

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.02270344	0.97729656	100000	2270.34402	97911.2835	6666118.507	66.66118507
1	0.001202239	0.998797761	97729.65598	117.4944064	97670.90878	6568207.224	67.20792331
2	0.000793819	0.999206181	97612.16157	77.48636466	97573.41839	6470536.315	66.28821871
3	0.000480647	0.999519353	97534.67521	46.87975675	97511.23533	6372962.897	65.34048412
4	0.000532018	0.999467982	97487.79545	51.86529845	97461.8628	6275451.661	64.3716645
5	0.000542241	0.999457759	97435.93015	52.83377593	97409.51327	6177989.798	63.40566348
6	0.000561808	0.999438192	97383.09638	54.71059266	97355.74108	6080580.285	62.43979203
7	0.000487081	0.999512919	97328.38578	47.40681397	97304.68238	5983224.544	61.47460986
8	0.000451211	0.999548789	97280.97897	43.89423681	97259.03185	5885919.862	60.50432391
9	0.000455304	0.999544696	97237.08473	44.27243884	97214.94851	5788660.83	59.53141073
10	0.000438502	0.999561498	97192.8123	42.61921815	97171.50269	5691445.881	58.55830022
11	0.000383306	0.999616694	97150.19308	37.2382053	97131.57397	5594274.379	57.58377005
12	0.000383624	0.999616376	97112.95487	37.25483006	97094.32746	5497142.805	56.60565897
13	0.000391803	0.999608197	97075.70004	38.03458794	97056.68275	5400048.477	55.62719069
14	0.000449152	0.999550848	97037.66545	43.58466719	97015.87312	5302991.794	54.64879817
15	0.000699603	0.999300397	96994.08079	67.85735405	96960.15211	5205975.921	53.67313014
16	0.001029064	0.998970936	96926.22343	99.74327152	96876.3518	5109015.769	52.71035627
17	0.001277948	0.998722052	96826.48016	123.7392458	96764.61054	5012139.417	51.76413941
18	0.001476905	0.998523095	96702.74092	142.8207599	96631.33054	4915374.807	50.82973616
19	0.001551395	0.998448605	96559.92016	149.8026085	96485.01885	4818743.476	49.90417834
20	0.001480717	0.998519283	96410.11755	142.7560622	96338.73952	4722258.458	48.98094285
21	0.001514293	0.998485707	96267.36148	145.7769529	96194.47301	4625919.718	48.05283584
22	0.001542357	0.998457643	96121.58453	148.2537669	96047.45765	4529725.245	47.12495395
23	0.001492826	0.998507174	95973.33076	143.2714919	95901.69502	4433677.787	46.19697735
24	0.001430532	0.998569468	95830.05927	137.088008	95761.51527	4337776.092	45.26529698
25	0.001477466	0.998522534	95692.97126	141.3831425	95622.27969	4242014.577	44.32942693
26	0.001425673	0.998574327	95551.58812	136.25328	95483.47546	4146392.297	43.39427925
27	0.001569131	0.998430869	95415.36279	149.7192389	95340.50317	4050908.822	42.45551977
28	0.001698078	0.998301922	95265.64356	161.7684782	95184.75932	3955568.319	41.52145696
29	0.001637736	0.998362264	95103.87508	155.7550527	95025.99755	3860383.559	40.59123307
30	0.001642619	0.998357381	94948.12002	155.9635476	94870.13825	3765357.562	39.65699964
31	0.001723843	0.998276157	94792.15648	163.4068094	94710.45307	3670487.424	38.72142549
32	0.0017541	0.9982459	94628.74967	165.9882549	94545.75554	3575776.971	37.787427
33	0.001831197	0.998168803	94462.76141	172.9799374	94376.27144	3481231.215	36.8529478
34	0.001949482	0.998050518	94289.78148	183.8162308	94197.87336	3386854.944	35.91963933
35	0.001986461	0.998013539	94105.96524	186.93783	94012.49633	3292657.07	34.98882416
36	0.002174738	0.997825262	93919.02741	204.2492348	93816.9028	3198644.574	34.05747123
37	0.002440906	0.997559094	93714.77818	228.7489321	93600.40371	3104827.671	33.13060898
38	0.002827831	0.997172169	93486.02925	264.3627122	93353.84789	3011227.267	32.2104521
39	0.003031339	0.996968661	93221.66654	282.5865019	93080.37328	2917873.419	31.3003782
40	0.003369914	0.996630086	92939.08003	313.1966801	92782.48169	2824793.046	30.39402849
41	0.003687247	0.996312753	92625.88335	341.5345165	92455.1161	2732010.564	29.49510942
42	0.004192634	0.995807366	92284.34884	386.9144925	92090.89159	2639555.448	28.60241722
43	0.004661399	0.995338601	91897.43434	428.3706063	91683.24904	2547464.557	27.72073644
44	0.004967515	0.995032485	91469.06374	454.3739862	91241.87674	2455781.308	26.84821739
45	0.005376826	0.994623174	91014.68975	489.3701827	90770.00466	2364539.431	25.97975599
46	0.005816893	0.994183107	90525.31957	526.5760602	90262.03154	2273769.426	25.11749682
47	0.00630789	0.99369211	89998.74351	567.7022176	89714.8924	2183507.395	24.26153199
48	0.007249334	0.992750666	89431.04129	648.3155265	89106.88353	2093792.502	23.41236859
49	0.00829645	0.99170355	88782.72576	736.5814843	88414.43502	2004685.619	22.57968092
50	0.009143268	0.990856732	88046.14428	805.0295008	87643.62953	1916271.184	21.76439638
51	0.010535397	0.989464603	87241.11478	919.1198211	86781.55487	1828627.554	20.96061655
52	0.011390139	0.988609861	86321.99496	983.2195048	85830.38521	1741845.999	20.17847248
53	0.012064973	0.987935027	85338.77545	1029.610009	84823.97045	1656015.614	19.40519542
54	0.013228303	0.986771697	84309.16545	1115.267197	83751.53185	1571191.644	18.6360716
55	0.014223852	0.985776148	83193.89825	1183.337721	82602.22939	1487440.112	17.87919719
56	0.015888738	0.984111262	82010.56053	1303.044314	81359.03837	1404837.883	17.12996318
57	0.018178054	0.981821946	80707.51621	1467.105616	79973.96341	1323478.844	16.39845836
58	0.01965978	0.98034022	79240.4106	1557.849023	78461.48609	1243504.881	15.69281218
59	0.021546178	0.978453822	77682.56157	1673.76232	76845.68041	1165043.395	14.99748941
60	0.02367639	0.97632361	76008.79925	1799.613964	75108.99227	1088197.714	14.31673339
61	0.025733878	0.974266122	74209.18529	1909.690156	73254.34021	1013088.722	13.65179685
62	0.028589257	0.971410743	72299.49513	2066.988815	71266.00073	939834.3818	12.99918319
63	0.031918124	0.968081876	70232.50632	2241.689843	69111.6614	868568.3811	12.36704237
64	0.035834477	0.964165523	67990.81648	2436.415322	66772.60882	799456.7197	11.75830445
65	0.039930148	0.960069852	65554.40115	2617.596948	64245.60268	732684.1109	11.1767341
66	0.044043506	0.955956494	62936.80421	2771.95752	61550.82545	668438.5082	10.62078885
67	0.047967401	0.952032599	60164.84669	2885.951341	58721.87102	606887.6827	10.08708101
68	0.05239117	0.94760883	57278.89535	3000.908366	55778.44116	548165.8117	9.570118425
69	0.059727614	0.942072386	54277.98698	3144.194254	52705.88985	492387.3706	9.071584964
70	0.063876858	0.936123142	51133.79273	3266.265998	49500.65973	439681.4807	8.598647925
71	0.06929251	0.93070749	47867.52673	3316.861057	46209.0962	390180.821	8.151263448
72	0.074798733	0.925201267	44550.66567	3332.333332	42884.499	343971.7248	7.720911003
73	0.080193205	0.919806795	41218.33234	3305.430182	39565.61725	301087.2258	7.30469208
74	0.087714393	0.912285607	37912.90216	3325.507191	36250.14856	261521.6085	6.897958047
75	0.095391389	0.904608611	34587.39497	3299.33964	32937.72515	225271.46	6.51310861
76	0.103658101	0.896341899	31288.05533	3243.260404	29666.42513	192333.7348	6.147193644
77	0.112619361	0.887380639	28044.79492	3158.386885	26465.60148	162667.3097	5.800267398
78	0.121364137	0.878635863	24886.40804	3020.317443	23376.24932	136201.7082	5.472935588

79	0.130623781	0.869376219	21866.0906	2856.231421	20437.97489	112825.4589	5.159836798
80	0.140963529	0.859036471	19009.85918	2679.696841	17670.01075	92387.48401	4.859977297
81	0.151894701	0.848105299	16330.16233	2480.465124	15089.92977	74717.47325	4.575427465
82	0.16351374	0.83648626	13849.69721	2264.615783	12717.38932	59627.54348	4.30533192
83	0.175851265	0.824148735	11585.08143	2037.251226	10566.45581	46910.15416	4.0491864
84	0.188937236	0.811062764	9547.830201	1803.940644	8645.859879	36343.69835	3.806487713
85	0.202800541	0.797199459	7743.889557	1570.464989	6958.657063	27697.83847	3.576734697
86	0.217468535	0.782531465	6173.424568	1342.525594	5502.161771	20739.1814	3.35942898
87	0.232966504	0.767033496	4830.898974	1125.437644	4268.180152	15237.01963	3.154075404
88	0.249317067	0.750682933	3705.46133	923.8347516	3243.543954	10968.83948	2.960181878
89	0.266539507	0.733460493	2781.626578	741.4133768	2410.91989	7725.295526	2.777258309
90	0.284649028	0.715350972	2040.213202	580.744704	1749.84085	5314.375636	2.604813866
91	0.303655948	0.696344052	1459.468498	443.1762895	1237.880353	3564.534787	2.442351303
92	0.323564824	0.676435176	1016.292208	328.8364097	851.8740032	2326.654434	2.289355773
93	0.344373522	0.655626478	687.4557983	236.7415748	569.0850109	1474.780431	2.145273099
94	0.366072234	0.633927766	450.7142236	164.9939626	368.2172423	905.6954198	2.009467136
95	0.388642466	0.611357534	285.720261	111.0430267	230.1987476	537.4781775	1.88113428
96	0.412056019	0.587943981	174.6772343	71.97680574	138.6888314	307.2794298	1.759126947
97	0.436273979	0.563726021	102.7004285	44.8055246	80.29766625	168.5905984	1.641576387
98	0.461245757	0.538754243	57.89490395	26.70377882	44.54301454	88.29293217	1.525055336
99	0.486908219	0.513091781	31.19112513	15.1872152	23.59751753	43.74991763	1.402639932
100	0.513184947	0.486815053	16.00390994	8.21296567	11.8974271	20.1524001	1.25921729
101	0.53998569	0.46001431	7.790944267	4.206998417	5.687445059	8.254972994	1.059560011
102	0.567206067	0.432793933	3.58394585	2.032835828	2.567527936	2.567527936	0.716396967
103	0.594727571	0.405272429	1.551110022	1.551110022	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.015579051	0.984420949	100000	1557.905077	98566.72733	7372124.674	73.72124674
1	0.000880392	0.999119608	98442.09492	86.66758561	98398.76113	7273557.947	73.88666355
2	0.000525217	0.999474783	98355.42734	51.65797505	98329.59835	7175159.186	72.95132948
3	0.000505047	0.999494953	98303.76936	49.6480091	98278.94536	7076829.587	71.98940217
4	0.000412588	0.999587412	98254.12135	40.53849616	98233.85211	6978550.642	71.02552591
5	0.000374222	0.999625778	98213.58286	36.75370054	98195.20601	6880316.79	70.05463592
6	0.000303007	0.999696993	98176.82916	29.74831464	98161.955	6782121.584	69.08067456
7	0.000238284	0.999761716	98147.08084	23.38683085	98135.38743	6683959.629	68.10146131
8	0.000207155	0.999792845	98123.69401	20.3268567	98113.53058	6585824.241	67.11757347
9	0.000148226	0.999851774	98103.36715	14.54150492	98096.0964	6487710.711	66.13137652
10	0.000151418	0.999848582	98088.82565	14.85241244	98081.39944	6389614.614	65.14110626
11	0.000191538	0.999808462	98073.97324	18.74892222	98064.58078	6291533.215	64.15089557
12	0.000223448	0.999776552	98055.18831	21.9102266	98044.2332	6193468.634	63.16308949
13	0.000275898	0.999724102	98033.27809	27.04717899	98019.7545	6095424.401	62.17709455
14	0.00035088	0.99964912	98006.23091	34.38843655	97989.03669	5997404.647	61.19411583
15	0.000377976	0.999622024	97971.84247	37.03098112	97953.32698	5899415.61	60.21541967
16	0.000395654	0.999604346	97934.81149	38.74828689	97915.43735	5801462.283	59.23799918
17	0.000449124	0.999550876	97896.0632	43.96746996	97874.07947	5703546.846	58.2612483
18	0.000465218	0.999534782	97852.09573	45.52255693	97829.33446	5605672.766	57.28720191
19	0.000509353	0.999490647	97806.57318	49.81802748	97781.66416	5507843.432	56.31362364
20	0.000571054	0.999428946	97756.75515	55.82440756	97728.84295	5410061.767	55.34207594
21	0.000553425	0.999446575	97700.93074	54.07014648	97673.89567	5312332.925	54.37341164
22	0.000465858	0.999534142	97646.8606	45.4895653	97624.11581	5214659.029	53.40324304
23	0.000475613	0.999524387	97601.37103	46.42048306	97578.16079	5117034.913	52.42789993
24	0.000469746	0.999530254	97554.95055	45.82601026	97532.03754	5019456.752	51.45260926
25	0.000506837	0.999493163	97509.12454	49.42123297	97484.41392	4921924.715	50.47655528
26	0.000553912	0.999446088	97459.7033	53.98410182	97432.71125	4824440.301	49.50189809
27	0.000585043	0.999414957	97405.7192	56.98655427	97377.22593	4727007.59	48.52905587
28	0.0005963	0.9994037	97348.73265	58.0490081	97319.70814	4629630.364	47.55717139
29	0.000640983	0.999359017	97290.68364	62.36170075	97259.50279	4532310.655	46.58524831
30	0.000643035	0.999356965	97228.32194	62.52125783	97197.06131	4435051.153	45.61480713
31	0.000675951	0.999324049	97165.80068	65.67933997	97132.96101	4337854.091	44.64383622
32	0.000761092	0.999238908	97100.12134	73.90216883	97063.17026	4240721.13	43.67369548
33	0.000892832	0.999107168	97026.21917	86.62813296	96982.90511	4143657.96	42.70657968
34	0.000908408	0.999091592	96939.59104	88.0606553	96895.56071	4046675.055	41.74429675
35	0.00093698	0.99906302	96851.53038	90.74796564	96806.1564	3949779.494	40.78179744
36	0.001001894	0.998998106	96760.78242	96.94408466	96712.31038	3852973.338	39.81957609
37	0.001001509	0.998998491	96663.83833	96.80973031	96615.43347	3756261.027	38.85900966
38	0.001165926	0.998834074	96567.0286	112.5899831	96510.73361	3659645.594	37.89746508
39	0.001397541	0.998602459	96454.43862	134.7990793	96387.03908	3563134.86	36.94111864
40	0.001562264	0.998437736	96319.63954	150.4766858	96244.4012	3466747.821	35.99211789
41	0.001714755	0.998285245	96169.16286	164.9065931	96086.70956	3370503.42	35.0476527
42	0.001955102	0.998044898	96004.25626	187.6981499	95910.40719	3274416.711	34.10699523
43	0.002110502	0.997889498	95816.55811	202.2210178	95715.4476	3178506.303	33.17282906
44	0.002330931	0.997669069	95614.3371	222.8704614	95502.90186	3082790.856	32.24193096
45	0.002687944	0.997312056	95391.46663	256.4069673	95263.26315	2987287.954	31.31609209
46	0.003033288	0.996966712	95135.05967	288.5720131	94990.77366	2892024.691	30.39914729
47	0.003249279	0.996750721	94846.48765	308.1827016	94692.3963	2797033.917	29.49011594
48	0.003580109	0.996419891	94538.30495	338.4574605	94369.07622	2702341.521	28.58461998
49	0.003976297	0.996023703	94199.84749	374.5665243	94012.56423	2607972.445	27.68552725
50	0.004190494	0.995809506	93825.28097	393.1742526	93628.69384	2513959.88	26.79405651
51	0.004830528	0.995169472	93432.10671	451.3264371	93206.4435	2420331.187	25.90470526
52	0.005190724	0.994809276	92980.78028	482.6375932	92739.46148	2327124.743	25.02801908
53	0.005501873	0.994498127	92498.14268	508.9129913	92243.68619	2234385.282	24.15600159
54	0.005852121	0.994147879	91989.22969	538.3321454	91720.06362	2142141.595	23.28687394
55	0.006519135	0.993480865	91450.89755	596.1807601	91152.80717	2050421.532	22.42101047
56	0.007514463	0.992485537	90854.71679	682.7243706	90513.3546	1959268.725	21.56485424
57	0.008666223	0.991333777	90171.99242	781.4506392	89781.2671	1868755.37	20.72434378
58	0.009496327	0.990503673	89390.54178	848.8817972	88966.10088	1778974.103	19.90114466
59	0.010476515	0.989523485	88541.65998	927.6080335	88077.85596	1690008.002	19.08715064
60	0.011138774	0.988861226	87614.05195	975.9131197	87126.09539	1601930.146	18.28394088
61	0.01208657	0.98791343	86638.13883	1047.157954	86114.55985	1514804.051	17.48426353
62	0.013672995	0.986327005	85590.98087	1170.28508	85005.83833	1428689.491	16.69205653
63	0.015137218	0.984862782	84420.69579	1277.894451	83781.74857	1343683.652	15.91651952
64	0.017012182	0.982987818	83142.80134	1414.440431	82435.58113	1259901.904	15.1534695
65	0.019310057	0.980689943	81728.36091	1578.179345	80939.27124	1177466.323	14.4070713
66	0.021382981	0.978617019	80150.18157	1713.849785	79293.25667	1096527.052	13.6809054
67	0.023632649	0.976367351	78436.33178	1853.658329	77509.50262	1017233.795	12.96891086
68	0.026627908	0.973372092	76582.67345	2039.236388	75563.05526	939724.2922	12.27071673
69	0.030072872	0.969927128	74543.43706	2241.735275	73422.56943	864161.237	11.59272058
70	0.034102689	0.965897311	72301.70179	2465.682453	71068.86056	790738.6675	10.93665361
71	0.03789029	0.96210971	69836.01934	2646.106995	68512.96584	719669.807	10.30513786
72	0.04302575	0.95697425	67189.91234	2890.896369	65744.46416	651156.8411	9.691288744
73	0.048431707	0.951568293	64299.01597	3114.111072	62741.96044	585412.377	9.104530888
74	0.054327809	0.945672191	61184.9049	3324.041811	59522.884	522670.4166	8.542473301
75	0.060457343	0.939542657	57860.86309	3498.114018	56111.80608	463147.5326	8.004504389
76	0.066925847	0.933074153	54362.74907	3638.273015	52543.61256	407035.7265	7.487401455
77	0.074246831	0.925753169	50724.47606	3766.131615	48841.41025	354492.1139	6.988581085
78	0.083278891	0.916721109	46958.34444	3910.638833	45003.02502	305650.7037	6.508975291

79	0.093001369	0.906998631	43047.70561	4003.495534	41045.95784	260647.6786	6.054856466
80	0.103579472	0.896420528	39044.21007	4044.178652	37022.12075	219601.7208	5.624437538
81	0.115077582	0.884922418	35000.03142	4027.718991	32986.17193	182579.6001	5.216555318
82	0.127895576	0.872104424	30972.31243	3961.221738	28991.70156	149593.4281	4.829908276
83	0.142008021	0.857991979	27011.09069	3835.791527	25093.19493	120601.7266	4.464896584
84	0.157517311	0.842482689	23175.29917	3650.510808	21350.04376	95508.53163	4.121134789
85	0.174526965	0.825473035	19524.78836	3407.602057	17820.98733	74158.48787	3.798171151
86	0.193139618	0.806860382	16117.1863	3112.867211	14560.7527	56337.50054	3.495492295
87	0.213454456	0.786545544	13004.31909	2775.829853	11616.40416	41776.74784	3.212528665
88	0.235564004	0.764435996	10228.48924	2409.463884	9023.757296	30160.34368	2.948660646
89	0.259550215	0.740449785	7819.025354	2029.429713	6804.310497	21136.58638	2.703225201
90	0.285479776	0.714520224	5789.59564	1652.812468	4963.189406	14332.27589	2.475522779
91	0.313398635	0.686601365	4136.783172	1296.462199	3488.552073	9369.086481	2.264824162
92	0.343325746	0.656674254	2840.320974	975.1553181	2352.743315	5880.534408	2.070376715
93	0.375246134	0.624753866	1865.165656	699.8962013	1515.217555	3527.791093	1.891408992
94	0.409103436	0.590896564	1165.269454	476.715738	926.9115852	2012.573538	1.727131464
95	0.444792234	0.555207766	688.5537162	306.2633456	535.4220434	1085.661953	1.576728042
96	0.482150586	0.517849414	382.2903706	184.3215264	290.1296074	550.2399095	1.439324534
97	0.520953383	0.479046617	197.9688442	103.1325391	146.4025747	260.110302	1.313895139
98	0.560907274	0.439092726	94.83630513	53.19437339	68.23911843	113.7077274	1.198989429
99	0.601648132	0.398351868	41.64193174	25.05379046	29.11503651	45.46860893	1.091894805
100	0.642742104	0.357257896	16.58814128	10.66189682	11.25719287	16.35357243	0.985859244
101	0.683691366	0.316308634	5.926244457	4.05172217	3.900383372	5.096379558	0.859967825
102	0.723945621	0.276054379	1.874522287	1.357052201	1.195996186	1.195996186	0.638027189
103	0.76292005	0.23707995	0.517470085	0.517470085	0	0	0