

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.107038419	0.892961581	100000	10703.84194	90152.46541	5642120.837	56.42120837
1	0.011755516	0.988244484	89296.15806	1049.722422	88771.29685	5551968.372	62.17477317
2	0.00571218	0.99428782	88246.43564	504.0794929	87994.39589	5463197.075	61.90841631
3	0.004059426	0.995940574	87742.35614	356.1836423	87564.26432	5375202.679	61.26120742
4	0.003254335	0.996745665	87386.1725	284.3838376	87243.98058	5287638.415	60.50886844
5	0.003262772	0.996737228	87101.78866	284.1933021	86959.69201	5200394.434	59.70479498
6	0.003014987	0.996985013	86817.59536	261.7538844	86686.71842	5113434.742	58.89859908
7	0.002761248	0.997238752	86555.84148	239.0021528	86436.3404	5026748.024	58.07520253
8	0.002530227	0.997469773	86316.83932	218.401166	86207.63874	4940311.684	57.23462215
9	0.002233664	0.997766336	86098.43816	192.3149388	86002.28069	4854104.045	56.37853774
10	0.002080102	0.997919898	85906.12322	178.6934829	85816.77648	4768101.764	55.503631
11	0.001899602	0.998100398	85727.42974	162.8479714	85646.00575	4682284.988	54.61828264
12	0.00176937	0.99823063	85564.58176	151.3954136	85488.88406	4596638.982	53.72128148
13	0.001720672	0.998279328	85413.18635	146.9680926	85339.7023	4511150.098	52.81561654
14	0.001760964	0.998239036	85266.21826	150.1507258	85191.14288	4425810.396	51.90578972
15	0.001876647	0.998123353	85116.06751	159.7327711	85036.20112	4340619.253	50.99647317
16	0.002206401	0.997793599	84956.33473	187.4477331	84862.61087	4255583.052	50.09141537
17	0.002732773	0.997267227	84768.887	231.6541597	84653.05992	4170720.441	49.20107587
18	0.003237904	0.996762096	84537.23284	273.7234633	84400.37111	4086067.381	48.33452957
19	0.003554772	0.996445228	84263.50938	299.5375854	84113.74059	4001667.01	47.48991632
20	0.003768641	0.996231359	83963.97179	316.4300469	83805.75677	3917553.269	46.65755068
21	0.003784334	0.996215666	83647.54175	316.5502691	83489.26661	3833747.512	45.83215994
22	0.003681204	0.996318796	83330.99148	306.7583583	83177.6123	3750258.246	45.00436367
23	0.003497698	0.996502302	83024.23312	290.393692	82879.03627	3667080.633	44.16879862
24	0.003270536	0.996729464	82733.83943	270.5839636	82598.54744	3584201.597	43.322075
25	0.0031141	0.9968859	82463.25546	256.7988203	82334.85605	3501603.05	42.46258567
26	0.003144607	0.996855393	82206.45664	258.708523	82077.20312	3419268.194	41.59366936
27	0.003300888	0.996699112	81947.94961	270.501044	81812.69908	3337190.99	40.72330066
28	0.003426715	0.996573285	81677.44856	279.8852982	81537.50591	3255378.291	39.85651301
29	0.003500223	0.996499777	81397.56326	284.9096425	81255.10844	3173840.785	38.99184027
30	0.00354389	0.99645611	81112.65362	287.4542863	80968.92648	3092585.677	38.12704355
31	0.003617087	0.996382913	80825.19933	292.3517795	80679.02344	3011616.751	37.26086388
32	0.003739153	0.996260847	80532.84755	301.1246226	80382.28524	2930937.727	36.39431382
33	0.003822784	0.996177216	80231.72293	306.708523	80078.36867	2850555.442	35.52903188
34	0.004192818	0.995807182	79925.01441	335.1110513	79757.45888	2770477.073	34.66345416
35	0.004651679	0.995348321	79589.90336	370.2266687	79404.79002	2690719.614	33.80729842
36	0.004824183	0.995175817	79219.67669	382.1702203	79028.59158	2611314.824	32.96295735
37	0.005202412	0.994797588	78837.50647	410.1452042	78632.43387	2532286.233	32.12032377
38	0.005543555	0.994456445	78427.36126	434.7664225	78209.97805	2453653.799	31.28568601
39	0.005711327	0.994288673	77992.59484	445.4411968	77769.87424	2375443.821	30.45729951
40	0.006223761	0.993776239	77547.15365	482.6349817	77305.83615	2297673.947	29.62937824
41	0.006562036	0.993437964	77064.51866	505.7001235	76811.6686	2220368.11	28.81180794
42	0.006712273	0.993287727	76558.81854	513.8836526	76301.87671	2143556.442	27.9988182
43	0.007130045	0.992869955	76044.93489	542.2038158	75773.83298	2067254.565	27.18464508
44	0.007693519	0.992306481	75502.73107	580.8817099	75212.29022	1991480.732	26.37627413
45	0.008192465	0.991807535	74921.84936	613.7946344	74614.95204	1916268.442	25.57689724
46	0.009200342	0.990799658	74308.05473	683.6594813	73966.22499	1841653.49	24.78403582
47	0.009764199	0.990235801	73624.39525	718.8832687	73264.95361	1767687.265	24.00953188
48	0.010557183	0.989442817	72905.51198	769.6768213	72520.67357	1694422.311	23.24134713
49	0.011273656	0.988726344	72135.83516	813.2346038	71729.21785	1621901.638	22.48399335
50	0.01205331	0.98794669	71322.60055	859.6733806	70892.76386	1550172.42	21.73465925
51	0.012523643	0.987476357	70462.92717	882.4525254	70021.70091	1479279.656	20.99372983
52	0.01360925	0.98639075	69580.47465	946.9380547	69107.00562	1409257.955	20.25364101
53	0.014330738	0.985669262	68633.53659	983.56923	68141.75198	1340150.949	19.52618233
54	0.015692749	0.984307251	67649.96736	1061.613934	67119.1604	1272009.197	18.80280578
55	0.017357201	0.982642799	66588.35343	1155.787413	66010.45972	1204890.037	18.09460626
56	0.01853357	0.98146643	65432.56602	1212.699063	64826.21648	1138879.577	17.40539378
57	0.019770363	0.980229637	64219.86695	1269.650108	63585.0419	1074053.361	16.72462762
58	0.021346894	0.978653106	62950.21685	1343.791634	62278.32103	1010468.319	16.05186399
59	0.022822587	0.977177413	61606.42521	1406.018026	60903.4162	948189.9979	15.3910894
60	0.024746782	0.975253218	60200.40719	1489.766369	59455.524	887286.5817	14.73888007
61	0.02673095	0.97326905	58710.64082	1569.391205	57925.94521	827831.0577	14.10018774
62	0.029018139	0.970981861	57141.24961	1658.132713	56312.18326	769905.1125	13.47371851
63	0.031227372	0.968772628	55483.1169	1732.591926	54616.82094	713592.9292	12.86144271
64	0.034027585	0.965972415	53750.52497	1829.000532	52836.02471	658976.1083	12.25990088
65	0.037283938	0.962716062	51921.52444	1935.838873	50953.60501	606140.0836	11.67415807
66	0.040438821	0.959561179	49985.68557	2021.362203	48975.00447	555186.4786	11.10690935
67	0.043708073	0.956291927	47964.32337	2096.428152	46916.10929	506211.4741	10.55391672
68	0.047882056	0.952117944	45867.89521	2196.24914	44769.77064	459295.3648	10.01343887
69	0.051655642	0.948344358	43671.64607	2255.886902	42543.70262	414525.5942	9.491870159
70	0.055766118	0.944233882	41415.75917	2309.596121	40260.96111	371981.8915	8.981650922
71	0.061776717	0.938223283	39106.16305	2415.850353	37898.23787	331720.9304	8.482574217
72	0.067872211	0.932127789	36690.3127	2490.252649	35445.18637	293822.6926	8.00818175
73	0.074121007	0.925878993	34200.06005	2534.942894	32932.5886	258377.5062	7.554884577
74	0.080422535	0.919577465	31665.11716	2546.588996	30391.82266	225444.9176	7.119661566
75	0.087323839	0.912676161	29118.52816	2542.741658	27847.15733	195053.0949	6.698590459
76	0.093857428	0.906142572	26575.7865	2494.334965	25328.61902	167205.9376	6.291664692
77	0.103946929	0.896053071	24081.45154	2503.192924	22829.85508	141877.3186	5.891560081
78	0.114012306	0.885987694	21578.25861	2460.187029	20348.1651	119047.4635	5.517009766

79	0.123862319	0.876137681	19118.07158	2368.008678	17934.06725	98699.2984	5.162617891
80	0.135743112	0.864256888	16750.06291	2273.705663	15613.21008	80765.23116	4.821786736
81	0.148205355	0.851794645	14476.35724	2145.47366	13403.62041	65152.02108	4.500581188
82	0.161456795	0.838543205	12330.88358	1990.904939	11335.43111	51748.40067	4.196649844
83	0.175824474	0.824175526	10339.97864	1818.021306	9430.967992	40412.96955	3.908419054
84	0.191481736	0.808518264	8521.957339	1631.799189	7706.057744	30982.00156	3.635549948
85	0.208386867	0.791613133	6890.15815	1435.818468	6172.248916	23275.94382	3.378143623
86	0.226601964	0.773398036	5454.339682	1235.964084	4836.35764	17103.6949	3.135795696
87	0.246184292	0.753815708	4218.375599	1038.497808	3699.126694	12267.33726	2.908071359
88	0.267184198	0.732815802	3179.87779	849.6130983	2755.071241	8568.210565	2.69450939
89	0.289642707	0.710357293	2330.264692	674.9441734	1992.792605	5813.139324	2.494626187
90	0.313588767	0.686411233	1655.320519	519.0899205	1395.775558	3820.346719	2.30791963
91	0.339036182	0.660963818	1136.230598	385.2232835	943.6189564	2424.57116	2.133872441
92	0.365980241	0.634019759	751.0073147	274.8538377	613.5803959	1480.952204	1.971954434
93	0.394394121	0.605605879	476.1534771	187.7921319	382.2574111	867.3718081	1.821622334
94	0.424225151	0.575774849	288.3613452	122.3301351	227.1962776	485.114397	1.682314239
95	0.45539108	0.54460892	166.03121	75.60913206	128.226644	257.9181194	1.553431547
96	0.48777654	0.51222346	90.42207797	44.10576835	68.3691938	129.6914754	1.434289925
97	0.521229947	0.478770053	46.31630962	24.1414476	34.24558582	61.3222816	1.323988938
98	0.55556114	0.44443886	22.17486203	12.31949162	16.01511622	27.07669577	1.221053363
99	0.590540118	0.409459882	9.855370405	5.819991604	6.945374603	11.06157956	1.122391052
100	0.625897261	0.374102739	4.035378801	2.525732539	2.772512532	4.116204956	1.020029385
101	0.661325448	0.338674552	1.509646262	0.998367491	1.010462517	1.343692425	0.890071044
102	0.696484475	0.303515525	0.511278771	0.356097726	0.333229908	0.333229908	0.651757763
103	0.731008088	0.268991912	0.155181045	0.155181045	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.088300828	0.911699172	100000	8830.082777	91876.32385	5999334.756	59.99334756
1	0.010645539	0.989354461	91169.91722	970.5528654	90684.64079	5907458.432	64.79613684
2	0.005301863	0.994698137	90199.36436	478.2246803	89960.25202	5816773.792	64.48796877
3	0.003865085	0.996134915	89721.13968	346.7797909	89547.74978	5726813.54	63.82903249
4	0.003162762	0.996837238	89374.35989	282.669839	89233.02497	5637265.79	63.07475429
5	0.003174202	0.996825798	89091.69005	282.7950259	88950.29253	5548032.765	62.27329128
6	0.002946629	0.997053371	88808.89502	261.686891	88678.05158	5459082.472	61.46999657
7	0.002553983	0.997446017	88547.20813	226.1480405	88434.13411	5370404.421	60.65018349
8	0.002193017	0.997806983	88321.06009	193.6895447	88224.21532	5281970.287	59.80419937
9	0.00204323	0.99795677	88127.37055	180.0644434	88037.33832	5193746.071	58.9345403
10	0.001928202	0.998071798	87947.3061	169.5801798	87862.51601	5105708.733	58.05417993
11	0.00186831	0.99813169	87777.72592	163.9960018	87695.72792	5017846.217	57.16537042
12	0.001731112	0.998268888	87613.72992	151.6691562	87537.89534	4930150.489	56.27143706
13	0.001539244	0.998460756	87462.06076	134.6254517	87394.74804	4842612.594	55.36815107
14	0.001572275	0.998427725	87327.43531	137.3027472	87258.78394	4755217.846	54.45273674
15	0.001796986	0.998203014	87190.13257	156.6794091	87111.79286	4667959.062	53.53769887
16	0.002102634	0.997897366	87033.45316	182.9994948	86941.95341	4580847.269	52.63317842
17	0.002350812	0.997649188	86850.45366	204.1691162	86748.3691	4493905.315	51.74302639
18	0.002478229	0.997521771	86646.28455	214.7293278	86538.91988	4407156.946	50.86377298
19	0.00259756	0.99740244	86431.55522	224.5111261	86319.29965	4320618.026	49.98889602
20	0.002866573	0.997133427	86207.04409	247.1188148	86083.48468	4234298.727	49.11778117
21	0.00318238	0.99681762	85959.92528	273.5571578	85823.1467	4148215.242	48.25754826
22	0.003445164	0.996554836	85686.36812	295.2036109	85538.76631	4062392.095	47.41001614
23	0.003378573	0.996621427	85391.16451	288.5003207	85246.91435	3976853.329	46.57218756
24	0.00337343	0.99662657	85102.66419	287.0879149	84959.12023	3891606.415	45.72837351
25	0.003277575	0.996722425	84815.57627	277.9894458	84676.58155	3806647.294	44.88146472
26	0.003475604	0.996724396	84537.58683	276.9116408	84399.13101	3721970.713	44.02740668
27	0.003313777	0.996686223	84260.67519	279.2211251	84121.06462	3637571.582	43.17045376
28	0.003369924	0.996630076	83981.45406	283.0111027	83839.94851	3553450.517	42.31232428
29	0.003314191	0.996685809	83698.44296	277.3926224	83559.74665	3469610.569	41.45370507
30	0.003418158	0.996581842	83421.05034	285.1463379	83278.47717	3386050.822	40.58988479
31	0.003491602	0.996508398	83135.904	290.2774719	82990.76526	3302772.345	39.72738836
32	0.003715846	0.996284154	82845.62653	307.8416011	82691.70573	3219781.58	38.86483469
33	0.003739286	0.996260714	82537.78492	308.6324155	82383.46872	3137089.874	38.00792421
34	0.003920602	0.996079398	82229.15251	322.387805	82067.95861	3054706.405	37.1487035
35	0.003987712	0.996012288	81906.7647	326.6205499	81743.45443	2972638.447	36.29295404
36	0.004046153	0.995953847	81580.14415	330.0857588	81415.10127	2890894.992	35.43625746
37	0.004164728	0.995835272	81250.0584	338.3843757	81080.86621	2809479.891	34.57818919
38	0.0043602	0.99566398	80911.67402	352.7911178	80735.27846	2728399.025	33.72070913
39	0.004334731	0.995665269	80558.8829	349.2010765	80384.28236	2647663.746	32.86619242
40	0.004535695	0.995464305	80209.68183	363.8066836	80027.77848	2567279.464	32.00710195
41	0.004701982	0.995298018	79845.87514	375.4339038	79658.15819	2487251.685	31.15065971
42	0.004899746	0.995100254	79470.44124	389.3849741	79275.74875	2407593.527	30.29545942
43	0.005305141	0.994694859	79081.05626	419.5361674	78871.28818	2328317.779	29.44216843
44	0.005680638	0.994319362	78661.5201	446.846759	78438.0963	2249446.49	28.59652963
45	0.005868399	0.994131601	78214.67251	458.9949381	77985.17504	2171008.394	27.75704768
46	0.006196529	0.993803471	77755.67757	481.8152812	77514.76993	2093023.219	26.91794714
47	0.00668715	0.99331285	77273.86229	516.7418928	77015.49134	2015508.449	26.0826674
48	0.007173149	0.992826851	76757.12039	550.5902844	76481.82525	1938492.958	25.25489424
49	0.00775131	0.992248669	76206.53011	590.7004454	75911.17989	1862011.132	24.43374774
50	0.008432298	0.991567702	75615.82966	637.6151941	75297.02207	1786099.953	23.62071488
51	0.008926254	0.991073746	74978.21447	669.2746019	74643.57717	1710802.931	22.81733358
52	0.009508464	0.990491536	74308.93987	706.5638476	73955.65795	1636159.353	22.01833799
53	0.010074157	0.989925843	73602.37602	741.4819222	73231.63506	1562203.695	21.22490849
54	0.010662661	0.989337339	72860.8941	776.8910037	72472.4486	1488972.06	20.43581922
55	0.011768169	0.988231831	72084.0031	848.2967185	71659.85474	1416499.612	19.65067908
56	0.0132503	0.9867497	71235.70638	943.8945074	70763.75912	1344839.757	18.87873126
57	0.014329968	0.985670032	70291.81187	1007.279425	69788.17216	1274075.998	18.12552506
58	0.01587069	0.98412931	69284.53244	1099.593319	68734.73578	1204287.826	17.38177026
59	0.017265389	0.982734611	68184.93913	1177.239507	67596.31937	1135553.09	16.65401633
60	0.018923408	0.981076592	67007.69962	1268.014056	66373.69259	1067956.771	15.93782172
61	0.020712414	0.979287586	65739.68556	1361.627551	65058.87179	1001583.078	15.23559277
62	0.02274856	0.97725144	64378.05801	1464.50814	63645.80394	936524.2062	14.54725779
63	0.024592836	0.975407164	62913.54987	1547.222592	62139.93857	872878.4023	13.87425132
64	0.026848849	0.973151151	61366.32728	1647.615283	60542.51964	810738.4637	13.21145487
65	0.02962612	0.97037388	59718.712	1769.233746	58834.09512	750195.944	12.56215881
66	0.033709508	0.966290492	57949.47825	1953.448376	56972.75406	691361.8489	11.93042405
67	0.036870251	0.963129749	55996.02987	2064.587685	54963.73603	634389.0949	11.32917988
68	0.040695293	0.959304707	53931.44219	2194.755858	52834.06426	579425.3588	10.74373937
69	0.044447224	0.95552776	51736.68633	2299.552106	50586.91028	526591.2946	10.17829575
70	0.048074114	0.951925886	49437.13422	2376.646427	48248.81101	476004.3843	9.628478506
71	0.053006197	0.946993803	47060.4878	2494.497474	45813.23906	427755.5733	9.089484476
72	0.059022752	0.940977248	44565.99032	2630.407379	43250.78663	381942.3342	8.570264712
73	0.065245888	0.934754112	41935.58294	2736.124363	40567.52076	338691.5476	8.076471669
74	0.071312185	0.928687815	39199.45858	2795.399047	37801.75906	298124.0268	7.605309808
75	0.078726436	0.921273564	36404.05953	2865.961847	34971.07861	260322.2678	7.150913143
76	0.087058431	0.912941569	33538.09769	2919.774148	32078.21061	225351.1892	6.719259728
77	0.09606655	0.90393345	30618.32354	2941.39671	29147.62518	193272.9785	6.312330533
78	0.105425505	0.894574495	27676.92683	2917.853978	26217.99984	164125.3534	5.930042536

79	0.112299619	0.887700381	24759.07285	2780.434446	23368.85563	137907.3535	5.569972444
80	0.122266703	0.877733297	21978.63841	2687.25566	20635.01058	114538.4979	5.211355489
81	0.132996865	0.867003135	19291.38275	2565.693434	18008.53603	93903.48731	4.867639015
82	0.145800328	0.854199672	16725.68931	2438.610986	15506.38382	75894.95128	4.53762771
83	0.159926531	0.840073469	14287.07833	2284.882875	13144.63689	60388.56747	4.226796136
84	0.174415132	0.825584868	12002.19545	2093.3645	10955.5132	47243.93058	3.936274057
85	0.190015774	0.809984226	9908.83095	1882.834186	8967.413857	36288.41738	3.66222994
86	0.206817013	0.793182987	8025.996764	1659.912677	7196.040426	27321.00352	3.40406361
87	0.224875527	0.775124473	6366.084087	1431.576513	5650.29583	20124.96309	3.161278239
88	0.24424331	0.75575669	4934.507573	1205.220464	4331.897342	14474.66726	2.933355973
89	0.264965802	0.735034198	3729.28711	988.1335504	3235.220334	10142.76992	2.719761076
90	0.287079734	0.712920266	2741.153559	786.9296355	2347.688741	6907.549589	2.519942586
91	0.310610691	0.689389309	1954.223924	607.0028435	1650.722502	4559.860847	2.333335905
92	0.335570395	0.664429605	1347.22108	452.0875103	1121.177325	2909.138345	2.159362252
93	0.361953746	0.638046254	895.1335698	323.996949	733.1350953	1787.96102	1.997423715
94	0.389735665	0.610264335	571.1366208	222.5923106	459.8404655	1054.825925	1.846888969
95	0.418867823	0.581132177	348.5443102	145.9939964	275.547312	594.9854594	1.707058305
96	0.449275378	0.550724622	202.5503137	91.00086873	157.0498794	319.4381475	1.577080487
97	0.480853863	0.519146137	111.549445	53.63898156	84.72995424	162.3882681	1.455751466
98	0.513466441	0.486533559	57.91046346	29.73507959	43.04292366	77.65831385	1.341006602
99	0.546941761	0.453058239	28.17538387	15.41029408	20.47023683	34.61539019	1.228568539
100	0.581072708	0.418927292	12.76508979	7.417445287	9.056367146	14.14515336	1.108112328
101	0.615616369	0.384383631	5.347644502	3.292097492	3.701595756	5.088786216	0.951593961
102	0.650295563	0.349704437	2.05554701	1.3367131	1.38719046	1.38719046	0.674852218
103	0.684802248	0.315197752	0.71883391	0.71883391	0	0	0