

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.019652335	0.980347665	100000	1965.233473	98191.9852	6725358.206	67.25358206
1	0.000787253	0.999212747	98034.76653	77.17815736	97996.17745	6627166.221	67.60016324
2	0.000621082	0.999378918	97957.58837	60.83969796	97927.16852	6529170.043	66.65302966
3	0.000568296	0.999431704	97896.74867	55.63435849	97868.93149	6431242.875	65.69414166
4	0.000514273	0.999485727	97841.11431	50.3170425	97815.95579	6333373.943	64.73121231
5	0.000459359	0.999540641	97790.79727	44.92105068	97768.33674	6235557.988	63.76426168
6	0.000404316	0.999595684	97745.87622	39.52020304	97726.11612	6137789.651	62.79333603
7	0.000364512	0.999635488	97706.35602	35.61514453	97688.54844	6040063.535	61.8185324
8	0.000377219	0.999622781	97670.74087	36.84321349	97652.31927	5942374.986	60.84089189
9	0.000388236	0.999611764	97633.89766	37.9049755	97614.94517	5844722.667	59.86366218
10	0.000376056	0.999623944	97595.99268	36.70156028	97577.6419	5747107.722	58.88671823
11	0.000359807	0.999640193	97559.29112	35.10255805	97541.73984	5649530.08	57.90868317
12	0.000345677	0.999654323	97524.18856	33.71185204	97507.33264	5551988.34	56.92934668
13	0.000379226	0.999620774	97490.47671	36.97090361	97471.99126	5454481.007	55.94885974
14	0.00040275	0.99959725	97453.50581	39.24940791	97433.88111	5357009.016	54.96989535
15	0.000556805	0.999443195	97414.2564	54.24077621	97387.13601	5259575.135	53.99184195
16	0.000759349	0.999240651	97360.01562	73.93018513	97323.05053	5162187.999	53.02164308
17	0.001001183	0.998998817	97286.08544	97.40120916	97237.38484	5064864.948	52.06155562
18	0.001155035	0.998844965	97188.68423	112.2562905	97132.55609	4967627.564	51.11322993
19	0.001279928	0.998720072	97076.42794	124.2508476	97014.30252	4870495.008	50.17175756
20	0.001286161	0.998713839	96952.17709	124.696111	96889.82904	4773480.705	49.23541532
21	0.001213606	0.998786394	96827.48098	117.5104405	96768.72576	4676590.876	48.29817763
22	0.001233927	0.998766073	96709.97054	119.3330862	96650.304	4579822.15	47.35625628
23	0.00123753	0.99876247	96590.63745	119.5338236	96530.87054	4483171.846	46.41414494
24	0.001215238	0.998784762	96471.10363	117.2353313	96412.48597	4386640.976	45.47103548
25	0.001276515	0.998723485	96353.8683	122.9971389	96292.36973	4290228.49	44.52575247
26	0.001361599	0.998638401	96230.87116	131.0278301	96165.35725	4193936.12	43.58202383
27	0.001281648	0.998718352	96099.84333	123.166168	96038.26025	4097770.763	42.64076424
28	0.001350166	0.998649834	95976.67716	129.5844915	95911.88492	4001732.503	41.69484317
29	0.0014219	0.9985781	95847.09267	136.2850047	95778.95017	3905820.618	40.75053827
30	0.001480482	0.998519518	95710.80767	141.6981557	95639.95859	3810041.667	39.80785201
31	0.001586931	0.998413069	95569.10951	151.6615509	95493.27874	3714401.709	38.86613287
32	0.001741254	0.998258746	95417.44796	166.1459912	95334.37496	3618908.43	37.92711404
33	0.001845928	0.998154072	95251.30197	175.8270717	95163.38843	3523574.055	36.99239782
34	0.001943934	0.998056066	95075.4749	184.8204593	94983.06467	3428410.667	36.05988474
35	0.002081645	0.997918355	94890.65444	197.5286633	94791.89011	3333427.602	35.12914545
36	0.002266866	0.997733134	94693.12577	214.6566016	94585.79747	3238635.712	34.20138141
37	0.002446403	0.997553597	94478.46917	231.1323876	94362.90298	3144049.914	33.27795149
38	0.002723381	0.997276619	94247.33679	256.6714262	94119.00107	3049687.011	32.35833622
39	0.003056506	0.996943494	93990.66536	287.2830771	93847.02382	2955568.01	31.44533555
40	0.00323246	0.99676754	93703.38228	302.8924067	93551.93608	2861720.987	30.54021015
41	0.003551171	0.996448829	93400.48988	331.6811219	93234.64931	2768169.051	29.63762882
42	0.003991045	0.996008955	93068.80875	371.4418366	92883.08784	2674934.401	28.74147028
43	0.004507024	0.995492976	92697.36692	417.7892905	92488.47227	2582051.313	27.85463492
44	0.004849808	0.995150192	92279.57763	447.5381916	92055.80853	2489562.841	26.9784811
45	0.0055631	0.9944369	91832.03943	510.8707909	91576.60404	2397507.033	26.10752247
46	0.0061717	0.9938283	91321.16864	563.6068818	91039.3652	2305930.429	25.2507766
47	0.00683675	0.99316325	90757.56176	620.4867834	90447.31837	2214891.063	24.40447959
48	0.007643893	0.992356107	90137.07498	688.9981772	89792.57589	2124443.745	23.56903356
49	0.008748713	0.991251287	89448.0768	782.5555189	89056.79904	2034651.169	22.74672907
50	0.009399021	0.990600979	88665.52128	833.3691323	88248.83672	1945594.37	21.9430771
51	0.010313716	0.989686284	87832.15215	905.8758834	87379.21421	1857345.533	21.14653333
52	0.011284804	0.988715196	86926.27627	980.9460196	86435.80326	1769966.319	20.36169493
53	0.01232191	0.98767809	85945.33025	1059.010594	85415.82495	1683530.516	19.58838847
54	0.014008629	0.985991371	84886.31965	1189.140974	84291.74917	1598114.691	18.8265282
55	0.015690371	0.984309629	83697.17868	1313.239772	83040.55879	1513822.942	18.08690526
56	0.017915771	0.982084229	82383.93891	1475.971788	81645.95301	1430782.383	17.36724903
57	0.019385823	0.980614177	80907.96712	1568.467529	80123.73335	1349136.43	16.67495153
58	0.020198216	0.979801784	79339.49959	1602.516333	78538.24142	1269012.697	15.99471516
59	0.021932093	0.978067907	77736.98326	1704.934708	76884.5159	1190474.455	15.31413241
60	0.022970643	0.977029357	76032.04855	1746.505024	75158.79604	1113589.939	14.64632297
61	0.024957894	0.975042106	74285.54352	1854.010708	73358.53817	1038431.143	13.97891291
62	0.028307372	0.971692628	72431.53282	2050.346334	71406.35965	965072.605	13.32392906
63	0.031030337	0.968969663	70381.18648	2183.951936	69289.21052	893666.2454	12.69751606
64	0.034167113	0.965832887	68197.23455	2330.102629	67032.18323	824377.0349	12.08812997
65	0.038059096	0.961940904	65867.13192	2506.843491	64613.71017	757344.8516	11.49806936
66	0.040708135	0.959291865	63360.28843	2579.279151	62070.64885	692731.1414	10.93320688
67	0.044272995	0.955727005	60781.00928	2690.957322	59435.53062	630660.4926	10.37594637
68	0.048516511	0.951483489	58090.05195	2818.326663	56680.88864	571224.962	9.833438649
69	0.053066157	0.946933843	55271.72532	2933.058032	53805.1963	514544.0733	9.309354292
70	0.058400898	0.941599102	52338.66729	3056.62515	50810.35471	460738.877	8.803030358
71	0.06475726	0.93524274	49282.04214	3191.370035	47686.35712	409928.5223	8.318010061
72	0.071487087	0.928512913	46090.6721	3294.8879	44443.22815	362242.1652	7.859337881
73	0.078183454	0.921816546	42795.7842	3345.922238	41122.82308	317798.9371	7.425940264
74	0.085373043	0.914626957	39449.86196	3367.95475	37765.88459	276676.114	7.013360762
75	0.092978939	0.907021061	36081.90721	3354.857452	34404.47849	238910.2294	6.621330407
76	0.099205283	0.900794717	32727.04976	3246.696236	31103.70164	204505.7509	6.248829405
77	0.108885893	0.891114107	29480.35353	3209.994631	27875.35621	173402.0493	5.881952843
78	0.118365005	0.881634995	26270.3589	3109.491166	24715.61331	145526.693	5.539577652

79	0.127973059	0.872026941	23160.86773	2963.967099	21678.88418	120811.0797	5.216172431
80	0.138504192	0.861495808	20196.90063	2797.355402	18798.22293	99132.19555	4.908287532
81	0.148762456	0.851237544	17399.54523	2588.399083	16105.34569	80333.97262	4.617015649
82	0.160340135	0.839659865	14811.14615	2374.821172	13623.73556	64228.62693	4.336506189
83	0.172842004	0.827157996	12436.32497	2149.519334	11361.56531	50604.89137	4.069119413
84	0.187787052	0.812212948	10286.80564	1931.728905	9320.941186	39243.32606	3.81491859
85	0.197495001	0.802504999	8355.076734	1650.08589	7530.033789	29922.38488	3.58134172
86	0.214155687	0.785844313	6704.990844	1435.911922	5987.034883	22392.35109	3.339654238
87	0.234237153	0.765762847	5269.078921	1234.214045	4651.971899	16405.31621	3.113507399
88	0.24874536	0.75125464	4034.864876	1003.653918	3533.037917	11753.34431	2.9129462
89	0.270765377	0.729234623	3031.210958	820.746978	2620.837469	8220.306391	2.711888583
90	0.290421672	0.709578328	2210.46398	641.9666441	1889.480658	5599.468921	2.533164517
91	0.311137968	0.688862032	1568.497336	488.0190747	1324.487799	3709.988263	2.365313716
92	0.332919059	0.667080941	1080.478262	359.7118065	900.6223583	2385.500464	2.207819027
93	0.355760117	0.644239883	720.7664551	256.4199582	592.556476	1484.878106	2.060137643
94	0.379645186	0.620354814	464.3464969	176.2869119	376.2030409	892.3216297	1.921671932
95	0.40454563	0.59545437	288.0595849	116.5332461	229.7929618	516.1185888	1.791707743
96	0.430418575	0.569581425	171.5263388	73.82812234	134.6122776	286.325627	1.669280817
97	0.457205403	0.542794597	97.69821645	44.66815241	75.36414025	151.7133493	1.552877369
98	0.484830353	0.515169647	53.03006404	25.71058468	40.1747717	76.3492091	1.439734431
99	0.513199327	0.486800673	27.31947937	14.02033843	20.30931015	36.17443739	1.324126163
100	0.542198973	0.457801027	13.29914094	7.210780562	9.693750657	15.86512724	1.192943764
101	0.571696168	0.428303832	6.088360376	3.480692295	4.348014228	6.171376586	1.013635233
102	0.601538002	0.398461998	2.607668081	1.568611447	1.823362357	1.823362357	0.699230999
103	0.631552398	0.368447602	1.039056634	1.039056634	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.014029973	0.985970027	100000	1402.997309	98709.24248	7423735.114	74.23735114
1	0.00068853	0.99931147	98597.00269	67.88702376	98563.05918	7325025.872	74.29258164
2	0.000527183	0.999472817	98529.11567	51.94286043	98503.14424	7226462.812	73.34342507
3	0.000367421	0.999632579	98477.17281	36.18254145	98459.08154	7127959.668	72.38184713
4	0.000364833	0.999635167	98440.99027	35.91451753	98423.03301	7029500.587	71.40826771
5	0.000352632	0.999647368	98405.07575	34.70081014	98387.72534	6931077.554	70.43414683
6	0.000329649	0.999670351	98370.37494	32.42773026	98354.16107	6832689.828	69.45881657
7	0.00026725	0.99973275	98337.94721	26.28077196	98324.80682	6734335.667	68.48155629
8	0.000257602	0.999742398	98311.66644	25.32527844	98299.0038	6636010.86	67.49972919
9	0.000237297	0.999762703	98286.34116	23.32303044	98274.67964	6537711.857	66.5169929
10	0.000247247	0.999752753	98263.01813	24.29526373	98250.87049	6439437.177	65.53266223
11	0.000263091	0.999736909	98238.72286	25.8456796	98225.80002	6341186.307	64.54874536
12	0.00023037	0.99976963	98212.87718	22.62533174	98201.56452	6242960.506	63.56560041
13	0.0002473	0.9997527	98190.25185	24.28243783	98178.11063	6144758.942	62.5801322
14	0.000258769	0.999741231	98165.96941	25.40228789	98153.26827	6046580.831	61.59548841
15	0.000386801	0.999613199	98140.56713	37.96088632	98121.58668	5948427.563	60.61130211
16	0.000454789	0.999545211	98102.60624	44.61599886	98080.29824	5850305.976	59.63456223
17	0.000452054	0.999547946	98057.99024	44.32749495	98035.82649	5752225.678	58.66146822
18	0.000435224	0.999564776	98013.66275	42.65790809	97992.33379	5654189.852	57.68777253
19	0.000452754	0.999547246	97971.00484	44.3567559	97948.82646	5556197.518	56.71267226
20	0.000408601	0.999591399	97926.64808	40.01295016	97906.64161	5458248.691	55.7381346
21	0.000501938	0.999498062	97886.63513	49.13300928	97862.06863	5360342.05	54.76071419
22	0.000475613	0.999524387	97837.50212	46.53281579	97814.23571	5262479.981	53.78796338
23	0.000477361	0.999522639	97790.96931	46.68162102	97767.6285	5164665.745	52.8133199
24	0.000496206	0.999503794	97744.28769	48.5013005	97720.03703	5066898.117	51.83830418
25	0.000507469	0.999492531	97695.78638	49.57762458	97670.99757	4969178.08	50.8637912
26	0.000502902	0.999497098	97646.20876	49.10651797	97621.6555	4871507.082	49.88936226
27	0.000502739	0.999497261	97597.10224	49.06588765	97572.5693	4773885.427	48.91421279
28	0.00047127	0.99952873	97548.03635	45.97146695	97525.05062	4676312.858	47.93856476
29	0.000531829	0.999468171	97502.06489	51.85440182	97476.13769	4578787.807	46.96093167
30	0.000526973	0.999473027	97450.21049	51.35362929	97424.53367	4481311.669	45.98565408
31	0.000579959	0.999420041	97398.85686	56.48730374	97370.6132	4383887.136	45.00963643
32	0.000617408	0.999382592	97342.36955	60.09994148	97312.31958	4286516.522	44.03546515
33	0.000664594	0.999335406	97282.26961	64.65317396	97249.94302	4189204.203	43.0623609
34	0.000739647	0.999260353	97217.61644	71.90672647	97181.66307	4091954.26	42.09066638
35	0.000834876	0.999165124	97145.70971	81.10461746	97105.1574	3994772.597	41.12145157
36	0.000978624	0.999021376	97064.60509	94.98972081	97017.11023	3897667.439	40.15539378
37	0.001208261	0.998791739	96969.61537	117.1645635	96911.03309	3800650.329	39.1942395
38	0.001196993	0.998803007	96852.45081	115.9317137	96794.48495	3703739.296	38.24104878
39	0.001298339	0.998701661	96736.5191	125.5967677	96673.72071	3606944.811	37.2862787
40	0.001389859	0.998610141	96610.92233	134.2756006	96543.78453	3510271.09	36.33410184
41	0.001532894	0.998467106	96476.64673	147.8884749	96402.70249	3413727.306	35.38397552
42	0.001771256	0.998228744	96328.75825	170.6228435	96243.44683	3317324.603	34.43753105
43	0.002051682	0.997948318	96158.13541	197.2859514	96059.49243	3221081.156	33.49774975
44	0.002073677	0.997926323	95960.84946	198.9918115	95861.35355	3125021.664	32.56558984
45	0.002368528	0.997631472	95761.85765	226.8146232	95648.45033	3029160.31	31.63222169
46	0.002696639	0.997303361	95535.04302	257.6235507	95406.23125	2933511.86	30.70613429
47	0.003051349	0.996948651	95277.41947	290.7246604	95132.05714	2838105.629	29.78780958
48	0.003275524	0.996724476	94986.69481	311.1312118	94831.12921	2742973.572	28.87745044
49	0.003610724	0.996389276	94675.5636	341.8473393	94504.63993	2648142.443	27.97070693
50	0.003901389	0.996098611	94333.71626	368.0324934	94149.70001	2553637.803	27.07025551
51	0.00444727	0.99555273	93965.68377	417.8907825	93756.73838	2459488.103	26.17432241
52	0.005233136	0.994766864	93547.79298	489.5483313	93303.01882	2365731.364	25.28901312
53	0.005830472	0.994169528	93058.24465	542.5734521	92786.95793	2272428.345	24.41941984
54	0.006326994	0.993673006	92515.6712	585.346061	92222.99817	2179641.387	23.55969523
55	0.006647109	0.993352891	91930.32514	611.0709061	91624.78969	2087418.389	22.70652678
56	0.007497272	0.992502728	91319.25423	684.6453242	90976.93157	1995793.6	21.85512372
57	0.008221897	0.991778103	90634.60891	745.1884258	90262.0147	1904816.668	21.01643832
58	0.009007896	0.990992104	89889.42048	809.7145464	89484.56321	1814554.653	20.18652077
59	0.010327731	0.989672269	89079.70594	919.9912587	88619.71031	1725070.09	19.36546683
60	0.01104768	0.98895232	88159.71468	973.9603415	87672.73451	1636450.38	18.56233752
61	0.01211912	0.98788088	87185.75434	1056.614619	86657.44703	1548777.645	17.76411361
62	0.013620277	0.986379723	86129.13972	1173.102732	85542.58835	1462120.198	16.97590622
63	0.01436323	0.98563677	84956.03699	1220.243102	84345.91544	1376577.61	16.2034113
64	0.015779893	0.984220107	83735.79388	1321.341849	83075.12296	1292231.695	15.43224987
65	0.018096141	0.981903859	82414.45204	1491.383536	81668.76027	1209156.572	14.67165699
66	0.020132154	0.979867846	80923.0685	1629.155664	80108.49067	1127487.811	13.93283562
67	0.023378311	0.976621689	79293.91284	1853.757793	78367.03394	1047379.321	13.20882377
68	0.026678602	0.973321398	77440.15504	2065.995082	76407.1575	969012.2867	12.51304683
69	0.029607383	0.970392617	75374.15996	2231.631604	74258.34416	892605.1292	11.84232275
70	0.03330883	0.96669117	73142.52836	2436.292033	71924.38234	818346.785	11.18838524
71	0.037041336	0.962958664	70706.23632	2619.053478	69396.70958	746422.4027	10.55666998
72	0.04135157	0.95864843	68087.18285	2815.511922	66679.42688	677025.6931	9.94351161
73	0.046267291	0.953732709	65271.67092	3019.943401	63761.69922	610346.2662	9.350860145
74	0.051629312	0.948370688	62251.72752	3214.013841	60644.7206	546584.567	8.780231308
75	0.057021285	0.942978715	59037.71368	3366.406296	57354.51053	485939.8464	8.2310072
76	0.063202839	0.936797161	55671.30739	3518.584685	53912.01504	428585.3359	7.698495975
77	0.071034799	0.928965201	52152.7227	3704.658186	50300.39361	374673.3208	7.184156481
78	0.080035039	0.919964961	48448.06451	3877.542726	46509.29315	324372.9272	6.695271121

79	0.089743717	0.910256283	44570.52179	3999.924274	42570.55965	277863.6341	6.234246827
80	0.099957237	0.900042763	40570.59751	4055.324817	38542.93511	235293.0744	5.799595984
81	0.110556211	0.889443789	36515.2727	4036.990192	34496.7776	196750.1393	5.388160207
82	0.122464116	0.877535884	32478.28251	3977.424148	30489.57043	162253.3617	4.995749442
83	0.135946437	0.864053563	28500.85836	3874.59015	26563.56328	131763.7913	4.623151682
84	0.150750369	0.849249631	24626.26821	3712.419013	22770.0587	105200.228	4.271870472
85	0.166989546	0.833010454	20913.84919	3492.394178	19167.6521	82430.16928	3.941415495
86	0.184764977	0.815235023	17421.45502	3218.87473	15812.01765	63262.51718	3.631299287
87	0.204175461	0.795824539	14202.58029	2899.81838	12752.6711	47450.49953	3.340977384
88	0.225314777	0.774685223	11302.76191	2546.679275	10029.42227	34697.82843	3.069853963
89	0.248268211	0.751731789	8756.082631	2173.856974	7669.154144	24668.40616	2.817287959
90	0.273108386	0.726891614	6582.225657	1797.661029	5683.395143	16999.25202	2.582599398
91	0.299890326	0.700109674	4784.564628	1434.844644	4067.142306	11315.85688	2.365075562
92	0.328645771	0.671354229	3349.719984	1100.871306	2799.284332	7248.71457	2.163976274
93	0.359376792	0.640623208	2248.848679	808.1840248	1844.756666	4449.430238	1.978536964
94	0.392048818	0.607951182	1440.664654	564.8108748	1158.259217	2604.673572	1.807966597
95	0.426583298	0.573416702	875.8537791	373.6245932	689.0414825	1446.414355	1.651433595
96	0.462850351	0.537149649	502.2291859	232.4569552	386.0007083	757.3728729	1.508022421
97	0.50066189	0.49933811	269.7722307	135.0646748	202.2398933	371.3721647	1.376613759
98	0.539765851	0.460234149	134.7075559	72.71053852	98.35228661	169.1322714	1.255551482
99	0.579842379	0.420157621	61.99701735	35.94849802	44.02276834	70.77998478	1.14166758
100	0.620502894	0.379497106	26.04851933	16.16318164	17.96692851	26.75721644	1.02720681
101	0.66129311	0.33870689	9.885337691	6.5371057	6.616784841	8.790287928	0.88922485
102	0.701701021	0.298298979	3.348231991	2.349457807	2.173503087	2.173503087	0.649149489
103	0.741170757	0.258829243	0.998774184	0.998774184	0	0	0