

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.021414613	0.978585387	100000	2141.461344	98029.85556	6685413.664	66.85413664
1	0.000963612	0.999036388	97858.53866	94.29767139	97811.38982	6587383.808	67.31537073
2	0.000588401	0.999411599	97764.24098	57.52457443	97735.4787	6489572.418	66.37981693
3	0.00063456	0.99936544	97706.71641	62.00074336	97675.71604	6391836.94	65.4186035
4	0.000550587	0.999449413	97644.71567	53.7619373	97617.8347	6294161.224	64.45982438
5	0.000548969	0.999451031	97590.95373	53.57443674	97564.16651	6196543.389	63.49505925
6	0.000527053	0.999472947	97537.37929	51.40740357	97511.67559	6098979.223	62.52966059
7	0.000493721	0.999506279	97485.97189	48.13091472	97461.90643	6001467.547	61.56237078
8	0.000473818	0.999526182	97437.84097	46.16784053	97414.75705	5904005.64	60.59253347
9	0.000482643	0.999517357	97391.67313	47.00539959	97368.17043	5806590.883	59.62101991
10	0.000431203	0.999568797	97344.66773	41.97526909	97323.6801	5709222.713	58.64956803
11	0.000353751	0.999646249	97302.69247	34.42097273	97285.48198	5611899.033	57.67465309
12	0.000394775	0.999605225	97268.27149	38.39904664	97249.07197	5514613.551	56.69488587
13	0.000365686	0.999634314	97229.87245	35.5556304	97212.09463	5417364.479	55.71707895
14	0.00042595	0.99957405	97194.31682	41.3998796	97173.61688	5320152.384	54.73727846
15	0.000617988	0.999382012	97152.91694	60.03935788	97122.89726	5222978.767	53.76039065
16	0.000894543	0.999105457	97092.87758	86.85375826	97049.4507	5125855.87	52.7933253
17	0.001120533	0.998879467	97006.02382	108.6984904	96951.67457	5028806.419	51.84014581
18	0.001300491	0.998699509	96897.32533	126.0141454	96834.31826	4931854.745	50.8977387
19	0.001351912	0.998648088	96771.31118	130.8262727	96705.89805	4835020.427	49.96336587
20	0.001384765	0.998615235	96640.48491	133.8243152	96573.57275	4738314.529	49.0303265
21	0.001432193	0.998567807	96506.6606	138.2162053	96437.55249	4641740.956	48.09762277
22	0.001475225	0.998524775	96368.44439	142.1651837	96297.3618	4545303.403	47.16588954
23	0.001464123	0.998535877	96226.27921	140.8870684	96155.83567	4449006.042	46.23483396
24	0.001357339	0.998642661	96085.39214	130.4204087	96020.18193	4352850.206	45.30189354
25	0.001332887	0.998667113	95954.97173	127.8971116	95891.02317	4256830.024	44.36278754
26	0.001363659	0.998636341	95827.07462	130.6754991	95761.73687	4160939.001	43.4213297
27	0.001341336	0.998658664	95696.39912	128.3610394	95632.2186	4065177.264	42.4799397
28	0.001368578	0.998631422	95568.03808	130.7923504	95502.64191	3969545.045	41.53632454
29	0.001407236	0.998592764	95437.24573	134.302723	95370.09437	3874042.403	40.59256293
30	0.001469483	0.998530517	95302.94301	140.0460242	95232.91999	3778672.309	39.64906214
31	0.001483069	0.998516931	95162.89698	141.1331056	95092.33043	3683439.389	38.70667567
32	0.001486911	0.998513089	95021.76388	141.2889263	94951.11941	3588347.059	37.76342295
33	0.001595315	0.998404685	94880.47495	151.3642798	94804.79281	3493395.939	36.81891286
34	0.001850064	0.998149936	94729.11067	175.2548824	94641.48323	3398591.146	35.87694556
35	0.002080907	0.997919093	94553.85579	196.7577776	94455.4769	3303949.663	34.94251647
36	0.002482093	0.997517907	94357.09801	234.2030681	94239.99648	3209494.186	34.0143376
37	0.002538925	0.997461075	94122.89494	238.9709578	94003.40946	3115254.19	33.09773028
38	0.0025427	0.9974573	93883.92399	238.7186699	93764.56465	3021250.78	32.18070413
39	0.002905049	0.997094951	93645.20532	272.0439195	93509.18336	2927486.216	31.26146401
40	0.0031968	0.9968032	93373.1614	298.4953364	93223.91373	2833977.032	30.35108794
41	0.003505139	0.996494861	93074.66606	326.2396032	92911.54626	2740753.119	29.44682194
42	0.00408172	0.99591828	92748.42646	378.5730968	92559.13991	2647841.572	28.54864145
43	0.00455971	0.99544029	92369.85336	421.1797518	92159.26348	2555282.432	27.66359737
44	0.005001097	0.994998903	91948.67361	459.8442194	91718.7515	2463123.169	26.78802284
45	0.005706487	0.994293513	91488.82939	522.0798109	91227.78948	2371404.417	25.92015258
46	0.006268113	0.993731887	90966.74958	570.1898351	90681.65466	2280176.628	25.06604489
47	0.006783972	0.993216028	90396.55974	613.2477331	90089.93588	2189494.973	24.22099889
48	0.007502648	0.992497352	89783.31201	673.61259	89446.50571	2099405.037	23.38302064
49	0.008405544	0.991594456	89109.69942	749.0155172	88735.19166	2009958.532	22.5560017
50	0.009499995	0.990500005	88360.6839	839.4260833	87940.97086	1921223.34	21.74296593
51	0.010564596	0.989435404	87521.25782	924.6267479	87058.94444	1833282.369	20.94670958
52	0.011908571	0.988091429	86596.63107	1031.242122	86081.01001	1746223.425	20.16502724
53	0.01298894	0.987011106	85565.38895	1111.403664	85009.68712	1660142.415	19.402032
54	0.013345243	0.986654757	84453.98528	1127.058916	83890.45583	1575132.788	18.65078033
55	0.01462196	0.98537804	83326.92637	1218.402976	82717.72488	1491242.272	17.89628319
56	0.015717038	0.984282962	82108.52339	1290.502822	81463.27198	1408524.547	17.15442549
57	0.017163074	0.982836926	80818.02057	1387.085677	80124.47773	1327061.275	16.4203635
58	0.019152805	0.980847195	79430.93489	1521.325223	78670.27228	1246936.797	15.69837745
59	0.021090335	0.978909665	77909.60967	1643.139802	77088.03977	1168266.525	14.9951531
60	0.023287064	0.976712936	76266.46987	1776.022195	75378.45877	1091178.485	14.30744713
61	0.026427475	0.973572525	74490.44767	1968.594423	73506.15046	1015800.026	13.63664816
62	0.028911692	0.971088308	72521.85325	2096.729518	71473.48849	942293.8759	12.99324043
63	0.03204666	0.96795334	70425.12373	2256.88999	69296.67874	870820.3874	12.36519499
64	0.035224624	0.964775376	68168.23374	2401.200383	66967.63355	801523.7087	11.75802371
65	0.038757134	0.961242866	65767.03336	2548.941714	64492.5625	734556.0751	11.16906203
66	0.04333105	0.95666895	63218.09165	2739.306281	61848.43851	670063.5126	10.59923663
67	0.048200516	0.951799484	60478.78537	2915.108635	59021.23105	608215.0741	10.05666814
68	0.052444566	0.947555434	57563.67673	3018.902046	56054.22571	549193.8431	9.540631771
69	0.057322158	0.942677842	54544.77468	3126.624172	52981.4626	493139.6174	9.041005673
70	0.063172547	0.936827453	51418.15051	3248.215506	49794.04276	440158.1548	8.560365365
71	0.069063053	0.930936947	48169.93501	3326.762755	46506.55363	390364.112	8.103895344
72	0.075407634	0.924592366	44843.17225	3381.51751	43152.4135	343857.5584	7.668002532
73	0.08152934	0.91847066	41461.65474	3380.341339	39771.48407	300705.1449	7.252608387
74	0.088269823	0.911730177	38081.3134	3361.430788	36400.59801	260933.6608	6.852013166
75	0.096770171	0.903229829	34719.88261	3359.848971	33039.95813	224533.0628	6.466987959
76	0.10549523	0.89450477	31360.03364	3308.33397	29705.86666	191493.1047	6.106278675
77	0.114914725	0.885085275	28051.69967	3223.553346	26439.923	161787.238	5.767466496
78	0.124340022	0.875659978	24828.14633	3087.132261	23284.5802	135347.315	5.451366092

79	0.13244223	0.86755777	21741.01407	2879.428392	20301.29987	112062.7348	5.154439185
80	0.141471345	0.858528655	18861.58568	2668.373896	17527.39873	91761.43495	4.864990491
81	0.150921073	0.849078927	16193.21178	2443.896903	14971.26333	74234.03623	4.584268843
82	0.162722783	0.837277217	13749.31488	2237.326775	12630.65149	59262.7729	4.310234613
83	0.175794438	0.824205562	11511.9881	2023.743479	10500.11636	46632.12141	4.050744406
84	0.189902025	0.810097975	9488.244623	1801.836867	8587.32619	36132.00504	3.808081102
85	0.202852861	0.797147139	7686.407756	1559.2098	6906.802856	27544.67885	3.58355681
86	0.217340435	0.782659565	6127.197956	1331.687869	5461.354021	20637.876	3.36824045
87	0.232626938	0.767373062	4795.510087	1115.564828	4237.727673	15176.52198	3.164735701
88	0.248733297	0.751266703	3679.945259	915.3249155	3222.282801	10938.7943	2.97254267
89	0.265677311	0.734322689	2764.620344	734.4969	2397.371894	7716.511503	2.791164986
90	0.283472988	0.716527012	2030.123444	575.4851581	1742.380864	5319.13961	2.62010649
91	0.302129804	0.697870196	1454.638285	439.4895807	1234.893495	3576.758745	2.45886471
92	0.321651926	0.678348074	1015.148705	326.5245363	851.8864366	2341.86525	2.306918424
93	0.342037366	0.657962634	688.6241684	235.5351965	570.8565702	1489.978814	2.163703922
94	0.363277103	0.636722897	453.088972	164.596849	370.7905475	919.1222434	2.028569002
95	0.385354177	0.614645823	288.4921229	111.1716447	232.9063006	548.331696	1.900681691
96	0.40824277	0.59175723	177.3204782	72.38980326	141.1255766	315.4253954	1.778843586
97	0.431907296	0.568092704	104.930675	45.32032407	82.27051293	174.2998188	1.661094993
98	0.456301535	0.543698465	59.61035089	27.2002946	46.01020359	92.02930589	1.543847746
99	0.481367841	0.518632159	32.41005629	15.60115881	24.60947689	46.0191023	1.419901955
100	0.507036458	0.492963542	16.80889748	8.522723844	12.54753556	21.40962541	1.273707894
101	0.533225001	0.466774999	8.286173639	4.418394947	6.076976166	8.862089847	1.069503275
102	0.559838138	0.440161862	3.867778692	2.165330021	2.785113681	2.785113681	0.720080931
103	0.586767542	0.413232458	1.702448671	1.702448671	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.016631521	0.983368479	100000	1663.152082	98469.90008	7360942.008	73.60942008
1	0.000824812	0.999175188	98336.84792	81.10943657	98296.2932	7262472.108	73.85300894
2	0.00049914	0.99950086	98255.73848	49.043333	98231.21682	7164175.815	72.91356134
3	0.000455911	0.999544089	98206.69515	44.77354172	98184.30838	7065944.598	71.94972387
4	0.0003642	0.9996358	98161.92161	35.7505857	98144.04631	6967760.29	70.98231346
5	0.000368054	0.999631946	98126.17102	36.11573527	98108.11315	6869616.243	70.00799248
6	0.000341608	0.999658392	98090.05529	33.50838099	98073.3011	6771508.13	69.0335846
7	0.000314992	0.999685008	98056.5469	30.88705939	98041.10338	6673434.829	68.05700425
8	0.000279192	0.999720808	98025.65985	27.36797148	98011.97586	6575393.726	67.07829089
9	0.000204594	0.999795406	97998.29187	20.04982676	97988.26696	6477381.75	66.0968842
10	0.000134944	0.999865056	97978.24205	13.22160499	97971.63124	6379393.483	65.11030765
11	0.000113834	0.999886166	97965.02044	11.15175728	97959.44456	6281421.852	64.11902762
12	0.000173417	0.999826583	97953.86869	16.98688146	97945.37524	6183462.407	63.12627046
13	0.000240787	0.999759213	97936.8818	23.58188959	97925.09086	6085517.032	62.13713281
14	0.000320417	0.999679583	97913.29991	31.3730889	97897.61337	5987591.941	61.15197778
15	0.000397946	0.999602054	97881.92683	38.95174249	97862.45095	5889694.328	60.17141794
16	0.000479626	0.999520374	97842.97508	46.9280592	97819.51105	5791831.877	59.19517341
17	0.000479712	0.999520288	97796.04702	46.91394205	97772.59005	5694012.366	58.22333866
18	0.000494595	0.999505405	97749.13308	48.34620078	97724.95998	5596239.776	57.25104253
19	0.000448556	0.999551444	97700.78688	43.82430099	97678.87473	5498514.816	56.27912519
20	0.000385871	0.999614129	97656.96258	37.68297964	97638.12109	5400835.941	55.30415649
21	0.000365236	0.999634764	97619.2796	35.65404711	97601.45258	5303197.82	54.32531198
22	0.000411828	0.999588172	97583.62555	40.1876469	97563.53173	5205596.367	53.34497809
23	0.000431668	0.999568332	97543.43791	42.10636909	97522.38472	5108032.835	52.36675009
24	0.000507733	0.999492267	97501.33154	49.50468573	97476.57919	5010510.451	51.38914897
25	0.000577349	0.999422651	97451.82685	56.2636736	97423.69501	4913033.872	50.41500021
26	0.000565356	0.999434644	97395.56318	55.06314759	97368.0316	4815610.177	49.44383522
27	0.000556518	0.999443482	97340.50003	54.17177805	97313.41414	4718242.145	48.47152155
28	0.000559792	0.999440208	97286.32825	54.46010355	97259.0982	4620928.731	47.49823345
29	0.000550547	0.999449453	97231.86815	53.53067004	97205.10281	4523669.633	46.52455742
30	0.000582489	0.999417511	97178.33748	56.60530886	97150.03482	4426464.53	45.54991004
31	0.000642776	0.999357224	97121.73217	62.42747337	97090.51843	4329314.495	44.57616641
32	0.000707326	0.999292674	97059.3047	68.65259148	97024.9784	4232223.977	43.60451571
33	0.00078127	0.99921873	96990.6521	75.77590028	96952.76415	4135198.998	42.63502625
34	0.000885479	0.999114521	96914.8762	85.8161307	96871.96814	4038246.234	41.66797082
35	0.000956635	0.999043365	96829.06007	92.63003519	96782.74506	3941374.266	40.70445652
36	0.000993808	0.999006192	96736.43004	96.13744955	96688.36131	3844591.521	39.74295433
37	0.00107374	0.99892626	96640.29259	103.7665184	96588.40933	3747903.159	38.78199309
38	0.001181457	0.998818543	96536.52607	114.0537659	96479.49919	3651314.75	37.82314217
39	0.001381019	0.998618981	96422.4723	133.1613004	96355.89165	3554835.251	36.86729002
40	0.001679699	0.998320301	96289.311	161.7370531	96208.44248	3458479.359	35.91758341
41	0.001942532	0.998057468	96127.57395	186.7309335	96034.20848	3362270.917	34.97717438
42	0.002161633	0.997838367	95940.84302	207.388888	95837.14857	3266236.708	34.04427776
43	0.002260537	0.997739463	95733.45413	216.4090353	95625.24961	3170399.56	33.11694526
44	0.00246465	0.99753535	95517.04509	235.4160886	95399.33705	3074774.31	32.19084413
45	0.002811754	0.997188246	95281.62901	267.9085343	95147.67474	2979374.973	31.26914395
46	0.003080063	0.996919937	95013.72047	292.6482876	94867.39633	2884227.298	30.35590317
47	0.003284928	0.996715072	94721.07218	311.1519388	94565.49621	2789359.902	29.44814536
48	0.003604804	0.996395196	94409.92024	340.3292621	94239.75561	2694794.406	28.54355134
49	0.003781793	0.996218207	94069.59098	355.7517509	93891.71511	2600554.65	27.64500858
50	0.004357235	0.995642765	93713.83923	408.3331972	93509.67263	2506662.935	26.7480551
51	0.004816906	0.995183094	93305.50603	449.4438804	93080.78409	2413153.262	25.86292455
52	0.005611751	0.994388249	92856.06215	521.0851442	92595.51958	2320072.478	24.98568671
53	0.005817702	0.994182298	92334.97701	537.1773982	92066.38831	2227476.959	24.12386975
54	0.006227304	0.993772696	91797.79961	571.6528081	91511.97321	2135410.57	23.26211063
55	0.006666709	0.993333291	91226.1468	608.1781534	90922.05773	2043898.597	22.40474545
56	0.007149979	0.992850021	90617.96865	647.9165539	90294.01037	1952976.54	21.5517581
57	0.008015614	0.991984386	89970.0521	721.1651728	89609.46951	1862682.529	20.70336168
58	0.009194911	0.990805089	89248.88692	820.6355393	88838.56915	1773073.06	19.86661258
59	0.010261254	0.989738746	88428.25138	907.3847087	87974.55903	1684234.491	19.04633942
60	0.011533228	0.988466772	87520.86668	1009.398119	87016.16762	1596259.931	18.23862117
61	0.012484192	0.987515808	86511.46856	1080.025807	85971.45565	1509243.764	17.44559177
62	0.013530064	0.986469936	85431.44275	1155.892874	84853.49631	1423272.308	16.65981824
63	0.015113492	0.984886508	84275.54988	1273.697868	83638.70094	1338418.812	15.88146045
64	0.01665345	0.98334655	83001.85201	1382.267199	82310.71841	1254780.111	15.11749534
65	0.018995306	0.981004694	81619.58481	1550.388985	80844.39032	1172469.393	14.3650497
66	0.021157529	0.978842471	80069.19582	1694.066349	79222.16265	1091625.002	13.63352024
67	0.023636835	0.976363165	78375.12947	1852.539974	77448.85949	1012402.84	12.91739926
68	0.026750149	0.973249851	76522.5895	2046.990647	75499.09418	934953.9801	12.21801283
69	0.030435521	0.969564479	74475.59885	2266.703616	73342.24705	859454.8859	11.54008694
70	0.034433261	0.965566739	72208.89524	2486.387728	70965.70137	786112.6389	10.88664542
71	0.038644944	0.961355056	69722.50751	2694.422364	68375.29633	715146.9375	10.25704558
72	0.043352541	0.956647459	67028.08515	2905.837803	65575.16624	646771.6412	9.649263287
73	0.048528015	0.951471985	64122.24734	3111.725382	62566.38465	581196.4749	9.063881867
74	0.054104167	0.945895833	61010.52196	3300.923486	59360.06022	518630.0903	8.500666338
75	0.060860104	0.939139896	57709.59847	3512.212167	55953.49239	459270.0301	7.958295365
76	0.067958235	0.932041765	54197.38631	3683.158704	52355.80696	403316.5377	7.441623391
77	0.07561242	0.92438758	50514.2276	3819.502983	48604.47611	350960.7307	6.947760015
78	0.085088296	0.914911704	46694.72462	3973.174555	44708.13734	302356.2546	6.475169456

79	0.09411088	0.90588912	42721.55007	4020.562667	40711.26873	257648.1173	6.030870061
80	0.104188671	0.895811329	38700.9874	4032.204428	36684.88518	216936.8485	5.605460302
81	0.11551914	0.88448086	34668.78297	4004.907993	32666.32897	180251.9633	5.199258465
82	0.128474905	0.871525095	30663.87498	3939.538435	28694.10576	147585.6344	4.813013179
83	0.142339164	0.857660836	26724.33654	3803.919716	24822.37668	118891.5286	4.448811233
84	0.158283985	0.841716015	22920.41683	3627.934904	21106.44937	94069.15192	4.104164101
85	0.175504459	0.824495541	19292.48192	3385.91661	17599.52362	72962.70255	3.781924111
86	0.194191732	0.805808268	15906.56531	3088.923467	14362.10358	55363.17893	3.480523787
87	0.214580736	0.785419264	12817.64185	2750.419023	11442.43233	41001.07535	3.198800204
88	0.236762903	0.763237097	10067.22282	2383.544898	8875.450373	29558.64302	2.936126829
89	0.260818903	0.739181097	7683.677924	2004.04845	6681.653699	20683.19265	2.691834933
90	0.286813964	0.713186036	5679.629474	1628.997046	4865.130951	14001.53895	2.465220489
91	0.314792398	0.685207602	4050.632428	1275.108295	3413.078281	9136.407997	2.255550993
92	0.344771371	0.655228629	2775.524133	956.9212603	2297.063503	5723.329717	2.062071682
93	0.376734002	0.623265998	1818.602873	685.1295388	1476.038103	3426.266214	1.884010118
94	0.410621965	0.589378035	1133.473334	465.4290483	900.75881	1950.22811	1.720576966
95	0.446327891	0.553672109	668.0442858	298.1667972	518.9608872	1049.4693	1.570957678
96	0.483688003	0.516311997	369.8774886	178.905304	280.4248367	530.5084129	1.434281429
97	0.522475593	0.477524407	190.9721847	99.77830534	141.083032	250.0835763	1.309528802
98	0.562396088	0.437603912	91.19387931	51.28708102	65.5503388	109.0005443	1.195261624
99	0.603084675	0.396915325	39.9067983	24.06717847	27.87320906	43.45020549	1.088792069
100	0.644107498	0.355892502	15.83961982	10.20241789	10.73841088	15.57699643	0.983419842
101	0.684967566	0.315032434	5.637201937	3.861300493	3.706551691	4.838585548	0.858331066
102	0.725116351	0.274883649	1.775901445	1.287735174	1.132033857	1.132033857	0.637441825
103	0.763971784	0.236028216	0.48816627	0.48816627	0	0	0