

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.061007371	0.938992629	100000	6100.737112	94387.32186	6303703.08	63.0370308
1	0.00540381	0.99459619	93899.26289	507.4137776	93645.556	6209315.758	66.12741748
2	0.002382632	0.997617368	93391.84911	222.5184197	93280.5899	6115670.202	65.48398238
3	0.001622807	0.998377193	93169.33069	151.1958318	93093.73277	6022389.612	64.6391851
4	0.000995136	0.99904864	93018.13486	92.56571408	92971.852	5929295.879	63.74343979
5	0.000950127	0.999049873	92925.56914	88.29109825	92881.4236	5836324.027	62.80643832
6	0.000862933	0.999137067	92837.27805	80.11236978	92797.22186	5743442.603	61.86569366
7	0.000852025	0.999147975	92757.16568	79.03140143	92717.64998	5650645.382	60.91869389
8	0.000837517	0.999162483	92678.13428	77.61953901	92639.32451	5557927.732	59.97021601
9	0.000819476	0.999180524	92600.51474	75.88392008	92562.57278	5465288.407	59.02006509
10	0.000748647	0.999251353	92524.63082	69.26832952	92489.99665	5372725.834	58.06806022
11	0.000660344	0.999339656	92455.36249	61.05231461	92424.83633	5280235.838	57.11119069
12	0.000741384	0.999258616	92394.31017	68.49967618	92360.06033	5187811.001	56.14859824
13	0.000808374	0.999191626	92325.8105	74.63379665	92288.4936	5095450.941	55.18988584
14	0.000888005	0.999111995	92251.1767	81.91948512	92210.21696	5003162.447	54.23413149
15	0.001111838	0.998888162	92169.25721	102.4773005	92118.01856	4910952.23	53.28189007
16	0.001317478	0.998682522	92066.77991	121.2959621	92006.13193	4818834.212	52.34064031
17	0.001488397	0.998511603	91945.48395	136.8514237	91877.05824	4726828.08	51.40902932
18	0.001817492	0.998182508	91808.63253	166.8614599	91725.2018	4634951.022	50.48491513
19	0.001922969	0.998077031	91641.77107	176.2242899	91553.65892	4543225.82	49.57592773
20	0.001986277	0.998013723	91465.54678	181.6759274	91374.70881	4451672.161	48.67048105
21	0.002091719	0.997908281	91283.87085	190.940207	91188.40075	4360297.452	47.7663514
22	0.002177518	0.997822482	91092.93064	198.3565222	90993.75238	4269109.051	46.86542656
23	0.002270961	0.997729039	90894.57412	206.4180493	90791.3651	4178115.299	45.96660845
24	0.002320433	0.997679567	90688.15607	210.4357794	90582.93818	4087323.934	45.07009637
25	0.002270436	0.997729564	90477.72029	205.4238461	90375.00837	3996740.996	44.17375883
26	0.002303676	0.997696324	90272.29645	207.9581291	90168.31738	3906365.987	43.27314294
27	0.002243378	0.997756622	90064.33832	202.048333	89963.31415	3816197.67	42.37190592
28	0.002272112	0.997727888	89862.28998	204.1771867	89760.20139	3726234.356	41.46605163
29	0.002490424	0.997509576	89658.1128	223.2867099	89546.46944	3636474.154	40.55934305
30	0.002382362	0.997617638	89434.82609	213.0661196	89328.29303	3546927.685	39.65935688
31	0.002480014	0.997519986	89221.75997	221.2712577	89111.12434	3457599.392	38.75287142
32	0.002625268	0.997374732	89000.48871	233.65015	88883.66364	3368488.268	37.87497495
33	0.002756814	0.997243186	88766.83856	244.7136257	88644.48175	3279604.604	36.94628149
34	0.00292686	0.99707314	88522.12493	259.0918731	88392.579	3190960.122	36.04703485
35	0.003097995	0.996902005	88263.03306	273.4384118	88126.31386	3102567.543	35.15138145
36	0.002886836	0.997113164	87989.59465	254.0115296	87862.58888	3014441.229	34.25906485
37	0.002926997	0.997073003	87735.58312	256.8018176	87607.18221	2926578.641	33.35680389
38	0.002952898	0.997047102	87478.7813	258.3159348	87349.62334	2838971.458	32.45325799
39	0.003281506	0.996718494	87220.46537	286.2145066	87077.35811	2751621.835	31.54789215
40	0.003696126	0.996303874	86934.25086	321.3199142	86773.5909	2664544.477	30.65011144
41	0.004041001	0.995958999	86612.93095	350.0029299	86437.92948	2577770.886	29.76196346
42	0.004427541	0.995572459	86262.92802	381.932643	86071.9617	2491332.956	28.88069086
43	0.004827032	0.995172968	85880.99537	414.5503467	85673.7202	2405260.995	28.00690635
44	0.005204783	0.994795217	85466.44503	444.8342641	85244.0279	2319587.275	27.14032711
45	0.005596791	0.994403209	85021.61076	475.8481985	84783.68666	2234343.247	26.27970967
46	0.00622868	0.99377132	84545.76256	526.6085088	84282.45831	2149559.56	25.42480539
47	0.006993213	0.993006787	84019.15406	587.5638082	83725.37215	2065277.102	24.58102709
48	0.008015605	0.991984395	83431.59025	668.7547099	83097.21289	1981551.73	23.75061681
49	0.008806176	0.991193824	82762.83554	728.8240715	82398.4235	1898454.517	22.9384905
50	0.009800983	0.990199017	82034.01147	804.0139113	81632.00451	1816056.093	22.13784333
51	0.010834315	0.989165685	81229.99756	880.0713628	80789.96187	1734424.089	21.35201454
52	0.011966239	0.988033761	80349.92619	961.4864133	79869.18299	1653634.127	20.58040629
53	0.013676966	0.986323034	79388.43978	1085.792979	78845.54329	1573764.944	19.82360339
54	0.015180931	0.984819069	78302.6468	1188.707108	77708.29325	1494919.401	19.09155644
55	0.016232898	0.983767102	77113.93969	1251.782741	76488.04832	1417211.107	18.37814425
56	0.017211729	0.982788271	75862.15695	1305.718871	75209.29752	1340723.059	17.6731471
57	0.01839035	0.98160965	74556.43808	1371.118996	73870.87858	1265513.761	16.97390318
58	0.019867559	0.980132441	73185.31908	1454.01361	72458.31228	1191642.883	16.28253997
59	0.022555275	0.977444725	71731.30547	1617.919338	70922.34581	1119184.571	15.60245646
60	0.02479641	0.97520359	70113.38614	1738.560301	69244.10599	1048262.225	14.95095705
61	0.026764505	0.973235495	68374.82584	1830.018396	67459.81664	979018.1188	14.31840018
62	0.029135705	0.970864295	66544.80744	1938.829851	65575.39251	911558.3021	13.6984137
63	0.031630811	0.968369189	64605.97759	2043.539481	63584.20785	845982.9096	13.09449901
64	0.034476359	0.965523641	62562.43811	2156.925068	61483.97557	782398.7018	12.50588573
65	0.037592002	0.962407998	60405.51304	2270.76414	59270.13097	720914.7262	11.93458494
66	0.040222803	0.959777197	58134.7489	2338.342538	56965.57763	661644.5952	11.38122393
67	0.042641453	0.957358547	55796.40636	2379.239847	54606.78644	604679.0176	10.83723948
68	0.045672559	0.954327441	53417.16652	2439.698689	52197.31717	550072.2312	10.29766772
69	0.048974139	0.951025861	50977.46783	2496.577611	49729.17902	497874.914	9.766568157
70	0.053896406	0.946103594	48480.89021	2612.945757	47174.41734	448145.735	9.243760438
71	0.05974972	0.94025028	45867.94446	2740.596819	44497.64605	400971.3176	8.741863678
72	0.065382523	0.934617477	43127.34764	2819.774778	41717.46025	356473.6716	8.26560619
73	0.072750896	0.927249104	40307.57286	2932.412056	38841.36683	314756.2113	7.808860445
74	0.079741974	0.920258026	37375.1608	2980.369119	35884.97624	275914.8445	7.382305215
75	0.086663426	0.913336574	34394.79169	2980.770473	32904.40645	240029.8683	6.978669051
76	0.094059947	0.905940053	31414.02121	2954.801157	29936.62063	207125.4618	6.593408097
77	0.101473327	0.898526673	28459.22006	2887.851743	27015.29418	177188.8412	6.226061039
78	0.107544388	0.892455612	25571.36831	2750.057148	24196.33974	150173.547	5.872722381

79	0.115881455	0.884118545	22821.31116	2644.566737	21499.0278	125977.2073	5.520156417
80	0.125796849	0.874203151	20176.74443	2538.170872	18907.65899	104478.1795	5.178148528
81	0.137056917	0.862943083	17638.57356	2417.48851	16429.8293	85570.52047	4.851328834
82	0.149175717	0.850824283	15221.08505	2270.616282	14085.7769	69140.69117	4.542428543
83	0.161873214	0.838126786	12950.46876	2096.333997	11902.30177	55054.91427	4.251190846
84	0.175335191	0.824664809	10854.13477	1903.111789	9902.578872	43152.6125	3.975684237
85	0.189803779	0.810196221	8951.022978	1698.937989	8101.553983	33250.03363	3.714662973
86	0.205329729	0.794670271	7252.084989	1489.068645	6507.550666	25148.47965	3.467758539
87	0.221961598	0.778038402	5763.016343	1279.168318	5123.432185	18640.92898	3.234578538
88	0.2397446	0.7602554	4483.848026	1074.978349	3946.358851	13517.4968	3.014708955
89	0.258719257	0.741280743	3408.869676	881.9402298	2967.899562	9571.137944	2.807716004
90	0.278919861	0.721080139	2526.929447	704.8108105	2174.524041	6603.238383	2.613147111
91	0.300372722	0.699627278	1822.118636	547.3147343	1548.461269	4428.714341	2.430530183
92	0.323094218	0.676905782	1274.803902	411.88177	1068.863017	2880.253072	2.259369514
93	0.347088661	0.652911339	862.9221319	299.510487	713.1668884	1811.390056	2.099135007
94	0.372345991	0.627654009	563.4116449	209.7840675	458.5196112	1098.223167	1.949237608
95	0.398839365	0.601160635	353.6275774	141.0405983	283.1072783	639.703556	1.808975309
96	0.42652267	0.57347733	212.5869791	90.67316595	167.2503962	356.5962777	1.677413542
97	0.455328087	0.544671913	121.9138132	55.51078328	94.15842154	189.3458815	1.553112618
98	0.485163778	0.514836222	66.4030299	32.21634483	50.29485749	95.18745999	1.433480673
99	0.51591187	0.48408813	34.18668507	17.63731662	25.36802676	44.89260251	1.313160443
100	0.547426886	0.452573114	16.54936845	9.059569235	12.01958384	19.52457574	1.179777694
101	0.579534828	0.420465172	7.489799219	4.340599499	5.319499469	7.504991908	1.002028451
102	0.612033129	0.387966871	3.149199719	1.927414559	2.185492439	2.185492439	0.693983435
103	0.64469171	0.35530829	1.22178516	1.22178516	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.049643096	0.950356904	100000	4964.309589	95432.83518	6783579.243	67.83579243
1	0.004903519	0.995096481	95035.69041	466.0092717	94802.68577	6688146.408	70.37510202
2	0.002223663	0.997776337	94569.68114	210.29106	94464.53561	6593343.722	69.71942427
3	0.001319711	0.998680289	94359.39008	124.5271054	94297.12653	6498879.187	68.87368794
4	0.000778655	0.999221345	94234.86297	73.37642583	94198.17476	6404582.06	67.96404067
5	0.000681971	0.999318029	94161.48655	64.21541053	94129.37884	6310383.885	67.01661281
6	0.000627615	0.999372385	94097.27114	59.05689541	94067.74269	6216254.506	66.06200617
7	0.000561728	0.999438272	94038.21424	52.82393708	94011.80227	6122186.764	65.10317974
8	0.000549167	0.999450833	93985.3903	51.61367649	93959.58347	6028174.962	64.13948957
9	0.000474172	0.999525828	93933.77663	44.54081312	93911.50622	5934215.378	63.17445749
10	0.000447616	0.999552384	93889.23582	42.02632358	93868.22265	5840303.872	62.20419009
11	0.000486011	0.999513989	93847.20949	45.61080939	93824.40409	5746435.649	61.23182224
12	0.00054201	0.99945799	93801.59868	50.84140396	93776.17798	5652611.245	60.26135295
13	0.000551387	0.999448613	93750.75728	51.69295337	93724.9108	5558835.067	59.29376176
14	0.000531843	0.999468157	93699.06432	49.8331709	93674.14774	5465110.156	58.32619777
15	0.000561822	0.999438178	93649.23115	52.61420987	93622.92405	5371436.009	57.35696858
16	0.000660722	0.999339278	93596.61694	61.84130678	93565.69629	5277813.085	56.38893004
17	0.0008331	0.9991669	93534.77564	77.92382596	93495.81372	5184247.388	55.42588147
18	0.001004098	0.998995902	93456.85181	93.83987127	93409.93188	5090751.575	54.47167838
19	0.001165641	0.998834359	93363.01194	108.8277764	93308.59805	4997341.643	53.52592573
20	0.001248866	0.998751134	93254.18416	116.4620149	93195.95316	4904033.045	52.58780706
21	0.001261505	0.998738495	93137.72215	117.4936783	93078.97531	4810837.091	51.65293911
22	0.001213733	0.998786267	93020.22847	112.9017137	92963.77761	4717758.116	50.7175503
23	0.001185221	0.998814779	92907.32676	110.1157174	92852.2689	4624794.339	49.77857506
24	0.001199829	0.998800171	92797.21104	111.3408177	92741.54063	4531942.07	48.83705037
25	0.001339708	0.998660292	92685.87022	124.1719795	92623.78423	4439200.529	47.89511625
26	0.001424399	0.998575601	92561.69824	131.8448259	92495.77583	4346576.745	46.95869703
27	0.001420344	0.998579656	92429.85342	131.2821584	92364.21234	4254080.969	46.02496717
28	0.001482708	0.998517292	92298.57126	136.851875	92230.14532	4161716.757	45.08972024
29	0.001555309	0.998444691	92161.71938	143.3399657	92090.0494	4069486.611	44.15593197
30	0.001577156	0.998422844	92018.37942	145.1273483	91945.81574	3977396.562	43.22393621
31	0.001641256	0.998358744	91873.25207	150.7874873	91797.85833	3885450.746	42.29142496
32	0.001827398	0.998172602	91722.46458	167.6134585	91638.65785	3793652.888	41.36012813
33	0.001828468	0.998171532	91554.85112	167.4050995	91471.14857	3702014.23	40.43493255
34	0.001955478	0.998044522	91387.44602	178.7061494	91298.09295	3610543.081	39.50808605
35	0.002114952	0.997885048	91208.73987	192.9021428	91112.2888	3519244.988	38.58451496
36	0.002196861	0.997803139	91015.83773	199.9491208	90915.86317	3428132.7	37.66523261
37	0.002321665	0.997678335	90815.88861	210.8441028	90710.46656	3337216.836	36.74705922
38	0.002549676	0.997450324	90605.04451	231.0135248	90489.53775	3246506.37	35.83140859
39	0.00256137	0.99743863	90374.03098	231.4813491	90258.29031	3156016.832	34.92172251
40	0.002706714	0.997293286	90142.54963	243.9900881	90020.55459	3065758.542	34.01011569
41	0.00296663	0.99703337	89898.55955	266.6957344	89765.21168	2975737.987	33.10106416
42	0.003080132	0.996919868	89631.86381	276.0779382	89493.82484	2885972.776	32.19806721
43	0.003347356	0.996652644	89355.78587	299.105615	89206.23307	2796478.951	31.29600309
44	0.003573766	0.996426234	89056.68026	318.2676961	88897.54641	2707272.718	30.39943449
45	0.003790462	0.996209538	88738.41256	336.3596013	88570.23276	2618375.171	29.5066713
46	0.003939463	0.996060537	88402.05296	348.2566337	88227.92464	2529804.938	28.61703834
47	0.004414913	0.995585087	88053.79633	388.7498289	87859.42141	2441577.014	27.72824246
48	0.004780284	0.995219716	87665.0465	419.0638005	87455.5146	2353717.592	26.84898584
49	0.005322811	0.994677189	87245.9827	464.3938989	87013.78575	2266262.078	25.97554647
50	0.005774432	0.994225568	86781.5888	501.114343	86531.03163	2179248.292	25.11187364
51	0.00651823	0.99348177	86280.47446	562.3960181	85999.27645	2092717.26	24.25481864
52	0.006963801	0.993036199	85718.07844	596.9236789	85419.6166	2006717.984	23.41067393
53	0.007532826	0.992467174	85121.15476	641.2028463	84800.55334	1921298.367	22.57133815
54	0.008337061	0.991662939	84479.95191	704.3145261	84127.79465	1836497.814	21.73885961
55	0.008914949	0.991085051	83775.63739	746.8555391	83402.20962	1752370.019	20.91741793
56	0.009466324	0.990533676	83028.78185	785.9773787	82635.79316	1668967.81	20.10107547
57	0.010298898	0.989701102	82242.80447	847.0102211	81819.29936	1586332.017	19.28839887
58	0.011369902	0.988630098	81395.79425	925.462222	80933.06314	1504512.717	18.48391224
59	0.012638906	0.987361094	80470.33203	1017.056951	79961.80355	1423579.654	17.69073916
60	0.014519785	0.985480215	79453.27507	1153.644507	78876.45282	1343617.851	16.91079253
61	0.01609934	0.98390066	78299.63057	1260.572362	77669.34439	1264741.398	16.15258448
62	0.017843529	0.982156471	77039.0582	1374.648664	76351.73387	1187072.053	15.40870412
63	0.019932154	0.980067846	75664.40954	1508.154642	74910.33222	1110720.32	14.67956106
64	0.022230966	0.977769034	74156.2549	1648.565178	73331.97231	1035809.987	13.96793822
65	0.024695013	0.975304987	72507.68972	1790.578332	71612.40055	962478.015	13.2741509
66	0.027084819	0.972915181	70717.11139	1915.36015	69759.43131	890865.6145	12.59759621
67	0.028497495	0.971502505	68801.75124	1960.677574	67821.41245	821106.1831	11.93437912
68	0.031137731	0.968862269	66841.07366	2081.279398	65800.43397	753284.7707	11.26978861
69	0.035730177	0.964269823	64759.79427	2313.878914	63602.85481	687484.3367	10.61591292
70	0.04159407	0.95840593	62445.91535	2597.379772	61147.22547	623881.4819	9.990749249
71	0.047482565	0.952517435	59848.53558	2841.761986	58427.65459	562734.2565	9.402640365
72	0.052975344	0.947024656	57006.77359	3019.953438	55496.79688	504306.6019	8.846432977
73	0.059713923	0.940286077	53986.82016	3223.764829	52374.93774	448809.805	8.313321727
74	0.066609076	0.933390924	50763.05533	3381.280193	49072.41523	396434.8672	7.809515497
75	0.076003831	0.923996169	47381.77513	3601.196444	45581.17691	347362.452	7.331140529
76	0.083513758	0.916486242	43780.57869	3656.280669	41952.43836	301781.2751	6.893039885
77	0.089233699	0.910766301	40124.29802	3580.439521	38334.07826	259828.8367	6.475598317
78	0.097713585	0.902286415	36543.8585	3570.831427	34758.44279	221494.7585	6.061066553

79	0.108271854	0.891728146	32973.02707	3570.050775	31188.00169	186736.3157	5.6633052
80	0.117914937	0.882085063	29402.9763	3467.050086	27669.45126	155548.314	5.290223426
81	0.128914776	0.871085224	25935.92621	3343.524122	24264.16415	127878.8628	4.930568575
82	0.141305086	0.858694914	22592.40209	3192.421323	20996.19143	103614.6986	4.586263036
83	0.154773357	0.845226643	19399.98077	3002.600149	17898.68069	82618.50717	4.258690158
84	0.171088692	0.828911308	16397.38062	2805.406396	14994.67742	64719.82648	3.946961285
85	0.187670866	0.812329134	13591.97422	2550.817573	12316.56544	49725.14905	3.658419905
86	0.205409161	0.794590839	11041.15665	2267.954727	9907.179287	37408.58362	3.388103693
87	0.224543966	0.775456034	8773.201924	1969.969554	7788.217147	27501.40433	3.134705501
88	0.245135409	0.754864591	6803.23237	1667.713151	5969.375795	19713.18718	2.897620735
89	0.267235343	0.732764657	5135.51922	1372.39224	4449.3231	13743.81139	2.676226259
90	0.290884522	0.709115478	3763.12698	1094.635394	3215.809283	9294.488289	2.469884311
91	0.316109399	0.683890601	2668.491586	843.5352709	2246.72395	6078.679006	2.277945727
92	0.342918547	0.657081453	1824.956315	625.8113681	1512.050631	3831.955056	2.099751662
93	0.371298772	0.628701228	1199.144947	445.2410468	976.5244235	2319.904425	1.934632199
94	0.401210984	0.598789016	753.9039001	302.4745254	602.6666374	1343.380001	1.781898199
95	0.432585965	0.567414035	451.4293746	195.2820114	353.7883689	740.7133641	1.640817824
96	0.465320227	0.534679773	256.1473632	119.1905491	196.5520886	386.9249952	1.51055623
97	0.499272199	0.500727801	136.956814	68.37872978	102.7674492	190.3729066	1.390021431
98	0.534259065	0.465740935	68.57808427	36.63846321	50.25885266	87.60545742	1.277455595
99	0.570054634	0.429945366	31.93962106	18.20732898	22.83595656	37.34660476	1.16928766
100	0.606388686	0.393611314	13.73229207	8.32710654	9.568738803	14.5106482	1.056680714
101	0.642948274	0.357051726	5.405185533	3.475254709	3.667558178	4.941909393	0.914290428
102	0.679381458	0.320618542	1.929930823	1.311159217	1.274351215	1.274351215	0.660309271
103	0.7153039	0.2846961	0.618771607	0.618771607	0	0	0