

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.009660831	0.990339169	100000	966.0831467	99111.2035	6930714.396	69.30714396
1	0.000796209	0.999203791	99033.91685	78.8517332	98994.49099	6831603.193	68.98245985
2	0.000380561	0.999619439	98955.06512	37.65843282	98936.2359	6732608.702	68.03702967
3	0.000308437	0.999691563	98917.40669	30.50981784	98902.15178	6633672.466	67.06274141
4	0.00025512	0.99974488	98886.89687	25.22800167	98874.28287	6534770.314	66.08327818
5	0.000272409	0.999727591	98861.66887	26.93082374	98848.20346	6435896.031	65.10001404
6	0.00023383	0.99976617	98834.73804	23.11047763	98823.18281	6337047.828	64.11761647
7	0.000258222	0.999741778	98811.62757	25.51532996	98798.8699	6238224.645	63.13249562
8	0.000277756	0.999722244	98786.11224	27.43848043	98772.393	6139425.775	62.14867289
9	0.000261852	0.999738148	98758.67376	25.86016257	98745.74367	6040653.382	61.16580096
10	0.000229918	0.999770082	98732.81359	22.70048548	98721.46335	5941907.638	60.18169059
11	0.000210506	0.999789494	98710.11311	20.77904517	98699.72359	5843186.175	59.19541566
12	0.000205492	0.999794508	98689.33406	20.27988977	98679.19412	5744486.451	58.20777398
13	0.000284704	0.999715296	98669.05417	28.09148856	98655.00843	5645807.257	57.21963492
14	0.000362247	0.999637753	98640.96268	35.73240484	98623.09648	5547152.249	56.23578783
15	0.000486943	0.999513057	98605.23028	48.01511549	98581.22272	5448529.152	55.25598528
16	0.000642128	0.999357872	98557.21516	63.28634877	98525.57199	5349947.93	54.2826613
17	0.000865512	0.999134488	98493.92882	85.24768409	98451.30497	5251422.358	53.31721885
18	0.001071405	0.998928595	98408.68113	105.4355134	98355.96337	5152971.053	52.36297239
19	0.001195109	0.998804891	98303.24562	117.4831221	98244.50406	5054615.089	51.41859821
20	0.001158239	0.998841761	98185.7625	113.7226034	98128.90119	4956370.585	50.47952432
21	0.001215109	0.998784891	98072.03989	119.1682047	98012.45579	4858241.684	49.53747969
22	0.00121634	0.99878366	97952.87169	119.1440175	97893.29968	4760229.228	48.59713806
23	0.001287594	0.998712406	97833.72767	125.9701232	97770.74261	4662335.929	47.65571178
24	0.001345093	0.998654907	97707.75755	131.4260663	97642.04451	4564565.186	46.71650748
25	0.001300328	0.998699672	97576.33148	126.8812839	97512.89084	4466923.142	45.77875673
26	0.001156934	0.998843066	97449.4502	112.7425382	97393.07893	4369410.251	44.83771065
27	0.001113374	0.998886626	97336.70766	108.3721933	97282.52156	4272017.172	43.88906585
28	0.00111928	0.99888072	97228.33547	108.8257583	97173.92259	4174734.65	42.93742797
29	0.001282059	0.998717941	97119.50971	124.5129718	97057.25322	4077560.728	41.98498057
30	0.001456399	0.998543601	96994.99674	141.2634124	96924.36503	3980503.474	41.03823505
31	0.001550102	0.998449898	96853.73332	150.133171	96778.66674	3883579.109	40.097361
32	0.001607046	0.998392954	96703.60015	155.4071787	96625.89656	3786800.443	39.15883625
33	0.001565213	0.998434787	96548.19297	151.1185156	96472.63372	3690174.546	38.22106279
34	0.001690505	0.998309495	96397.07446	162.9597192	96315.5946	3593701.912	37.28019686
35	0.001819607	0.998180393	96234.11474	175.1082339	96146.56062	3497386.318	36.34247925
36	0.002015034	0.997984966	96059.0065	193.5621855	95962.22541	3401239.757	35.40781735
37	0.002276205	0.997723795	95865.44432	218.2094455	95756.3396	3305277.532	34.47829982
38	0.002531525	0.997468475	95647.23487	242.1333621	95526.16819	3209521.192	33.55581786
39	0.002803779	0.997196221	95405.10151	267.4948463	95271.35409	3113995.024	32.63971187
40	0.003088923	0.996911077	95137.60666	293.8726975	94990.67032	3018723.67	31.73007789
41	0.003320475	0.996679525	94843.73397	314.926277	94686.27083	2923733	30.82684409
42	0.003620741	0.996379259	94528.80769	342.2643193	94357.67553	2829046.729	29.92787911
43	0.004144567	0.995855433	94186.54337	390.362417	93991.36216	2734689.053	29.03481703
44	0.004638204	0.995361796	93796.18095	435.0458218	93578.65804	2640697.691	28.15357368
45	0.00526718	0.99473282	93361.13513	491.7498885	93115.26019	2547119.033	27.28243427
46	0.005764445	0.994235555	92869.38524	535.3404286	92601.71503	2454003.773	26.42424914
47	0.006395455	0.993604545	92334.04482	590.5181858	92038.78572	2361402.058	25.57455446
48	0.007219134	0.992780866	91743.52663	662.3088018	91412.37223	2269363.272	24.73594983
49	0.008157458	0.991842542	91081.21783	742.9911864	90709.72223	2177950.9	23.91218466
50	0.008779368	0.991220632	90338.22664	793.11254	89941.67037	2087241.178	23.10473932
51	0.009597638	0.990402362	89545.1141	859.4215988	89115.4033	1997299.507	22.30495239
52	0.010040592	0.989959408	88685.6925	890.4568425	88240.46408	1908184.104	21.51625646
53	0.011234553	0.988765447	87795.23566	986.3402143	87302.06555	1819943.64	20.72941232
54	0.012833681	0.987166319	86808.89545	1114.077656	86251.85662	1732641.574	19.95926299
55	0.014221583	0.985778417	85694.81779	1218.715968	85085.45981	1646389.718	19.21224364
56	0.015440248	0.984559752	84476.10182	1304.331984	83823.93583	1561304.258	18.48220058
57	0.017150765	0.982849235	83171.76984	1426.459464	82458.54011	1477480.322	17.76420443
58	0.018176848	0.981823152	81745.31037	1485.87212	81002.37431	1395021.782	17.0654656
59	0.020132816	0.979867184	80259.43825	1615.848476	79451.51402	1314019.408	16.37214808
60	0.021641459	0.978358541	78643.58978	1701.962004	77792.60878	1234567.894	15.69826475
61	0.023848154	0.976151846	76941.62777	1834.91582	76024.16986	1156775.285	15.03445298
62	0.026197071	0.973802929	75106.71195	1967.575829	74122.92404	1080751.115	14.38954105
63	0.028515043	0.971484957	73139.13612	2085.565625	72096.35331	1006628.191	13.76319498
64	0.031052984	0.968947016	71053.5705	2206.425362	69950.35782	934531.8376	13.1524965
65	0.033448155	0.966551845	68847.14514	2302.809994	67695.74014	864581.4798	12.55798593
66	0.03593493	0.96406507	66544.33514	2391.266051	65348.70212	796885.7397	11.97526037
67	0.039465598	0.960534402	64153.06909	2531.839218	62887.14948	731537.0375	11.40299362
68	0.042559616	0.957440384	61621.22987	2622.575911	60309.94192	668649.888	10.85096629
69	0.047721427	0.952278573	58998.65396	2815.499961	57590.90398	608339.9461	10.31108178
70	0.051954589	0.948045411	56183.154	2918.972668	54723.66767	550749.0421	9.802743401
71	0.058186591	0.941813409	53264.18133	3099.261141	51714.55076	496025.3745	9.312550424
72	0.062623537	0.937376463	50164.92019	3141.504759	48594.16781	444310.8237	8.857002503
73	0.066806399	0.933193601	47023.41543	3141.465047	45452.68291	395716.6559	8.415310803
74	0.070523719	0.929476281	43881.95039	3094.718336	42334.59122	350263.973	7.981960006
75	0.075037627	0.924962373	40787.23205	3060.577094	39256.9435	307929.3818	7.549651356
76	0.080334818	0.919665182	37726.65496	3030.763947	36211.27298	268672.4383	7.121554735
77	0.088507381	0.911492619	34695.89101	3070.842453	33160.46978	232461.1653	6.699962402
78	0.097457623	0.902542377	31625.04856	3082.102048	30083.99753	199300.6955	6.3019886

79	0.106734146	0.893265854	28542.94651	3046.507012	27019.693	169216.698	5.92849438
80	0.117449334	0.882550666	25496.4395	2994.539828	23999.16958	142197.005	5.577131857
81	0.127173661	0.872826339	22501.89967	2861.648957	21071.07519	118197.8354	5.252793636
82	0.138007746	0.861992254	19640.25071	2710.506731	18284.99735	97126.76019	4.94529126
83	0.147211715	0.852788285	16929.74398	2492.256646	15683.61566	78841.76284	4.656996758
84	0.158758414	0.841241586	14437.48734	2292.072587	13291.45104	63158.14718	4.374594118
85	0.170148372	0.829851628	12145.41475	2066.522545	11112.15348	49866.69614	4.105804303
86	0.18713839	0.81286161	10078.8922	1886.147659	9135.818374	38754.54266	3.845119273
87	0.201609384	0.798390616	8192.744544	1651.73418	7366.877455	29618.72429	3.615238353
88	0.214653502	0.785346498	6541.010365	1404.050783	5838.984973	22251.84684	3.401897504
89	0.226889528	0.773110472	5136.959582	1165.522336	4554.198414	16412.86186	3.195053728
90	0.244936482	0.755063518	3971.437246	972.7498692	3485.062311	11858.66345	2.985987871
91	0.262821854	0.737178146	2998.687377	788.1205756	2604.627089	8373.601137	2.792422178
92	0.281736804	0.718263196	2210.566801	622.7980256	1899.167788	5768.974048	2.609726177
93	0.301698524	0.698301476	1587.768776	479.0274953	1348.255028	3869.80626	2.437260588
94	0.322716898	0.677283102	1108.74128	357.8095471	929.8365067	2521.551232	2.27424673
95	0.344793142	0.655206858	750.9317332	258.916112	621.4736772	1591.714725	2.119653032
96	0.367918342	0.632081658	492.0156211	181.0215718	401.5048353	970.2410477	1.971972039
97	0.39207194	0.60792806	310.9940494	121.9320403	250.0280292	568.7362125	1.828768794
98	0.417220183	0.582779817	189.0620091	78.88048613	149.621766	318.7081832	1.685733611
99	0.443314595	0.556685405	110.181523	48.84507719	85.75898438	169.0864172	1.534616809
100	0.470290507	0.529709493	61.33644579	28.8459482	46.91347169	83.32743279	1.358530507
101	0.498065748	0.501934252	32.49049759	16.18240399	24.3992956	36.4139611	1.120757261
102	0.526539545	0.473460455	16.3080936	8.586856185	12.01466551	12.01466551	0.736730227
103	0.555591757	0.444408243	7.721237416	7.721237416	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.007188434	0.992811566	100000	718.8433562	99338.66411	7641438.148	76.41438148
1	0.000513062	0.999486938	99281.15664	50.93742771	99255.68793	7542099.484	75.96707914
2	0.000353419	0.999646581	99230.21922	35.06987743	99212.68428	7442843.796	75.00581834
3	0.000258536	0.999741464	99195.14934	25.64548905	99182.32659	7343631.112	74.03215944
4	0.000208787	0.999791213	99169.50385	20.70526448	99159.15122	7244448.785	73.05117505
5	0.000180952	0.999819048	99148.79859	17.94116553	99139.828	7145289.634	72.06632593
6	0.000184203	0.999815797	99130.85742	18.260244	99121.7273	7046149.806	71.07927833
7	0.000157791	0.999842209	99112.59718	15.63909998	99104.77763	6947028.079	70.09228167
8	0.000167372	0.999832628	99096.95808	16.58604034	99088.66506	6847923.301	69.10326446
9	0.000180896	0.999819104	99080.37204	17.92328768	99071.41039	6748834.636	68.11474864
10	0.000162207	0.999837793	99062.44875	16.06858578	99054.41445	6649763.226	67.12698212
11	0.000155952	0.999844048	99046.38016	15.44647817	99038.65692	6550708.811	66.13779121
12	0.000157208	0.999842792	99030.93368	15.56846154	99023.14945	6451670.154	65.14802915
13	0.000162224	0.999837776	99015.36522	16.06271396	99007.33387	6352647.005	64.15819394
14	0.000193685	0.999806315	98999.30251	19.1746638	98989.71518	6253639.671	63.16852253
15	0.000247878	0.999752122	98980.12784	24.5349677	98967.86036	6154649.956	62.18066282
16	0.000281128	0.999718872	98955.59288	27.81916758	98941.68329	6055682.095	61.19595588
17	0.000319265	0.999680735	98927.77371	31.58416135	98911.98163	5956740.412	60.21302399
18	0.000351408	0.999648592	98896.18955	34.75289543	98878.8131	5857828.43	59.23209435
19	0.000368562	0.999631438	98861.43665	36.43657381	98843.21837	5758949.617	58.25274053
20	0.000383648	0.999616352	98825.00008	37.91399635	98806.04308	5660106.399	57.27403384
21	0.000364231	0.999635769	98787.08608	35.98131966	98769.09542	5561300.356	56.29582344
22	0.000406105	0.999593895	98751.10476	40.10332254	98731.0531	5462531.261	55.31615341
23	0.000427957	0.999572043	98711.00144	42.24411161	98689.87938	5363800.207	54.33842357
24	0.000487717	0.999512283	98668.75733	48.12242961	98644.69611	5265110.328	53.36147399
25	0.000518089	0.999481911	98620.6349	51.09421725	98595.08779	5166465.632	52.38726801
26	0.000499403	0.999500597	98569.54068	49.22591224	98544.92773	5067870.544	51.41416414
27	0.000448657	0.999551343	98520.31477	44.20179923	98498.21387	4969325.616	50.43960353
28	0.000441215	0.999558785	98476.11297	43.44913198	98454.3884	4870827.403	49.46201932
29	0.000428238	0.999571762	98432.66384	42.15257855	98411.58755	4772373.014	48.48363163
30	0.000500372	0.999499628	98390.51126	49.23180828	98365.89536	4673961.427	47.50418884
31	0.000617346	0.999382654	98341.27945	60.71057247	98310.92416	4575595.531	46.52772017
32	0.000626356	0.999373644	98280.56888	61.55861274	98249.78957	4477284.607	45.55615274
33	0.000662378	0.999337622	98219.01027	65.05809587	98186.48122	4379034.817	44.58439161
34	0.000697238	0.999302762	98153.95217	68.43670439	98119.73382	4280848.336	43.61361149
35	0.000772186	0.999227814	98085.51547	75.74024027	98047.64535	4182728.602	42.64369293
36	0.000898579	0.999101421	98009.77523	88.06954889	97965.74045	4084680.957	41.67626084
37	0.001079786	0.998920214	97921.70568	105.7345256	97868.83841	3986715.217	40.71329425
38	0.001156427	0.998843573	97815.97115	113.1170689	97759.41262	3888846.378	39.75676295
39	0.001227981	0.998772019	97702.85408	119.977216	97642.86547	3791086.966	38.80221311
40	0.001362919	0.998637081	97582.87687	132.9976015	97516.37807	3693444.1	37.84930532
41	0.001443653	0.998556347	97449.87926	140.6838303	97379.53735	3595927.722	36.90027888
42	0.001556976	0.998443024	97309.19543	151.5080777	97233.4414	3498548.185	35.95290424
43	0.001743035	0.998256965	97157.68736	169.3492897	97073.01271	3401314.743	35.00818963
44	0.001919257	0.998080743	96988.33807	186.145553	96895.26529	3304241.731	34.06844365
45	0.002159355	0.997840645	96802.19251	209.0303041	96697.67736	3207346.465	33.13299402
46	0.002475136	0.997524864	96593.16221	239.0811984	96473.62161	3110648.788	32.20361273
47	0.002770671	0.997229329	96354.08101	266.9654969	96220.59826	3014175.166	31.28227818
48	0.003112554	0.996887446	96087.11551	299.0763041	95937.57736	2917954.568	30.36780272
49	0.003371665	0.996628335	95788.03921	322.9652014	95626.55661	2822016.991	29.46105812
50	0.003526253	0.996473747	95465.07401	336.6339673	95296.75703	2726390.434	28.55903546
51	0.003678335	0.996321665	95128.44004	349.9142522	94953.48292	2631093.677	27.65832884
52	0.004019574	0.995980426	94778.52579	380.9692614	94588.04116	2536140.194	26.75859508
53	0.004451276	0.995548724	94397.55653	420.1895484	94187.46175	2441552.153	25.86456941
54	0.00486243	0.99513757	93977.36698	456.9583388	93748.88781	2347364.691	24.97797892
55	0.005468496	0.994531504	93520.40865	511.4159508	93264.70067	2253615.803	24.09758293
56	0.006030108	0.993969892	93008.9927	560.854232	92728.56558	2160351.103	23.22733577
57	0.006799288	0.993200712	92448.13846	628.5815438	92133.84769	2067622.537	22.36521548
58	0.007628016	0.992371984	91819.55692	700.4010771	91469.35638	1975488.69	21.51490114
59	0.008535538	0.991464462	91119.15584	777.7510575	90730.28031	1884019.333	20.67643533
60	0.009260302	0.990739698	90341.40478	836.5887226	89923.11042	1793289.053	19.85013469
61	0.010515368	0.989484632	89504.81606	941.1761161	89034.228	1703365.942	19.03099763
62	0.01153714	0.98846286	88563.63995	1021.771109	88052.75439	1614331.714	18.2279287
63	0.013058441	0.986941559	87541.86884	1143.160326	86970.28867	1526278.96	17.43484552
64	0.014431957	0.985568043	86398.70851	1246.902453	85775.25728	1439308.671	16.65891419
65	0.016039531	0.983960469	85151.80606	1365.795043	84468.90854	1353533.414	15.89553383
66	0.017310033	0.982689967	83786.01101	1450.33858	83060.84172	1269064.506	15.1464963
67	0.019475366	0.980524634	82335.67244	1603.517368	81533.91375	1186003.664	14.40449357
68	0.021369935	0.978630065	80732.15507	1725.240875	79869.53463	1104469.75	13.68066725
69	0.024403708	0.975596292	79006.91419	1928.061675	78042.88335	1024600.215	12.96848796
70	0.027238792	0.972761208	77078.85252	2099.534864	76029.08509	946557.332	12.28037654
71	0.031774507	0.968225493	74979.31765	2382.430851	73788.10223	870528.247	11.61024499
72	0.034799148	0.965200852	72596.8868	2526.309817	71333.73189	796740.1447	10.97485278
73	0.037920919	0.962079081	70070.57699	2657.140658	68742.00666	725406.4128	10.35251091
74	0.041539484	0.958460516	67413.43633	2800.31933	66013.27666	656664.4062	9.740853485
75	0.045976928	0.954023072	64613.117	2970.712632	63127.76068	590651.1295	9.141350193
76	0.051771146	0.948228854	61642.40436	3191.297941	60046.75539	527523.3688	8.557800012
77	0.060296035	0.939703965	58451.10642	3524.369941	56688.92145	467476.6134	7.997737631
78	0.067125755	0.932874245	54926.73648	3686.998683	53083.23714	410787.692	7.478829406

79	0.074039944	0.925960056	51239.7378	3793.7873	49342.84415	357704.4549	6.98099698
80	0.082502184	0.917497816	47445.9505	3914.394557	45488.75322	308361.6107	6.499218742
81	0.092035722	0.907964278	43531.55594	4006.458191	41528.32685	262872.8575	6.038673596
82	0.102599697	0.897400303	39525.09775	4055.263037	37497.46623	221344.5306	5.600100777
83	0.114276466	0.885723534	35469.83471	4053.367373	33443.15103	183847.0644	5.183194844
84	0.126987316	0.873012684	31416.46734	3989.49288	29421.7209	150403.9134	4.787422842
85	0.142070308	0.857929692	27426.97446	3896.558699	25478.69511	120982.1925	4.411065925
86	0.158687758	0.841312242	23530.41576	3733.988925	21663.4213	95503.49736	4.058725452
87	0.176494474	0.823505526	19796.42684	3493.959941	18049.44687	73840.07606	3.729969891
88	0.196074767	0.803925233	16302.4669	3196.502399	14704.2157	55790.62919	3.422220057
89	0.217544297	0.782455703	13105.9645	2851.127827	11680.40058	41086.41349	3.134940088
90	0.241010351	0.758989649	10254.83667	2471.521787	9019.075778	29406.01291	2.867526208
91	0.266566705	0.733433295	7783.314884	2074.772604	6745.928582	20386.93713	2.619312906
92	0.294287423	0.705712577	5708.54228	1679.952195	4868.566183	13641.00855	2.389578263
93	0.32421958	0.67578042	4028.590085	1306.147786	3375.516192	8772.442366	2.177546531
94	0.356374951	0.643625049	2722.442299	970.2102402	2237.337179	5396.926174	1.982384044
95	0.390720799	0.609279201	1752.232059	684.6335091	1409.915304	3159.588995	1.803179539
96	0.427170082	0.572829918	1067.59855	456.0461597	839.5754696	1749.673691	1.638887288
97	0.465571548	0.534428452	611.5523898	284.7213929	469.1916933	910.0982214	1.488177034
98	0.505700437	0.494299563	326.8309968	165.2785778	244.1917079	440.9065281	1.349035227
99	0.547250759	0.452749241	161.552419	88.40968394	117.347577	196.7148201	1.217653201
100	0.589830397	0.410169603	73.14273508	43.1418085	51.57183083	79.3672431	1.085100838
101	0.632960479	0.367039521	30.00092658	18.98940087	20.50622614	27.79541227	0.926485127
102	0.676080623	0.323919377	11.01152571	7.444679166	7.289186125	7.289186125	0.661959688
103	0.718561589	0.281438411	3.566846542	3.566846542	0	0	0