

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.049288235	0.950711765	100000	4928.823496	95465.48238	6468217.06	64.6821706
1	0.004004934	0.995995066	95071.1765	380.753793	94880.79961	6372751.578	67.03137388
2	0.00196575	0.99803425	94690.42271	186.1377332	94597.35384	6277870.778	66.29889907
3	0.001279393	0.998720607	94504.28498	120.9080995	94443.83093	6183273.424	65.42849804
4	0.000914518	0.999085482	94383.37688	86.31528726	94340.21924	6088829.593	64.5116735
5	0.000924914	0.999075086	94297.06159	87.21664876	94253.45327	5994489.374	63.57026691
6	0.000838074	0.999161926	94209.84494	78.95485974	94170.36751	5900235.921	62.62865547
7	0.000758464	0.999241536	94130.89008	71.39490617	94095.19263	5806065.553	61.68076758
8	0.000703582	0.999296418	94059.49518	66.17854449	94026.4059	5711970.361	60.72720622
9	0.000574114	0.999425886	93993.31663	53.9628903	93966.33519	5617943.955	59.76961082
10	0.00059183	0.99940817	93939.35374	55.59610875	93911.55569	5523977.62	58.80365789
11	0.000641965	0.999358035	93883.75763	60.27012342	93853.62257	5430066.064	57.83818416
12	0.000626024	0.999373976	93823.48751	58.73573131	93794.11964	5336212.441	56.87501694
13	0.000620403	0.999379597	93764.75178	58.17191217	93735.66582	5242418.322	55.91033114
14	0.000731892	0.999268108	93706.57987	68.58311855	93672.28831	5148682.656	54.94472921
15	0.000842345	0.999157655	93637.99675	78.87552638	93598.55898	5055010.368	53.98460607
16	0.001114802	0.998885198	93559.12122	104.2998919	93506.97128	4961411.809	53.02969656
17	0.001416854	0.998583146	93454.82133	132.4118495	93388.6154	4867904.837	52.08832212
18	0.001545426	0.998454574	93322.40948	144.2228657	93250.29805	4774516.222	51.16151896
19	0.001619782	0.998380218	93178.18661	150.9283636	93102.72243	4681265.924	50.23993376
20	0.001677275	0.998322725	93027.25825	156.0323325	92949.24208	4588163.201	49.32063234
21	0.001768234	0.998231766	92871.22592	164.2180144	92789.11691	4495213.959	48.40265556
22	0.001834132	0.998165868	92707.0079	170.0369027	92621.98945	4402424.842	47.48750868
23	0.001951012	0.998048988	92536.971	180.5407679	92446.70062	4309802.853	46.57384834
24	0.001987261	0.998012739	92356.43023	183.5363579	92264.66205	4217356.152	45.6639147
25	0.001986357	0.998013643	92172.89388	183.0882493	92081.34975	4125091.49	44.75384592
26	0.002018878	0.997981122	91989.80563	185.7161904	91896.94753	4033010.141	43.8419248
27	0.002123043	0.997876957	91804.08944	194.9040163	91706.63743	3941113.193	42.92960387
28	0.002130944	0.997869056	91609.18542	195.214029	91511.5784	3849406.556	42.01987539
29	0.002130212	0.997869788	91413.97139	194.731148	91316.60582	3757894.977	41.10854085
30	0.002192543	0.997807457	91219.24024	200.0021522	91119.23917	3666578.371	40.19523032
31	0.002083712	0.997916288	91019.23809	189.6578897	90924.40915	3575459.132	39.28245508
32	0.002132458	0.997867542	90829.5802	193.690222	90732.73509	3484534.723	38.3634353
33	0.002397035	0.997602965	90635.88998	217.2573692	90527.26129	3393801.988	37.44435001
34	0.002617845	0.997382155	90418.63261	236.7019233	90300.28165	3303274.727	36.53311968
35	0.002863765	0.997136235	90181.93069	258.2599013	90052.80074	3212974.445	35.62769637
36	0.002975781	0.997024219	89923.67078	267.5931824	89789.87419	3122921.644	34.72858277
37	0.002882486	0.997117514	89656.0776	258.4323712	89526.86142	3033131.77	33.83074356
38	0.002895165	0.997104835	89397.64523	258.8209188	89268.23477	2943604.909	32.92709669
39	0.003144419	0.996855581	89138.82431	280.2897905	88998.67942	2854336.674	32.02125108
40	0.003283713	0.996716287	88858.53452	291.7858973	88712.64157	2765337.994	31.12067973
41	0.003623813	0.996376187	88566.74862	320.9493666	88406.27394	2676625.353	30.22156051
42	0.003862851	0.996137149	88245.79926	340.880355	88075.35908	2588219.079	29.32965762
43	0.0044118	0.9955882	87904.9189	387.8189519	87711.00943	2500143.72	28.44145414
44	0.004951325	0.995048675	87517.09995	433.325553	87300.43717	2412432.71	27.56527562
45	0.005595465	0.994404535	87083.77439	487.2741798	86840.1373	2325132.273	26.69994829
46	0.006061527	0.993938473	86596.50021	524.9070076	86334.0467	2238292.136	25.84737409
47	0.006587968	0.993412032	86071.5932	567.0369143	85788.07474	2151958.089	25.00195488
48	0.007266188	0.992733812	85504.55629	621.2921843	85193.91019	2066170.015	24.16444344
49	0.008231257	0.991768743	84883.2641	698.6959569	84533.91612	1980976.104	23.33765231
50	0.009310709	0.990689291	84184.56815	783.8180309	83792.65913	1896442.188	22.52719507
51	0.010279302	0.989720698	83400.75011	857.3015042	82972.09936	1812649.529	21.73421134
52	0.011633382	0.988366618	82543.44861	960.2594453	82063.31889	1729677.43	20.95475121
53	0.012621702	0.987378298	81583.18916	1029.718662	81068.32983	1647614.111	20.19550998
54	0.013935013	0.986064987	80553.4705	1122.513659	79992.21367	1566545.781	19.44727857
55	0.015175836	0.984824164	79430.95684	1205.431152	78828.24127	1486553.567	18.71504041
56	0.016948746	0.983051254	78225.52569	1325.824559	77562.61341	1407725.326	17.99572855
57	0.018070645	0.981929355	76899.70113	1389.627221	76204.88752	1330162.713	17.29737168
58	0.019816387	0.980183613	75510.07391	1496.336859	74761.90548	1253957.825	16.60649712
59	0.020744581	0.979255419	74013.73705	1535.383938	73246.04508	1179195.92	15.93212242
60	0.022409369	0.977590631	72478.35312	1624.194173	71666.25603	1105949.875	15.25903704
61	0.024306338	0.975693662	70854.15894	1722.205146	69993.05637	1034283.618	14.59735934
62	0.02727552	0.97272448	69131.9538	1885.609965	68189.14882	964290.5621	13.94855069
63	0.030392807	0.969607193	67246.34383	2043.80512	66224.44127	896101.4133	13.32565255
64	0.033606449	0.966393551	65202.53871	2191.225791	64106.92582	829876.972	12.72767884
65	0.036011413	0.963988587	63011.31292	2269.126412	61876.74972	765770.0462	12.1528978
66	0.038296805	0.961703195	60742.18651	2326.231659	59579.07068	703893.2965	11.58821137
67	0.041177706	0.958822294	58415.95485	2405.435019	57213.23734	644314.2258	11.02976451
68	0.044712773	0.955287227	56010.51983	2504.385677	54758.32699	587100.9885	10.48197714
69	0.049103969	0.950896031	53506.13416	2627.36358	52192.45237	532342.6615	9.949189376
70	0.05299434	0.94700566	50878.77058	2696.286885	49530.62713	480150.2091	9.437142519
71	0.05678447	0.94321553	48182.48369	2736.016824	46814.47528	430619.582	8.937264105
72	0.062285112	0.937714888	45446.46687	2830.638276	44031.14773	383805.1067	8.445213306
73	0.06782925	0.93217075	42615.82859	2890.599709	41170.52874	339773.959	7.972952075
74	0.075192959	0.924807041	39725.22888	2987.057493	38231.70014	298603.4302	7.516720196
75	0.084620673	0.915379327	36738.17139	3108.808786	35183.767	260371.7301	7.087226181
76	0.094139835	0.905860165	33629.3626	3165.86266	32046.43127	225187.9631	6.696171015
77	0.101773196	0.898226804	30463.49994	3100.367763	28913.31606	193141.5318	6.340096581
78	0.107820381	0.892179619	27363.13218	2950.303325	25887.98052	164228.2158	6.001806178

79	0.112788632	0.887211368	24412.82886	2753.48956	23036.08408	138340.2353	5.666702375
80	0.120587754	0.879412246	21659.3393	2611.851081	20353.41376	115304.1512	5.3235304
81	0.131421967	0.868578033	19047.48822	2503.258362	17795.85903	94950.73742	4.984947955
82	0.143866233	0.856133767	16544.22985	2380.156024	15354.15184	77154.87839	4.663552131
83	0.156509909	0.843490091	14164.07383	2216.817906	13055.66488	61800.72655	4.363202797
84	0.169985868	0.830014132	11947.25592	2030.864663	10931.82359	48745.06167	4.080021553
85	0.184088354	0.815911646	9916.39126	1825.492145	9003.645188	37813.23808	3.813205539
86	0.199225732	0.800774268	8090.899116	1611.915296	7284.941468	28809.59289	3.56074059
87	0.215446935	0.784553065	6478.98382	1395.877209	5781.045216	21524.65142	3.322226451
88	0.232797994	0.767202006	5083.106611	1183.337021	4491.438101	15743.60621	3.097241001
89	0.25132077	0.74867923	3899.76959	980.0930945	3409.723043	11252.16811	2.885341774
90	0.271051508	0.728948492	2919.676495	791.3827162	2523.985137	7842.445065	2.686066445
91	0.292019184	0.707980816	2128.293779	621.5026126	1817.542473	5318.459928	2.498931294
92	0.314243653	0.685756347	1506.791167	473.499561	1270.041386	3500.917455	2.323425789
93	0.337733609	0.662266391	1033.291606	348.9773031	858.802954	2230.876069	2.158999509
94	0.362484371	0.637515629	684.3143025	248.0532396	560.2876827	1372.073115	2.005033521
95	0.388475542	0.611524458	436.2610629	169.4767528	351.5226865	811.7854324	1.860779018
96	0.41566858	0.58433142	266.7843101	110.8938555	211.3373824	460.2627459	1.725224192
97	0.444004375	0.555995625	155.8904546	69.21604385	121.2824327	248.9253635	1.5967967
98	0.473400908	0.526599092	86.67441078	41.03174477	66.15853839	127.6429308	1.472671457
99	0.503751151	0.496248849	45.642666	22.99254552	34.14639325	61.48439242	1.347081531
100	0.534921331	0.465078669	22.65012049	12.1160326	16.59210419	27.33799918	1.206969261
101	0.566749771	0.433250229	10.53408789	5.970191902	7.548991939	10.74589499	1.020106828
102	0.599046492	0.400953508	4.563895988	2.73398588	3.196903048	3.196903048	0.700476754
103	0.631593808	0.368406192	1.829910108	1.829910108	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.038130644	0.961869356	100000	3813.064376	96491.98077	6927878.38	69.2787838
1	0.003630016	0.996369984	96186.93562	349.1601075	96012.35557	6831386.399	71.02197773
2	0.00205732	0.99794268	95837.77552	197.1690202	95739.19101	6735374.044	70.27890628
3	0.001263849	0.998736151	95640.6065	120.875241	95580.16888	6639634.853	69.42275981
4	0.000807835	0.999192165	95519.73126	77.16413811	95481.14919	6544054.684	68.50997797
5	0.000653465	0.999346535	95442.56712	62.36836985	95411.38293	6448573.535	67.5649632
6	0.00054794	0.99945206	95380.19875	52.26264174	95354.06743	6353162.152	66.60881646
7	0.000505511	0.999494489	95327.93611	48.18933064	95303.84144	6257808.084	65.64505999
8	0.000447756	0.999552244	95279.74677	42.66205682	95258.41575	6162504.243	64.6780082
9	0.000460578	0.999539422	95237.08472	43.864109	95215.15266	6067245.827	63.70675714
10	0.000435207	0.999564793	95193.22061	41.42873533	95172.50624	5972030.675	62.7358822
11	0.000437526	0.999562474	95151.79187	41.63139807	95130.97617	5876858.168	61.76297947
12	0.000463468	0.999536532	95110.16048	44.08050106	95088.12022	5781727.192	60.78979536
13	0.000511526	0.999488474	95066.07997	48.62876728	95041.76559	5686639.072	59.8177507
14	0.000540649	0.999459351	95017.45121	51.37105534	94991.76568	5591597.306	58.8481088
15	0.000692497	0.999307503	94966.08015	65.76373602	94933.19828	5496605.541	57.87967169
16	0.000801191	0.999198809	94900.31642	76.03330302	94862.29976	5401672.342	56.91943448
17	0.000839558	0.999160442	94824.28311	79.61049	94784.47787	5306810.043	55.96467348
18	0.000867034	0.999132966	94744.67262	82.14684563	94703.5992	5212025.565	55.01127842
19	0.00085598	0.99914402	94662.52578	81.02923597	94622.01116	5117321.966	54.05858257
20	0.000830669	0.999169331	94581.49654	78.5659271	94542.21358	5022699.954	53.10446692
21	0.000911108	0.999088892	94502.93061	86.10240426	94459.87941	4928157.741	52.14820015
22	0.001025612	0.998974388	94416.82821	96.83499418	94368.41071	4833697.861	51.19530017
23	0.001140298	0.998859702	94319.99322	107.5528708	94266.21678	4739329.451	50.24734724
24	0.001195852	0.998804148	94212.44034	112.6641001	94156.10829	4645063.234	49.30413878
25	0.001256918	0.998743082	94099.77624	118.2757043	94040.63839	4550907.126	48.36257117
26	0.00120945	0.99879055	93981.50054	113.6659154	93924.66758	4456866.487	47.42280621
27	0.001218056	0.998781944	93867.83463	114.3362983	93810.66648	4362941.82	46.47962571
28	0.001293035	0.998706965	93753.49833	121.226543	93692.88506	4269131.153	45.53569978
29	0.00135228	0.99864772	93632.27178	126.6170181	93568.96327	4175438.268	44.59400791
30	0.001488654	0.998511346	93505.65477	139.19757	93436.05598	4081869.305	43.65371608
31	0.00158815	0.99841185	93366.4572	148.2799766	93292.31721	3988433.249	42.71805281
32	0.001481661	0.998518339	93218.17722	138.1177404	93149.11835	3895140.932	41.78520808
33	0.001527475	0.998472525	93080.05948	142.177453	93008.97075	3801991.813	40.84646953
34	0.001705916	0.998294084	92937.88203	158.5442099	92858.60992	3708982.843	39.90819203
35	0.001824797	0.998175203	92779.33782	169.3034132	92694.68611	3616124.233	38.97553397
36	0.002107515	0.997892485	92610.0344	195.1770589	92512.44587	3523429.547	38.04587234
37	0.002296743	0.997703257	92414.85734	212.2531802	92308.73075	3430917.101	37.12516796
38	0.002367146	0.997632854	92202.60416	218.2570137	92093.47566	3338608.37	36.2094802
39	0.002448103	0.997551897	91984.34715	225.1871346	91871.75358	3246514.894	35.29421032
40	0.002534613	0.997465387	91759.16001	232.5739955	91642.87302	3154643.141	34.37959916
41	0.002632955	0.997367045	91526.58602	240.9853389	91406.09335	3063000.268	33.46568905
42	0.002792003	0.997207997	91285.60068	254.8696967	91158.16583	2971594.174	32.55271535
43	0.003027717	0.996972283	91030.73098	275.615288	90892.92334	2880436.009	31.64245719
44	0.003257683	0.996742317	90755.1157	295.6514083	90607.28999	2789543.085	30.73703409
45	0.003465236	0.996534764	90459.46429	313.4633567	90302.73261	2698935.795	29.83585871
46	0.003744352	0.996255648	90146.00093	337.5383714	89977.23174	2608633.063	28.93786785
47	0.004131033	0.995868967	89808.46256	371.0017597	89622.96168	2518655.831	28.04474945
48	0.004574255	0.995425745	89437.4608	409.1097462	89232.90593	2429032.869	27.15900974
49	0.005154195	0.994845805	89028.35105	458.8695114	88798.9163	2339799.963	26.28151522
50	0.005552966	0.994447034	88569.48154	491.8232761	88323.5699	2251001.047	25.41508664
51	0.006055231	0.993944769	88077.65827	533.3305443	87810.99299	2162677.477	24.55421181
52	0.00647295	0.99352705	87544.32772	566.6700242	87260.99271	2074866.484	23.70075296
53	0.007027986	0.992972014	86977.6577	611.2777611	86672.01882	1987605.491	22.85190868
54	0.007689485	0.992310515	86366.37994	664.1129462	86034.32346	1900933.473	22.01010942
55	0.008371095	0.991628905	85702.26699	717.4218051	85343.55609	1814899.149	21.17679278
56	0.00896528	0.99103472	84984.84519	761.9129561	84603.88871	1729555.593	20.35134134
57	0.010083219	0.989916781	84222.93223	849.2382696	83798.31309	1644951.704	19.53092419
58	0.010936153	0.989063847	83373.69396	911.7874805	82917.80022	1561153.391	18.72477177
59	0.012381482	0.987618518	82461.90648	1021.000644	81951.40616	1478235.591	17.92628444
60	0.013694514	0.986305486	81440.90584	1115.293605	80883.25903	1396284.185	17.14475263
61	0.01499238	0.98500762	80325.61223	1204.272112	79723.47617	1315400.926	16.37585932
62	0.016631176	0.983368824	79121.34012	1315.880932	78463.39965	1235677.45	15.61749899
63	0.018698984	0.981301016	77805.45919	1454.88306	77078.01766	1157214.05	14.87317294
64	0.020937627	0.979062373	76350.57613	1598.59992	75551.27617	1080136.032	14.14705805
65	0.023574036	0.976425964	74751.97621	1762.205768	73870.87332	1004584.756	13.43890566
66	0.025857177	0.974142823	72989.77044	1887.30939	72046.11574	930713.8828	12.75129209
67	0.027937057	0.972062943	71102.46105	1986.393502	70109.2643	858667.767	12.07648448
68	0.031598655	0.968401345	69116.06755	2183.974758	68024.08017	788558.5027	11.40919226
69	0.034651812	0.965348188	66932.09279	2319.13813	65772.43363	720534.4226	10.76515603
70	0.039770662	0.960229338	64612.77448	2569.692821	63327.92807	654761.9889	10.1336306
71	0.045066731	0.954933269	62043.08166	2796.078861	60645.04223	591434.0609	9.532635147
72	0.049487068	0.950512932	59247.0028	2931.960449	57781.02257	530789.0186	8.958917643
73	0.054012126	0.945987874	56315.04235	3041.695146	54794.19478	473007.9961	8.399318838
74	0.062974983	0.937025017	53273.3472	3354.888124	51595.90314	418213.8013	7.850338363
75	0.070869658	0.929130342	49918.45908	3537.704135	48149.60701	366617.8981	7.34433524
76	0.080782102	0.919217898	46380.75494	3746.734863	44507.38751	318468.2911	6.866388689
77	0.088527625	0.911472375	42634.02008	3774.288541	40746.87581	273960.9036	6.425875465
78	0.096430505	0.903569495	38859.73154	3747.263551	36986.09976	233214.0278	6.00143178

79	0.104547632	0.895452368	35112.46799	3670.925387	33277.00529	196227.928	5.588554132
80	0.116796845	0.883203155	31441.5426	3672.272974	29605.40611	162950.9228	5.182663103
81	0.128672716	0.871327284	27769.26963	3573.147356	25982.69595	133345.5166	4.801909392
82	0.14359016	0.85640984	24196.12227	3474.325071	22458.95974	107362.8207	4.437191195
83	0.158156348	0.841843652	20721.7972	3277.283772	19083.15531	84903.86095	4.097321296
84	0.17618218	0.82381782	17444.51343	3073.412398	15907.80723	65820.70564	3.773146549
85	0.194969278	0.805030722	14371.10103	2801.923195	12970.13943	49912.89841	3.473143659
86	0.215274597	0.784725403	11569.17784	2490.550098	10323.90279	36942.75898	3.193205213
87	0.237367246	0.762632754	9078.627737	2154.968859	8001.143308	26618.85619	2.932035211
88	0.261328079	0.738671921	6923.658878	1809.346474	6018.985641	18617.71289	2.688999157
89	0.287222682	0.712777318	5114.312403	1468.946523	4379.839142	12598.72724	2.463425432
90	0.315095931	0.684904069	3645.36588	1148.639955	3071.045903	8218.888102	2.254612671
91	0.344965802	0.655034198	2496.725925	861.2850615	2066.083395	5147.8422	2.061837123
92	0.3768165	0.6231835	1635.440864	616.261102	1327.310313	3081.758805	1.884359669
93	0.410591087	0.589408913	1019.179762	418.4661264	809.9466986	1754.448492	1.72143184
94	0.446183908	0.553816092	600.7136354	268.0287572	466.6992568	944.5017937	1.572299575
95	0.483433226	0.516566774	332.6848782	160.8309238	252.2694163	477.8025369	1.436201547
96	0.522114681	0.477885319	171.8539544	89.72747248	126.9902181	225.5331206	1.312353396
97	0.561936314	0.438063686	82.12648188	46.14985248	59.05155564	98.54290248	1.199891926
98	0.602536102	0.397463898	35.9766294	21.67721804	25.13802038	39.49134684	1.097694462
99	0.643483044	0.356516956	14.29941136	9.201428746	9.698696988	14.35332646	1.003770442
100	0.684282895	0.315717105	5.097982615	3.488462301	3.353751465	4.654629472	0.91303361
101	0.724389557	0.275610443	1.609520314	1.165919708	1.02656046	1.300878007	0.80823957
102	0.76322285	0.23677715	0.443600606	0.338566119	0.274317547	0.274317547	0.618388575
103	0.800192857	0.199807143	0.105034487	0.105034487	0	0	0