

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.026684463	0.973315537	100000	2668.446342	97545.02937	6713409.319	67.13409319
1	0.001670778	0.998329222	97331.55366	162.6194145	97250.24395	6615864.29	67.97245129
2	0.000941811	0.999058189	97168.93424	91.51481403	97123.17684	6518614.046	67.08537144
3	0.000928881	0.999071119	97077.41943	90.17333471	97032.33276	6421490.869	66.14814142
4	0.000643575	0.999356425	96987.24609	62.41853611	96956.03683	6324458.537	65.2091774
5	0.000597842	0.999402158	96924.82756	57.94569545	96895.85471	6227502.5	64.25084941
6	0.000493622	0.999506378	96866.88186	47.8156368	96842.97405	6130606.645	63.28989512
7	0.000485577	0.999514423	96819.06623	47.01308935	96795.55968	6033763.671	62.31999446
8	0.000536337	0.999463663	96772.05314	51.90241948	96746.10193	5936968.111	61.3500274
9	0.000504156	0.999495844	96720.15072	48.76206224	96695.76969	5840222.009	60.38268102
10	0.000437299	0.999562701	96671.38866	42.27429164	96650.25151	5743526.24	59.41288648
11	0.000366235	0.999633765	96629.11436	35.38898411	96611.41987	5646875.988	58.43866029
12	0.000392465	0.999607535	96593.72538	37.90967549	96574.77054	5550264.568	57.45988724
13	0.000449178	0.999550822	96555.8157	43.37076378	96534.13032	5453689.798	56.48225079
14	0.000510207	0.999489793	96512.44494	49.24129226	96487.82429	5357155.667	55.50740809
15	0.000742575	0.999257425	96463.20365	71.63115418	96427.38807	5260667.843	54.53548757
16	0.000989222	0.999010778	96391.57249	95.35262948	96343.89618	5164240.455	53.57564278
17	0.001181809	0.998818191	96296.21986	113.803783	96239.31797	5067896.559	52.62819834
18	0.001392695	0.998607305	96182.41608	133.9527951	96115.43968	4971657.241	51.68987683
19	0.001504691	0.998495309	96048.46329	144.5232181	95976.20168	4875541.801	50.76126816
20	0.001597727	0.998402273	95903.94007	153.2283422	95827.3259	4779565.6	49.83700978
21	0.001707175	0.998292825	95750.71173	163.463208	95668.98012	4683738.274	48.91596302
22	0.001703331	0.998296669	95587.24852	162.8167162	95505.84016	4588069.293	47.99875888
23	0.001681126	0.998318874	95424.4318	160.4204563	95344.22157	4492563.453	47.07980303
24	0.001608346	0.998391654	95264.01135	153.2174497	95187.40262	4397219.232	46.15824139
25	0.001436822	0.998563178	95110.7939	136.6572582	95042.46527	4302031.829	45.23179392
26	0.001424811	0.998575189	94974.13664	135.3202368	94906.47652	4206989.364	44.29615802
27	0.001444949	0.998555051	94838.8164	137.0372809	94770.29776	4112082.887	43.35864832
28	0.001469664	0.998530336	94701.77912	139.1798114	94632.18921	4017312.59	42.42066651
29	0.001567799	0.998432201	94562.59931	148.2551419	94488.47174	3922680.4	41.48236649
30	0.001698689	0.998301311	94414.34417	160.3805895	94334.15387	3828191.929	40.54671949
31	0.001763331	0.998236669	94253.96358	166.200955	94170.8631	3733857.775	39.61486216
32	0.001870496	0.998129504	94087.76262	175.9907457	93999.76725	3639686.912	38.68395645
33	0.001852227	0.998147773	93911.77188	173.945936	93824.79891	3545687.144	37.75551322
34	0.001861508	0.998138492	93737.82594	174.4937528	93650.57906	3451862.346	36.82464694
35	0.00191085	0.99808915	93563.33219	178.7854604	93473.93946	3358211.766	35.89239169
36	0.00212696	0.99787304	93384.54673	198.625162	93285.23415	3264737.827	34.9601507
37	0.002462821	0.997537179	93185.92157	229.5002781	93071.17143	3171452.593	34.03360228
38	0.002709683	0.997290317	92956.42129	251.8824544	92830.48006	3078381.421	33.11639345
39	0.002798676	0.997201324	92704.53883	259.4499668	92574.81385	2985550.941	32.20501368
40	0.002971683	0.997028317	92445.08887	274.7175065	92307.73011	2892976.127	31.29399477
41	0.003207386	0.996792614	92170.37136	295.6259778	92022.55837	2800668.397	30.38577751
42	0.003719385	0.996280615	91874.74538	341.7175665	91703.8866	2708645.839	29.48194118
43	0.004243527	0.995756473	91533.02782	388.4228745	91338.81638	2616941.952	28.59013861
44	0.004612669	0.995387331	91144.60494	420.4198664	90934.39501	2525603.136	27.70984786
45	0.004815503	0.995184497	90724.18507	436.8826055	90505.74377	2434668.741	26.83593949
46	0.005159119	0.994840881	90287.30247	465.8028978	90054.40102	2344162.997	25.96337395
47	0.005525188	0.994474812	89821.49957	496.2806791	89573.35923	2254108.596	25.09542378
48	0.00609113	0.99390887	89325.21889	544.091562	89053.17311	2164535.237	24.23207314
49	0.006801624	0.993198376	88781.12733	603.8558081	88479.19943	2075482.064	23.37751419
50	0.007565683	0.992434317	88177.27152	667.1212923	87843.71088	1987002.864	22.53418404
51	0.008496682	0.991503318	87510.15023	743.545894	87138.37728	1899159.154	21.70215853
52	0.009532511	0.990467489	86766.60434	827.1035821	86353.05254	1812020.776	20.8838503
53	0.010520131	0.989479869	85939.50075	904.0947663	85487.45337	1725667.724	20.08002966
54	0.01170811	0.98829189	85035.40599	995.603926	84537.60402	1640180.27	19.28820415
55	0.013114014	0.986885986	84039.80206	1102.099118	83488.7525	1555642.666	18.51078451
56	0.01469332	0.98530668	82937.70294	1218.630198	82328.38784	1472153.914	17.75011679
57	0.016255572	0.983744428	81719.07275	1328.390255	81054.87762	1389825.526	17.00735801
58	0.018262568	0.981737432	80390.68249	1468.140297	79656.61234	1308770.648	16.28012859
59	0.020340282	0.979659718	78922.54219	1605.306786	78119.8888	1229114.036	15.57367517
60	0.022316125	0.977683875	77317.23541	1725.421089	76454.52486	1150994.147	14.88664385
61	0.025159022	0.974840978	75591.81432	1901.816143	74640.90625	1074539.622	14.21502622
62	0.027854605	0.972145395	73689.99818	2052.605813	72663.69527	999898.7162	13.56898821
63	0.031092603	0.968907397	71637.39236	2227.392991	70523.69587	927235.0209	12.94345021
64	0.034789405	0.965210595	69409.99937	2414.73258	68202.63308	856711.325	12.3427652
65	0.038205192	0.961794808	66995.26679	2559.567024	65715.48328	788508.6919	11.76961791
66	0.041620256	0.958379744	64435.69977	2681.83034	63094.7846	722793.2086	11.21727879
67	0.045677971	0.954322029	61753.86943	2820.791434	60343.47371	659698.424	10.68270588
68	0.049863469	0.950136531	58933.078	2938.607704	57463.77414	599354.9503	10.17009413
69	0.054449826	0.945550174	55994.47029	3048.889158	54470.02571	541891.1762	9.677583757
70	0.058139668	0.941860332	52945.58113	3078.238502	51406.46188	487421.1505	9.206078015
71	0.062034955	0.937965045	49867.34263	3093.518369	48320.58345	436014.6886	8.743491544
72	0.0673171229	0.932628771	46773.82426	3151.210048	45198.21924	387694.1052	8.288698033
73	0.073011166	0.926988834	43622.61421	3184.937947	42030.14524	342495.8859	7.851337937
74	0.079220664	0.920779336	40437.67627	3203.499548	38835.92649	300465.7407	7.430341414
75	0.085652128	0.914347872	37234.17672	3189.186462	35639.58349	261629.8142	7.026603976
76	0.092124447	0.907875553	34044.99026	3136.375916	32476.8023	225990.2307	6.637987821
77	0.099954951	0.900045049	30908.61434	3089.469042	29363.87982	193513.4284	6.260825098
78	0.108642641	0.891357359	27819.1453	3022.345424	26307.97259	164149.5486	5.900596399

79	0.117778572	0.882221428	24796.79987	2920.531669	23336.53404	137841.576	5.558845363
80	0.127711312	0.872288688	21876.2682	2793.846916	20479.34475	114505.0419	5.23421275
81	0.137841331	0.862158669	19082.42129	2630.346343	17767.24812	94025.6972	4.927346262
82	0.14867421	0.85132579	16452.07495	2445.999238	15229.07533	76258.44909	4.635187315
83	0.160247104	0.839752896	14006.07571	2244.433069	12883.85917	61029.37376	4.357349984
84	0.172597151	0.827402849	11761.64264	2030.026015	10746.62963	48145.51459	4.093434571
85	0.185761062	0.814238938	9731.616624	1807.755441	8827.738904	37398.88496	3.843029005
86	0.199774634	0.800225366	7923.861183	1582.986465	7132.36795	28571.14605	3.605710069
87	0.214672181	0.785327819	6340.874718	1361.209405	5660.270016	21438.7781	3.381044265
88	0.230485879	0.769514121	4979.665313	1147.742539	4405.794044	15778.50809	3.168588066
89	0.247245011	0.752754989	3831.922774	947.4237897	3358.210879	11372.71404	2.967887066
90	0.264975112	0.735024888	2884.498985	764.320441	2502.338764	8014.503162	2.778473213
91	0.283697014	0.716302986	2120.178544	601.4883218	1819.434383	5512.164398	2.59985859
92	0.303425791	0.696574209	1518.690222	460.8097813	1288.285331	3692.730015	2.431522875
93	0.3241696	0.6758304	1057.880441	342.9326791	886.414101	2404.444684	2.272888875
94	0.34592844	0.65407156	714.9477615	247.3207635	591.2873797	1518.030583	2.123274825
95	0.368692829	0.631307171	467.6269979	172.4107209	381.4216375	926.7432033	1.98180004
96	0.392442437	0.607557563	295.2162771	115.8553951	237.2885795	545.3215657	1.847193424
97	0.417144684	0.582855316	179.360882	74.81943851	141.9511627	308.0329862	1.717392236
98	0.44275337	0.55724663	104.5414435	46.28607637	81.39840527	166.0818235	1.588669699
99	0.469207353	0.530792647	58.25536708	27.33384658	44.58844379	84.68341823	1.453658649
100	0.496429372	0.503570628	30.9215205	15.35035101	23.24634499	40.09497444	1.296668915
101	0.524325061	0.475674939	15.57116949	8.16435439	11.48899229	16.84862944	1.082040078
102	0.552782247	0.447217753	7.406815097	4.09435589	5.359637152	5.359637152	0.723608877
103	0.581670632	0.418329368	3.312459207	3.312459207	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.019980635	0.980019365	100000	1998.063499	98161.78158	7338529.38	73.3852938
1	0.0012653	0.9987347	98001.9365	124.0018836	97939.93556	7240367.598	73.87984214
2	0.000780795	0.999219205	97877.93462	76.42263527	97839.7233	7142427.662	72.97280731
3	0.000424438	0.999575562	97801.51198	41.51069795	97780.75663	7044587.939	72.02943795
4	0.000460505	0.999539495	97760.00128	45.01895237	97737.49181	6946807.182	71.05981067
5	0.000422925	0.999577075	97714.98233	41.32613086	97694.31927	6849069.691	70.09231877
6	0.000440022	0.999559978	97673.6562	42.97853394	97652.16693	6751375.371	69.12176357
7	0.00036481	0.99963519	97630.67767	35.61668595	97612.86932	6653723.204	68.15197194
8	0.000339486	0.999660514	97595.06098	33.13218083	97578.49489	6556110.335	67.17666108
9	0.000329988	0.999670012	97561.9288	32.1942587	97545.83167	6458531.84	66.19930458
10	0.000316293	0.999683707	97529.73454	30.84797937	97514.31055	6360986.009	65.22099172
11	0.000252424	0.999747576	97498.88656	24.61107762	97486.58102	6263471.698	64.24146899
12	0.000268065	0.999731935	97474.27548	26.12948554	97461.21074	6165985.117	63.25756294
13	0.000298933	0.999701067	97448.146	29.13049195	97433.58075	6068523.906	62.27439059
14	0.000385823	0.999614177	97419.01551	37.58654172	97400.22224	5971090.325	61.29286253
15	0.000456349	0.999543651	97381.42897	44.43988466	97359.20902	5873690.103	60.3163269
16	0.000495971	0.999504029	97336.98908	48.27628654	97312.85094	5776330.894	59.34363646
17	0.000501653	0.999498347	97288.71279	48.80514648	97264.31022	5679018.043	58.37283566
18	0.000543625	0.999456375	97239.90765	52.86203677	97213.47663	5581753.733	57.40188229
19	0.000545584	0.999454416	97187.04561	53.02371465	97160.53375	5484540.256	56.4328324
20	0.000527195	0.999472805	97134.0219	51.20858077	97108.41761	5387379.723	55.46336513
21	0.00050689	0.99949311	97082.81332	49.2102785	97058.20818	5290271.305	54.49235683
22	0.000504556	0.999495444	97033.60304	48.95891136	97009.12358	5193213.097	53.51973888
23	0.000491009	0.999508991	96984.64413	47.62034595	96960.83395	5096203.973	52.54650382
24	0.000517109	0.999482891	96937.02378	50.12702052	96911.96027	4999243.139	51.57207169
25	0.000549616	0.999450384	96886.89676	53.25055516	96860.27148	4902331.179	50.59849518
26	0.000505487	0.999494513	96833.6462	48.94819623	96809.17211	4805470.908	49.62604524
27	0.000526365	0.999473635	96784.69801	50.94405675	96759.22598	4708661.735	48.6508904
28	0.000547274	0.999452726	96733.75395	52.93984648	96707.28403	4611902.51	47.67624868
29	0.000579097	0.999420903	96680.8141	55.98758252	96652.82031	4515195.225	46.70208115
30	0.000660371	0.999339629	96624.82652	63.80827053	96592.92239	4418542.405	45.72885214
31	0.000748384	0.999251616	96561.01825	72.26469992	96524.8859	4321949.483	44.75873972
32	0.00071445	0.99928555	96488.75355	68.93638409	96454.28536	4225424.597	43.79188705
33	0.000783202	0.999216798	96419.81717	75.51615499	96382.05909	4128970.312	42.82283905
34	0.000911846	0.999088154	96344.30101	87.85120445	96300.37541	4032588.252	41.85601234
35	0.001082699	0.998917301	96256.44981	104.2167422	96204.34144	3936287.877	40.89375709
36	0.001211119	0.998788881	96152.23307	116.4517965	96094.00717	3840083.536	39.93753877
37	0.001291173	0.998708827	96035.78127	123.9987724	95973.78188	3743989.528	38.98536024
38	0.001288857	0.998711143	95911.7825	123.6166166	95849.97419	3648015.747	38.03511572
39	0.001414982	0.998585018	95788.16588	135.538524	95720.39662	3552165.772	37.08355557
40	0.001602806	0.998397194	95652.62736	153.3125837	95575.97106	3456445.376	36.13539399
41	0.001872094	0.998127906	95499.31477	178.7837112	95409.92292	3360869.405	35.1926023
42	0.002080006	0.997919994	95320.53106	198.2672598	95221.39743	3265459.482	34.25767193
43	0.002329653	0.997670347	95122.2638	221.601835	95011.46288	3170238.084	33.32803444
44	0.002495451	0.997504549	94900.66197	236.8199059	94782.25201	3075226.621	32.40469094
45	0.002720317	0.997279683	94663.84206	257.5156868	94535.08422	2980444.369	31.4845067
46	0.002938108	0.997061892	94406.32637	277.37596	94267.63839	2885909.285	30.5690243
47	0.003190522	0.996809478	94128.95041	300.3205128	93978.79016	2791641.647	29.65763067
48	0.00342099	0.99657901	93828.6299	320.9867648	93668.13652	2697662.857	28.7509565
49	0.00382306	0.99617694	93507.64314	357.4853346	93328.90047	2603994.72	27.84793449
50	0.004251206	0.995748794	93150.1578	396.0004845	92952.15756	2510665.82	26.95288853
51	0.004803016	0.995196984	92754.15732	445.4996835	92531.40748	2417713.662	26.06582532
52	0.005261232	0.994738768	92308.65763	485.6572911	92065.82899	2325182.255	25.189211
53	0.005583702	0.994416298	91823.00034	512.7123068	91566.64419	2233116.426	24.3197937
54	0.005968061	0.994031939	91310.28804	544.9453679	91037.81535	2141549.781	23.45354316
55	0.006576571	0.993423429	90765.34267	596.9246779	90466.88033	2050511.966	22.59135377
56	0.007263946	0.992736054	90168.41799	654.9785295	89840.92873	1960045.086	21.73760092
57	0.008109653	0.991890347	89513.43946	725.9229666	89150.47798	1870204.157	20.89299851
58	0.00899022	0.99100978	88787.51649	798.2192636	88388.40686	1781053.679	20.0597308
59	0.009882946	0.990117054	87989.29723	869.593505	87554.50048	1692665.272	19.23717231
60	0.010940054	0.989059946	87119.70373	953.0943008	86643.15657	1605110.772	18.42419915
61	0.012084683	0.987915317	86166.60942	1041.296128	85645.96136	1518467.615	17.62245885
62	0.013143904	0.986856096	85125.3133	1118.878959	84565.87382	1432821.654	16.83191049
63	0.014734459	0.985265541	84006.43434	1237.789401	83387.53964	1348255.78	16.04943467
64	0.016773597	0.983226403	82768.64494	1388.327856	82074.48101	1264868.24	15.28197352
65	0.019014892	0.980985108	81380.31708	1547.437937	80606.59811	1182793.759	14.53415029
66	0.021579248	0.978420752	79832.87914	1722.733521	78971.51238	1102187.161	13.80618077
67	0.024156105	0.975843895	78110.14562	1886.83686	77166.72719	1023215.649	13.09965102
68	0.026671285	0.973328715	76223.30876	2032.973626	75206.82195	946048.9216	12.41154362
69	0.029906166	0.970093834	74190.33514	2218.748484	73080.96089	870842.0997	11.73794535
70	0.03392736	0.96607264	71971.58665	2441.805958	70750.68367	797761.1388	11.08439005
71	0.037472081	0.962527919	69529.7807	2605.425549	68227.06792	727010.4551	10.45610166
72	0.042184096	0.957815904	66924.35515	2823.143435	65512.78343	658783.3872	9.84370168
73	0.0475671	0.9524329	64101.21171	3049.108729	62576.65735	593270.6038	9.255216679
74	0.053785228	0.946214772	61052.10298	3283.701275	59410.25235	530693.9464	8.692476106
75	0.060699199	0.939300801	57768.40171	3506.495738	56015.15384	471283.6941	8.158157057
76	0.06773442	0.93226558	54261.90597	3675.398709	52424.20662	415268.5402	7.653040062
77	0.073898397	0.926101603	50586.50726	3738.261791	48717.37636	362844.3336	7.172749282
78	0.08171972	0.91828028	46848.24547	3828.425491	44934.03272	314126.9573	6.705202172

79	0.090083338	0.909916662	43019.81998	3875.368999	41082.13548	269192.9245	6.257416342
80	0.099887308	0.900112692	39144.45098	3910.033816	37189.43407	228110.7891	5.827410613
81	0.111161752	0.888838248	35234.41716	3916.719529	33276.0574	190921.355	5.418604034
82	0.122611113	0.877388887	31317.69763	3839.897753	29397.74876	157645.2976	5.033744799
83	0.135579817	0.864420183	27477.79988	3725.435085	25615.08234	128247.5488	4.667315047
84	0.150165609	0.849834391	23752.3648	3566.788318	21968.97064	102632.4665	4.320936773
85	0.165780121	0.834219879	20185.57648	3346.367306	18512.39282	80663.49586	3.996095725
86	0.182810228	0.817189772	16839.20917	3078.379669	15300.01934	62151.10304	3.690856405
87	0.201343502	0.798656498	13760.8295	2770.6536	12375.5027	46851.0837	3.404670023
88	0.221463394	0.778536606	10990.1759	2433.921652	9773.215077	34475.58099	3.136945332
89	0.243246451	0.756753549	8556.254251	2081.27848	7515.61501	24702.36592	2.88705375
90	0.266758979	0.733241021	6474.97577	1727.257928	5611.346806	17186.75091	2.654334397
91	0.292053118	0.707946882	4747.717843	1386.585799	4054.424943	11575.4041	2.438098574
92	0.319162323	0.680837677	3361.132044	1072.74671	2824.758689	7520.979158	2.237632756
93	0.348096284	0.651903716	2288.385334	796.5784303	1890.096119	4696.220469	2.05219829
94	0.378835355	0.621164645	1491.806904	565.1491976	1209.232305	2806.12435	1.881023839
95	0.411324638	0.588675362	926.6577063	381.1571457	736.0791335	1596.892045	1.72328146
96	0.445467951	0.554532049	545.5005607	243.0030169	423.9990522	860.8129113	1.57802388
97	0.481121999	0.518878001	302.4975438	145.5382231	229.7284322	436.8138591	1.444024483
98	0.518091202	0.481908798	156.9593207	81.31924309	116.2996992	207.0854269	1.319357308
99	0.556123716	0.443876284	75.64007762	42.06524106	54.60745709	90.78572769	1.200233138
100	0.59490935	0.40509065	33.57483656	19.97398419	23.58784447	36.1782706	1.077541227
101	0.634080107	0.365919893	13.60085237	8.624029933	9.288837405	12.59042614	0.925708609
102	0.673214176	0.326785824	4.976822439	3.350467418	3.30158873	3.30158873	0.663392912
103	0.711844096	0.288155904	1.626355021	1.626355021	0	0	0