

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.011023148	0.988976852	100000	1102.314763	98985.87042	6853343.521	68.53343521
1	0.000578475	0.999421525	98897.68524	57.20980262	98869.08034	6754357.651	68.29641801
2	0.000462599	0.999537401	98840.47543	45.72349247	98817.61369	6655488.57	67.33565921
3	0.00035238	0.99964762	98794.75194	34.81326589	98777.34531	6556670.957	66.36659162
4	0.000331074	0.999668926	98759.93868	32.6968346	98743.59026	6457893.611	65.38980986
5	0.00030297	0.99969703	98727.24184	29.9114188	98712.28613	6359150.021	64.41130029
6	0.000278975	0.999721025	98697.33042	27.53412968	98683.56336	6260437.735	63.43066938
7	0.000249761	0.999750239	98669.79629	24.64389523	98657.47435	6161754.172	62.44823039
8	0.00023431	0.99976569	98645.1524	23.11358664	98633.5956	6063096.697	61.46370653
9	0.000235113	0.999764887	98622.03881	23.18736794	98610.44513	5964463.102	60.47799431
10	0.000246991	0.999753009	98598.85144	24.35306466	98586.67491	5865852.657	59.49209926
11	0.000265085	0.999734915	98574.49838	26.13058996	98561.43308	5767265.982	58.50667339
12	0.000279455	0.999720545	98548.36779	27.53978563	98534.5979	5668704.549	57.52205415
13	0.000288831	0.999711169	98520.828	28.45586256	98506.60007	5570169.951	56.53799368
14	0.000369655	0.999630345	98492.37214	36.40815482	98474.16806	5471663.351	55.55418386
15	0.000437754	0.999562246	98455.96399	43.09944314	98434.41426	5373189.183	54.57454242
16	0.000654702	0.999345298	98412.86454	64.43105352	98380.64902	5274754.768	53.5982241
17	0.000909412	0.999090588	98348.43349	89.43922541	98303.71388	5176374.119	52.63301037
18	0.001069008	0.998930992	98258.99426	105.0396902	98206.47442	5078070.405	51.6804639
19	0.001174986	0.998825014	98153.95457	115.3295598	98096.28979	4979863.931	50.7325415
20	0.001271762	0.998728238	98038.62501	124.6817781	97976.28412	4881767.641	49.79432994
21	0.001267011	0.998732989	97913.94324	124.0580658	97851.9142	4783791.357	48.85710042
22	0.001302285	0.998697715	97789.88517	127.3502934	97726.21002	4685939.443	47.91844714
23	0.00130878	0.99869122	97662.53488	127.8187749	97598.62549	4588213.233	46.98027999
24	0.001156185	0.998843815	97534.7161	112.7681827	97478.33201	4490614.607	46.04119217
25	0.001117797	0.998882203	97421.94792	108.8980005	97367.49892	4393136.275	45.09390717
26	0.00116442	0.99883558	97313.04992	113.3132702	97256.39328	4295768.776	44.1438099
27	0.001224185	0.998775815	97199.73665	118.9904364	97140.24143	4198512.383	43.19468887
28	0.001276495	0.998723505	97080.74621	123.9230957	97018.78466	4101372.142	42.24701912
29	0.001382468	0.998617532	96956.82312	134.0396908	96889.80327	4004353.357	41.3003771
30	0.001420477	0.998579523	96822.78342	137.5345241	96754.01616	3907463.554	40.3568604
31	0.001558302	0.998441698	96685.2489	150.6647986	96609.9165	3810709.538	39.41355668
32	0.00166096	0.99833904	96534.5841	160.3400518	96454.41408	3714099.621	38.47429039
33	0.001849654	0.998150346	96374.24405	178.2590326	96285.11453	3617645.207	37.53746909
34	0.001992715	0.998007285	96195.98502	191.6912296	96100.1394	3521360.092	36.60610255
35	0.002178223	0.997821777	96004.29379	209.1187472	95899.73441	3425259.953	35.6781954
36	0.002314108	0.997685892	95795.17504	221.6803895	95684.33485	3329360.219	34.75498862
37	0.002455771	0.997544229	95573.49465	234.7065973	95456.14135	3233675.884	33.83444223
38	0.002579428	0.997420572	95338.78805	245.9194931	95215.82831	3138219.742	32.91650551
39	0.003017809	0.996982191	95092.86856	286.9721016	94949.38251	3043003.914	32.00033778
40	0.003354318	0.996645682	94805.89646	318.0091274	94646.8919	2948054.532	31.09568752
41	0.003871528	0.996128472	94487.88733	365.8125346	94304.98106	2853407.64	30.19866059
42	0.004336374	0.995663626	94122.0748	408.1484747	93918.00056	2759102.659	29.31408668
43	0.004770811	0.995229189	93713.92632	447.0914677	93490.38059	2665184.658	28.4395795
44	0.005217103	0.994782897	93266.83485	486.5826694	93023.54352	2571694.278	27.57312694
45	0.005856655	0.994143345	92780.25219	543.3819061	92508.56123	2478670.734	26.715499
46	0.006367876	0.993632124	92236.87028	587.3529402	91943.19381	2386162.173	25.86993862
47	0.00713503	0.99286497	91649.51734	653.9220218	91322.55633	2294218.979	25.03252658
48	0.00777454	0.99222546	90995.59532	707.4488549	90641.87089	2202896.423	24.20882478
49	0.008373005	0.991626995	90288.14646	755.9831124	89910.15491	2112254.552	23.39459425
50	0.009077	0.990923	89532.16335	812.6834617	89125.82162	2022344.397	22.58790943
51	0.010061351	0.989938649	88719.47989	892.6378456	88273.16097	1933218.575	21.79023792
52	0.011228441	0.988771559	87826.84204	986.1585514	87333.76277	1844945.414	21.00662362
53	0.012553107	0.987446893	86840.68349	1090.120414	86295.62328	1757611.652	20.23949583
54	0.013825965	0.986174035	85750.56308	1185.584308	85157.77092	1671316.028	19.49043794
55	0.014680297	0.985319703	84564.97877	1241.438993	83944.25927	1586158.257	18.75668013
56	0.015881226	0.984118774	83323.53978	1323.27995	82661.8998	1502213.998	18.02868676
57	0.017520625	0.982479375	82000.25983	1436.695833	81281.91191	1419552.098	17.3115561
58	0.019480597	0.980519403	80563.56399	1569.426342	79778.85082	1338270.186	16.61135779
59	0.021668851	0.978331149	78994.13765	1711.712205	78138.28155	1258491.336	15.93145229
60	0.023925453	0.976074547	77282.42545	1849.017052	76357.91692	1180353.054	15.27324029
61	0.025683756	0.974316244	75433.40839	1937.413266	74464.70176	1103995.137	14.63536065
62	0.027829372	0.972170628	73495.99513	2045.347402	72473.32143	1029530.435	14.00798007
63	0.030224304	0.969775696	71450.64773	2159.54607	70370.87469	957057.1138	13.39465973
64	0.033182031	0.966817969	69291.10166	2299.219468	68141.49192	886686.2392	12.79653834
65	0.035975912	0.964024088	66991.88219	2410.094061	65786.83516	818544.7472	12.2185662
66	0.039637189	0.960362811	64581.78813	2559.840511	63301.86787	752757.9121	11.65588526
67	0.043284893	0.956715107	62021.94762	2684.613389	60679.64092	689456.0442	11.11632367
68	0.047263033	0.952736967	59337.33423	2804.462388	57935.10303	628776.4033	10.59664057
69	0.04996282	0.95003718	56532.87184	2824.541728	55120.60098	570841.3002	10.09751109
70	0.055614382	0.944385618	53708.33011	2986.955566	52214.85233	515720.6993	9.602247886
71	0.058945961	0.941054039	50721.37455	2989.820155	49226.46447	463505.8469	9.138274565
72	0.061775928	0.938224072	47731.55439	2948.661044	46257.22387	414279.3825	8.679360808
73	0.0657206	0.9342794	44782.89335	2943.158622	43311.31404	368022.1586	8.217918296
74	0.068761825	0.931238175	41839.73473	2876.976503	40401.24647	324710.8446	7.760824649
75	0.075738238	0.924261762	38962.75822	2950.970653	37487.2729	284309.5981	7.296957686
76	0.086358703	0.913641297	36011.78757	3109.931259	34456.82194	246822.3252	6.8539315
77	0.095960129	0.904039871	32901.85631	3157.266375	31323.22312	212365.5033	6.454514336
78	0.104129116	0.895870884	29744.58994	3097.277866	28195.951	181042.2801	6.086561641

79	0.111668164	0.888331836	26647.31207	2975.656405	25159.48387	152846.3291	5.735900443
80	0.118802043	0.881197957	23671.65567	2812.241057	22265.53514	127686.8453	5.394081726
81	0.129203547	0.870796453	20859.41461	2695.110365	19511.85943	105421.3101	5.053895907
82	0.139626319	0.860373681	18164.30424	2536.214941	16896.19677	85909.45069	4.72957563
83	0.152771637	0.847228363	15628.0893	2387.528789	14434.32491	69013.25392	4.415975144
84	0.165452466	0.834547534	13240.56051	2190.683394	12145.21882	54578.92901	4.122101096
85	0.181759005	0.818240995	11049.87712	2008.414666	10045.66979	42433.71019	3.840197473
86	0.195219029	0.804780971	9041.462454	1765.065524	8158.929692	32388.0404	3.582168324
87	0.213386377	0.786613623	7276.39693	1552.683981	6500.05494	24229.11071	3.329822568
88	0.229227998	0.770772002	5723.712949	1312.035258	5067.69532	17729.05577	3.097474652
89	0.250941782	0.749058218	4411.677691	1107.074263	3858.14056	12661.36045	2.869964975
90	0.271678187	0.728321813	3304.603428	897.7886679	2855.709094	8803.219893	2.663926273
91	0.293659161	0.706340839	2406.81476	706.7832024	2053.423159	5947.510799	2.471112816
92	0.317048118	0.682951882	1700.031558	538.9918063	1430.535655	3894.08764	2.290597267
93	0.341856323	0.658143677	1161.039752	396.9087802	962.5853615	2463.551985	2.121849817
94	0.36807822	0.63192178	764.1309714	281.2599675	623.5009876	1500.966623	1.964279266
95	0.395688288	0.604311712	482.8710038	191.0664006	387.3378035	877.4656358	1.817184359
96	0.424637782	0.575362218	291.8046032	123.9112596	229.8489734	490.1278323	1.679643936
97	0.454851486	0.545148514	167.8933436	76.36653684	129.7100752	260.2788589	1.550263121
98	0.486224618	0.513775382	91.52680675	44.50258667	69.27551342	130.5687837	1.426563303
99	0.518620114	0.481379886	47.02422008	24.38770639	34.83036688	61.2932703	1.303440444
100	0.551866514	0.448133486	22.63651369	12.4923339	16.39034673	26.46290342	1.169036177
101	0.585756752	0.414243248	10.14417978	5.9420218	7.173168882	10.07255669	0.992939489
102	0.620048167	0.379951833	4.202157981	2.605540356	2.899387804	2.899387804	0.689975916
103	0.654464083	0.345535917	1.596617626	1.596617626	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.008589432	0.991410568	100000	858.9432015	99209.77225	7614222.445	76.14222445
1	0.000690769	0.999309231	99141.0568	68.48352634	99106.81504	7515012.673	75.80121612
2	0.000371534	0.999628466	99072.57327	36.80883216	99054.16886	7415905.858	74.85326779
3	0.000319734	0.999680266	99035.76444	31.66509899	99019.93189	7316851.689	73.88090283
4	0.000214303	0.999785697	99004.09934	21.21691646	98993.49088	7217831.757	72.9043727
5	0.000224548	0.999775452	98982.88242	22.22636323	98971.76924	7118838.266	71.91989253
6	0.000226524	0.999773476	98960.65606	22.41699405	98949.44756	7019866.497	70.93593329
7	0.000223431	0.999776569	98938.23907	22.10586865	98927.18613	6920917.049	69.95189236
8	0.000220329	0.999779671	98916.1332	21.79409391	98905.23615	6821989.863	68.96741353
9	0.000177347	0.999822653	98894.3391	17.53865708	98885.56978	6723084.627	67.98250221
10	0.000173187	0.999826813	98876.80045	17.12416528	98868.23837	6624199.057	66.99447219
11	0.00017172	0.99982828	98859.67628	16.97615367	98851.18821	6525330.819	66.00599015
12	0.000184733	0.999815267	98842.70013	18.25954111	98833.57036	6426479.631	65.01724075
13	0.000154158	0.999845842	98824.44059	15.23455538	98816.82331	6327646.06	64.02916144
14	0.00016269	0.99983731	98809.20603	16.07528262	98801.16839	6228829.237	63.03895646
15	0.000183074	0.999816926	98793.13075	18.0864378	98784.08753	6130028.069	62.04913259
16	0.000268375	0.999731625	98775.04431	26.50871804	98761.78995	6031243.981	61.06040269
17	0.00032314	0.99967686	98748.53559	31.90956119	98732.58081	5932482.191	60.07665993
18	0.000414267	0.999585733	98716.62603	40.89503492	98696.17852	5833749.61	59.09591773
19	0.00043154	0.99956846	98675.731	42.58249519	98654.43975	5735053.432	58.12020214
20	0.000436152	0.999563848	98633.1485	43.01907167	98611.63897	5636398.992	57.14507828
21	0.00040997	0.99959003	98590.12943	40.41897541	98569.91994	5537787.353	56.16979494
22	0.000383955	0.999616045	98549.71046	37.83862771	98530.79114	5439217.433	55.19262723
23	0.000393065	0.999606935	98511.87183	38.72157305	98492.51104	5340686.642	54.21363479
24	0.000438198	0.999561802	98473.15025	43.15076214	98451.57487	5242194.131	53.23475605
25	0.000467078	0.999532922	98429.99949	45.97453217	98407.01223	5143742.556	52.25787446
26	0.000508389	0.999491611	98384.02496	50.01739669	98359.01626	5045335.544	51.28206074
27	0.000490222	0.999509778	98334.00756	48.20544572	98309.90484	4946976.528	50.30789093
28	0.000485006	0.999514994	98285.80212	47.66917678	98261.96753	4848666.623	49.33231981
29	0.000506244	0.999493756	98238.13294	49.73247572	98213.2667	4750404.655	48.35601526
30	0.000559537	0.999440463	98188.40047	54.94001855	98160.93046	4652191.389	47.38025435
31	0.000584108	0.999415892	98133.46045	57.32057445	98104.80016	4554030.458	46.40650026
32	0.00064001	0.99935999	98076.13987	62.76966647	98044.75504	4455925.658	45.43333031
33	0.000644753	0.999355247	98013.37021	63.19437394	97981.77302	4357880.903	44.46210648
34	0.000671121	0.999328879	97950.17583	65.73645149	97917.30761	4259899.13	43.49046945
35	0.000717431	0.999282569	97884.43938	70.22537535	97849.32669	4161981.822	42.51934065
36	0.000840829	0.999159171	97814.21401	82.2450308	97773.09149	4064132.496	41.54950829
37	0.001031162	0.998968838	97731.96897	100.7775215	97681.58021	3966359.404	40.58405295
38	0.001196203	0.998803797	97631.19145	116.7867385	97572.79808	3868677.824	39.62542878
39	0.001252793	0.998747207	97514.40471	122.1653348	97453.32205	3771105.026	38.6722868
40	0.001320091	0.998679909	97392.23938	128.5666352	97327.95606	3673651.704	37.72016874
41	0.001363115	0.998636885	97263.67274	132.5815605	97197.38196	3576323.748	36.76936771
42	0.001532903	0.998467097	97131.09118	148.8925714	97056.6449	3479126.366	35.81887451
43	0.001848509	0.998151491	96982.19861	179.2724691	96892.56238	3382069.721	34.87309805
44	0.002130625	0.997869375	96802.92614	206.250743	96699.80077	3285177.159	33.87367547
45	0.002284632	0.997715368	96596.6754	220.6878281	96486.33149	3188477.358	33.008148
46	0.002504467	0.997495533	96375.98757	241.3704815	96255.30233	3091991.026	32.08258721
47	0.002758586	0.997241414	96134.61709	265.1956129	96002.01928	2995735.724	31.16188335
48	0.003077799	0.996922201	95869.42148	295.0667833	95721.88809	2899733.705	30.24670077
49	0.003458333	0.996541667	95574.35469	330.5279533	95409.09072	2804011.817	29.33853779
50	0.003709434	0.996290566	95243.82674	353.3006757	95067.1764	2708602.726	28.43861716
51	0.003966403	0.996033597	94890.52607	376.3740919	94702.33902	2613535.549	27.54263948
52	0.004334694	0.995665306	94514.15197	409.6899402	94309.307	2518833.21	26.65032863
53	0.004871113	0.995128887	94104.46203	458.3934781	93875.26529	2424523.903	25.7641758
54	0.005223231	0.994776769	93646.06856	489.1350188	93401.50105	2330648.638	24.88784285
55	0.00586033	0.99413967	93156.93354	545.9303771	92883.96835	2237247.137	24.01589503
56	0.006435854	0.993564146	92611.00316	596.0309059	92312.98771	2144363.169	23.15451831
57	0.007215524	0.992784476	92014.97225	663.9362009	91683.00415	2052050.181	22.30126392
58	0.008175807	0.991824193	91351.03605	746.8684195	90977.60184	1960367.177	21.45971476
59	0.009015785	0.990984215	90604.16763	816.8676521	90195.73381	1869389.575	20.63248992
60	0.009813916	0.990186084	89787.29998	881.1650331	89346.71746	1779193.841	19.81565145
61	0.011030088	0.988969912	88906.13495	980.6424982	88415.8137	1689847.124	19.00709242
62	0.011882151	0.988117849	87925.49245	1044.743962	87403.12047	1601431.31	18.21350402
63	0.012957162	0.987042838	86880.74849	1125.727927	86317.88452	1514028.19	17.42650951
64	0.014424612	0.985575388	85755.02056	1236.982897	85136.52911	1427710.305	16.6487081
65	0.015890764	0.984109236	84518.03766	1343.056157	83846.50959	1342573.776	15.88505617
66	0.017647815	0.982352185	83174.98151	1467.856676	82441.05317	1258727.266	15.13348417
67	0.019920755	0.980079245	81707.12483	1627.667611	80893.29103	1176286.213	14.3963726
68	0.022212366	0.977787634	80079.45722	1778.754222	79190.08011	1095392.922	13.67882551
69	0.024278285	0.975721715	78300.703	1901.006819	77350.19959	1016202.842	12.97820841
70	0.028147794	0.971852206	76399.69618	2150.482911	75324.45472	938852.6425	12.28869602
71	0.031484711	0.968515289	74249.21327	2337.715051	73080.35574	863528.1878	11.63013249
72	0.034185003	0.965814997	71911.49821	2458.294788	70682.35082	790447.832	10.99195333
73	0.038164292	0.961835708	69453.20343	2650.632322	68127.88727	719765.4812	10.36331581
74	0.041891942	0.958108058	66802.5711	2798.48944	65403.32638	651637.5939	9.754678348
75	0.046996415	0.953003585	64004.08166	3007.962353	62500.10049	586234.2676	9.159326285
76	0.053274255	0.946725745	60996.11931	3249.522788	59371.35792	523734.1671	8.586352263
77	0.059270185	0.940729815	57746.59652	3422.65144	56035.2708	464362.8091	8.041388361
78	0.066065209	0.933934791	54323.94508	3588.922776	52529.4837	408327.5383	7.516529547

79	0.073847446	0.926152554	50735.02231	3746.651845	48861.69639	355798.0546	7.012868793
80	0.082096502	0.917903498	46988.37046	3857.580866	45059.58003	306936.3583	6.532177116
81	0.091734566	0.908265434	43130.7896	3956.584264	41152.49746	261876.7782	6.071689869
82	0.1022676	0.8977324	39174.20533	4006.251968	37171.07935	220724.2808	5.634429056
83	0.113935379	0.886064621	35167.95336	4006.874088	33164.51632	183553.2014	5.219331347
84	0.126883559	0.873116441	31161.07928	3953.828637	29184.16496	150388.6851	4.826170614
85	0.141201129	0.858798871	27207.25064	3841.694502	25286.40339	121204.5201	4.454861013
86	0.157002479	0.842997521	23365.55614	3668.450233	21531.33102	95918.11675	4.105107372
87	0.17440373	0.82559627	19697.1059	3435.248742	17979.48153	74386.78573	3.776533776
88	0.193520416	0.806479584	16261.85716	3147.001358	14688.35648	56407.3042	3.468687717
89	0.214464471	0.785535529	13114.8558	2812.670611	11708.5205	41718.94772	3.181045094
90	0.237340427	0.762659573	10302.18519	2445.125028	9079.622679	30010.42722	2.913015701
91	0.262240712	0.737759288	7857.060165	2060.441053	6826.839639	20930.80454	2.663948615
92	0.289239993	0.710760007	5796.619112	1676.61407	4958.312077	14103.9649	2.43313639
93	0.318388506	0.681611494	4120.005042	1311.762249	3464.123918	9145.652825	2.21981593
94	0.349704422	0.650295578	2808.242794	982.0549244	2317.215332	5681.528907	2.023161572
95	0.383165356	0.616834644	1826.18787	699.7319243	1476.321907	3364.313575	1.842260389
96	0.418699251	0.581300749	1126.455945	471.6462602	890.6328151	1887.991668	1.676045722
97	0.456175073	0.543824927	654.809685	298.7078559	505.455757	997.3588527	1.523127827
98	0.495393893	0.504606107	356.1018291	176.4106713	267.8964934	491.9030956	1.38135515
99	0.536081203	0.463918797	179.6911577	96.32905202	131.5266317	224.0066022	1.246620062
100	0.577881548	0.422118452	83.36210571	48.17342266	59.27539438	92.47997051	1.109376613
101	0.620356747	0.379643253	35.18868305	21.82953695	24.27391457	33.20457613	0.943615198
102	0.662989162	0.337010838	13.3591461	8.856969071	8.930661562	8.930661562	0.668505419
103	0.705191429	0.294808571	4.502177026	4.502177026	0	0	0