

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.031328629	0.968671371	100000	3132.862877	97117.76615	6660424.504	66.60424504
1	0.00236625	0.99763375	96867.13712	229.2118438	96752.5312	6563306.738	67.75576251
2	0.001422067	0.998577933	96637.92528	137.4256077	96569.21248	6466554.207	66.91528391
3	0.001220529	0.998779471	96500.49967	117.7816949	96441.60882	6369984.995	66.0098654
4	0.000865443	0.999134557	96382.71798	83.41371984	96341.01112	6273543.386	65.08991983
5	0.000777781	0.999222219	96299.30426	74.89977634	96261.85437	6177202.375	64.14586712
6	0.000681755	0.999318245	96224.40448	65.6014307	96191.60376	6080940.52	63.1954082
7	0.000664677	0.999335323	96158.80305	63.91456011	96126.84577	5984748.916	62.23818025
8	0.000642046	0.999357954	96094.88849	61.69734072	96064.03982	5888622.071	61.2792435
9	0.00062093	0.99937907	96033.19115	59.62988188	96003.37621	5792558.031	60.31829164
10	0.000600233	0.999399767	95973.56127	57.60651425	95944.75801	5696554.655	59.35545768
11	0.000555113	0.999444887	95915.95475	55.2441979	95889.33265	5600609.897	58.3908059
12	0.000560258	0.999439742	95862.71055	53.70780998	95835.85665	5504720.564	57.42295969
13	0.000630601	0.999369399	95809.00274	60.41726362	95778.79411	5408884.707	56.45486909
14	0.000670328	0.999329672	95748.58548	64.18299783	95716.49398	5313105.913	55.49017655
15	0.000785807	0.999214193	95684.40248	75.18948304	95646.80774	5217389.419	54.52706276
16	0.000969313	0.999030687	95609.213	92.67529697	95562.87535	5121742.611	53.569551
17	0.001135626	0.998864374	95516.5377	108.471046	95462.30218	5026179.736	52.62104194
18	0.00131507	0.99868493	95408.06666	125.4682846	95345.33251	4930717.434	51.68029923
19	0.001456684	0.998543316	95282.59837	138.796649	95213.20005	4835372.101	50.74769354
20	0.001529939	0.998470061	95143.80172	145.5642418	95071.0196	4740158.901	49.82099533
21	0.001637148	0.998362852	94998.23748	155.5261572	94920.4744	4645087.882	48.89656908
22	0.001703594	0.998296406	94842.71132	161.5734829	94761.92458	4550167.407	47.97593135
23	0.001747582	0.998252418	94681.13784	165.4630181	94598.40633	4455405.483	47.05694909
24	0.001737408	0.998262592	94515.67482	164.2123152	94433.56867	4360807.076	46.13845359
25	0.001601054	0.998398946	94351.46251	151.0617446	94275.93164	4266373.508	45.21788422
26	0.001615686	0.998384314	94200.40076	152.1982898	94124.30162	4172097.576	44.28959476
27	0.001688191	0.998311809	94048.20247	158.7713052	93968.81682	4077973.275	43.3604595
28	0.001661347	0.998338653	93889.43117	155.9828996	93811.43972	3984004.458	42.43293849
29	0.001742194	0.998257806	93733.44827	163.3018093	93651.79736	3890193.018	41.50271957
30	0.001812209	0.998187791	93570.14646	169.5686393	93485.36214	3796541.221	40.57427892
31	0.001833908	0.998166092	93400.57782	171.2880229	93314.93381	3703055.859	39.64703372
32	0.002006339	0.997993661	93229.2898	187.0496041	93135.765	3609740.925	38.71895766
33	0.002244463	0.997755537	93042.24019	208.8298647	92937.82526	3516605.16	37.79579202
34	0.00221445	0.99778555	92833.41033	205.5749348	92730.62286	3423667.334	36.87968935
35	0.002142192	0.997857808	92627.83539	198.4265771	92528.62211	3330936.712	35.96042915
36	0.002048132	0.997951868	92429.40882	189.3076105	92334.75501	3238408.089	35.03655526
37	0.002045516	0.997954484	92240.10121	188.6786109	92145.7619	3146073.334	34.10743585
38	0.002339974	0.997660026	92051.4226	215.3979768	91943.72361	3053927.573	33.1763213
39	0.002775067	0.997224933	91836.02462	254.8510888	91708.59907	2961983.849	32.2529624
40	0.0031006	0.9968994	91581.17353	283.9566214	91439.19522	2870275.25	31.3413242
41	0.00339251	0.99660749	91297.21691	309.7267624	91142.35353	2778836.055	30.43724824
42	0.003598472	0.996401528	90987.49015	327.4159755	90823.78216	2687693.701	29.53915639
43	0.003963379	0.996036621	90660.07417	359.3202059	90480.41407	2596869.919	28.64403038
44	0.004403091	0.995596909	90300.75397	397.6023996	90101.95277	2506389.505	27.75601969
45	0.004827609	0.995172391	89903.15157	434.0172285	89686.14295	2416287.552	26.87656117
46	0.005420792	0.994579208	89469.13434	484.9935711	89226.63755	2326601.409	26.00451459
47	0.006217989	0.993782011	88984.14077	553.3023742	88707.48958	2237374.772	25.14352279
48	0.00698973	0.99301027	88430.83839	618.1077246	88121.78453	2148667.282	24.2977147
49	0.007962894	0.992037106	87812.73067	699.2434871	87463.10892	2060545.498	23.46522517
50	0.008659987	0.991340013	87113.48718	754.40166	86736.28635	1973082.389	22.64956269
51	0.009395098	0.990604902	86359.08552	811.3520365	85953.4095	1886346.102	21.84305323
52	0.010489251	0.989510749	85547.73348	897.3316826	85099.06764	1800392.693	21.04547508
53	0.011659085	0.988340915	84650.4018	986.9462226	84156.92869	1715293.625	20.26326619
54	0.01339303	0.98660697	83663.45558	1120.5007179	83103.20199	1631136.696	19.49640599
55	0.015286565	0.984713435	82542.9484	1261.798183	81912.04931	1548033.494	18.75427913
56	0.016882713	0.983117287	81281.15022	1372.246299	80595.02707	1466121.445	18.03765622
57	0.018293853	0.981706147	79908.90392	1461.841704	79177.98306	1385526.418	17.33882396
58	0.019716951	0.980283049	78447.06221	1546.736844	77673.69379	1306348.435	16.6526113
59	0.02156186	0.97843814	76900.32537	1658.114063	76071.26834	1228674.741	15.9774973
60	0.023776972	0.976223028	75242.21131	1789.031932	74347.69534	1152603.473	15.31857521
61	0.025585403	0.974414597	73453.17937	1879.329189	72513.51478	1078255.778	14.6794977
62	0.027499518	0.972500482	71573.85019	1968.246407	70589.72698	1005742.263	14.05181166
63	0.029946291	0.970053709	69605.60378	2084.429636	68563.38896	935152.5358	13.43501794
64	0.032355318	0.967644682	67521.17414	2184.669041	66428.83962	866589.1468	12.83433172
65	0.034999357	0.965000643	65336.5051	2286.735646	64193.13728	800160.3072	12.24657509
66	0.038303663	0.961696337	63049.76946	2415.037121	61842.2509	735967.1699	11.67279716
67	0.041968731	0.958031269	60634.73233	2544.762744	59362.35096	674124.919	11.11780151
68	0.045350093	0.954649907	58089.96959	2634.385517	56772.77683	614762.568	10.58293837
69	0.049180108	0.950819892	55455.58407	2727.311596	54091.92828	557989.7912	10.06192254
70	0.053441551	0.946558449	52728.27248	2817.880642	51319.33216	503897.8629	9.556502409
71	0.057878754	0.942121246	49910.39184	2888.75128	48466.0162	452578.5308	9.067821633
72	0.061959996	0.938040004	47021.64056	2913.460676	45564.91022	404112.5146	8.594181526
73	0.067042143	0.932957857	44108.17988	2957.1069	42629.62643	358547.6044	8.128823392
74	0.07312357	0.92687643	41151.07298	3009.113382	39646.51629	315917.9779	7.677028934
75	0.078747915	0.921252085	38141.9596	3003.599788	36640.1597	276271.4617	7.24324247
76	0.085692473	0.914307527	35138.35981	3011.092933	33632.81334	239631.3019	6.819649615
77	0.094300622	0.905699378	32127.26688	3029.621238	30612.45626	205998.4886	6.41195186
78	0.102759101	0.897240899	29097.64564	2990.047898	27602.62169	175386.0323	6.027499081

79	0.113150933	0.886849067	26107.59774	2954.099036	24630.54822	147783.4107	5.660551849
80	0.122742306	0.877257694	23153.49871	2841.91382	21732.5418	123152.8624	5.318974208
81	0.132316225	0.867683775	20311.58489	2687.552234	18967.80877	101420.3206	4.993225354
82	0.143047144	0.856952856	17624.03265	2521.067541	16363.49888	82452.51187	4.678413477
83	0.155338648	0.844661352	15102.96511	2346.074183	13929.92802	66089.01299	4.375896554
84	0.168611279	0.831388721	12756.89093	2150.95569	11681.41308	52159.08497	4.088698827
85	0.182922472	0.817077528	10605.93524	1940.063892	9635.903291	40477.67189	3.81651132
86	0.198328853	0.801671147	8665.871345	1718.692324	7806.525183	30841.7686	3.558992209
87	0.2148852	0.7851148	6947.179021	1492.845954	6200.756044	23035.24341	3.315769371
88	0.232643209	0.767356791	5454.333067	1268.913548	4819.876293	16834.48737	3.086442863
89	0.251650034	0.748349966	4185.41952	1053.260966	3658.789037	12014.61108	2.870587051
90	0.271946595	0.728053405	3132.158554	851.7798534	2706.268627	8355.82204	2.667751934
91	0.293565633	0.706434367	2280.3787	669.4408162	1945.658292	5649.553413	2.477462806
92	0.316529528	0.683470472	1610.937884	509.9094081	1355.98318	3703.895121	2.299216598
93	0.340847877	0.659152123	1101.028476	375.2832181	913.3868668	2347.911941	2.132471587
94	0.36651486	0.63348514	725.7452577	265.9964214	592.747047	1434.525074	1.976623421
95	0.39350645	0.60649355	459.7488363	180.9141324	369.2917701	841.7780274	1.830951948
96	0.421777522	0.578222478	278.8347039	117.6062105	220.0315987	472.4862573	1.694503054
97	0.451258972	0.548741028	161.2284934	72.75580422	124.8505913	252.4546587	1.565819126
98	0.481854971	0.518145029	88.4726892	42.63100512	67.15718664	127.6040674	1.442298957
99	0.513440528	0.486559472	45.84168408	23.53697846	34.07319485	60.44688072	1.318600787
100	0.545859558	0.454140442	22.30470562	12.17523674	16.21708725	26.37368587	1.182426987
101	0.578923712	0.421076288	10.12946888	5.864189725	7.197374016	10.15659862	1.002678299
102	0.612412224	0.387587776	4.265279153	2.612109094	2.959224606	2.959224606	0.693793888
103	0.646073066	0.353926934	1.653170059	1.653170059	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.023421752	0.976578248	100000	2342.175223	97845.1988	7163200.586	71.63200586
1	0.002172037	0.997827963	97657.82478	212.116404	97551.76658	7065355.387	72.3480725
2	0.001284303	0.998715697	97445.70837	125.1498597	97383.13344	6967803.62	71.50446886
3	0.001111729	0.998888271	97320.55851	108.1940506	97266.46149	6870420.487	70.59577742
4	0.000652022	0.999347978	97212.36446	63.38455787	97180.67218	6773154.025	69.67379163
5	0.000530081	0.999469919	97148.97991	51.49682812	97123.23149	6675973.353	68.71892386
6	0.000426213	0.999573787	97097.48308	41.38416825	97076.79099	6578850.122	67.75510459
7	0.000392335	0.999607665	97056.09891	38.07848764	97037.05967	6481773.331	66.78378179
8	0.000325658	0.999674342	97018.02042	31.59473764	97002.22305	6384736.271	65.80979743
9	0.00026473	0.99973527	96986.42568	25.67520215	96973.58808	6287734.048	64.83107305
10	0.000302857	0.999697143	96960.75048	29.36519728	96946.06788	6190760.46	63.84810791
11	0.000382916	0.999617084	96931.38528	37.11659367	96912.82699	6093814.392	62.86729911
12	0.000424358	0.999575642	96894.26869	41.11783881	96873.70977	5996901.565	61.89118971
13	0.000440962	0.999559038	96853.15085	42.70859519	96831.79655	5900027.855	60.9172526
14	0.000389838	0.999610162	96810.44226	37.74035432	96791.57208	5803196.059	59.94390608
15	0.000418494	0.999581506	96772.7019	40.49878917	96752.45251	5706404.487	58.96708859
16	0.000425539	0.999574461	96732.20311	41.16336123	96711.62143	5609652.034	57.99156696
17	0.000498247	0.999501753	96691.03975	48.17601839	96666.95174	5512940.413	57.0160423
18	0.000555882	0.999444118	96642.86373	53.72206666	96616.0027	5416273.461	56.04421529
19	0.000650081	0.999349919	96589.14167	62.79080025	96557.74627	5319657.458	55.05710851
20	0.000679316	0.999320684	96526.35087	65.57185628	96493.56494	5223099.712	54.11060985
21	0.000755397	0.999244603	96460.77901	72.86622144	96424.3459	5126606.147	53.14705313
22	0.000724802	0.999275198	96387.91279	69.86210817	96352.98173	5030181.801	52.18685264
23	0.000685794	0.999314206	96318.05068	66.05431365	96285.02352	4933828.819	51.22434252
24	0.000791591	0.999208409	96251.99637	76.19216739	96213.90028	4837543.796	50.25915283
25	0.000872705	0.999127295	96175.8042	83.93309979	96133.83765	4741329.896	49.29857291
26	0.000959971	0.999040029	96091.8711	92.24544858	96045.74838	4645196.058	48.34119686
27	0.001004469	0.998995531	95999.62565	96.42866411	95951.41132	4549150.31	47.38716718
28	0.000981873	0.999018127	95903.19699	94.16472309	95856.11463	4453198.898	46.43431124
29	0.001014446	0.998985554	95809.03226	97.19311122	95760.43571	4357342.784	45.47945721
30	0.001131888	0.998868112	95711.83915	108.3350486	95657.67163	4261582.348	44.52513279
31	0.00118564	0.99881436	95603.5041	113.3512967	95546.82846	4165924.676	43.57502076
32	0.001261078	0.998738922	95490.15281	120.4204835	95429.94257	4070377.848	42.62615283
33	0.001347051	0.998652949	95369.73232	128.4679269	95305.49836	3974947.905	41.67934426
34	0.001440437	0.998559563	95241.2644	137.1890051	95172.66989	3879642.407	40.73488977
35	0.001621026	0.998378974	95104.07539	154.1661512	95026.99232	3784469.737	39.79292918
36	0.00160033	0.99839967	94949.90924	151.951227	94873.93363	3689442.745	38.85672745
37	0.001629181	0.998370819	94797.95801	154.4430159	94720.73651	3594568.811	37.91820928
38	0.001662128	0.998337872	94643.515	157.3096268	94564.86018	3499848.075	36.97926978
39	0.001818222	0.998181778	94486.20537	171.7969102	94400.30692	3405283.214	36.04000394
40	0.001990596	0.998009404	94314.40846	187.7418989	94220.53751	3310882.907	35.10474127
41	0.002270054	0.997729946	94126.66656	213.6726323	94019.83025	3216662.37	34.17376273
42	0.002509548	0.997490452	93912.99393	235.6791205	93795.15437	3122642.54	33.25037792
43	0.00279985	0.99720015	93677.31481	262.2824318	93546.17359	3028847.385	32.33277332
44	0.003024901	0.996975099	93415.03238	282.5712331	93273.74676	2935301.212	31.42215056
45	0.003285273	0.996714727	93132.46114	305.9655869	92979.47835	2842027.465	30.5159708
46	0.003417863	0.996582137	92826.49556	317.2682423	92667.86144	2749047.987	29.6149065
47	0.003672781	0.996327219	92509.22732	339.7661262	92339.34425	2656380.125	28.71475854
48	0.00406555	0.99593445	92169.46119	374.7195967	91982.10139	2564040.781	27.81876717
49	0.004587826	0.995412174	91794.74159	421.1383043	91584.17244	2472058.679	26.93028638
50	0.005186418	0.994813582	91373.60329	473.9016623	91136.65246	2380474.507	26.05210281
51	0.005674247	0.994325753	90899.70163	515.7873647	90641.80794	2289337.855	25.18531759
52	0.00618835	0.99381165	90383.91426	559.3273204	90104.2506	2198696.047	24.32618751
53	0.006530527	0.993469473	89824.58694	586.6018978	89531.28599	2108591.796	23.47455043
54	0.007062975	0.992937025	89237.98504	630.2856435	88922.84222	2019060.51	22.62557261
55	0.007626216	0.992373784	88607.6994	675.7414628	88269.82867	1930137.668	21.78295657
56	0.008385882	0.991614118	87931.95794	737.3870403	87563.26442	1841867.839	20.94651231
57	0.009090535	0.990909465	87194.5709	792.6453277	86798.24823	1754304.575	20.11942437
58	0.010222004	0.989777996	86401.92557	883.2008541	85960.32514	1667506.327	19.29941162
59	0.011226846	0.988773154	85518.72471	960.1055709	85038.67193	1581546.001	18.49356391
60	0.012510844	0.987489156	84558.61914	1057.899675	84029.66931	1496507.329	17.69786859
61	0.013680535	0.986319465	83500.71947	1142.334508	82929.55221	1412477.66	16.91575437
62	0.014998661	0.985001339	82358.38496	1235.265477	81740.75222	1329548.108	16.14344561
63	0.016659868	0.983340132	81123.11948	1351.500435	80447.36927	1247807.356	15.38164907
64	0.018784688	0.981215312	79771.61905	1498.484988	79022.37655	1167359.986	14.63377578
65	0.021269216	0.978730784	78273.13406	1664.808191	77440.72997	1088337.61	13.90435713
66	0.024158174	0.975841826	76608.32587	1850.717253	75682.96724	1010896.88	13.19565293
67	0.027458777	0.972541223	74757.60862	2052.752496	73731.23237	935213.9127	12.50994956
68	0.030258607	0.969741393	72704.85612	2199.947679	71604.88228	861482.6803	11.84903906
69	0.033675232	0.966324768	70504.90844	2374.269179	69317.77385	789877.798	11.2031604
70	0.037208088	0.962791912	68130.63926	2535.010846	66863.13384	720560.0242	10.5761524
71	0.041769231	0.958230769	65595.62842	2739.878972	64225.68893	653696.8903	9.96555726
72	0.046915745	0.953084255	62855.74944	2948.924333	61381.28728	589471.2014	9.378158826
73	0.052995235	0.947004765	59906.82511	3174.776294	58319.43696	528089.9141	8.815187805
74	0.059282587	0.940717413	56732.04882	3363.222617	55050.43751	469770.4772	8.280513166
75	0.06497564	0.93502436	53368.8262	3467.67363	51634.98939	414720.0397	7.770829325
76	0.072465558	0.927534442	49901.15257	3616.114847	48093.09515	363085.0503	7.276085452
77	0.080845024	0.919154976	46285.03772	3741.914984	44414.08023	314991.9551	6.805481223
78	0.089317759	0.910682241	42543.12274	3799.856376	40643.19455	270577.8749	6.360084955

79	0.098540802	0.901459198	38743.26636	3817.792549	36834.37009	229934.6803	5.934829505
80	0.108601064	0.891398936	34925.47381	3792.943617	33029.00201	193100.3103	5.528924569
81	0.120061511	0.879938489	31132.5302	3737.818632	29263.62088	160071.3082	5.141609347
82	0.132608611	0.867391389	27394.71157	3632.774636	25578.32425	130807.6874	4.77492479
83	0.146324814	0.853675186	23761.93693	3476.960997	22023.45643	105229.3631	4.428484236
84	0.161294125	0.838705875	20284.97593	3271.847445	18649.05221	83205.90669	4.101848923
85	0.177600885	0.822399115	17013.12849	3021.546671	15502.35515	64556.85448	3.794531648
86	0.195328217	0.804671783	13991.58182	2732.950727	12625.10645	49054.49933	3.506000963
87	0.214556088	0.785443912	11258.63109	2415.607839	10050.82717	36429.39287	3.235685812
88	0.235358928	0.764641072	8843.023249	2081.284468	7802.381015	26378.5657	2.982980476
89	0.257802773	0.742197227	6761.738781	1743.195009	5890.141277	18576.18469	2.747249678
90	0.281941898	0.718058102	5018.543772	1414.937758	4311.074893	12686.04341	2.527833569
91	0.307814918	0.692185082	3603.606014	1109.24369	3048.984169	8374.96852	2.32405221
92	0.335440377	0.664559623	2494.362324	836.709838	2076.007405	5325.984351	2.135208786
93	0.364811873	0.635188127	1657.652486	604.731309	1355.286832	3249.976946	1.960590035
94	0.395892819	0.604107181	1052.921177	416.8439329	844.4992106	1894.690114	1.799460544
95	0.428610995	0.571389005	636.0772442	272.6297004	499.762394	1050.190904	1.651043035
96	0.462853155	0.537146845	363.4475438	168.2228423	279.3361227	550.4285096	1.514464794
97	0.498460006	0.501539994	195.2247015	97.31170586	146.5688486	271.092387	1.388617244
98	0.535222004	0.464777996	97.91299567	52.40518979	71.71040077	124.5235384	1.271777434
99	0.572876507	0.427123493	45.50780588	26.07035286	32.47262945	52.81313761	1.160529201
100	0.611106898	0.388893102	19.43745302	11.87836161	13.49827221	20.34050816	1.046459541
101	0.649544381	0.350455619	7.559091407	4.909965351	5.104108731	6.842235943	0.905166451
102	0.687773118	0.312226882	2.649126055	1.821997687	1.738127212	1.738127212	0.656113441
103	0.725339311	0.274660689	0.827128369	0.827128369	0	0	0