

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.024916192	0.975083808	100000	2491.619195	97707.71034	6725623.855	67.25623855
1	0.001628065	0.998371935	97508.38081	158.7500203	97429.0058	6627916.145	67.97278439
2	0.001084039	0.998915961	97349.63079	105.5308013	97296.86538	6530487.139	67.08281363
3	0.000885397	0.999114603	97244.09998	86.09965496	97201.05016	6433190.274	66.15507033
4	0.00065776	0.99934224	97158.00033	63.90665908	97126.047	6335989.224	65.21325266
5	0.000584785	0.999415215	97094.09367	56.77915759	97065.70409	6238863.177	64.25584648
6	0.000546543	0.999453457	97037.31451	53.03509431	97010.79697	6141797.473	63.29315175
7	0.000558016	0.999441984	96984.27942	54.11880391	96957.22002	6044786.676	62.32748969
8	0.000534652	0.999465348	96930.16061	51.82389132	96904.24867	5947829.456	61.3620097
9	0.000466928	0.999533072	96878.33672	45.23521648	96855.71911	5850925.207	60.39456709
10	0.000441568	0.999558432	96833.10151	42.75844189	96811.72229	5754069.488	59.42254661
11	0.000444619	0.999555381	96790.34306	43.03482444	96768.82565	5657257.766	58.44857644
12	0.000482849	0.999517151	96747.30824	46.71433300	96723.95107	5560488.94	57.47435294
13	0.000546067	0.999453933	96700.59391	52.80503522	96674.19139	5463764.989	56.50187624
14	0.000548712	0.999451288	96647.78887	53.03184719	96621.27295	5367090.798	55.53247374
15	0.000647838	0.999352162	96594.75702	62.57776068	96563.46814	5270469.525	54.56268732
16	0.000899267	0.999100733	96532.17926	86.80821387	96488.77516	5173906.056	53.59773389
17	0.001193636	0.998806364	96445.37105	115.1206765	96387.81071	5077417.281	52.64552592
18	0.001466093	0.998533907	96330.25037	141.229119	96259.63581	4981029.471	51.70784308
19	0.001623509	0.998376491	96189.02125	156.1637612	96110.93937	4884769.835	50.78320287
20	0.001681423	0.998318577	96032.85749	161.4718192	95952.12158	4788658.895	49.86479649
21	0.001672878	0.998327122	95871.38567	160.3811666	95791.19509	4692706.774	48.94792398
22	0.001655071	0.998344929	95711.00451	158.4084734	95631.80027	4596915.579	48.02912673
23	0.00165159	0.99834841	95552.59603	157.8137196	95473.68917	4501283.778	47.10791716
24	0.001614647	0.998385353	95394.78231	154.0288996	95317.76786	4405810.089	46.18502168
25	0.001547805	0.998452195	95240.75341	147.4141266	95167.04635	4310492.321	45.25890616
26	0.001471656	0.998528344	95093.33929	139.9446597	95023.36696	4215325.275	44.32829162
27	0.001428678	0.998571322	94953.39463	135.6578472	94885.5657	4120301.908	43.39288684
28	0.001453265	0.998546735	94817.73678	137.7952958	94748.83913	4025416.342	42.45425465
29	0.001552948	0.998447052	94679.94149	147.0330644	94606.42495	3930667.503	41.51531403
30	0.00170874	0.99829126	94532.90842	161.5321779	94452.14233	3836061.078	40.57910777
31	0.001892671	0.998107329	94371.37624	178.6139635	94282.06926	3741608.936	39.64770977
32	0.0019026	0.9980974	94192.76228	179.211175	94103.15669	3647326.867	38.72194401
33	0.00192407	0.99807593	94013.5511	180.8886439	93923.10678	3553223.71	37.79480371
34	0.001975094	0.998024906	93832.66246	185.3283039	93739.99831	3459300.603	36.86669985
35	0.001992691	0.998007309	93647.33416	186.6101821	93554.02907	3365560.605	35.93866964
36	0.0021485	0.9978515	93460.72397	200.8003295	93360.32381	3272006.576	35.00942895
37	0.002245653	0.997574347	93259.92365	226.216176	93146.81556	3178646.252	34.08373209
38	0.002692637	0.997307363	93033.70747	250.5059614	92908.45449	3085499.437	33.16539263
39	0.00291427	0.99708573	92783.20151	270.3952784	92648.00387	2992590.982	32.25358614
40	0.003137276	0.996862724	92512.80623	290.2381741	92367.68714	2899942.978	31.34639512
41	0.003261084	0.996738916	92222.56806	300.7455365	92072.19529	2807575.291	30.44347333
42	0.003628618	0.996371382	91921.82252	333.549158	91755.04794	2715503.096	29.54144099
43	0.004009709	0.995990291	91588.27336	367.2423024	91404.65221	2623748.048	28.64720506
44	0.00453494	0.99546506	91221.03106	413.6818707	91014.19012	2532343.396	27.76052152
45	0.004928088	0.995071912	90807.34919	447.5065722	90583.5959	2441329.205	26.88470952
46	0.005237303	0.994762697	90359.84262	473.2418941	90123.22167	2350745.61	26.01537964
47	0.005510753	0.994489247	89886.60072	495.3428314	89638.92931	2260622.388	25.14971497
48	0.006001566	0.993998434	89391.25789	536.4875174	89123.01413	2170983.459	24.28630618
49	0.006639314	0.993360686	88854.77037	589.934743	88559.803	2081860.444	23.42992318
50	0.007399929	0.992600071	88264.83563	653.1535071	87938.25888	1993300.641	22.58317967
51	0.008326881	0.991673119	87611.68212	729.5320301	87246.91611	1905362.383	21.74781189
52	0.009373028	0.990626972	86882.15009	814.3488498	86474.97567	1818115.466	20.92622552
53	0.010329134	0.989670866	86067.80124	889.0058498	85623.29832	1731640.491	20.11949261
54	0.011490239	0.988509761	85178.79539	978.7247135	84689.43304	1646017.192	19.32426004
55	0.012823297	0.987176703	84200.07068	1079.722555	83660.2094	1561327.759	18.54306946
56	0.014030182	0.985969818	83120.34812	1166.193591	82537.25133	1477667.55	17.7774466
57	0.015700102	0.984299898	81954.15453	1286.688603	81310.81023	1395130.299	17.02330171
58	0.01755142	0.98244858	80667.46593	1415.828562	79959.55165	1313819.488	16.28685708
59	0.019914452	0.980085548	79251.63737	1578.252913	78462.51091	1233859.937	15.56888889
60	0.022600417	0.977399583	77673.38446	1755.450847	76795.65903	1155397.426	14.87507509
61	0.025570376	0.974429624	75917.93361	1941.250132	74947.30854	1078601.767	14.20747004
62	0.028320962	0.971679038	73976.68348	2095.09082	72929.13807	1003654.458	13.56717294
63	0.03144387	0.96855613	71881.59266	2260.235458	70751.47493	930725.3203	12.9480342
64	0.034755135	0.965244865	69621.3572	2419.699685	68411.50736	859973.8453	12.35215572
65	0.038150852	0.961849148	67201.65751	2563.800492	65919.75727	791562.338	11.77891093
66	0.041493588	0.958506412	64637.85702	2682.056613	63296.82872	725642.5807	11.22627844
67	0.04541136	0.95458864	61955.80041	2813.497145	60549.05184	662345.752	10.6906173
68	0.049659817	0.950340183	59142.30326	2936.995959	57673.80528	601796.7002	10.17540182
69	0.054131094	0.945868906	56205.30731	3042.454754	54684.07993	544122.8949	9.68098781
70	0.058475665	0.941524335	53162.85255	3108.733143	51608.48598	489438.8149	9.206406192
71	0.063082238	0.936917762	50054.11941	3157.525894	48475.35646	437830.329	8.74713878
72	0.068047326	0.931952674	46896.59351	3191.187773	45300.99963	389354.9725	8.302414809
73	0.073482753	0.926517247	43705.40574	3211.593525	42099.60898	344053.9729	7.872114834
74	0.079854397	0.920145603	40493.81222	3233.608967	38877.00773	301954.3639	7.456802592
75	0.086653105	0.913346895	37260.20325	3228.71231	35645.84709	263077.3562	7.060545387
76	0.092845018	0.907154982	34031.49094	3159.6544	32451.66374	227431.5091	6.682272235
77	0.099737395	0.900262605	30871.83654	3079.076544	29332.29827	194979.8453	6.315783808
78	0.109004402	0.890995598	27792.76	3029.533184	26277.9934	165647.5471	5.960097057

79	0.117718549	0.882281451	24763.22681	2915.091134	23305.68124	139369.5537	5.628085335
80	0.127316635	0.872683365	21848.13568	2781.631118	20457.32012	116063.8724	5.312300973
81	0.137531255	0.862468745	19066.50456	2622.240302	17755.38441	95606.55229	5.014372299
82	0.146753869	0.853246131	16444.26426	2413.259408	15237.63455	77851.16789	4.734244516
83	0.157400032	0.842599968	14031.00485	2208.480606	12926.76455	62613.53333	4.462512415
84	0.169201338	0.830798662	11822.52424	2000.386922	10822.33078	49686.76879	4.20272082
85	0.181513898	0.818486102	9822.137322	1782.854435	8930.710104	38864.438	3.956820876
86	0.194566534	0.805433466	8039.282887	1564.175409	7257.195182	29933.7279	3.72343259
87	0.208387296	0.791612704	6475.107477	1349.330136	5800.442409	22676.53272	3.502109084
88	0.223002673	0.776997327	5125.777341	1143.062048	4554.246318	16876.09031	3.292396291
89	0.238437076	0.761562924	3982.715294	949.6269872	3507.9018	12321.84399	3.093829983
90	0.254712244	0.745287756	3033.088306	772.5647284	2646.805942	8813.94219	2.905929963
91	0.271846595	0.728153405	2260.523578	614.5156369	1953.26576	6167.136247	2.728189304
92	0.289854499	0.710145501	1646.007941	477.1028064	1407.456538	4213.870488	2.560054774
93	0.308745492	0.691254508	1168.905135	360.8941906	988.4580395	2806.41395	2.400891113
94	0.328523426	0.671476574	808.0109442	265.4505234	675.2856825	1817.95591	2.249914959
95	0.349185562	0.650814438	542.5604208	189.4542655	447.8332881	1142.670228	2.106070004
96	0.370721624	0.629278376	353.1061553	130.9040872	287.6541117	694.8369396	1.967784841
97	0.393112816	0.606887184	222.2020681	87.35048065	178.5268277	407.1828279	1.832488921
98	0.416330839	0.583669161	134.8515874	56.14287453	106.7801501	228.6560002	1.695612225
99	0.440336919	0.559663081	78.70871288	34.65835211	61.37953682	121.87585	1.54844166
100	0.465080884	0.534919116	44.05036076	20.4869807	33.80687041	60.4963132	1.37334433
101	0.490500329	0.509499671	23.56338006	11.55784568	17.78445722	26.68944279	1.132666142
102	0.516519917	0.483480083	12.00553438	6.201097625	8.90498557	8.90498557	0.741740041
103	0.543050854	0.456949146	5.804436757	5.804436757	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.01825826	0.98174174	10000	1825.825995	98320.24008	7375435.649	73.75435649
1	0.001053565	0.998946435	98174.17401	103.4329119	98122.45755	7277115.408	74.12453919
2	0.000701132	0.999298868	98070.74109	68.76054401	98036.36082	7178992.951	73.20218927
3	0.000574277	0.999425723	98001.98055	56.28026382	97973.84042	7080956.59	72.25319887
4	0.00041975	0.99958025	97945.70029	41.11270739	97925.14393	6982982.75	71.29442874
5	0.000350505	0.999649495	97904.58758	34.31606705	97887.42954	6885057.606	70.32415718
6	0.000315754	0.999684246	97870.27151	30.9029099	97854.82006	6787170.176	69.34863949
7	0.000297952	0.999702048	97839.3686	29.15141507	97824.79289	6689315.356	68.37038558
8	0.000269386	0.999730614	97810.21719	26.34870413	97797.04283	6591490.563	67.39061371
9	0.000281977	0.999718023	97783.86848	27.57282391	97770.08207	6493693.52	66.40863796
10	0.00027989	0.99972011	97756.29566	27.36099363	97742.61516	6395923.438	65.42722794
11	0.000284223	0.999715777	97728.93466	27.77685472	97715.04624	6298180.823	64.4454055
12	0.000301517	0.999698483	97701.15781	29.45852817	97686.42855	6200465.777	63.46358545
13	0.000283225	0.999716775	97671.69928	27.66306724	97657.86775	6102779.348	62.48257574
14	0.000315179	0.999684821	97644.03621	30.77533835	97628.64855	6005121.481	61.50013573
15	0.000373255	0.999626745	97613.26088	36.43463026	97595.04356	5907492.832	60.51936775
16	0.000422778	0.999577222	97576.82625	41.25329776	97556.1996	5809897.789	59.54177864
17	0.000519044	0.999480956	97535.57295	50.62526622	97510.26031	5712341.589	58.56675074
18	0.000578109	0.999421891	97484.94768	56.35689231	97456.76924	5614831.329	57.5969056
19	0.000534291	0.999465709	97428.59079	52.05255443	97402.56316	5517374.559	56.6299329
20	0.000498784	0.999501216	97376.53554	48.56989968	97352.25059	5419971.996	55.65993868
21	0.00048982	0.99951018	97327.96564	47.67316352	97304.12905	5322619.746	54.68746532
22	0.000487821	0.999512179	97280.29247	47.4553798	97256.56478	5225315.617	53.71402042
23	0.000530873	0.999469127	97232.83709	51.61832175	97207.02793	5128059.052	52.73999202
24	0.000591509	0.999408491	97181.21877	57.48355096	97152.47699	5030852.024	51.76773957
25	0.000561863	0.999438137	97123.73522	54.57019836	97096.45012	4933699.547	50.79808284
26	0.000563346	0.999436654	97069.16502	54.6834866	97041.82328	4836603.097	49.82635934
27	0.000631572	0.999368428	97014.48153	61.27163088	96983.84572	4739561.274	48.85416279
28	0.000648464	0.999351536	96953.2099	62.87064826	96921.77458	4642577.428	47.88472122
29	0.000673689	0.999326311	96890.33926	65.27391589	96857.7023	4545655.653	46.91546844
30	0.000709996	0.999290004	96825.06534	68.74539779	96790.69264	4448797.951	45.94675909
31	0.000702811	0.999297189	96756.31994	68.00140003	96722.31924	4352007.258	44.97904903
32	0.000728635	0.999271365	96688.31854	70.45044819	96653.09332	4255284.939	44.01033137
33	0.000837563	0.999162437	96617.86809	80.92350829	96577.40634	4158631.846	43.04205762
34	0.000893767	0.999106233	96536.94459	86.28154456	96493.80381	4062054.439	42.07771912
35	0.001091428	0.998908572	96450.66304	105.2689272	96398.02858	3965560.636	41.11491316
36	0.001210538	0.998789462	96345.39411	116.6297173	96287.07925	3869162.607	40.15928984
37	0.00129077	0.99870923	96228.7644	124.2092107	96166.65979	3772875.528	39.20735709
38	0.001354802	0.998645198	96104.55519	130.2026617	96039.45385	3676708.868	38.25738396
39	0.001483901	0.998516099	95974.35252	142.4164599	95903.14429	3580669.414	37.30860714
40	0.001584932	0.998415068	95831.93606	151.8871037	95755.99251	3484766.27	36.36330865
41	0.001711525	0.998288475	95680.04896	163.7588125	95598.16955	3389010.277	35.42023979
42	0.001939991	0.998060009	95516.29015	185.3007659	95423.63976	3293412.108	34.48010913
43	0.002129772	0.997870228	95330.98938	203.0332848	95229.47274	3197988.468	33.54615838
44	0.002499488	0.997500512	95127.9561	237.7712006	95009.0705	3102758.995	32.61668938
45	0.002702889	0.997297111	94890.1849	256.4776488	94761.94607	3007749.925	31.69716581
46	0.002780348	0.997219652	94633.70725	263.1146278	94502.14993	2912987.979	30.78171683
47	0.002878121	0.997121879	94370.59262	271.6100303	94234.7876	2818485.829	29.86614527
48	0.003144353	0.996855647	94098.98259	295.8803885	93951.0424	2724251.041	28.95090857
49	0.003574445	0.996425555	93803.1022	335.2940151	93635.45519	2630299.999	28.04065044
50	0.004275969	0.995724031	93467.80819	399.6654815	93267.97544	2536664.544	27.13944611
51	0.004735366	0.995264634	93068.1427	440.71173	92847.78684	2443396.568	26.25384473
52	0.005214086	0.994785914	92627.43097	482.9673506	92385.9473	2350548.781	25.37637886
53	0.005601259	0.994398741	92144.46362	516.1250242	91886.40111	2258162.834	24.50676628
54	0.005894343	0.994105657	91628.3386	540.0888537	91358.29417	2166276.433	23.64199183
55	0.006355379	0.993644621	91088.24975	578.9003883	90798.79955	2074918.139	22.77920747
56	0.006927538	0.993072462	90509.34936	627.0069798	90195.84587	1984119.339	21.92170591
57	0.007770908	0.992229092	89882.34238	698.467421	89533.10867	1893923.493	21.07114082
58	0.008764395	0.991235605	89183.87496	781.6427477	88793.05358	1804390.385	20.23224922
59	0.009593135	0.990406865	88402.23221	848.0545307	87978.20494	1715597.331	19.40671958
60	0.010522929	0.989477071	87554.17768	921.3264023	87093.51448	1627619.126	18.5898511
61	0.01149439	0.98850561	86632.85128	995.7917686	86134.95539	1540525.612	17.78223375
62	0.013082205	0.986917795	85637.05951	1120.321591	85076.89871	1454390.656	16.98319238
63	0.014698838	0.985301162	84516.73792	1242.297814	83895.58901	1369313.757	16.20168728
64	0.016681175	0.983318825	83274.4401	1389.11547	82579.88237	1285418.168	15.43592688
65	0.018666839	0.981333161	81885.32463	1528.540136	81121.05456	1202838.286	14.68930228
66	0.020818687	0.979181313	80356.7845	1672.922709	79520.32314	1121717.232	13.95921002
67	0.02323911	0.97676089	78683.86179	1828.542913	77769.59033	1042196.908	13.24537058
68	0.026203779	0.973796221	76855.31887	2013.899818	75848.36897	964427.3181	12.54860863
69	0.029031419	0.970968581	74841.41906	2172.752595	73755.04276	888578.9491	11.87282337
70	0.032840729	0.967159271	72668.66646	2386.492005	71475.42046	814823.9063	11.21286444
71	0.036887922	0.963112078	70282.17446	2592.563392	68985.89276	743348.4859	10.57662902
72	0.041672837	0.958327163	67689.61106	2820.81812	66279.202	674362.5931	9.962571546
73	0.04785381	0.95214619	64868.79294	3104.218918	63316.68348	608083.3911	9.374051274
74	0.053266888	0.946733112	61764.57403	3290.006656	60119.5707	544766.7076	8.820051239
75	0.058776025	0.941223975	58474.56737	3436.902607	56756.11607	484647.1369	8.288169691
76	0.064954017	0.935045983	55037.66476	3574.917425	53250.20605	427891.0209	7.774512649
77	0.072346389	0.927653611	51462.74734	3723.143924	49601.17538	374640.8148	7.279844824
78	0.079750428	0.920249572	47739.60341	3807.253819	45835.9765	325039.6394	6.8085953

79	0.08917534	0.91082466	43932.3496	3917.682216	41973.50849	279203.6629	6.35530914
80	0.098270739	0.901729261	40014.66738	3932.270916	38048.53192	237230.1545	5.928579943
81	0.108460756	0.891539244	36082.39646	3913.524002	34125.63446	199181.6225	5.520188293
82	0.119971368	0.880028632	32168.87246	3859.343644	30239.20064	165055.9881	5.130922393
83	0.132779432	0.867220568	28309.52882	3758.923156	26430.06724	134816.7874	4.762240598
84	0.146613579	0.853386421	24550.60566	3599.45217	22750.87958	108386.7202	4.41482877
85	0.161717256	0.838282744	20951.15349	3388.163045	19257.07197	85635.84062	4.087404574
86	0.178176096	0.821823904	17562.99045	3129.305076	15998.33791	66378.76865	3.779468471
87	0.196074416	0.803925584	14433.68537	2830.07643	13018.64716	50380.43074	3.490475887
88	0.215493198	0.784506802	11603.60894	2500.498798	10353.35954	37361.78359	3.21984167
89	0.236507629	0.763492371	9103.110142	2152.954996	8026.632644	27008.42405	2.966944662
90	0.25918414	0.74081586	6950.155146	1801.369982	6049.470155	18981.7914	2.73113204
91	0.283576914	0.716423086	5148.785164	1460.076609	4418.74686	12932.32125	2.511722831
92	0.309723858	0.690276142	3688.708556	1142.481044	3117.468034	8513.574387	2.308009499
93	0.337642035	0.662357965	2546.227512	859.7134385	2116.370793	5396.106353	2.11925538
94	0.367322634	0.632677366	1686.514073	619.4947925	1376.766677	3279.735561	1.944683186
95	0.398725568	0.601274432	1067.019281	425.4478692	854.2953462	1902.968883	1.783443765
96	0.431773882	0.568226118	641.5714116	277.0137792	503.064522	1048.673537	1.634539068
97	0.466348238	0.533651762	364.5576324	170.0108096	279.5522277	545.6090152	1.496633088
98	0.502281825	0.497718175	194.5468229	97.71733331	145.6881562	266.0567876	1.367571999
99	0.539356166	0.460643834	96.82948957	52.22558222	70.71669847	120.3686313	1.243098893
100	0.577298375	0.422701625	44.60390736	25.74976324	31.72902574	49.65193286	1.113174513
101	0.615780543	0.384219457	18.85414412	11.6100151	13.04913657	17.92290712	0.950608365
102	0.654421936	0.345578064	7.244129019	4.740716941	4.873770549	4.873770549	0.672789032
103	0.692794739	0.307205261	2.503412078	2.503412078	0	0	0