

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.017792659	0.982207341	100000	1779.265901	98363.07537	6731119.586	67.31119586
1	0.000794786	0.999205214	98220.7341	78.06448015	98181.70186	6632756.511	67.52908713
2	0.00055788	0.99944212	98142.66962	54.75183658	98115.2937	6534574.809	66.58240329
3	0.00052071	0.99947929	98087.91778	51.07531176	98062.38013	6436459.515	65.61928992
4	0.000500586	0.999499414	98036.84247	49.07582539	98012.30456	6338397.135	64.65321582
5	0.000454164	0.999545836	97987.76665	44.50249439	97965.5154	6240384.83	63.68534608
6	0.000389805	0.999610195	97943.26415	38.17876001	97924.17477	6142419.315	62.71405561
7	0.000333545	0.999666455	97905.08539	32.65578121	97888.7575	6044495.14	61.73831641
8	0.000288105	0.999711895	97872.42961	28.19755517	97858.33083	5946606.383	60.75874898
9	0.000285134	0.999714866	97844.23205	27.89869784	97830.28271	5848748.052	59.77611484
10	0.00028964	0.99971036	97816.33336	28.333152	97802.1676	5750917.769	58.79302129
11	0.000288425	0.999711575	97788.00184	28.20447806	97773.8996	5653115.601	57.80991017
12	0.000328989	0.999671011	97759.79736	32.16194182	97743.71639	5555341.702	56.82644453
13	0.000347947	0.999652053	97727.63542	34.00406108	97710.63339	5457597.986	55.84498143
14	0.000408515	0.999591485	97693.63136	39.90933778	97673.67669	5359887.352	54.86424527
15	0.000549877	0.999450123	97653.72202	53.69757011	97626.87323	5262213.675	53.88646297
16	0.000769192	0.999230808	97600.02445	75.07316069	97562.48787	5164586.802	52.91583513
17	0.00092831	0.99907169	97524.95129	90.53336645	97479.6846	5067024.314	51.95618401
18	0.000972234	0.999027766	97434.41792	94.72901778	97387.05341	4969544.63	51.00399567
19	0.000911709	0.999088291	97339.6889	88.74542396	97295.31619	4872157.576	50.05314514
20	0.000921191	0.999078809	97250.94348	89.5866583	97206.15015	4774862.26	49.09836439
21	0.000966276	0.999033724	97161.35682	93.88466288	97114.41449	4677656.11	48.14317403
22	0.001148852	0.998851148	97067.47216	111.5161997	97011.71406	4580541.695	47.189255
23	0.001333007	0.998666993	96955.95596	129.2429492	96891.33448	4483529.981	46.24295575
24	0.001309031	0.998690969	96826.71301	126.7491509	96763.33843	4386638.647	45.30401281
25	0.001266184	0.998733816	96699.96386	122.4399894	96638.74386	4289875.309	44.36273952
26	0.001265161	0.998734839	96577.52387	122.1861425	96516.4308	4193236.565	43.41834825
27	0.001194048	0.998805952	96455.33773	115.1723491	96397.75155	4096720.134	42.47271567
28	0.001243978	0.998756022	96340.16538	119.845035	96280.24286	4000322.382	41.52289304
29	0.001411379	0.998588621	96220.32034	135.8033353	96152.41867	3904042.139	40.57398817
30	0.001538289	0.998461711	96084.51701	147.8057551	96010.61413	3807889.721	39.6306277
31	0.001676232	0.998323768	95936.71125	160.8122113	95856.30515	3711879.107	38.69091465
32	0.001761178	0.998238822	95775.89904	168.6783966	95691.55984	3616022.801	37.75503898
33	0.003302763	0.998180668	95607.22064	173.941245	95520.25002	3520331.242	36.82076749
34	0.001885901	0.998114099	95433.2794	179.9777186	95343.29054	3424810.992	35.88696745
35	0.002009788	0.997990212	95253.30168	191.4388995	95157.58223	3329467.701	34.95382987
36	0.002247758	0.997752242	95061.86278	213.6760397	94955.02476	3234310.119	34.02321419
37	0.002433733	0.997566267	94848.18674	230.8351322	94732.76917	3139355.094	33.09873601
38	0.002626447	0.997373553	94617.35161	248.5074794	94493.09787	3044622.325	32.17826618
39	0.002981343	0.997018657	94368.84413	281.3459178	94228.17117	2950129.227	31.26168657
40	0.003302763	0.996697237	94087.49821	310.7486623	93932.12388	2855901.056	30.35367196
41	0.003667914	0.996332086	93776.74955	343.9650874	93604.76701	2761968.932	29.45259828
42	0.004137032	0.995862968	93432.78446	386.5343885	93239.51727	2668364.165	28.55918488
43	0.004356238	0.995643762	93046.25007	405.3316172	92843.58426	2575124.648	27.67574884
44	0.004717732	0.995282268	92640.91846	437.0549906	92422.39096	2482281.063	26.79465084
45	0.005299622	0.994700378	92203.86347	488.6455846	91959.54067	2389858.673	25.91928996
46	0.005947639	0.994052361	91715.21788	545.4890503	91442.47336	2297899.132	25.05472031
47	0.006696921	0.993303079	91169.72883	610.5564773	90864.45059	2206456.658	24.20163674
48	0.007514426	0.992485574	90559.17235	680.5002398	90218.92223	2115592.208	23.36143488
49	0.00837573	0.99162427	89878.67211	752.799485	89502.27237	2025373.286	22.53452613
50	0.009344077	0.990655923	89125.87263	832.7989861	88709.47314	1935871.013	21.72064022
51	0.010687593	0.989312407	88293.07364	943.6404757	87821.2534	1847161.54	20.92079779
52	0.011738447	0.988261553	87349.43317	1025.346696	86836.75982	1759340.287	20.14140473
53	0.012972187	0.987027813	86324.08647	1119.812192	85764.18037	1672503.527	19.37470288
54	0.014232273	0.985767727	85204.27428	1212.650525	84597.94902	1586739.347	18.62276699
55	0.015516701	0.984483299	83991.62375	1303.272941	83339.98728	1502141.398	17.88441907
56	0.016965592	0.983034408	82688.35081	1402.856846	81986.92239	1418801.41	17.15841949
57	0.018834794	0.981165206	81285.49397	1530.995505	80519.99621	1336814.488	16.44591701
58	0.020685119	0.979314881	79754.49846	1649.731322	78929.6328	1256294.492	15.75202046
59	0.02222001	0.97777999	78104.76714	1735.488738	77237.02277	1177364.859	15.07417411
60	0.02574769	0.97425231	76369.2784	1966.332522	75386.11214	1100127.836	14.40537162
61	0.02792437	0.97207563	74402.94588	2077.655374	73364.11819	1024741.724	13.77286493
62	0.030430301	0.969569699	72325.29051	2200.880354	71224.85033	951377.6057	13.15414842
63	0.033255615	0.966744385	70124.41015	2332.030386	68958.39496	880152.7554	12.55130351
64	0.03545674	0.96454326	67792.37977	2403.696799	66590.53137	811194.3605	11.96586347
65	0.038009312	0.961990688	65388.68297	2485.378879	64145.99353	744603.8291	11.38735015
66	0.042301906	0.957698094	62903.30409	2660.929675	61572.83925	680457.8356	10.81752136
67	0.044654603	0.955345397	60242.37441	2690.099314	58897.32476	618884.9963	10.27325039
68	0.048943798	0.951056202	57552.2751	2816.826904	56143.86165	559987.6716	9.730070108
69	0.053289013	0.946710987	54735.44819	2916.797992	53277.0492	503843.8099	9.205073248
70	0.058038892	0.941961108	51818.6502	3007.497055	50314.90168	450566.7607	8.695069419
71	0.06398192	0.93601808	48811.15315	3123.031286	47249.63751	400251.859	8.20008261
72	0.07008683	0.92991317	45688.12186	3202.135625	44087.05405	353002.2215	7.726345648
73	0.076556229	0.923443771	42485.98624	3252.566876	40859.7028	308915.1675	7.27098968
74	0.085229625	0.914770375	39233.41936	3343.849605	37561.49456	268055.4647	6.832324815
75	0.092778699	0.907221301	35889.56976	3329.787605	34224.67595	230493.9701	6.422310763
76	0.102421766	0.897578234	32559.78215	3334.830374	30892.36697	192629.2942	6.027967056
77	0.110936263	0.889063737	29224.95178	3242.106947	27603.8983	165376.9272	5.658757916
78	0.121389241	0.878610759	25982.84483	3154.03781	24405.82593	137773.0289	5.302461289

79	0.132170442	0.867829558	22828.80702	3017.293511	21320.16027	113367.203	4.965971409
80	0.142689464	0.857310536	19811.51351	2826.894236	18398.06639	92047.04271	4.646138856
81	0.154294594	0.845705406	16984.61927	2620.634935	15674.30181	73648.97632	4.33621591
82	0.168340375	0.831659625	14363.98434	2418.038507	13154.96509	57974.67452	4.036113738
83	0.18313821	0.81686179	11945.94583	2187.759138	10852.06626	44819.70943	3.751876165
84	0.200376401	0.799623599	9758.186694	1955.310334	8780.531527	33967.64317	3.48093803
85	0.218905305	0.781094695	7802.87636	1708.091033	6948.830843	25187.11164	3.227926534
86	0.238139069	0.761860931	6094.785327	1451.406506	5369.082073	18238.2808	2.992440229
87	0.258807599	0.741192401	4643.37882	1201.741726	4042.507958	12869.19872	2.771516006
88	0.280957974	0.719042026	3441.637095	966.955385	2958.159402	8826.690767	2.564677949
89	0.304625765	0.695374235	2474.68171	753.8518101	2097.755805	5868.531365	2.371428755
90	0.329831892	0.670168108	1720.8299	567.5845809	1437.037609	3770.77556	2.191254093
91	0.356579131	0.643420869	1153.245319	411.2232132	947.6337122	2333.737951	2.023626641
92	0.384848357	0.615151643	742.0221056	285.5659879	599.2391116	1386.104239	1.86800936
93	0.414594582	0.585405418	456.4561176	189.2442335	361.8340009	786.8651272	1.723857118
94	0.445742948	0.554257052	267.2118842	119.1078129	207.6579777	425.0311263	1.590614608
95	0.478184842	0.521815158	148.1040712	70.82112188	112.6935103	217.3731486	1.467705423
96	0.511774406	0.488225594	77.28294936	39.5514355	57.50723161	104.6796383	1.354498491
97	0.546325731	0.453674269	37.73151386	20.61369688	27.42466542	47.17240668	1.250212405
98	0.581611117	0.418388883	17.11781698	9.955912653	12.13986066	19.74774126	1.153636663
99	0.617360823	0.382639177	7.161904332	4.421479152	4.951164756	7.607880598	1.062270626
100	0.653264749	0.346735251	2.74042518	1.790223169	1.845313596	2.656715842	0.969453887
101	0.688976502	0.311023498	0.950202011	0.654666858	0.622868582	0.811402246	0.853926046
102	0.724120219	0.275879781	0.295535154	0.21400298	0.188533664	0.188533664	0.637939891
103	0.758300425	0.241699575	0.081532174	0.081532174	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.01188674	0.98811326	100000	1188.673979	98906.41994	7439409.653	74.39409653
1	0.000461238	0.999538762	98811.32602	45.57558652	98788.53823	7340503.233	74.28807535
2	0.00037175	0.99962825	98765.75043	36.71612726	98747.39237	7241714.695	73.32212496
3	0.000462746	0.999537254	98729.03431	45.68646313	98706.19108	7142967.303	72.34920662
4	0.000335833	0.999664167	98683.34784	33.14111782	98666.77729	7044261.112	71.38246995
5	0.00031793	0.99968207	98650.20673	31.36389636	98634.52478	6945594.334	70.40628261
6	0.000277127	0.999722873	98618.84283	27.32998878	98605.17784	6846959.81	69.42851501
7	0.000270399	0.999729601	98591.51284	26.65907185	98578.18331	6748354.632	68.44762229
8	0.000245892	0.999754108	98564.85377	24.23628637	98552.73563	6649776.448	67.46600024
9	0.000213482	0.999786518	98540.61748	21.03662752	98530.09917	6551223.713	66.48247068
10	0.000189699	0.999810301	98519.58086	18.6890216	98510.23634	6452693.614	65.49655975
11	0.00023017	0.99976983	98500.89183	22.67195463	98489.55586	6354183.377	64.50889184
12	0.000229832	0.999770168	98478.21988	22.63348981	98466.90313	6255693.821	63.52362816
13	0.000248623	0.999751377	98455.58639	24.47833705	98443.34722	6157226.918	62.53811636
14	0.000251961	0.999748039	98431.10805	24.80075445	98418.70767	6058783.571	61.55354431
15	0.000272189	0.999727811	98406.3073	26.78511037	98392.91474	5960364.863	60.56893127
16	0.000332045	0.999667955	98379.52219	32.66647528	98363.18895	5861971.949	59.58528582
17	0.000430049	0.999569951	98346.85571	42.29397792	98325.70872	5763608.76	58.60491134
18	0.000458468	0.999541532	98304.56173	45.06951627	98282.02698	5665283.051	57.62991006
19	0.000490576	0.999509424	98259.49222	48.20373318	98235.39035	5567001.024	56.65611432
20	0.000436004	0.999563996	98211.28848	42.82048685	98189.87824	5468765.634	55.68367667
21	0.000397351	0.999602649	98168.468	39.00735965	98148.96432	5370575.755	54.70774746
22	0.000384785	0.999615215	98129.46064	37.75877801	98110.58125	5272426.791	53.72929553
23	0.000407782	0.999592218	98091.70186	40.00001938	98071.70185	5174316.21	52.74978527
24	0.000414576	0.999585424	98051.70184	40.64993046	98031.37688	5076244.508	51.77110048
25	0.000442784	0.999557216	98011.05191	43.39768631	97989.35307	4978213.131	50.79236509
26	0.000470457	0.999529543	97967.65422	46.08954222	97944.60945	4880223.778	49.81464359
27	0.000473027	0.999526973	97921.56468	46.31954827	97898.40491	4782279.169	48.83785491
28	0.000496997	0.999503003	97875.24513	48.64370577	97850.92328	4684380.764	47.86073085
29	0.000517525	0.999482475	97826.60143	50.62769456	97801.28758	4586529.84	46.88428069
30	0.00058324	0.99941676	97775.97373	57.02690374	97747.46028	4488728.553	45.90829814
31	0.000617118	0.999382882	97718.94683	60.30411987	97688.79477	4390981.093	44.93479755
32	0.000675069	0.999324931	97658.64271	65.92631688	97625.67955	4293292.298	43.962236
33	0.000740963	0.999259037	97592.71639	72.31257239	97556.56011	4195666.618	42.99159582
34	0.000812609	0.999187391	97520.40382	79.24591769	97480.78086	4098110.058	42.02310386
35	0.000861688	0.999138312	97441.1579	83.9639072	97399.17595	4000629.277	41.05687333
36	0.001022848	0.998977152	97357.194	99.58164049	97307.40318	3903230.101	40.09185086
37	0.001082655	0.998917345	97257.61235	105.2964246	97204.96414	3805922.698	39.13238878
38	0.001193461	0.998806539	97152.31593	115.9475327	97094.34216	3708717.734	38.17425965
39	0.001294967	0.998705033	97036.3684	125.6588675	96973.53896	3611623.392	37.21927615
40	0.001417444	0.998582556	96910.70953	137.365548	96842.02676	3514649.853	36.26688805
41	0.001555567	0.998444433	96773.34398	150.5374582	96698.07525	3417807.826	35.31765759
42	0.001733231	0.998266769	96622.80652	167.4696274	96539.07171	3321109.751	34.37190318
43	0.001911335	0.998088665	96455.3369	184.3584138	96363.15769	3224570.679	33.43071294
44	0.002239969	0.997760031	96270.97848	215.6440007	96163.15648	3128207.522	32.49377508
45	0.002569433	0.997430567	96055.33448	246.8077416	95931.93061	3032044.365	31.56560103
46	0.002900861	0.997099139	95808.52674	277.9271978	95669.56314	2936112.434	30.64562763
47	0.003328677	0.996671323	95530.59954	317.9904634	95371.60431	2840442.871	29.73333031
48	0.003608814	0.996391186	95212.60908	343.6045669	95040.8068	2745071.267	28.8309636
49	0.003928756	0.996071244	94869.00451	372.7172017	94682.64591	2650030.46	27.93357508
50	0.004184614	0.995815386	94496.28731	395.4304477	94298.57209	2555347.814	27.04178002
51	0.004552579	0.995447421	94100.85686	428.4015497	93886.65609	2461049.242	26.15331384
52	0.004775941	0.995224059	93672.45531	447.3740739	93448.76828	2367162.586	25.27063669
53	0.005345934	0.994654066	93225.08124	498.3751597	92975.89366	2273713.818	24.3895075
54	0.005790799	0.994209201	92726.70608	536.9617419	92458.22521	2180737.924	23.51790564
55	0.006347781	0.993652219	92189.74434	585.2003296	91897.14417	2088279.699	22.65197408
56	0.006911003	0.993088997	91604.54401	633.0793151	91288.00435	1996382.555	21.79348826
57	0.007634544	0.992365456	90971.46469	694.5256493	90624.20187	1905094.55	20.94167173
58	0.008500244	0.991499756	90276.93904	767.3759926	89893.25105	1814470.349	20.09893521
59	0.009528794	0.990471206	89509.56305	852.9182301	89083.10394	1724577.098	19.26695918
60	0.011307381	0.988692619	88656.64482	1002.474485	88155.40758	1635493.994	18.44750607
61	0.013114184	0.986885816	87654.17034	1149.512943	87079.41386	1547338.586	17.65276632
62	0.014359812	0.985640188	86504.65739	1242.190607	85883.56209	1460259.172	16.88070002
63	0.015888099	0.984111901	85262.46679	1354.658496	84585.13754	1374375.61	16.11935077
64	0.017002891	0.982997109	83907.80829	1426.675303	83194.47064	1289790.472	15.37151904
65	0.018435214	0.981564786	82481.13299	1520.55731	81720.85433	1206596.002	14.62875155
66	0.02099641	0.97900359	80960.57568	1699.881423	80110.63497	1124875.148	13.89411004
67	0.023200562	0.976799438	79260.69425	1838.892635	78341.24794	1044764.513	13.18136969
68	0.025391721	0.974608279	77421.80162	1965.872748	76438.86525	966423.2646	12.48257267
69	0.028751733	0.971248267	75455.92887	2169.488732	74371.18451	889984.3994	11.79475772
70	0.031893649	0.968106351	73286.44014	2337.37198	72117.75415	815613.2149	11.12911493
71	0.036437349	0.963562651	70949.06816	2585.195993	69656.47016	743495.4607	10.47928437
72	0.041125833	0.958874167	68363.87217	2811.521223	66958.11156	673838.9906	9.856653364
73	0.046070155	0.953929845	65552.35094	3020.006992	64042.34745	606880.879	9.257957499
74	0.050944721	0.949055279	62532.34395	3185.692838	60939.49753	542838.5316	8.680924099
75	0.057400586	0.942599414	59346.65111	3406.532548	57643.38484	481899.034	8.120071225
76	0.064623195	0.935376805	55940.11857	3615.029186	54132.60397	424255.6492	7.584103503
77	0.072810717	0.927189283	52325.08938	3809.827298	50420.17573	370123.0452	7.073529154
78	0.081166933	0.918833067	48515.26208	3937.835037	46546.34456	319702.8695	6.589738069

79	0.090328575	0.909671425	44577.42705	4026.615475	42564.11931	273156.5249	6.127687106
80	0.100319294	0.899680706	40550.81157	4068.028782	38516.79718	230592.4056	5.686505317
81	0.111453161	0.888546839	36482.78279	4066.12145	34449.72206	192075.6084	5.264828879
82	0.123906693	0.876093307	32416.66134	4016.641292	30408.34069	157625.8864	4.862496008
83	0.137863779	0.862136221	28400.02005	3915.334098	26442.353	127217.5457	4.479487883
84	0.153804869	0.846195131	24484.68595	3765.863921	22601.75399	100775.1927	4.115845835
85	0.172020427	0.827979573	20718.82203	3564.060615	18936.79172	78173.43868	3.773063864
86	0.192907174	0.807092826	17154.76141	3309.27655	15500.12314	59236.64696	3.453073205
87	0.214555684	0.785444316	13845.48486	2970.627478	12360.17112	43736.52383	3.158901567
88	0.238284996	0.761715004	10874.85738	2591.315353	9579.199707	31376.35271	2.885219695
89	0.264198809	0.735801191	8283.542031	2188.501943	7189.29106	21797.153	2.631380745
90	0.292380043	0.707619957	6095.040089	1782.068083	5204.006047	14607.86194	2.396680207
91	0.322882738	0.677117262	4312.972005	1392.58421	3616.6799	9403.855891	2.180365623
92	0.355722738	0.644277262	2920.387795	1038.848343	2400.963624	5787.175991	1.98164641
93	0.390867317	0.609132683	1881.539452	735.4322779	1513.823313	3386.212367	1.799703091
94	0.428224093	0.571775907	1146.107175	490.7907059	900.7118216	1872.389054	1.633694558
95	0.467629796	0.532370204	655.3164687	306.4455068	502.0937153	971.6772323	1.482760283
96	0.508839732	0.491160268	348.8709619	177.5194067	260.1112585	469.5835171	1.346009179
97	0.55151911	0.44848089	171.3515552	94.50365719	124.0997266	209.4722585	1.222470717
98	0.595237714	0.404762286	76.84789799	45.74276713	53.97651442	85.37253194	1.110928655
99	0.639469672	0.360530328	31.10513086	19.89078782	21.15973695	31.39601751	1.009351726
100	0.683600223	0.316399777	11.21434304	7.666127403	7.381279342	10.23628056	0.912784683
101	0.726941294	0.273058706	3.548215641	2.57934447	2.258543406	2.855001219	0.804630132
102	0.768757228	0.231242772	0.968871171	0.744826716	0.596457813	0.596457813	0.615621386
103	0.808301085	0.191698915	0.224044455	0.224044455	0	0	0