

Contribution from Dr Jitka Rychtarikova

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.104913288	0.895086712	100000	10491.32884	90347.97747	5670118.223	56.70118223
1	0.010720252	0.989279748	89508.67116	959.555545	89028.89339	5579770.246	62.33776207
2	0.005582754	0.994417246	88549.11562	494.347932	88301.94165	5490741.352	62.00786213
3	0.00357652	0.99642348	88054.76768	314.9296587	87897.30285	5402439.411	61.35317318
4	0.002911184	0.997088816	87739.83802	255.4267926	87612.12463	5314542.108	60.57159698
5	0.003022213	0.996977787	87484.41123	264.396544	87352.21296	5226929.983	59.74698703
6	0.003005968	0.996994032	87220.01469	262.1805961	87088.92439	5139577.77	58.92658685
7	0.00274352	0.99725648	86957.83409	238.5705209	86838.54883	5052488.846	58.10274484
8	0.00245407	0.99754593	86719.26357	212.8151336	86612.856	4965650.297	57.26121386
9	0.002058086	0.997941914	86506.44844	178.0377182	86417.42958	4879037.441	56.40085253
10	0.001761642	0.998238358	86328.41072	152.0797737	86252.37083	4792620.012	55.51613857
11	0.001676823	0.998323177	86176.33095	144.5024543	86104.07972	4706367.641	54.61322836
12	0.001607999	0.998392001	86031.82849	138.3390783	85962.65895	4620263.561	53.70411907
13	0.001637901	0.998362099	85893.48941	140.68502	85823.1469	4534300.902	52.78980902
14	0.00180224	0.99819776	85752.80439	154.5471568	85675.53081	4448477.755	51.87559505
15	0.002015376	0.997984624	85598.25724	172.5126453	85512.00091	4362802.224	50.96835339
16	0.002375979	0.997624021	85425.74459	202.9697796	85324.2597	4277290.223	50.07027148
17	0.002801437	0.997198563	85222.77481	238.7462003	85103.40171	4191965.964	49.18832992
18	0.00306408	0.99693592	84984.02861	260.3978476	84853.82969	4106862.562	48.32511037
19	0.003314699	0.996685301	84723.63076	280.8333283	84583.2141	4022008.732	47.47210071
20	0.003453122	0.996546878	84442.79743	291.5912711	84297.0018	3937425.518	46.62831689
21	0.003554178	0.996445822	84151.20616	299.0883498	84001.66199	3853128.516	45.78815554
22	0.003623182	0.996376818	83852.11781	303.8114456	83700.21209	3769126.854	44.94969182
23	0.003686341	0.996313659	83548.30637	307.9875277	83394.3126	3685426.642	44.11132676
24	0.003444123	0.996555877	83240.31884	286.6899068	83096.97389	3602032.33	43.2726878
25	0.003410327	0.996589673	82953.62893	282.898979	82812.17944	3518935.356	42.42051133
26	0.003315394	0.996684606	82670.72995	274.0860709	82533.68692	3436123.176	41.56396319
27	0.003323082	0.996676918	82396.64388	273.8107967	82259.73849	3353589.49	40.70055929
28	0.00345526	0.99654474	82122.83309	283.7557092	81980.95523	3271329.751	39.83459445
29	0.003596287	0.996403713	81839.07738	294.3168332	81691.91896	3189348.796	38.97097692
30	0.003469344	0.996530656	81544.76054	282.9068021	81403.30714	3107656.877	38.10982896
31	0.003479384	0.996520616	81261.85374	282.7411545	81120.48317	3026253.57	37.24076464
32	0.003552028	0.996447972	80979.11259	287.6400643	80835.29256	2945133.087	36.36904619
33	0.003790721	0.996209279	80691.47252	305.8788567	80538.5331	2864297.794	35.49690822
34	0.004112263	0.995887737	80385.59367	330.5666629	80220.31034	2783759.261	34.63007653
35	0.004369224	0.995630776	80055.027	349.778362	79880.13782	2703538.951	33.77100791
36	0.004620821	0.995379179	79705.24864	368.3036874	79521.0968	2623658.813	32.91701434
37	0.004995919	0.995004081	79336.94495	396.3609554	79138.76448	2544137.716	32.06750294
38	0.005451964	0.994548036	78940.584	430.3811913	78725.3934	2464998.951	31.22600349
39	0.005913572	0.994086428	78510.20281	464.2757228	78278.06495	2386273.558	30.39443885
40	0.006278753	0.993721247	78045.92709	490.0311091	77800.91153	2307995.493	29.57227339
41	0.006508576	0.993491424	77555.89598	504.7784751	77303.50674	2230194.582	28.75596437
42	0.006724039	0.993275961	77051.1175	518.0947324	76792.07013	2152891.075	27.94107528
43	0.007117969	0.992882031	76533.02277	544.7597185	76260.64291	2076099.005	27.12683923
44	0.007564608	0.992435392	75988.26305	574.8214196	75700.85234	1999838.362	26.31772699
45	0.008281865	0.991718135	75413.44163	624.5639356	75101.15966	1924137.509	25.51451661
46	0.008977448	0.991022552	74788.87769	671.4132407	74453.17107	1849036.35	24.72341352
47	0.009758163	0.990241837	74117.46445	723.2503007	73755.8393	1774583.179	23.94284791
48	0.010427226	0.989572774	73394.21415	765.2980799	73011.56511	1700827.339	23.17386131
49	0.011085647	0.988914353	72628.91607	805.1385381	72226.3468	1627815.774	22.41277803
50	0.011816578	0.988183422	71823.77754	848.7112918	71399.42189	1555589.427	21.65841884
51	0.012569205	0.987430795	70975.06624	892.1001298	70529.01618	1484190.006	20.91142825
52	0.013238625	0.986761375	70082.96611	927.8020814	69619.06507	1413660.989	20.17124942
53	0.014080114	0.985919886	69155.16403	973.7126071	68668.30773	1344041.924	19.43516356
54	0.015426776	0.984573224	68181.45143	1051.819999	67655.54143	1275373.617	18.70558033
55	0.016880143	0.983119857	67129.63143	1133.157784	66563.05253	1207718.075	17.99083429
56	0.018348795	0.981651205	65996.47364	1210.955746	65390.99577	1141155.023	17.29115148
57	0.020201529	0.979798471	64785.5179	1308.766512	64131.13464	1075764.027	16.60500775
58	0.021697247	0.978302753	63476.75139	1377.270752	62788.11601	1011632.892	15.93706152
59	0.02329567	0.97670433	62099.48063	1446.649016	61376.15613	948844.7762	15.27943175
60	0.025036738	0.974963262	60652.83162	1518.549034	59893.5571	887468.6201	14.63194045
61	0.02716059	0.97283941	59134.28258	1606.121976	58331.2216	827575.063	13.99484405
62	0.029125806	0.970874194	57528.16061	1675.554052	56690.38358	769243.8414	13.37160502
63	0.031859633	0.968140367	55852.60656	1779.44352	54962.8848	712553.4578	12.75774761
64	0.035047016	0.964952984	54073.16304	1895.102987	53125.61154	657590.573	12.16112645
65	0.038565718	0.961434282	52178.06005	2012.284326	51171.91789	604464.9615	11.58465763
66	0.041053264	0.958946736	50165.77572	2059.468857	49136.04129	553293.0436	11.02929309
67	0.044511451	0.955488549	48106.30687	2141.281541	47035.6661	504157.0023	10.48006042
68	0.047292103	0.952707897	45965.02532	2173.782703	44878.13397	457121.3362	9.944981711
69	0.051510243	0.948489757	43791.24262	2255.697568	42663.39384	412243.2022	9.413827458
70	0.056718894	0.943281106	41535.54505	2355.850195	40357.61996	369579.8084	8.897916421
71	0.061567834	0.938432166	39179.69486	2412.208958	37973.59038	329222.1884	8.402877808
72	0.069102469	0.930897531	36767.4859	2540.724061	35497.12387	291248.5981	7.921362882
73	0.074804168	0.925195832	34226.76184	2560.304447	32946.60961	255751.4742	7.472266158
74	0.081341766	0.918658234	31666.45739	2575.805553	30378.55461	222804.8646	7.035989591
75	0.089148107	0.910851893	29090.65184	2593.376546	27793.96357	192426.31	6.614712899
76	0.096356315	0.903643685	26497.27529	2553.179809	25220.68539	164632.3464	6.213180207
77	0.105040585	0.894959415	23944.09548	2515.101791	22686.54459	139411.661	5.822381602
78	0.115852423	0.884147577	21428.99369	2482.600843	20187.69327	116725.1164	5.447064762

79	0.126526951	0.873473049	18946.39285	2397.229327	17747.77818	96537.42315	5.095293015
80	0.137589634	0.862410366	16549.16352	2276.993346	15410.66685	78789.64496	4.760944253
81	0.150031992	0.849968008	14272.17017	2141.282128	13201.52911	63378.97812	4.440738678
82	0.163710418	0.836289582	12130.88805	1985.952754	11137.91167	50177.44901	4.136337654
83	0.178552038	0.821447962	10144.93529	1811.398872	9239.235858	39039.53733	3.848180023
84	0.194627301	0.805372699	8333.536422	1621.933704	7522.56957	29800.30148	3.575949029
85	0.212004782	0.787995218	6711.602718	1422.891871	6000.156783	22277.73191	3.319286442
86	0.230749527	0.769250473	5288.710847	1220.367527	4678.527084	16277.57512	3.077796384
87	0.250921076	0.749078924	4068.343321	1020.833082	3557.926779	11599.04804	2.851049463
88	0.272571122	0.727428878	3047.510238	830.6632845	2632.178596	8041.121261	2.638587119
89	0.295740806	0.704259194	2216.846954	655.6121045	1889.040902	5408.942665	2.439926065
90	0.32045763	0.67954237	1561.234849	500.3096191	1311.08004	3519.901763	2.25456264
91	0.346732014	0.653267986	1060.92523	367.8567413	876.9968595	2208.821724	2.081976808
92	0.374553536	0.625446464	693.0684888	259.5912533	563.2728622	1331.824864	1.921635287
93	0.403886937	0.596113063	433.4772355	175.075793	345.939339	768.552002	1.772992764
94	0.434668003	0.565331997	258.4014426	112.318839	202.2420231	422.612663	1.635488791
95	0.466799512	0.533200488	146.0826036	68.19128798	111.9869596	220.3706399	1.508534449
96	0.500147467	0.499852533	77.89131557	38.95714418	58.41274348	108.3836804	1.391473229
97	0.534537926	0.465462074	38.93417139	20.81179123	28.52827578	49.97093687	1.283472464
98	0.569754778	0.430245222	18.12238016	10.32531268	12.95972382	21.44266109	1.183214396
99	0.605538896	0.394461104	7.797067481	4.721427634	5.436353664	8.482937273	1.087965096
100	0.641589127	0.358410873	3.075639848	1.973297086	2.088991304	3.046583609	0.990552783
101	0.67756558	0.32243442	1.102342761	0.746909512	0.728888005	0.957592305	0.868688341
102	0.713095637	0.286904363	0.355433249	0.253457899	0.228704299	0.228704299	0.643452181
103	0.747783024	0.252216976	0.10197535	0.10197535	0	0	0

vik	qx	px	lx	dx	Lx_1	Tx	ex
0	0.086074375	0.913925625	100000	8607.437523	92081.15748	6056994.147	60.56994147
1	0.009114464	0.990885536	91392.56248	832.9942652	90976.06534	5964912.989	65.26694107
2	0.004264857	0.995735143	90559.56821	386.223582	90366.45642	5873936.924	64.86268696
3	0.003850582	0.996149418	90173.34463	347.219841	89999.73471	5783570.467	64.1383603
4	0.002696174	0.997303826	89826.12479	242.186821	89705.03138	5693570.733	63.38435223
5	0.002880852	0.997119148	89583.93797	258.0780724	89454.89893	5603865.701	62.55435772
6	0.002666854	0.997333146	89325.8599	238.2190302	89206.75038	5514410.802	61.73364364
7	0.002537404	0.997462596	89087.64087	226.0513785	88974.61518	5425204.052	60.89738149
8	0.002150868	0.997849132	88861.58949	191.1295637	88766.02471	5336229.437	60.05102393
9	0.00184826	0.99815174	88670.45992	163.8860443	88588.5169	5247463.412	59.17938642
10	0.001641956	0.998358044	88506.57388	145.3238889	88433.91193	5158874.895	58.288042
11	0.001561602	0.998438398	88361.24999	137.9850945	88292.25744	5070440.983	57.38308347
12	0.001469709	0.998530291	88223.2649	129.6625397	88158.43363	4982148.726	56.47205113
13	0.001447747	0.998552253	88093.60236	127.5372279	88029.83374	4893990.292	55.55443484
14	0.001426556	0.998573444	87966.06513	125.4884941	87903.32088	4805960.458	54.63425528
15	0.001629146	0.998370854	87840.57663	143.1050835	87769.02409	4718057.138	53.71159114
16	0.001966827	0.998033173	87697.47155	172.4857568	87611.22867	4630288.113	52.79842203
17	0.002169603	0.997830397	87524.98579	189.8944875	87430.03855	4542676.885	51.90148669
18	0.002500101	0.997499899	87335.09131	218.346556	87225.91803	4455246.846	51.01325
19	0.002629528	0.997370472	87116.74475	229.0758856	87002.20681	4368020.928	50.13985475
20	0.002713861	0.997286139	86887.66886	235.8010531	86769.76834	4281018.721	49.27072826
21	0.002951136	0.997048864	86651.86781	255.7214555	86524.00708	4194248.953	48.40344541
22	0.003153511	0.996846489	86396.14636	272.4512368	86259.92074	4107724.946	47.54523343
23	0.003145354	0.996854646	86123.69512	270.8895449	85988.25035	4021465.025	46.69406044
24	0.003274826	0.996725174	85852.80557	281.1529879	85712.22908	3935476.775	45.83981558
25	0.003127692	0.996872308	85571.65259	267.6418028	85437.83168	3849764.546	44.98878343
26	0.003112153	0.996887847	85304.01078	265.4791337	85171.27122	3764326.714	44.12836723
27	0.00311018	0.99688982	85038.53165	264.4851504	84906.28907	3679155.443	43.26456927
28	0.003135739	0.996864261	84774.0465	265.8292861	84641.13186	3594249.154	42.39798974
29	0.00327232	0.99672768	84508.21721	276.5379477	84369.94824	3509608.022	41.52978418
30	0.003337966	0.996662034	84231.67927	281.1624465	84091.09804	3425238.074	40.66448756
31	0.003288626	0.996711374	83950.51682	276.0818746	83812.47588	3341146.976	39.79900425
32	0.003334252	0.996665748	83674.43494	278.9916413	83534.93912	3257334.5	38.92867041
33	0.003466888	0.996533112	83395.4433	289.1226604	83250.88197	3173799.561	38.05722993
34	0.003540038	0.996459962	83106.32064	294.1995041	82959.22089	3090548.679	37.18788962
35	0.003939436	0.996060564	82812.12114	326.2330424	82649.00462	3007589.458	36.31822753
36	0.004057998	0.995942002	82485.8881	334.7275445	82318.52432	2924940.453	35.45988921
37	0.004057653	0.995942347	82151.16055	333.3409259	81984.49009	2842621.929	34.6023344
38	0.004130651	0.995869349	81817.81963	337.960842	81648.8392	2760637.439	33.74127362
39	0.0044025	0.9955975	81479.85878	358.7150455	81300.50126	2678988.6	32.87915124
40	0.004539019	0.995460981	81121.14374	368.2103791	80937.03855	2597688.098	32.02233078
41	0.004771097	0.995228903	80752.93336	385.2800828	80560.29332	2516751.06	31.16606364
42	0.004957027	0.995042973	80367.65328	398.3846166	80168.46097	2436190.766	30.31307581
43	0.005180078	0.994819922	79969.26866	414.2470168	79762.14515	2356022.306	29.46159625
44	0.00510599	0.994489401	79555.02164	438.3957851	79335.82375	2276260.16	28.61240074
45	0.005989354	0.994010646	79116.62586	473.8574516	78879.69713	2196924.337	27.76817531
46	0.006191632	0.993808368	78642.76841	486.9270902	78399.30486	2118044.639	26.93247812
47	0.006379627	0.993620373	78155.84132	498.6050854	77906.53877	2039645.335	26.09715794
48	0.006916723	0.993083277	77657.23623	537.1335612	77388.66945	1961738.796	25.26150673
49	0.00770477	0.99229523	77120.10267	594.192657	76823.00634	1884350.126	24.43396807
50	0.0084869	0.9915131	76525.91001	649.4677748	76201.17613	1807527.12	23.61980563
51	0.009146805	0.990853195	75876.44224	694.0270448	75529.42872	1731325.944	22.81770063
52	0.009684592	0.990315408	75182.41519	728.1110152	74818.35969	1655796.515	22.02372072
53	0.010153478	0.989846522	74454.30418	755.9701206	74076.31912	1580978.156	21.23420765
54	0.010582465	0.989417535	73698.33406	779.9100043	73308.37906	1506901.836	20.44689145
55	0.011712739	0.988287261	72918.42405	854.0744478	72491.38681	1433593.457	19.66023644
56	0.012790251	0.987209749	72064.34957	921.7211069	71603.48902	1361102.071	18.887315
57	0.013992328	0.986007672	71142.62847	995.4510242	70644.90296	1289498.582	18.12554033
58	0.015792358	0.984207642	70147.17744	1107.78933	69593.28278	1218853.679	17.37566247
59	0.017292421	0.982707579	69039.38811	1193.85817	68442.45903	1149260.396	16.64644527
60	0.018626416	0.981373584	67845.52994	1263.71904	67213.67042	1080817.937	15.9305696
61	0.020973362	0.979026638	66581.8109	1396.444406	65883.5887	1013604.266	15.22344095
62	0.022567724	0.977432276	65185.3665	1471.085354	64449.82382	947720.6776	14.53885632
63	0.024485177	0.975514823	63714.28114	1560.055427	62934.25343	883270.8538	13.86299646
64	0.027111993	0.972888007	62154.22572	1685.124925	61311.66325	820336.6004	13.19840431
65	0.029411082	0.970588918	60469.10079	1778.461709	59579.86994	759024.9371	12.55227756
66	0.032408875	0.967591125	58690.63908	1902.097614	57739.59028	699445.0672	11.91748937
67	0.036368613	0.963631387	56788.54147	2065.320476	55755.88123	641705.4769	11.29991122
68	0.03966011	0.96033989	54723.22099	2170.328989	53638.0565	585949.5957	10.70751292
69	0.043437393	0.956562607	52552.892	2282.760607	51411.5117	532311.5392	10.12906272
70	0.047801206	0.952198794	50270.1314	2402.972895	49068.64495	480900.0275	9.566317297
71	0.052975634	0.947024366	47867.1585	2535.793062	46599.26197	431831.3825	9.021454293
72	0.058864455	0.941135545	45331.36544	2668.406134	43997.16237	385232.1206	8.498136265
73	0.065294861	0.934705139	42662.95931	2785.671989	41270.12331	341234.9582	7.998389323
74	0.072327126	0.927672874	39877.28732	2884.209584	38435.18253	299964.8349	7.522197598
75	0.079822532	0.920177468	36993.07773	2952.881136	35516.63717	261529.6524	7.069691639
76	0.087082051	0.912917949	34040.1966	2964.290131	32558.05153	226013.0152	6.639591947
77	0.095422042	0.904577958	31075.90647	2965.326443	29593.24324	193454.9637	6.225239604
78	0.105478636	0.894521364	28110.58002	2965.065638	26628.0472	163861.7204	5.829183186

79	0.114453811	0.885546189	25145.51439	2877.999945	23706.51441	137233.6732	5.457580669
80	0.123532458	0.876467542	22267.51444	2750.760798	20892.13404	113527.1588	5.098330984
81	0.136563381	0.863436619	19516.75364	2665.273864	18184.11671	92635.02476	4.746436137
82	0.149837846	0.850162154	16851.47978	2524.989431	15588.98506	74450.90805	4.418063519
83	0.164274508	0.835725492	14326.49035	2353.477154	13149.75177	58861.92299	4.108607312
84	0.179468407	0.820531593	11973.01319	2148.77761	10898.62439	45712.17122	3.817933755
85	0.196018739	0.803981261	9824.235584	1925.73427	8861.368449	34813.54683	3.543639252
86	0.213882812	0.786117188	7898.501313	1689.35367	7053.824478	25952.17838	3.285709194
87	0.233122527	0.766877473	6209.147644	1447.492192	5485.401547	18898.3539	3.043630944
88	0.253793602	0.746206398	4761.655451	1208.477689	4157.416607	13412.95236	2.816867473
89	0.275943181	0.724056819	3553.177762	980.4751749	3062.940175	9255.535751	2.604861442
90	0.299607095	0.700392905	2572.702587	770.7999488	2187.302613	6192.595576	2.407039044
91	0.324806761	0.675193239	1801.902639	585.2701595	1509.267559	4005.292963	2.222813196
92	0.351545751	0.648454249	1216.632479	427.7019784	1002.78149	2496.025404	2.051585377
93	0.379806083	0.620193917	788.9305007	299.6406031	639.1101992	1493.243914	1.89274456
94	0.409544317	0.590455683	489.2898977	200.3858967	389.0969493	854.1337146	1.74565982
95	0.44068759	0.55931241	288.9040009	127.3164078	225.245797	465.0367653	1.609658446
96	0.473129773	0.526870227	161.5875931	76.45190127	123.3616424	239.7909683	1.483968934
97	0.506727989	0.493272011	85.13569181	43.14063788	63.56537287	116.4293258	1.367573615
98	0.541299789	0.458700211	41.99505393	22.73191383	30.62909702	52.86395297	1.258813789
99	0.576621362	0.423378638	19.2631401	11.10753808	13.70937106	22.23485595	1.154269544
100	0.612427171	0.387572829	8.155602023	4.994712277	5.658245884	8.525484888	1.045353226
101	0.648411472	0.351588528	3.160889746	2.049557172	2.13611116	2.867239004	0.907098708
102	0.684232137	0.315767863	1.111332575	0.760409462	0.731127843	0.731127843	0.657883932
103	0.719517186	0.280482814	0.350923112	0.350923112	0	0	0