

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.011656996	0.988343004	100000	1165.699624	98927.55635	6812375.66	68.1237566
1	0.000658515	0.999341485	98834.30038	65.08387176	98801.75844	6713448.104	67.92629763
2	0.000447034	0.999552966	98769.2165	44.15319027	98747.13991	6614646.345	66.97072812
3	0.000527303	0.999472697	98725.06331	52.05797687	98699.03433	6515899.205	66.00045608
4	0.000394755	0.999605245	98673.00534	38.95164216	98653.52952	6417200.171	65.03501286
5	0.000374979	0.999625021	98634.0537	36.98572608	98615.56083	6318546.642	64.06049843
6	0.000346348	0.999653652	98597.06797	34.14886661	98579.99354	6219931.081	63.08434124
7	0.000323414	0.999676586	98562.9191	31.87659303	98546.98081	6121351.087	62.10602469
8	0.000292903	0.999707097	98531.04251	28.86002214	98516.6125	6022804.106	61.12595536
9	0.000276068	0.999723932	98502.18249	27.19329371	98488.58584	5924287.494	60.14371808
10	0.000229703	0.999770297	98474.98919	22.61999339	98463.6792	5825798.908	59.16018835
11	0.000233685	0.999766315	98452.3692	23.0068836	98440.86576	5727335.229	58.17366586
12	0.000281637	0.999718363	98429.36232	27.72139756	98415.50162	5628894.363	57.1871465
13	0.000301501	0.999698499	98401.64092	29.66819846	98386.80682	5530478.862	56.20311623
14	0.000349362	0.999650638	98371.97272	34.36743276	98354.789	5432092.055	55.21991584
15	0.000420198	0.999579802	98337.60529	41.32122896	98316.94467	5333737.266	54.23903958
16	0.000604851	0.999395149	98296.28406	59.45456012	98266.55678	5235420.321	53.26163009
17	0.000775979	0.999224021	98236.8295	76.22968905	98198.71465	5137153.764	52.29356231
18	0.000938934	0.999061066	98160.59981	92.16631172	98114.51665	5038955.05	51.33378422
19	0.00101082	0.99898918	98068.4335	99.1295337	98018.86873	4940840.533	50.38155864
20	0.001057193	0.998942807	97969.30396	103.572504	97917.51771	4842821.664	49.43203093
21	0.001052066	0.998947934	97865.73146	102.9612353	97814.25084	4744904.147	48.4838163
22	0.001193187	0.998806813	97762.77022	116.6492188	97704.44562	4647089.896	47.53435162
23	0.001260339	0.998739661	97646.12101	123.0671915	97584.58741	4549385.45	46.59053942
24	0.001216544	0.998783456	97523.05381	118.6411334	97463.73325	4451800.863	45.64870242
25	0.001161142	0.998838858	97404.41268	113.100336	97347.86251	4354337.129	44.70369473
26	0.00110017	0.99889983	97291.31235	107.0389175	97237.79386	4256989.267	43.75508115
27	0.001074899	0.998925101	97184.27537	104.463269	97132.04373	4159751.473	42.8027215
28	0.00112716	0.99887284	97079.8121	109.4244573	97025.09987	4062619.429	41.84824158
29	0.001283764	0.998716236	96970.38764	124.4870735	96908.1441	3965594.329	40.89490025
30	0.001340252	0.998659748	96845.90057	129.7987303	96781.00163	3868686.185	39.94682442
31	0.001490007	0.998509993	96716.1027	144.1076724	96644.04886	3771905.184	38.99976404
32	0.001552505	0.998447495	96571.99503	149.9284791	96497.03079	3675261.135	38.05721456
33	0.001567722	0.998432278	96422.06655	151.1629753	96346.48506	3578764.104	37.11561297
34	0.001669443	0.998330557	96270.90357	160.7188088	96190.54417	3482417.619	36.1731062
35	0.001838002	0.998161998	96110.18476	176.6507595	96021.85938	3386227.075	35.23276002
36	0.002030099	0.997969901	95933.534	194.7545603	95836.15672	3290205.215	34.29671647
37	0.00232189	0.99767811	95738.77944	222.2949549	95627.63196	3194369.059	33.36546671
38	0.002591692	0.997408308	95516.48449	247.5493097	95392.70983	3098741.427	32.44195432
39	0.002895509	0.997104491	95268.93518	275.8520121	95131.00917	3003348.717	31.52495314
40	0.003268357	0.996731643	94993.08317	310.4713299	94837.8475	2908217.708	30.61504702
41	0.003692664	0.996307336	94682.61184	349.6310891	94507.79629	2813379.86	29.7137965
42	0.004032041	0.995967959	94332.98075	380.3544751	94142.80351	2718872.064	28.82207307
43	0.004579708	0.995420292	93952.62627	430.2755543	93737.48849	2624729.26	27.93673114
44	0.005234769	0.994765231	93522.35072	489.5679267	93277.56675	2530991.772	27.06296145
45	0.005881138	0.994118862	93032.78279	547.1386169	92759.21348	2437714.205	26.20274415
46	0.006344694	0.993655306	92485.64417	586.7931406	92192.2476	2344954.992	25.35479979
47	0.007023318	0.992976682	91898.85103	645.4348185	91576.13362	2252762.744	24.51350282
48	0.007571848	0.992428152	91253.41621	690.9569908	90907.93772	2161186.61	23.68335017
49	0.008264558	0.991735442	90562.45922	748.4586777	90188.22988	2070278.673	22.86023028
50	0.009219318	0.990780682	89814.00055	828.0238445	89399.98862	1980090.443	22.04656769
51	0.010294642	0.989705358	88985.9767	916.5787472	88527.93733	1890690.454	21.24706077
52	0.011305888	0.988694112	88069.89795	995.7084445	87572.04373	1802162.517	20.46286596
53	0.012439906	0.987560094	87074.18951	1083.194723	86532.59215	1714590.477	19.69114479
54	0.013589059	0.986410941	85990.99479	1168.536699	85406.72644	1628050.881	18.93288809
55	0.01454173	0.98545827	84822.45809	1233.465314	84205.72543	1542651.155	18.18682445
56	0.016238819	0.983761181	83588.99277	1357.386485	82910.29953	1458445.429	17.44781676
57	0.018374216	0.981625784	82231.60629	1510.941266	81476.13566	1375535.13	16.72757218
58	0.020695373	0.979304627	80720.66502	1670.544274	79885.39289	1294058.994	16.03132226
59	0.023198294	0.976801706	79050.12075	1833.827976	78133.20676	1214173.601	15.35954138
60	0.025262649	0.974737351	77216.29277	1950.688106	76240.94872	1136040.394	14.71244414
61	0.027010005	0.972989995	75265.60467	2032.924362	74249.14249	1059799.446	14.08079362
62	0.029273495	0.970726505	73232.68031	2143.776497	72160.79206	985550.3031	13.45779369
63	0.032646933	0.967353067	71088.90381	2320.834675	69928.48647	913389.5111	12.84855248
64	0.035610399	0.964389601	68768.06913	2448.858395	67543.63994	843461.0246	12.26530038
65	0.039074736	0.960925264	66319.21074	2591.405635	65023.50792	775917.3847	11.69973792
66	0.041963749	0.958036251	63727.8051	2674.257629	62390.67629	710893.8768	11.15516023
67	0.047192004	0.952807996	61053.54747	2881.239261	59612.92784	648503.2005	10.62187583
68	0.050703101	0.949296899	58172.30821	2949.516394	56697.55002	588890.2726	10.12320623
69	0.054195475	0.945804525	55222.79182	2992.82543	53726.3791	532192.7226	9.63719336
70	0.057660726	0.942339274	52229.96639	3011.6178	50724.15749	478466.3435	9.160762999
71	0.060534202	0.939465798	49218.34859	2979.393465	47728.65186	427742.186	8.690705769
72	0.065130694	0.934869306	46238.95512	3011.575226	44733.16751	380013.5342	8.218471485
73	0.072407563	0.927592437	43227.3799	3129.98925	41662.38527	335280.3667	7.756203764
74	0.078001898	0.921998102	40097.39065	3127.672564	38533.55437	293617.9814	7.322620665
75	0.085121098	0.914878902	36969.71808	3146.90298	35396.26659	255084.427	6.899820725
76	0.093088727	0.906911273	33822.8151	3148.522799	32248.5537	219688.1604	6.495265393
77	0.100655904	0.899344096	30674.2923	3087.548628	29130.51799	187439.6067	6.110641604
78	0.109663233	0.890336767	27586.74368	3025.251491	26074.11793	158309.0887	5.738592803

79	0.119205557	0.880794443	24561.49219	2927.866362	23097.559	132234.9708	5.383832945
80	0.129721178	0.870278822	21633.62582	2806.339416	20230.45612	109137.4118	5.044804449
81	0.141090478	0.858909522	18827.28641	2656.350842	17499.11099	88906.95568	4.722239507
82	0.153285775	0.846714225	16170.93557	2478.774384	14931.54837	71407.84469	4.415814064
83	0.166479384	0.833520616	13692.16118	2279.462566	12552.4299	56476.29632	4.124717462
84	0.18073202	0.81926798	11412.69862	2062.640072	10381.37858	43923.86642	3.848683638
85	0.196103799	0.803896201	9350.058543	1833.582005	8433.267541	33542.48784	3.587409393
86	0.212653174	0.787346826	7516.476538	1598.402593	6717.275242	25109.2203	3.340557264
87	0.23043563	0.76956437	5918.073945	1363.735097	5236.206396	18391.94506	3.107758577
88	0.24950215	0.75049785	4554.338847	1136.317332	3986.180181	13155.73866	2.888616571
89	0.269897412	0.730102588	3418.021515	922.5151597	2956.763936	9169.558483	2.68270941
90	0.291657719	0.708342281	2495.506356	727.8336917	2131.58951	6212.794547	2.489592757
91	0.314808651	0.685191349	1767.672664	556.4786475	1489.43334	4081.205038	2.308801353
92	0.339362451	0.660637549	1211.194017	411.0337695	1005.677132	2591.771697	2.139848498
93	0.365315168	0.634684832	800.1602471	292.3106751	654.0049095	1586.094565	1.98222115
94	0.392643621	0.607356379	507.8495719	199.403895	408.1476244	932.0896559	1.835365643
95	0.421302234	0.578697766	308.4456769	129.9488529	243.4712505	523.9420315	1.698652536
96	0.451219874	0.548780126	178.4968241	80.5413144	138.2261669	280.470781	1.571292836
97	0.482296824	0.517703176	97.95550966	47.24363119	74.33369407	142.2446141	1.452134899
98	0.514402094	0.485597906	50.71187847	26.08629648	37.66873023	67.91092004	1.339152129
99	0.547371286	0.452628714	24.62558199	13.47933648	17.88591375	30.24218981	1.228080206
100	0.581005296	0.418994704	11.14624551	6.47602767	7.908231678	12.35627606	1.108559473
101	0.61507016	0.38492984	4.670217843	2.872511637	3.233962025	4.448044378	0.952427601
102	0.649298368	0.350701632	1.797706206	1.167247705	1.214082353	1.214082353	0.675350816
103	0.683391957	0.316608043	0.630458501	0.630458501	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.008102653	0.991897347	100000	810.2653211	99254.5559	7538601.334	75.38601334
1	0.000628269	0.999371731	99189.73468	62.31782959	99158.57576	7439346.778	75.0011763
2	0.000219963	0.999780037	99127.41685	21.80438717	99116.51466	7340188.202	74.0480125
3	0.000308	0.999692	99105.61246	30.52455892	99090.35018	7241071.687	73.06419392
4	0.000210111	0.999789889	99075.0879	20.81673114	99064.67954	7141981.337	72.0865506
5	0.000254864	0.999745136	99054.27117	25.24532639	99041.64851	7042916.658	71.10159486
6	0.00022251	0.99977749	99029.02585	22.03492477	99018.00838	6943875.009	70.11959322
7	0.000215173	0.999784827	99006.99092	21.30361403	98996.33911	6844857.001	69.1350877
8	0.000191665	0.999808335	98985.68731	18.97211652	98976.20125	6745860.662	68.14985929
9	0.000151511	0.999848489	98966.71519	14.99451795	98959.21793	6646884.46	67.1628279
10	0.000174791	0.999825209	98951.72067	17.29590743	98943.07272	6547925.242	66.17292956
11	0.000189725	0.999810275	98934.42477	18.77028716	98925.03962	6448982.17	65.18441063
12	0.000183348	0.999816652	98915.65448	18.13600721	98906.58647	6350057.13	64.19668518
13	0.000191065	0.999808935	98897.51847	18.89581199	98888.07056	6251150.544	63.208366
14	0.000178393	0.999821607	98878.62266	17.63921317	98869.80305	6152262.473	62.22034963
15	0.000213545	0.999786455	98860.98345	21.11131126	98850.42779	6053392.67	61.23136205
16	0.000235325	0.999764675	98839.87213	23.25946316	98828.2424	5954542.242	60.24433372
17	0.000271699	0.999728301	98816.61267	26.84838495	98803.18848	5855714	59.25839635
18	0.00028629	0.99971371	98789.76429	28.28254273	98775.62301	5756910.811	58.27436529
19	0.000318859	0.999681141	98761.48174	31.49096935	98745.73626	5658135.188	57.29091027
20	0.000319237	0.999680763	98729.99077	31.51827122	98714.23164	5559389.452	56.30902432
21	0.000361074	0.999638926	98698.4725	35.63741714	98680.65379	5460675.22	55.32684632
22	0.000378172	0.999621828	98662.83509	37.31152866	98644.17932	5361994.567	54.34665
23	0.000410523	0.999589477	98625.52356	40.48801323	98605.27955	5263350.387	53.367021
24	0.000412452	0.999587548	98585.03554	40.66159467	98564.70475	5164745.108	52.38873303
25	0.000388032	0.999611968	98544.37395	38.23837034	98525.25476	5066180.403	51.41014347
26	0.000363391	0.999636609	98506.13558	35.79621688	98488.23747	4967655.148	50.4299059
27	0.000376876	0.999623124	98470.33936	37.11107529	98451.78382	4869166.911	49.44805656
28	0.00044018	0.99955982	98433.22829	43.32837842	98411.5641	4770715.127	48.46651085
29	0.000466851	0.999533149	98389.89991	45.93338777	98366.93321	4672303.563	47.48763407
30	0.000512286	0.999487714	98343.96652	50.38024835	98318.7764	4573936.63	46.50958052
31	0.000550362	0.999449638	98293.58627	54.0970958	98266.53772	4475617.853	45.53316267
32	0.000643755	0.999356245	98239.48918	63.24216102	98207.8681	4377351.315	44.55796088
33	0.000697315	0.999302685	98176.24702	68.45981208	98142.01711	4279143.447	43.58634168
34	0.000753699	0.999246301	98107.7872	73.94377903	98070.81531	4181001.43	42.61640742
35	0.000813102	0.999186898	98033.84342	79.71155547	97993.98765	4082930.615	41.64817447
36	0.00086525	0.99913475	97954.13187	84.75483739	97911.75445	3984936.627	40.68165938
37	0.000954299	0.999045701	97869.37703	93.39667857	97822.67869	3887024.873	39.71645668
38	0.00110376	0.99889624	97775.98035	107.9212497	97722.01973	3789202.194	38.75391666
39	0.001266551	0.998733449	97668.0591	123.70155	97606.20833	3691480.174	37.79618647
40	0.00144593	0.99855407	97544.35755	141.0422722	97473.83642	3593873.966	36.84348389
41	0.001582235	0.998417765	97403.31528	154.114973	97326.25779	3496400.13	35.8961101
42	0.001763533	0.998236467	97249.20031	171.5021961	97163.44921	3399073.872	34.95220383
43	0.001878229	0.998121771	97077.69811	182.3341109	96986.53106	3301910.423	34.01306878
44	0.002056549	0.997943451	96895.364	199.2700636	96795.72897	3204923.892	33.07613243
45	0.002345212	0.997654788	96696.09394	226.7728685	96582.7075	3108128.163	32.1432649
46	0.002679985	0.997320015	96469.32107	258.53631	96340.05291	3011545.455	31.21764953
47	0.003077057	0.996922943	96210.78476	296.0460481	96062.76173	2915205.402	30.30019358
48	0.003469617	0.996530383	95914.73871	332.7874291	95748.345	2819142.64	29.39217349
49	0.003588673	0.996411327	95581.95128	343.0123378	95410.44511	2723394.295	28.4927673
50	0.003816489	0.996183511	95238.93894	363.4784	95057.19974	2627983.85	27.59358598
51	0.004046195	0.995953805	94875.46054	383.8846022	94683.51824	2532926.651	26.69738451
52	0.004615578	0.995384422	94491.57594	436.133261	94273.50931	2438243.132	25.80381487
53	0.005340765	0.994659235	94055.44268	502.3280257	93804.27867	2343969.623	24.92114817
54	0.006001442	0.993998558	93553.11465	561.4535841	93272.38786	2250165.344	24.05227611
55	0.006486919	0.993513081	92991.66107	603.229366	92690.04639	2156892.957	23.19447714
56	0.007043478	0.992956522	92388.4317	650.7358742	92063.06377	2064202.91	22.34265559
57	0.007673157	0.992326843	91737.69583	703.9177431	91385.73696	1972139.846	21.49759517
58	0.00830568	0.99169432	91033.77809	756.0974614	90655.72936	1880754.109	20.65995885
59	0.009086135	0.990913865	90277.68063	820.2752018	89867.54303	1790098.38	19.82880339
60	0.010027702	0.989972298	89457.40542	897.052212	89008.87932	1700230.837	19.00603789
61	0.011376138	0.988623862	88560.35321	1007.474776	88056.61582	1611221.958	18.19349065
62	0.012574504	0.987425496	87552.87844	1100.934049	87002.41141	1523165.342	17.39709041
63	0.01432194	0.98567806	86451.94439	1238.159584	85832.86459	1436162.93	16.61226871
64	0.015872844	0.984127156	85213.7848	1352.580573	84537.49227	1350330.066	15.84638059
65	0.017641437	0.982358563	83861.19973	1479.432111	83121.48367	1265792.574	15.09390013
66	0.019350419	0.980649581	82381.76762	1594.121695	81584.70677	1182671.09	14.35598099
67	0.022805676	0.977194324	80787.64592	1842.416891	79866.43748	1101086.383	13.62939062
68	0.025217825	0.974782175	78945.22903	1990.82695	77949.81556	1021219.946	12.93580319
69	0.02810648	0.97189352	76954.40208	2162.917371	75872.9434	943270.1302	12.2575201
70	0.031111674	0.968888326	74791.48471	2326.888268	73628.04058	867397.1868	11.59753935
71	0.033733734	0.966266266	72464.59644	2444.5014	71242.34574	793769.1462	10.953889
72	0.037574032	0.962425968	70020.09504	2630.937259	68704.62641	722526.8004	10.31884918
73	0.043060646	0.956939354	67389.15778	2901.82064	65938.24746	653822.174	9.702186457
74	0.048122476	0.951877524	64487.33714	3103.290324	62935.69198	587883.9266	9.116269218
75	0.053913755	0.946086245	61384.04682	3309.44445	59729.3246	524948.2346	8.551867493
76	0.059914331	0.940085669	58074.60237	3479.500963	56334.85189	465218.91	8.010711929
77	0.066479054	0.933520946	54595.10141	3629.430669	52780.38607	408884.0581	7.489390945
78	0.074361318	0.925638682	50965.67074	3789.874444	49070.73352	356103.672	6.987128137

79	0.083073669	0.916926331	47175.79629	3919.066505	45216.26304	307032.9385	6.508272517
80	0.092699026	0.907300974	43256.72979	4009.856705	41251.80144	261816.6755	6.05262295
81	0.103180724	0.896819276	39246.87308	4049.520767	37222.1127	220564.874	5.619934958
82	0.114848291	0.885151709	35197.35232	4042.355755	33176.17444	183342.7613	5.208992986
83	0.127742636	0.872257364	31154.99656	3979.821375	29165.08587	150166.5869	4.819984062
84	0.141968913	0.858031087	27175.17519	3858.03007	25246.16015	121001.501	4.452648426
85	0.15763529	0.84236471	23317.14512	3675.604938	21479.34265	95755.34086	4.106649437
86	0.174851323	0.825148677	19641.54018	3434.349286	17924.36554	74275.99821	3.781577083
87	0.193725789	0.806274211	16207.19089	3139.750848	14637.31547	56351.63268	3.476952487
88	0.214363907	0.785636093	13067.44004	2801.187506	11666.84629	41714.31721	3.192233297
89	0.236863837	0.763136163	10266.25254	2431.703967	9050.400555	30047.47092	2.926819773
90	0.261312386	0.738687614	7834.548572	2047.264578	6810.916282	20997.07036	2.680061292
91	0.287779855	0.712220145	5787.283993	1665.463751	4954.552118	14186.15408	2.45126282
92	0.316313999	0.683686001	4121.820242	1303.789445	3469.925519	9231.601965	2.239690579
93	0.346933113	0.653066887	2818.030797	977.6681962	2329.196699	5761.676446	2.044575401
94	0.37961836	0.62038164	1840.362601	698.6354324	1491.044884	3432.479747	1.865110574
95	0.414305542	0.585694458	1141.727168	473.0238938	905.2152213	1941.434863	1.700436774
96	0.450876653	0.549123347	668.7032744	301.5026944	517.9519272	1036.219641	1.549595584
97	0.489151734	0.510848266	367.20058	179.6168005	277.3921797	518.2677141	1.411402221
98	0.528881738	0.471118262	187.5837795	99.20963537	137.9789618	240.8755344	1.284095752
99	0.569743315	0.430256685	88.37414409	50.35057779	63.1988552	102.8965726	1.16432893
100	0.611336614	0.388663386	38.0235663	23.24519828	26.40096716	39.69771741	1.044029303
101	0.653187357	0.346812643	14.77836802	9.653043143	9.951846448	13.29675025	0.899744155
102	0.694754427	0.305245573	5.125324877	3.560842147	3.344903803	3.344903803	0.652622787
103	0.735444118	0.264555882	1.56448273	1.56448273	0	0	0