064268253	0.935731747	55609.27219	3573.910794	53822.31679	420662.2183	7.564605717

79	0.072549527	0.927450473	52035.36139	3775.140873	50147.79096	366839.9015	7.049819424
80	0.081132714	0.918867286	48260.22052	3915.482657	46302.47919	316692.1105	6.56217703
81	0.09023045	0.90976955	44344.73786	4001.245662	42344.11503	270389.6313	6.097445703
82	0.101148188	0.898851812	40343.4922	4080.671117	38303.15664	228045.5163	5.65259733
83	0.112693256	0.887306744	36262.82108	4086.57537	34219.5334	189742.3597	5.232421362
84	0.125848717	0.874151283	32176.24571	4049.339241	30151.57609	155522.8263	4.833467138
85	0.14031346	0.85968654	28126.90647	3946.583559	26153.61469	125371.2502	4.457342307
86	0.156304367	0.843695633	24180.32291	3779.490071	22290.57788	99217.63549	4.103238648
87	0.173943253	0.826056747	20400.83284	3548.587218	18626.53923	76927.05761	3.770780253
88	0.193351398	0.806648602	16852.24562	3258.405246	15223.043	58300.51838	3.459510364
89	0.214646313	0.785353687	13593.84038	2917.867712	12134.90652	43077.47538	3.168896661
90	0.237937621	0.762062379	10675.97267	2540.215535	9405.864898	30942.56886	2.898337213
91	0.263321963	0.736678037	8135.75713	2142.323538	7064.595361	21536.70396	2.647166529
92	0.29087684	0.70912316	5993.433592	1743.351022	5121.758081	14472.1086	2.414660708
93	0.320653349	0.679346651	4250.08257	1362.803209	3568.680965	9350.350519	2.200039732
94	0.352667858	0.647332142	2887.279361	1018.250629	2378.154046	5781.669554	2.002462814
95	0.386892747	0.613107253	1869.028732	723.1136597	1507.471902	3403.515508	1.821007591
96	0.423246499	0.576753501	1145.915072	485.0045421	903.4128011	1896.043606	1.654610932
97	0.461583629	0.538416371	660.91053	305.0654805	508.3777897	992.6308047	1.501914041
98	0.501685131	0.498314869	355.8450494	178.5221702	266.5839643	484.253015	1.360853596
99	0.543250429	0.456749571	177.3228793	96.33073025	129.1575141	217.6690507	1.227529417
100	0.585892055	0.414107945	80.992149	47.45265663	57.26582068	88.51153654	1.092840944
101	0.629134536	0.370865464	33.53949237	21.10085298	22.98906588	31.24571586	0.931609683
102	0.67241911	0.32758089	12.43863939	8.363978829	8.256649977	8.256649977	0.663790445
103	0.715115851	0.284884149	4.074660562	4.074660562	0	0	0