

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.02353321	0.97646679	100000	2353.320999	97834.94468	6738090.154	67.38090154
1	0.002342781	0.997657219	97646.679	228.7648315	97532.29659	6640255.21	68.00287811
2	0.001079249	0.998920751	97417.91417	105.1382293	97365.34505	6542722.913	67.16139397
3	0.00079125	0.99920875	97312.77594	76.9987292	97274.27658	6445357.568	66.23341597
4	0.000583714	0.999416286	97235.77721	56.75790932	97207.39826	6348083.291	65.28546872
5	0.000614491	0.999385509	97179.0193	59.71562055	97149.16149	6250875.893	64.32330701
6	0.000595934	0.999404066	97119.30368	57.87666012	97090.36535	6153726.732	63.36254996
7	0.000552559	0.999447441	97061.42702	53.63217261	97034.61093	6056636.366	62.40003421
8	0.000519985	0.999480015	97007.79485	50.44262286	96982.57354	5959601.755	61.43425654
9	0.000448118	0.999551882	96957.35223	43.44832145	96935.62806	5862619.182	60.46595794
10	0.000428483	0.999571517	96913.9039	41.5259623	96893.14092	5765683.554	59.49284181
11	0.000455344	0.999544656	96872.37794	44.1102886	96850.3228	5668790.413	58.51813007
12	0.000468977	0.999531023	96828.26765	45.41019237	96805.56256	5571940.09	57.54456033
13	0.000521563	0.999478437	96782.85746	50.47837731	96757.61827	5475134.527	56.57132545
14	0.000596095	0.999403905	96732.37908	57.66169059	96703.54824	5378376.909	55.60058545
15	0.000690865	0.999309135	96674.71739	66.78915247	96641.32282	5281673.361	54.63345023
16	0.000973536	0.999026464	96607.92824	94.0512562	96560.90261	5185032.038	53.67087497
17	0.001411916	0.998588084	96513.87698	136.2695298	96445.74222	5088471.135	52.72268916
18	0.00161636	0.99838364	96377.60745	155.7809433	96299.71698	4992025.393	51.79652748
19	0.001766324	0.998233676	96221.82651	169.9589239	96136.84705	4895725.676	50.87957539
20	0.001694176	0.998305824	96051.86759	162.7287296	95970.50322	4799588.829	49.9687195
21	0.001668296	0.998331704	95889.13886	159.9714987	95809.15311	4703618.326	49.05267043
22	0.001741074	0.998258926	95729.16736	166.6715257	95645.8316	4607809.173	48.13380603
23	0.001901855	0.998098145	95562.49583	181.7459974	95471.62283	4512163.341	47.21688464
24	0.001865085	0.998134915	95380.74984	177.893172	95291.80325	4416691.718	46.30590267
25	0.001886034	0.998113966	95202.85666	179.5558259	95113.07875	4321399.915	45.39149491
26	0.001698357	0.998301643	95023.30084	161.383518	94942.60908	4226286.836	44.47632106
27	0.001573529	0.998426471	94861.91732	149.2679724	94787.28333	4131344.227	43.55113563
28	0.001586037	0.998413963	94712.64935	150.217754	94637.54047	4036556.944	42.6189846
29	0.001567898	0.998432102	94562.43159	148.2642193	94488.29948	3941919.404	41.68589298
30	0.001624893	0.998375107	94414.16737	153.4128945	94337.46093	3847431.104	40.75056966
31	0.001669085	0.998330915	94260.75448	157.3291959	94182.08988	3753093.643	39.81607896
32	0.001681992	0.998318008	94103.42528	158.2811819	94024.28469	3658911.553	38.88181054
33	0.001715308	0.998284692	93945.1441	161.1448196	93864.57169	3564887.269	37.9464772
34	0.001899455	0.998100545	93783.99928	178.1385259	93694.93002	3471022.697	37.01081979
35	0.002159639	0.997840361	93605.86076	202.1548619	93504.78333	3377327.767	36.08030245
36	0.002281246	0.997718754	93403.70589	213.0768432	93297.16747	3283822.984	35.15730936
37	0.002321177	0.997678823	93190.62905	216.3119532	93082.47307	3190525.816	34.23655199
38	0.002528693	0.997471307	92974.3171	235.1034943	92856.76535	3097443.343	33.31504269
39	0.002568234	0.997431766	92739.2136	238.176041	92620.12558	3004586.578	32.39823221
40	0.002857558	0.997142442	92501.03756	264.3270684	92368.87403	2911966.452	31.48036529
41	0.002992604	0.997007396	92236.71049	276.027922	92098.69653	2819597.578	30.56914717
42	0.003213442	0.996786558	91960.68257	295.5103614	91812.92739	2727498.881	29.65940231
43	0.003541916	0.996458084	91665.17221	324.6703118	91502.83705	2635685.954	28.75340645
44	0.00387508	0.99612492	91340.5019	353.9517666	91163.52602	2544183.117	27.85383334
45	0.004394753	0.995605247	90986.55013	399.8634226	90786.61842	2453019.591	26.96024399
46	0.005004817	0.994995183	90586.68671	453.3698137	90360.0018	2362232.973	26.07704353
47	0.005271881	0.994728119	90133.3169	475.1721497	89895.73082	2271872.971	25.20569584
48	0.005960768	0.994039232	89658.14475	534.4314403	89390.92903	2181977.24	24.33663162
49	0.006620945	0.993379055	89123.71331	590.0832319	88828.67169	2092586.311	23.47956827
50	0.007420011	0.992579989	88533.63007	656.9204957	88205.16983	2003757.639	22.6327288
51	0.008752107	0.991247893	87876.70958	769.1063326	87492.15641	1915552.469	21.79818155
52	0.009850572	0.990149428	87107.60325	858.0597605	86678.57337	1828060.313	20.98623134
53	0.011099086	0.988900914	86249.54349	957.2911277	85770.89792	1741381.74	20.19004008
54	0.012385221	0.987614779	85292.25236	1056.363377	84764.07067	1655610.842	19.411103437
55	0.013543689	0.986456311	84235.88898	1140.864644	83665.45666	1570846.771	18.64818891
56	0.015073352	0.984926648	83095.02434	1252.520557	82468.76406	1487181.314	17.89735699
57	0.017217869	0.982782131	81842.50378	1409.15347	81137.92704	1404712.55	17.16360675
58	0.019246424	0.980753576	80433.35031	1548.054325	79659.32315	1323574.623	16.4555451
59	0.021698284	0.978301716	78885.29598	1711.675582	78029.45819	1243915.3	15.76865859
60	0.024325945	0.975674055	77173.6204	1877.321242	76234.95978	1165885.842	15.10731045
61	0.02639993	0.97360007	75296.29916	1987.817037	74302.39064	1089650.882	14.47150649
62	0.028140096	0.971859904	73308.48212	2062.90776	72277.02824	1015348.492	13.85035486
63	0.030524041	0.969475959	71245.57436	2174.702868	70158.22293	943071.4633	13.23691291
64	0.032846664	0.967153336	69070.8715	2268.747675	67936.49766	872913.2404	12.63793581
65	0.035669893	0.964330107	66802.12382	2382.824607	65610.71152	804976.7427	12.05016692
66	0.039229623	0.960770377	64419.29921	2527.144791	63155.72682	739366.0312	11.47739948
67	0.043385924	0.956614076	61892.15442	2685.248284	60549.53028	676210.3044	10.92562233
68	0.047343657	0.952656343	59206.90614	2803.071462	57805.37041	615660.7741	10.39846218
69	0.051445461	0.948554539	56403.83468	2901.721293	54952.97403	557855.4037	9.890380803
70	0.05621584	0.94378416	53502.11338	3007.666228	51998.28027	502902.4297	9.399674104
71	0.060389336	0.939610664	50494.44715	3049.32613	48969.78409	450904.1494	8.929776932
72	0.064609716	0.935390284	47445.12102	3065.415787	45912.41313	401934.3653	8.471563706
73	0.070358317	0.929641683	44379.70524	3122.481371	42818.46455	356021.9522	8.022179288
74	0.076779247	0.923220753	41257.22387	3167.698561	39673.37459	313203.4876	7.59148237
75	0.082092288	0.917907712	38089.52531	3126.856263	36526.09717	273530.113	7.181242372
76	0.087086023	0.912913977	34962.66904	3044.759783	33440.28915	237004.0159	6.778773542
77	0.092962874	0.907037126	31917.90926	2967.180574	30434.31897	203563.7267	6.377727472
78	0.1011196	0.8988804	28950.72869	2927.486118	27486.98563	173129.4077	5.9801399

79	0.111928864	0.888071136	26023.24257	2912.751988	24566.86657	145642.4221	5.596628542
80	0.122094817	0.877905183	23110.49058	2821.671111	21699.65502	121075.5555	5.23898682
81	0.134973006	0.865026994	20288.81947	2738.442959	18919.59799	99375.90052	4.898062239
82	0.149238258	0.850761742	17550.37651	2619.187613	16240.7827	80456.30253	4.584306353
83	0.164159107	0.835840893	14931.1889	2451.090629	13705.64358	64215.51983	4.300764009
84	0.176746077	0.823253923	12480.09827	2205.808408	11377.19406	50509.87625	4.047233857
85	0.187323118	0.812676882	10274.28986	1924.612011	9311.983855	39132.68218	3.808796784
86	0.199863454	0.800136546	8349.67785	1668.795454	7515.280123	29820.69833	3.571478908
87	0.215589855	0.784410145	6680.882396	1440.330466	5960.717163	22305.4182	3.338693436
88	0.232362547	0.767637453	5240.55193	1217.707994	4631.697933	16344.70104	3.118889243
89	0.250218222	0.749781778	4022.843936	1006.588855	3519.549508	11713.00311	2.911622547
90	0.26918872	0.73081128	3016.255081	811.9418452	2610.284158	8193.4536	2.716432589
91	0.289299682	0.710700318	2204.313236	637.707119	1885.459676	5583.169441	2.532838505
92	0.310569037	0.689430963	1566.606117	486.5393533	1323.33644	3697.709765	2.3603315
93	0.333005347	0.666994653	1080.066763	359.6680068	900.23276	2374.373325	2.198357922
94	0.356606014	0.643393986	720.3987566	256.898529	591.9494921	1474.140565	2.046284161
95	0.381355385	0.618644615	463.5002276	176.7583077	375.1210738	882.1910732	1.903323927
96	0.407222778	0.592777222	286.7419199	116.7678413	228.3579993	507.0699994	1.768384614
97	0.434160502	0.565839498	169.9740786	73.79603127	133.076063	278.7120001	1.639732378
98	0.462101922	0.537898078	96.17804737	44.44406055	73.95601709	145.6359371	1.514232625
99	0.490959683	0.509040317	51.73398681	25.39930178	39.03433592	71.67992004	1.385547963
100	0.520624181	0.479375819	26.33468503	13.71047382	19.47944812	32.64558412	1.239642095
101	0.550962424	0.449037576	12.62421122	6.955466017	9.146478207	13.166136	1.042927417
102	0.58181744	0.41818256	5.668745199	3.29817482	4.019657789	4.019657789	0.70909128
103	0.61300837	0.38699163	2.370570379	2.370570379	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.018040376	0.981959624	100000	1804.037563	98340.28544	7273931.399	72.73931399
1	0.002313312	0.997686688	98195.96244	227.1578787	98082.3835	7175591.113	73.0741971
2	0.00099127	0.99900873	97968.80456	97.11354987	97920.24778	7077508.73	72.24247312
3	0.000807242	0.999192758	97871.69101	79.00614655	97832.18794	6979588.482	71.31365985
4	0.000462821	0.999537179	97792.68486	45.26051218	97770.05461	6881756.294	70.3708698
5	0.000422535	0.999577465	97747.42435	41.30166558	97726.77352	6783986.239	69.40322248
6	0.00033459	0.99966541	97706.12268	32.69151256	97689.77693	6686259.466	68.43234878
7	0.000323497	0.999676503	97673.43117	31.59705684	97657.63264	6588569.689	67.45508589
8	0.000318957	0.999681043	97641.83411	31.14356221	97626.26233	6490912.056	66.47675267
9	0.000272559	0.999727441	97610.69055	26.60466176	97597.38822	6393285.794	65.49780314
10	0.000242506	0.999757494	97584.08589	23.66474191	97572.25352	6295688.406	64.5155237
11	0.00023885	0.99976115	97560.42115	23.30232025	97548.76999	6198116.152	63.53105162
12	0.000253089	0.999746911	97537.11883	24.6855875	97524.77603	6100567.382	62.54611019
13	0.000292021	0.999707979	97512.43324	28.47572579	97498.19538	6003042.606	61.56181737
14	0.000362417	0.999637583	97483.95752	35.32980193	97466.29261	5905544.411	60.57965394
15	0.000419048	0.999580952	97448.62771	40.83568916	97428.20987	5808078.118	59.60143569
16	0.000451692	0.999548308	97407.79202	43.99831372	97385.79287	5710649.908	58.62621244
17	0.000520319	0.999479681	97363.79371	50.66018793	97338.46362	5613264.115	57.65247944
18	0.000515414	0.999484586	97313.13352	50.15659856	97288.05522	5515925.652	56.68223242
19	0.000494741	0.999505259	97262.97692	48.11995847	97238.91694	5418637.597	55.71120449
20	0.00048827	0.99951173	97214.85697	47.46705651	97191.12344	5321398.68	54.73853324
21	0.000538371	0.999461629	97167.38991	52.31206919	97141.23387	5224207.556	53.7650292
22	0.000523394	0.999476606	97115.07784	50.82946863	97089.66311	5127066.322	52.79372098
23	0.000549937	0.999450063	97064.24837	53.37922831	97037.55876	5029976.659	51.82110554
24	0.000538221	0.999461779	97010.86914	52.21326838	96984.76251	4932939.1	50.84934445
25	0.000633617	0.999366383	96958.65587	61.43467225	96927.93854	4835954.338	49.87645811
26	0.000705992	0.999294008	96897.2212	68.40868916	96863.01686	4739026.399	48.97076372
27	0.000830316	0.999169684	96828.81251	80.39855216	96788.61324	4642163.383	47.94196337
28	0.000847545	0.999152455	96748.41396	81.99862911	96707.41465	4545374.769	46.98138794
29	0.000839138	0.999160862	96666.41533	81.11646485	96625.8571	4448667.355	46.02081643
30	0.000797928	0.999202072	96585.29887	77.06812976	96546.7648	4352041.498	45.05904676
31	0.000827441	0.999172559	96508.23074	79.85490101	96468.30329	4255494.733	44.09463007
32	0.000926556	0.999073444	96428.37584	89.34624951	96383.70271	4159026.43	43.13073194
33	0.001040194	0.998959806	96339.02959	100.2112452	96288.92396	4062642.727	42.17026831
34	0.001173851	0.998826149	96238.81834	112.9700395	96182.33332	3966353.803	41.2136586
35	0.001193623	0.998806377	96125.8483	114.7380154	96068.47929	3870171.47	40.26150653
36	0.001243044	0.998756956	96011.11029	119.3460802	95951.43725	3774102.99	39.3090235
37	0.001303729	0.998696271	95891.76421	125.0168818	95829.25578	3678151.553	38.35732488
38	0.001412201	0.998587799	95766.74734	135.2419165	95699.12639	3582322.297	37.406745
39	0.001532264	0.998467736	95631.50543	146.5327249	95558.23907	3486623.171	36.45893846
40	0.001715989	0.998284011	95484.9727	163.8511997	95403.0471	3391064.932	35.5141216
41	0.00185224	0.99814776	95321.1215	176.5575656	95232.84272	3295661.885	34.57430874
42	0.002167527	0.997832473	95144.56394	206.228366	95041.44975	3200429.042	33.63753965
43	0.002498523	0.997501477	94938.33557	237.2056324	94819.73276	3105387.592	32.70952217
44	0.002793075	0.997206925	94701.12994	264.5073197	94568.87628	3010567.859	31.79019998
45	0.00295981	0.99704019	94436.62262	279.514458	94296.86539	2915998.983	30.87784063
46	0.003161693	0.996838307	94157.10816	297.6958626	94008.26023	2821702.118	29.96802018
47	0.003371323	0.996628677	93859.4123	316.430352	93701.19712	2727693.858	29.06148452
48	0.003810217	0.996189783	93542.98195	356.4190406	93364.77243	2633992.66	28.15810022
49	0.004188126	0.995811874	93186.56291	390.2771068	92991.42435	2540627.888	27.26388665
50	0.004690355	0.995309645	92796.2858	435.2475661	92578.66202	2447636.464	26.37644461
51	0.004996877	0.995003123	92361.03823	461.5167322	92130.27987	2355057.302	25.49839302
52	0.005521261	0.994478739	91899.5215	507.4012829	91645.82086	2262927.522	24.62393149
53	0.005944056	0.994055944	91392.12022	543.2398648	91120.50029	2171281.701	23.75786551
54	0.006459896	0.993540104	90848.88035	586.87431	90555.4432	2080161.201	22.89693822
55	0.007160375	0.992839625	90262.00604	646.3098086	89938.85114	1989605.757	22.04256081
56	0.00780232	0.99219768	89615.69624	699.210378	89266.09105	1899666.906	21.1979261
57	0.008574627	0.991425373	88916.48586	762.4256731	88535.27302	1810400.815	20.36068787
58	0.009690493	0.990309507	88154.06018	854.2563224	87726.93202	1721865.542	19.53245873
59	0.010738566	0.989261434	87299.80386	937.4746887	86831.06652	1634138.61	18.71869738
60	0.011952913	0.988047087	86362.32917	1032.281371	85846.18849	1547307.544	17.91646379
61	0.013230174	0.986769826	85330.0478	1128.931369	84765.58212	1461461.355	17.12715969
62	0.014128891	0.985871109	84201.11643	1189.66841	83606.28223	1376695.773	16.3500893
63	0.015714193	0.984285807	83011.44802	1304.45788	82359.21908	1293089.491	15.57724292
64	0.017286192	0.982713808	81706.99014	1412.402698	81000.78879	1210730.272	14.81795217
65	0.019604377	0.980395623	80294.58744	1574.125383	79507.52475	1129729.483	14.06980867
66	0.022603903	0.977396097	78720.46206	1779.389697	77830.76721	1050221.958	13.34115592
67	0.025790281	0.974209719	76941.07236	1984.331854	75948.90644	972391.191	12.63812891
68	0.029428776	0.970571224	74856.74051	2205.885151	73853.79794	896442.2845	11.95946193
69	0.033558194	0.966441806	72750.85536	2441.387313	71530.1617	822588.4866	11.30692529
70	0.037156224	0.962843776	70309.46805	2612.434345	69003.25088	751058.3249	10.68217903
71	0.041641574	0.958358426	67697.0337	2819.011071	66287.52817	682055.074	10.07511019
72	0.046042785	0.953957215	64878.02263	2987.164868	63384.4402	615767.5458	9.491157727
73	0.050478388	0.949521612	61890.85776	3124.15076	60328.78238	552383.1056	8.925116335
74	0.055519785	0.944480215	58766.707	3262.714957	57135.34953	492054.3233	8.373011665
75	0.061039756	0.938960244	55503.99205	3387.95014	53810.01698	434918.9737	7.835814284
76	0.06806001	0.931993999	52116.04191	3544.203614	50343.9401	381108.9568	7.31269956
77	0.077558848	0.922441152	48571.83829	3767.175836	46688.25038	330765.0167	6.809810546
78	0.088073096	0.911926904	44804.66246	3946.085333	42831.61979	284076.7663	6.340339391

79	0.09684757	0.90315243	40858.57713	3957.053914	38880.05017	241245.1465	5.904394217
80	0.107436767	0.892563233	36901.52321	3964.580368	34919.23303	202365.0963	5.483922579
81	0.120274266	0.879725734	32936.94284	3961.466636	30956.20952	167445.8633	5.083831371
82	0.133460953	0.866539047	28975.47621	3867.094657	27041.92888	136489.6538	4.71052323
83	0.147617386	0.852382614	25108.38155	3706.433643	23255.16473	109447.7249	4.359011539
84	0.163110386	0.836889614	21401.94791	3490.879978	19656.50792	86192.56016	4.027323145
85	0.180308698	0.819691302	17911.06793	3229.52134	16296.30726	66536.05224	3.714800955
86	0.199071735	0.800928265	14681.54659	2922.680947	13220.20611	50239.74498	3.421965437
87	0.219490157	0.780509843	11758.86564	2580.955268	10468.38801	37019.53887	3.148223647
88	0.241647443	0.758352557	9177.910374	2217.818575	8069.001086	26551.15086	2.892940744
89	0.265616185	0.734383815	6960.091799	1848.713033	6035.735283	18482.14977	2.655446265
90	0.291453715	0.708546285	5111.378766	1489.730332	4366.513601	12446.41449	2.435040536
91	0.319197039	0.680802961	3621.648435	1156.019457	3043.638706	8079.900892	2.231000893
92	0.348857113	0.651142887	2465.628978	860.152207	2035.552874	5036.262185	2.042587198
93	0.380412553	0.619587447	1605.476771	610.7435165	1300.105013	3000.709311	1.86904561
94	0.413802939	0.586197061	994.7332545	411.6235446	788.9214822	1700.604298	1.70960837
95	0.448921999	0.551078001	583.1097099	261.7707768	452.2243215	911.6828158	1.563484196
96	0.485611042	0.514388958	321.3389331	156.0457341	243.3160661	459.4584943	1.429825169
97	0.523653193	0.476346807	165.293199	86.55631146	122.0150433	216.1424283	1.307630499
98	0.562769097	0.437230903	78.73688756	44.3106871	56.58154401	94.12738496	1.195467434
99	0.602614898	0.397385102	34.42620046	20.74574129	24.05332981	37.54584095	1.090618205
100	0.642783422	0.357216578	13.68045916	8.793572355	9.283672986	13.49251114	0.986261571
101	0.682809487	0.317190513	4.886886808	3.336812677	3.21848047	4.208838155	0.86125141
102	0.722180229	0.277819771	1.550074131	1.119432892	0.990357685	0.990357685	0.638909885
103	0.760351039	0.239648961	0.43064124	0.43064124	0	0	0