

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.138014029	0.861985971	100000	13801.40291	87302.70932	5329550.938	53.29550938
1	0.01755083	0.98244917	86198.59709	1512.8569	85442.16864	5242248.229	60.81593444
2	0.006548827	0.993451173	84685.74019	554.5922743	84408.44405	5156806.06	60.89344025
3	0.004888019	0.995111981	84131.14791	411.2346492	83925.53059	5072397.616	60.29155363
4	0.00240535	0.99759465	83719.91327	201.3756661	83619.22543	4988472.086	59.58525148
5	0.002403199	0.997596801	83518.5376	200.7116923	83418.18175	4904852.86	58.72771485
6	0.001969073	0.998030927	83317.82591	164.0588849	83235.79646	4821434.679	57.86798475
7	0.001920072	0.998079928	83153.76702	159.6612424	83073.9364	4738198.882	56.98116937
8	0.001901024	0.998098976	82994.10578	157.7737558	82915.2189	4655124.946	56.08982592
9	0.001876649	0.998123351	82836.33202	155.454757	82758.60465	4572209.727	55.19570477
10	0.00172706	0.99827294	82680.87727	142.7948744	82609.47983	4489451.122	54.29854243
11	0.001760088	0.998239912	82538.08239	145.2742654	82465.44526	4406841.642	53.39161651
12	0.001719685	0.998280315	82392.80813	141.6896939	82321.96328	4324376.197	52.48487454
13	0.001763514	0.998236486	82251.11843	145.051024	82178.59292	4242054.234	51.57442616
14	0.002010496	0.997989504	82106.06741	165.0739412	82023.53044	4159875.641	50.66465576
15	0.002437402	0.997562598	81940.99347	199.7231576	81841.13189	4077852.111	49.76571479
16	0.002891339	0.997108661	81741.27031	236.3417282	81623.09945	3996010.979	48.88608855
17	0.003535648	0.996464352	81504.92858	288.1727028	81360.84223	3914387.879	48.02639481
18	0.003987379	0.996012621	81216.75588	323.8420187	81054.83487	3833027.037	47.19502762
19	0.004270023	0.995729977	80892.91386	345.4146319	80720.20654	3751972.202	46.3819638
20	0.004628601	0.995371399	80547.49923	372.8222468	80361.08811	3671251.996	45.57872101
21	0.004790937	0.995209063	80174.67698	384.1118493	79982.62106	3590890.907	44.78834269
22	0.004860852	0.995139148	79790.56513	387.8500915	79596.64009	3510908.286	44.00154681
23	0.004998749	0.995001251	79402.71504	396.9142582	79204.25791	3431311.646	43.21403424
24	0.004874055	0.995125945	79005.80078	385.0786569	78813.26145	3352107.388	42.42862366
25	0.004753011	0.995246989	78620.72213	373.685118	78433.87957	3273294.127	41.63398705
26	0.004816502	0.995183498	78247.03701	376.8770399	78058.59849	3194860.247	40.83043102
27	0.004758252	0.995241748	77870.15997	370.5258716	77684.89703	3116801.649	40.02562278
28	0.004819433	0.995180567	77499.6341	373.5042811	77312.88196	3039116.752	39.21459485
29	0.004801059	0.995198941	77126.12982	370.287083	76940.98627	2961803.87	38.40208081
30	0.00466451	0.99533549	76755.84273	358.0283707	76576.82855	2884862.884	37.58492879
31	0.004614529	0.995385471	76397.81436	352.5399015	76221.54441	2808286.055	36.75872247
32	0.004730915	0.995269085	76045.27446	359.7636919	75865.39261	2732064.511	35.92681505
33	0.004987669	0.995012331	75685.51077	377.4942741	75496.76363	2656199.118	35.09521296
34	0.005212686	0.994787314	75308.01649	392.5570415	75111.73797	2580702.354	34.26862736
35	0.005386321	0.994613679	74915.45945	403.5186984	74713.7001	2505590.616	33.44557498
36	0.005680211	0.994319789	74511.94075	423.2435135	74300.319	2430876.916	32.62399143
37	0.005869102	0.994130898	74088.69724	434.8341289	73871.28018	2356576.597	31.80750486
38	0.006188318	0.993811682	73653.86311	455.793538	73425.96634	2282705.317	30.9923366
39	0.006404998	0.993595002	73198.06957	468.833457	72963.65285	2209279.351	30.18220786
40	0.00671722	0.99328278	72729.23612	488.5383038	72484.96696	2136315.698	29.37354786
41	0.007267574	0.992732426	72240.69781	525.0146527	71978.19049	2063830.731	28.56880946
42	0.007850164	0.992149836	71715.68316	562.9798518	71434.19323	1991852.541	27.774295
43	0.008302956	0.991697044	71152.70331	590.7777486	70857.31443	1920418.347	26.99009676
44	0.008821689	0.991178311	70561.92556	622.475352	70250.68788	1849561.033	26.21188436
45	0.009062948	0.990937052	69939.45021	633.8576094	69622.5214	1779310.345	25.44072537
46	0.00948573	0.99051427	69305.5926	657.4141092	68976.88554	1709687.824	24.66882916
47	0.010168272	0.989831728	68648.17849	698.0333719	68299.1618	1640710.938	23.90028365
48	0.010770314	0.989229686	67950.14512	731.8443821	67584.22293	1572411.776	23.1406684
49	0.011361116	0.988638884	67218.30074	763.6749163	66836.46328	1504827.553	22.38717041
50	0.012073264	0.987926736	66454.62582	802.3242137	66053.46371	1437991.09	21.63869064
51	0.01320975	0.98679025	65652.30161	867.2504923	65218.67636	1371937.626	20.89702254
52	0.014276493	0.985723507	64785.05111	924.9033046	64322.59946	1306718.95	20.17006898
53	0.015426598	0.984573402	63860.14781	985.1448357	63367.57539	1242396.35	19.45495576
54	0.016333	0.983667	62875.00297	1026.937437	62361.53425	1179028.775	18.75194782
55	0.016760245	0.983239755	61848.06554	1036.588701	61329.77118	1116667.241	18.05500675
56	0.017471694	0.982528306	60811.47683	1062.47953	60280.23707	1055337.47	17.35424832
57	0.019080556	0.980919444	59748.9973	1140.044098	59178.97526	995057.2326	16.65395701
58	0.021205215	0.978794785	58608.95321	1242.815445	57987.54548	935878.2573	15.96817903
59	0.022970249	0.977029751	57366.13776	1317.714477	56707.28052	877890.7118	15.30329121
60	0.025469314	0.974530686	56048.42329	1427.514869	55334.66585	821183.4313	14.65132083
61	0.027306728	0.972693272	54620.90842	1491.518284	53875.14927	765848.7655	14.02116493
62	0.029316619	0.970683381	53129.39013	1557.574108	52350.60308	711973.6162	13.4007489
63	0.032179985	0.967820015	51571.81602	1659.580282	50742.02588	659623.0131	12.79037785
64	0.035009325	0.964990675	49912.23574	1747.39367	49038.53891	608880.9872	12.19903253
65	0.037703092	0.962296908	48164.84207	1815.963481	47256.86033	559842.4483	11.62346692
66	0.040598661	0.959401339	46348.87859	1881.7024	45408.02739	512585.588	11.05928781
67	0.043641792	0.956358208	44467.17619	1940.627243	43496.86257	467177.5606	10.50612161
68	0.04745613	0.95254387	42526.54895	2018.145416	41517.47624	423680.698	9.962734069
69	0.051348263	0.948651737	40508.40353	2080.036161	39468.38545	382163.2218	9.434171393
70	0.056329995	0.943670005	38428.36737	2164.669754	37346.03249	342694.8363	8.917756849
71	0.063106376	0.936893624	36263.69762	2288.470548	35119.46234	305348.8038	8.420233564
72	0.069874006	0.930125994	33975.22707	2373.985206	32788.23447	270229.3415	7.953717011
73	0.076685723	0.923314277	31601.24186	2423.364066	30389.55983	237441.107	7.5136638
74	0.084275723	0.915724277	29177.8778	2458.986741	27948.38443	207051.5472	7.096182548
75	0.091025894	0.908974106	26718.89106	2432.11094	25502.83559	179103.1628	6.703240879
76	0.096720326	0.903279674	24286.78012	2349.025291	23112.26747	153600.3272	6.324441793
77	0.103045296	0.896954704	21937.75483	2260.582433	20807.46361	130488.0597	5.948104569
78	0.11170606	0.88829394	19677.17239	2198.059401	18578.14269	109680.5961	5.57400189

79	0.12365593	0.87634407	17479.11299	2161.395968	16398.41501	91102.45341	5.212075318
80	0.135852019	0.864147981	15317.71702	2080.942777	14277.24564	74704.0384	4.876969478
81	0.147799	0.852201	13236.77425	1956.381996	12258.58325	60426.79277	4.565069377
82	0.160944053	0.839055947	11280.39225	1815.51205	10372.63623	48168.20952	4.270082852
83	0.174647926	0.825352074	9464.880202	1653.021698	8638.369353	37795.57329	3.993243706
84	0.189450574	0.810549426	7811.858504	1479.961074	7071.877967	29157.20394	3.73242858
85	0.20361059	0.79638941	6331.897429	1289.241372	5687.276744	22085.32597	3.487947526
86	0.220312268	0.779687732	5042.656058	1110.958993	4487.176561	16398.04923	3.251867476
87	0.238170906	0.761829094	3931.697065	936.4158511	3463.489139	11910.87267	3.029448218
88	0.257227201	0.742772799	2995.281214	770.4678023	2610.047313	8447.383528	2.820230531
89	0.277515555	0.722484445	2224.813412	617.4203276	1916.103248	5837.336215	2.623741921
90	0.299062307	0.700937693	1607.393084	480.7106843	1367.037742	3921.232967	2.439498469
91	0.32188377	0.67811623	1126.6824	362.6607786	945.3520104	2554.195226	2.267005525
92	0.345984068	0.654015932	764.0216211	264.3393084	631.8519669	1608.843215	2.105756134
93	0.371352817	0.628647183	499.6823127	185.5584343	406.9030955	976.9912483	1.955224797
94	0.397962684	0.602037316	314.1238784	125.0095819	251.6190875	570.0881528	1.814851375
95	0.425766894	0.574233106	189.1142965	80.51860659	148.8549932	318.4690653	1.68400312
96	0.454696757	0.545303243	108.5956899	49.37810802	83.90663591	169.6140721	1.561885856
97	0.484659357	0.515340643	59.2175819	28.70035518	44.86740431	85.70743619	1.447330901
98	0.515535519	0.484464481	30.51722672	15.73271432	22.65086956	40.84003188	1.338261574
99	0.547178241	0.452821759	14.7845124	8.089763493	10.73963065	18.18916232	1.230284897
100	0.57941179	0.42058821	6.694748908	3.879016451	4.755240682	7.449531662	1.112742504
101	0.612031679	0.387968321	2.815732457	1.723317463	1.954073726	2.69429098	0.956870378
102	0.644805758	0.355194242	1.092414994	0.704395479	0.740217255	0.740217255	0.677597121
103	0.677476655	0.322523345	0.388019515	0.388019515	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.115942146	0.884057854	100000	11594.21462	89333.32255	5612569.658	56.12569658
1	0.016560384	0.983439616	88405.78538	1464.033779	87673.76849	5523236.335	62.47596027
2	0.005577598	0.994422402	86941.7516	484.9261037	86699.28855	5435562.567	62.51958888
3	0.004572053	0.995427947	86456.8255	395.2851689	86259.18291	5348863.278	61.86744941
4	0.002247741	0.997752259	86061.54033	193.4440706	85964.81829	5262604.095	61.14931333
5	0.002486024	0.997513976	85868.09626	213.4701412	85761.36119	5176639.277	60.2859444
6	0.002040704	0.997959296	85654.62612	174.7957044	85567.22826	5090877.916	59.43494411
7	0.001907542	0.998092458	85479.83041	163.0563965	85398.30221	5005310.687	58.55545879
8	0.001765234	0.998234766	85316.77401	150.6040308	85241.472	4919912.385	57.66641369
9	0.001604515	0.998395485	85166.16998	136.6503985	85097.84478	4834670.913	56.76750421
10	0.001615642	0.998384358	85029.51959	137.3772238	84960.83097	4749573.068	55.85793136
11	0.00161394	0.99838606	84892.14236	137.0108013	84823.63696	4664612.237	54.94751466
12	0.001651147	0.998348853	84755.13156	139.943141	84685.15999	4579788.6	54.03553173
13	0.001800435	0.998199565	84615.18842	152.34413	84539.01635	4495103.44	53.12407293
14	0.002116851	0.997883149	84462.84429	178.7952142	84373.44668	4410564.424	52.21899003
15	0.002425732	0.997574268	84284.04908	204.4505007	84181.82382	4326190.977	51.32870365
16	0.002829611	0.997170389	84079.59857	237.9125729	83960.64229	4242009.154	50.45230027
17	0.003034938	0.996965062	83841.686	254.4542781	83714.45886	4158048.511	49.59404694
18	0.003286003	0.996713997	83587.23172	274.6679125	83449.89777	4074334.052	48.74349788
19	0.003550891	0.996449109	83312.56381	295.5337984	83164.64691	3990884.155	47.90254881
20	0.003763244	0.996236756	83016.73001	312.412187	82860.52392	3907719.508	47.0714699
21	0.003964426	0.996035574	82704.31783	327.8751125	82540.38027	3824858.984	46.24739172
22	0.004327117	0.995672883	82376.44271	356.4524944	82198.21647	3742318.604	45.42947571
23	0.004530875	0.995469125	82019.99022	371.622355	81834.17904	3660120.387	44.62473572
24	0.004797849	0.995202151	81648.36786	391.7365558	81452.49959	3578286.208	43.82556935
25	0.00490612	0.99509388	81256.63131	398.6547884	81057.30391	3496833.708	43.03444103
26	0.004794481	0.995205519	80857.97652	387.6720381	80664.1405	3415776.405	42.24414896
27	0.004800898	0.995199102	80470.30448	386.3297215	80277.13962	3335112.264	41.44525469
28	0.004990533	0.995009467	80083.97476	399.6617336	79884.14389	3254835.124	40.64277696
29	0.005037236	0.994962764	79684.31303	401.3886806	79483.61869	3174950.98	39.84411561
30	0.005213619	0.994786381	79282.92435	413.350997	79076.24885	3095467.362	39.04330456
31	0.005450335	0.994549665	78869.57335	429.8655752	78654.64056	3016391.113	38.24530785
32	0.005359065	0.994640935	78439.70777	420.3634865	78229.52603	2937736.472	37.45215983
33	0.005415819	0.994584181	78019.34429	422.5386261	77808.07497	2859506.946	36.65125582
34	0.005534629	0.994465371	77596.80566	429.4695481	77382.07089	2781698.871	35.8481106
35	0.00539394	0.99460606	77167.33611	416.2359751	76959.21813	2704316.801	35.0448381
36	0.005383846	0.994616154	76751.10014	413.2161354	76544.49207	2627357.582	34.2321814
37	0.005718472	0.994281528	76337.884	436.536015	76119.61599	2550813.09	33.41477333
38	0.005846894	0.994153106	75901.34799	443.787172	75679.4544	2474693.474	32.60407806
39	0.006000489	0.993999511	75457.56082	452.7822901	75231.16967	2399014.02	31.79289118
40	0.006277745	0.993722255	75004.77853	470.8608442	74769.3481	2323782.85	30.98179737
41	0.006346527	0.993653473	74533.91768	473.0315437	74297.40191	2249013.502	30.17436319
42	0.006444145	0.993555855	74060.88614	477.2590954	73822.25659	2174716.1	29.36389522
43	0.006765103	0.993234897	73583.62704	497.8008093	73334.72664	2100893.844	28.55110475
44	0.006888713	0.993111287	73085.82623	503.4672842	72834.09259	2027559.117	27.74216591
45	0.007278371	0.992721629	72582.35895	528.2813288	72318.21828	1954725.024	26.9311311
46	0.007603809	0.992396191	72054.07762	547.8854378	71780.1349	1882406.806	26.12491712
47	0.008164122	0.991835878	71506.19218	583.7852634	71214.29955	1810626.671	25.32125703
48	0.008647958	0.991352042	70922.40692	613.3339738	70615.73993	1739412.372	24.52556882
49	0.009266085	0.990733915	70309.07294	651.4898489	69983.32802	1668796.632	23.7351534
50	0.009821563	0.990178437	69657.5831	684.1463219	69315.50993	1598813.304	22.95246594
51	0.010496371	0.989503629	68973.43677	723.9707168	68611.45139	1529497.734	22.17517056
52	0.011257924	0.988742076	68249.46601	768.3472922	67865.29236	1460886.342	21.40509557
53	0.012556661	0.987443339	67481.11871	847.3375048	67057.44996	1393021.05	20.64312324
54	0.013350738	0.986649262	66633.78121	889.6101513	66188.97613	1325963.6	19.89926915
55	0.014032483	0.985967517	65744.17106	922.5539672	65282.89407	1259774.624	19.16176908
56	0.014864513	0.985135487	64821.61709	963.5417399	64339.84622	1194491.73	18.42736703
57	0.015595419	0.984404581	63858.07535	995.8934597	63360.12862	1130151.884	17.69786949
58	0.017177098	0.982822902	62862.18189	1079.789886	62322.28695	1066791.755	16.97032656
59	0.019004366	0.980995634	61782.39201	1174.135176	61195.32442	1004469.468	16.25818353
60	0.020659928	0.979340072	60608.25683	1252.162196	59982.17573	943274.1437	15.56345939
61	0.022501472	0.977498528	59356.09463	1335.599519	58688.29487	883291.9679	14.88123458
62	0.02454393	0.97545607	58020.49511	1424.050965	57308.46963	824603.6731	14.2122826
63	0.027041622	0.972958378	56596.44415	1530.459648	55831.21432	767295.2034	13.55730408
64	0.029941625	0.970058375	55065.9845	1648.765036	54241.60198	711463.9891	12.92020828
65	0.032916354	0.967083646	53417.21947	1758.300085	52538.06942	657222.3871	12.30356791
66	0.034983306	0.965016694	51658.91938	1807.199794	50755.31948	604684.3177	11.70532262
67	0.037305922	0.962694078	49851.71959	1859.76434	48921.83742	553928.9982	11.11153242
68	0.041409716	0.958590284	47991.95525	1987.333245	46998.28862	505007.1608	10.52274612
69	0.04627394	0.95372606	46004.622	2128.815116	44940.21444	458008.8722	9.955714279
70	0.052081614	0.947918386	43875.80689	2285.122836	42733.24547	413068.6577	9.414497124
71	0.058019148	0.941980852	41590.68405	2413.056065	40384.15602	370335.4123	8.9042876
72	0.062748007	0.937251993	39177.62798	2458.318082	37948.46894	329951.2562	8.421930403
73	0.067592503	0.932407497	36719.3099	2481.950062	35478.33487	292002.7873	7.952295075
74	0.077006829	0.922993171	34237.35984	2636.510508	32919.10459	256524.4524	7.492530196
75	0.084179105	0.915820895	31600.84933	2660.131218	30270.78372	223605.3478	7.075928418
76	0.091038092	0.908961908	28940.71811	2634.707762	27623.36423	193334.5641	6.68036513
77	0.096965518	0.903034482	26306.01035	2550.775918	25030.62239	165711.1999	6.299366482
78	0.10605161	0.89394839	23755.23444	2519.280866	22495.594	140680.5775	5.922087524

79	0.115123851	0.884876149	21235.95357	2444.764749	20013.57119	118184.9835	5.565325009
80	0.125884296	0.874115704	18791.18882	2365.515585	17608.43103	98171.41229	5.224332172
81	0.135765356	0.864234644	16425.67324	2230.037374	15310.65455	80562.98127	4.904698889
82	0.147346724	0.852653276	14195.63586	2091.680442	13149.79564	65252.32672	4.59664698
83	0.159892633	0.840107367	12103.95542	1935.333296	11136.28877	52102.53108	4.304587159
84	0.173164708	0.826835292	10168.62212	1760.846476	9288.198886	40966.24231	4.028691577
85	0.187370592	0.812629408	8407.775648	1575.369901	7620.090698	31678.04342	3.767707982
86	0.202553685	0.797446315	6832.405747	1383.928959	6140.441268	24057.95272	3.521153985
87	0.218755304	0.781244696	5448.476789	1191.883198	4852.53519	17917.51145	3.288535888
88	0.236013748	0.763986252	4256.593591	1004.614605	3754.286289	13064.97626	3.06935017
89	0.254363201	0.745636799	3251.978986	827.1837858	2838.387093	9310.689975	2.863084299
90	0.273832508	0.726167492	2424.7952	663.9877505	2092.801325	6472.302882	2.669216304
91	0.294443775	0.705556225	1760.80745	518.4587928	1501.578053	4379.501557	2.487212078
92	0.316210842	0.683789158	1242.348657	392.8441142	1045.9266	2877.923503	2.316518384
93	0.339137598	0.660862402	849.5045427	288.0989302	705.4550776	1831.996904	2.156547507
94	0.363216193	0.636783807	561.4056125	203.9116092	459.4498079	1126.541826	2.006645108
95	0.388425143	0.611574857	357.4940033	138.8596593	288.0641737	667.0920182	1.86602296
96	0.4147274	0.5852726	218.6343441	90.6736531	173.2975175	379.0278445	1.733615303
97	0.44206843	0.55793157	127.960691	56.56738172	99.6770001	205.730327	1.607761926
98	0.470374373	0.529625627	71.39330924	33.58158308	54.6025177	106.0533269	1.485479914
99	0.499550398	0.500449602	37.81172616	18.88886285	28.36729474	51.45080921	1.360710405
100	0.529479344	0.470520656	18.92286331	10.01926525	13.91323069	23.08351447	1.219874291
101	0.5600208	0.4399792	8.903598064	4.98620011	6.410498009	9.170283782	1.029952578
102	0.591010765	0.408989235	3.917397954	2.315224364	2.759785773	2.759785773	0.704494617
103	0.622262049	0.377737951	1.602173591	1.602173591	0	0	0