

A

Durbin-Watson Significance Tables

Table A-1
Models with an intercept (from Savin and White)

Durbin-Watson Statistic: 1 Per Cent Significance Points of dL and dU																				
	k*=1		k'=2		k'=3		k'=4		k'=5		k'=6		k'=7		k'=8		k'=9		k'=10	
n	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU
6	0.390	1.142	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
7	0.435	1.036	0.294	1.676	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
8	0.497	1.003	0.345	1.489	0.229	2.102	----	----	----	----	----	----	----	----	----	----	----	----	----	----
9	0.554	0.998	0.408	1.389	0.279	1.875	0.183	2.433	----	----	----	----	----	----	----	----	----	----	----	----
10	0.604	1.001	0.466	1.333	0.340	1.733	0.230	2.193	0.150	2.690	----	----	----	----	----	----	----	----	----	----
11	0.653	1.010	0.519	1.297	0.396	1.640	0.286	2.030	0.193	2.453	0.124	2.892	----	----	----	----	----	----	----	----
12	0.697	1.023	0.569	1.274	0.449	1.575	0.339	1.913	0.244	2.280	0.164	2.665	0.105	3.053	----	----	----	----	----	----
13	0.738	1.038	0.616	1.261	0.499	1.526	0.391	1.826	0.294	2.150	0.211	2.490	0.140	2.838	0.090	3.182	----	----	----	----
14	0.776	1.054	0.660	1.254	0.547	1.490	0.441	1.757	0.343	2.049	0.257	2.354	0.183	2.667	0.122	2.981	0.078	3.287	----	----
15	0.811	1.070	0.700	1.252	0.591	1.465	0.487	1.705	0.390	1.967	0.303	2.244	0.226	2.530	0.161	2.817	0.107	3.101	0.068	3.374
16	0.844	1.086	0.738	1.253	0.633	1.447	0.532	1.664	0.437	1.901	0.349	2.153	0.269	2.416	0.200	2.681	0.142	2.944	0.094	3.201
17	0.873	1.102	0.773	1.255	0.672	1.432	0.574	1.631	0.481	1.847	0.393	2.078	0.313	2.319	0.241	2.566	0.179	2.811	0.127	3.053
18	0.902	1.118	0.805	1.259	0.708	1.422	0.614	1.604	0.522	1.803	0.435	2.015	0.355	2.238	0.282	2.467	0.216	2.697	0.160	2.925
19	0.928	1.133	0.835	1.264	0.742	1.416	0.650	1.583	0.561	1.767	0.476	1.963	0.396	2.169	0.322	2.381	0.255	2.597	0.196	2.813
20	0.952	1.147	0.862	1.270	0.774	1.410	0.684	1.567	0.598	1.736	0.515	1.918	0.436	2.110	0.362	2.308	0.294	2.510	0.232	2.174
21	0.975	1.161	0.889	1.276	0.803	1.408	0.718	1.554	0.634	1.712	0.552	1.881	0.474	2.059	0.400	2.244	0.331	2.434	0.268	2.625
22	0.997	1.174	0.915	1.284	0.832	1.407	0.748	1.543	0.666	1.691	0.587	1.849	0.510	2.015	0.437	2.188	0.368	2.367	0.304	2.548
23	1.017	1.186	0.938	1.290	0.858	1.407	0.777	1.535	0.699	1.674	0.620	1.821	0.545	1.977	0.473	2.140	0.404	2.308	0.340	2.479
24	1.037	1.199	0.959	1.298	0.881	1.407	0.805	1.527	0.728	1.659	0.652	1.797	0.578	1.944	0.507	2.097	0.439	2.255	0.375	2.417
25	1.055	1.210	0.981	1.305	0.906	1.408	0.832	1.521	0.756	1.645	0.682	1.776	0.610	1.915	0.540	2.059	0.473	2.209	0.409	2.362
26	1.072	1.222	1.000	1.311	0.928	1.410	0.855	1.517	0.782	1.635	0.711	1.759	0.640	1.889	0.572	2.026	0.505	2.168	0.441	2.313
27	1.088	1.232	1.019	1.318	0.948	1.413	0.878	1.514	0.808	1.625	0.738	1.743	0.669	1.867	0.602	1.997	0.536	2.131	0.473	2.269
28	1.104	1.244	1.036	1.325	0.969	1.414	0.901	1.512	0.832	1.618	0.764	1.729	0.696	1.847	0.630	1.970	0.566	2.098	0.504	2.229
29	1.119	1.254	1.053	1.332	0.988	1.418	0.921	1.511	0.855	1.611	0.788	1.718	0.723	1.830	0.658	1.947	0.595	2.068	0.533	2.193
30	1.134	1.264	1.070	1.339	1.006	1.421	0.941	1.510	0.877	1.606	0.812	1.707	0.748	1.814	0.684	1.925	0.622	2.041	0.562	2.160
31	1.147	1.274	1.085	1.345	1.022	1.425	0.960	1.509	0.897	1.601	0.834	1.698	0.772	1.800	0.710	1.906	0.649	2.017	0.589	2.131
32	1.160	1.283	1.100	1.351	1.039	1.428	0.978	1.509	0.917	1.597	0.856	1.690	0.794	1.788	0.734	1.889	0.674	1.995	0.615	2.104
33	1.171	1.291	1.114	1.358	1.055	1.432	0.995	1.510	0.935	1.594	0.876	1.683	0.816	1.776	0.757	1.874	0.698	1.975	0.641	2.080
34	1.184	1.298	1.128	1.364	1.070	1.436	1.012	1.511	0.954	1.591	0.896	1.677	0.837	1.766	0.779	1.860	0.722	1.957	0.665	2.057
35	1.195	1.307	1.141	1.370	1.085	1.439	1.028	1.512	0.971	1.589	0.914	1.671	0.857	1.757	0.800	1.847	0.744	1.940	0.689	2.037
36	1.205	1.315	1.153	1.376	1.098	1.442	1.043	1.513	0.987	1.587	0.932	1.666	0.877	1.749	0.821	1.836	0.766	1.925	0.711	2.018
37	1.217	1.322	1.164	1.383	1.112	1.446	1.058	1.514	1.004	1.585	0.950	1.662	0.895	1.742	0.841	1.825	0.787	1.911	0.733	2.001
38	1.227	1.330	1.176	1.388	1.124	1.449	1.072	1.515	1.019	1.584	0.966	1.658	0.913	1.735	0.860	1.816	0.807	1.899	0.754	1.985
39	1.237	1.337	1.187	1.392	1.137	1.452	1.085	1.517	1.033	1.583	0.982	1.655	0.930	1.729	0.878	1.807	0.826	1.887	0.774	1.970
40	1.246	1.344	1.197	1.398	1.149	1.456	1.098	1.518	1.047	1.583	0.997	1.652	0.946	1.724	0.895	1.799	0.844	1.876	0.749	1.956
45	1.288	1.376	1.245	1.424	1.201	1.474	1.156	1.528	1.111	1.583	1.065	1.643	1.019	1.704	0.974	1.768	0.927	1.834	0.881	1.902
50	1.324	1.403	1.285	1.445	1.245	1.491	1.206	1.537	1.164	1.587	1.123	1.639	1.081	1.692	1.039	1.748	0.997	1.805	0.955	1.864
55	1.356	1.428	1.320	1.466	1.284	1.505	1.246	1.548	1.209	1.592	1.172	1.638	1.134	1.685	1.095	1.734	1.057	1.785	1.018	1.837
60	1.382	1.449	1.351	1.484	1.317	1.520	1.283	1.559	1.248	1.598	1.214	1.639	1.179	1.682	1.144	1.726	1.108	1.771	1.072	1.817
65	1.407	1.467	1.377	1.500	1.346	1.534	1.314	1.568	1.283	1.604	1.251	1.642	1.218	1.680	1.186	1.720	1.153	1.761	1.120	1.802
70	1.429	1.485	1.400	1.514	1.372	1.546	1.343	1.577	1.313	1.611	1.283	1.645	1.253	1.680	1.223	1.716	1.192	1.754	1.162	1.792
75	1.448	1.501	1.422	1.529	1.395	1.557	1.368	1.586	1.340	1.617	1.313	1.649	1.284	1.682	1.256	1.714	1.227	1.748	1.199	1.783
80	1.465	1.514	1.440	1.541	1.416	1.568	1.390	1.595	1.364	1.624	1.338	1.653	1.312	1.683	1.285	1.714	1.259	1.745	1.232	1.777
85	1.481	1.529	1.458	1.553	1.434	1.577	1.411	1.603	1.386	1.630	1.362	1.657	1.337	1.685	1.312	1.714	1.287	1.743	1.262	1.773
90	1.496	1.541	1.474	1.563	1.452	1.587	1.429	1.611	1.406	1.636	1.383	1.661	1.360	1.687	1.336	1.714	1.312	1.741	1.288	1.769
95	1.510	1.552	1.489	1.573	1.468	1.596	1.446	1.618	1.425	1.641	1.403	1.666	1.381	1.690	1.358	1.715	1.336	1.741	1.313	1.767
100	1.522	1.562	1.502	1.582	1.482	1.604	1.461	1.625	1.441	1.647	1.421	1.670	1.400	1.693	1.378	1.717	1.357	1.741	1.335	1.765
150	1.611	1.637	1.598	1.651	1.584	1.665	1.571	1.679	1.557	1.693	1.543	1.708	1.530	1.722	1.515	1.737	1.501	1.752	1.486	1.767
200	1.664	1.684	1.653	1.693	1.643	1.704	1.633	1.715	1.623	1.725	1.613	1.735	1.603	1.746	1.592	1.757	1.582	1.768	1.571	1.779

k is the number of regressors excluding the intercept

Durbin-Watson Significance Tables

n	k'=11		k'=12		k'=13		k'=14		k'=15		k'=16		k'=17		k'=18		k'=19		k'=20	
	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU
16	0.060	3.446	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
17	0.084	3.286	0.053	3.506	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
18	0.113	3.146	0.075	3.358	0.047	3.557	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
19	0.145	3.023	0.102	3.227	0.067	3.420	0.043	3.601	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
20	0.178	2.914	0.131	3.109	0.092	3.297	0.061	3.474	0.038	3.639	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
21	0.212	2.817	0.162	3.004	0.119	3.185	0.084	3.358	0.055	3.521	0.035	3.671	-----	-----	-----	-----	-----	-----	-----	-----
22	0.246	2.729	0.194	2.909	0.148	3.084	0.109	3.252	0.077	3.412	0.050	3.562	0.032	3.700	-----	-----	-----	-----	-----	-----
23	0.281	2.651	0.227	2.822	0.178	2.991	0.136	3.155	0.100	3.311	0.070	3.459	0.046	3.597	0.029	3.725	-----	-----	-----	-----
24	0.315	2.580	0.260	2.744	0.209	2.906	0.165	3.065	0.125	3.218	0.092	3.363	0.065	3.501	0.043	3.629	0.027	3.747	-----	-----
25	0.348	2.517	0.292	2.674	0.240	2.829	0.194	2.982	0.152	3.131	0.116	3.274	0.085	3.410	0.060	3.538	0.039	3.657	0.025	3.766
26	0.381	2.460	0.324	2.610	0.272	2.758	0.224	2.906	0.180	3.050	0.141	3.191	0.107	3.325	0.079	3.452	0.055	3.572	0.036	3.682
27	0.413	2.409	0.356	2.552	0.303	2.694	0.253	2.836	0.208	2.976	0.167	3.113	0.131	3.245	0.100	3.371	0.073	3.490	0.051	3.602
28	0.444	2.363	0.387	2.499	0.333	2.635	0.283	2.772	0.237	2.907	0.194	3.040	0.156	3.169	0.122	3.294	0.093	3.412	0.068	3.524
29	0.474	2.321	0.417	2.451	0.363	2.582	0.313	2.713	0.266	2.843	0.222	2.972	0.182	3.098	0.146	3.220	0.114	3.338	0.087	3.450
30	0.503	2.283	0.447	2.407	0.393	2.533	0.342	2.659	0.294	2.785	0.249	2.909	0.208	3.032	0.171	3.152	0.137	3.267	0.107	3.379
31	0.531	2.248	0.475	2.367	0.422	2.487	0.371	2.609	0.322	2.730	0.277	2.851	0.234	2.970	0.193	3.087	0.160	3.201	0.128	3.311
32	0.558	2.216	0.503	2.330	0.450	2.446	0.399	2.563	0.350	2.680	0.304	2.797	0.261	2.912	0.221	3.026	0.184	3.137	0.151	3.246
33	0.585	2.187	0.530	2.296	0.477	2.408	0.426	2.520	0.377	2.633	0.331	2.746	0.287	2.858	0.246	2.969	0.209	3.078	0.174	3.184
34	0.610	2.160	0.556	2.266	0.503	2.373	0.452	2.481	0.404	2.590	0.357	2.699	0.313	2.808	0.272	2.915	0.233	3.022	0.197	3.126
35	0.634	2.136	0.581	2.237	0.529	2.340	0.478	2.444	0.430	2.550	0.383	2.655	0.339	2.761	0.297	2.865	0.257	2.969	0.221	3.071
36	0.658	2.113	0.605	2.210	0.554	2.310	0.504	2.410	0.455	2.512	0.409	2.614	0.364	2.717	0.322	2.818	0.282	2.919	0.244	3.019
37	0.680	2.092	0.628	2.186	0.578	2.282	0.528	2.379	0.480	2.477	0.434	2.576	0.389	2.675	0.347	2.774	0.306	2.872	0.268	2.969
38	0.702	2.073	0.651	2.164	0.601	2.256	0.552	2.350	0.504	2.445	0.458	2.540	0.414	2.637	0.371	2.733	0.330	2.828	0.291	2.923
39	0.723	2.055	0.673	2.143	0.623	2.232	0.575	2.323	0.528	2.414	0.482	2.507	0.438	2.600	0.395	2.694	0.354	2.787	0.315	2.879
40	0.744	2.039	0.694	2.123	0.645	2.210	0.597	2.297	0.551	2.386	0.505	2.476	0.461	2.566	0.418	2.657	0.377	2.748	0.338	2.838
45	0.835	1.972	0.790	2.044	0.744	2.118	0.700	2.193	0.655	2.269	0.612	2.346	0.570	2.424	0.528	2.503	0.488	2.582	0.448	2.661
50	0.913	1.925	0.871	1.987	0.829	2.051	0.787	2.116	0.746	2.182	0.705	2.250	0.665	2.318	0.625	2.387	0.586	2.456	0.548	2.526
55	0.979	1.891	0.940	1.945	0.902	2.002	0.863	2.059	0.825	2.117	0.786	2.176	0.748	2.237	0.711	2.298	0.674	2.359	0.637	2.421
60	1.037	1.865	1.001	1.914	0.965	1.964	0.929	2.015	0.893	2.067	0.857	2.120	0.822	2.173	0.786	2.227	0.751	2.283	0.716	2.338
65	1.087	1.845	1.053	1.889	1.020	1.934	0.986	1.980	0.953	2.027	0.919	2.075	0.886	2.123	0.852	2.172	0.819	2.221	0.789	2.272
70	1.131	1.831	1.099	1.870	1.068	1.911	1.037	1.953	1.005	1.995	0.974	2.038	0.943	2.082	0.911	2.127	0.880	2.172	0.849	2.217
75	1.170	1.819	1.141	1.856	1.111	1.893	1.082	1.931	1.052	1.970	1.023	2.009	0.993	2.049	0.964	2.090	0.934	2.131	0.905	2.172
80	1.205	1.810	1.177	1.844	1.150	1.878	1.122	1.913	1.094	1.949	1.066	1.984	1.039	2.022	1.011	2.059	0.983	2.097	0.955	2.135
85	1.236	1.803	1.210	1.834	1.184	1.866	1.158	1.898	1.132	1.931	1.106	1.965	1.080	1.999	1.053	2.033	1.027	2.068	1.000	2.104
90	1.264	1.798	1.240	1.827	1.215	1.856	1.191	1.886	1.166	1.917	1.141	1.948	1.116	1.979	1.091	2.012	1.066	2.044	1.041	2.077
95	1.290	1.793	1.267	1.821	1.244	1.848	1.221	1.876	1.197	1.905	1.174	1.943	1.150	1.963	1.126	1.993	1.102	2.023	1.079	2.054
100	1.314	1.790	1.292	1.816	1.270	1.841	1.248	1.868	1.225	1.895	1.203	1.922	1.181	1.949	1.158	1.977	1.136	2.006	1.113	2.034
150	1.473	1.783	1.458	1.799	1.444	1.814	1.429	1.830	1.414	1.847	1.400	1.863	1.385	1.880	1.370	1.897	1.355	1.913	1.340	1.931
200	1.561	1.791	1.550	1.801	1.539	1.813	1.528	1.824	1.518	1.836	1.507	1.847	1.495	1.860	1.484	1.871	1.474	1.883	1.462	1.896

*k' is the number of regressors excluding the intercept

Table A-2
Models with an intercept (from Savin and White)

Durbin-Watson Statistic: 5 Per Cent Significance Points of dL and dU																				
	k*=1		k*=2		k*=3		k*=4		k*=5		k*=6		k*=7		k*=8		k*=9		k*=10	
n	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU
6	0.610	1.400	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
7	0.700	1.356	0.467	1.896	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
8	0.763	1.332	0.559	1.777	0.367	2.287	----	----	----	----	----	----	----	----	----	----	----	----	----	----
9	0.824	1.320	0.629	1.699	0.455	2.128	0.296	2.588	----	----	----	----	----	----	----	----	----	----	----	----
10	0.879	1.320	0.697	1.641	0.525	2.016	0.376	2.414	0.243	2.822	----	----	----	----	----	----	----	----	----	----
11	0.927	1.324	0.758	1.604	0.595	1.928	0.444	2.283	0.315	2.645	0.203	3.004	----	----	----	----	----	----	----	----
12	0.971	1.331	0.812	1.579	0.658	1.864	0.512	2.177	0.380	2.506	0.268	2.832	0.171	3.149	----	----	----	----	----	----
13	1.010	1.340	0.861	1.562	0.715	1.816	0.574	2.094	0.444	2.390	0.328	2.692	0.230	2.985	0.147	3.266	----	----	----	----
14	1.045	1.350	0.905	1.551	0.767	1.779	0.632	2.030	0.505	2.296	0.389	2.572	0.286	2.848	0.200	3.111	0.127	3.360	----	----
15	1.077	1.361	0.946	1.543	0.814	1.750	0.685	1.977	0.562	2.220	0.447	2.471	0.343	2.727	0.251	2.979	0.175	3.216	0.111	3.438
16	1.106	1.371	0.982	1.539	0.857	1.728	0.734	1.935	0.615	2.157	0.502	2.388	0.398	2.624	0.304	2.860	0.222	3.090	0.155	3.304
17	1.133	1.381	1.015	1.536	0.897	1.710	0.779	1.900	0.664	2.104	0.554	2.318	0.451	2.537	0.356	2.757	0.272	2.975	0.198	3.184
18	1.158	1.391	1.046	1.535	0.933	1.696	0.820	1.872	0.710	2.060	0.603	2.258	0.502	2.461	0.407	2.668	0.321	2.873	0.244	3.073
19	1.180	1.401	1.074	1.536	0.967	1.685	0.859	1.848	0.752	2.023	0.649	2.206	0.549	2.396	0.456	2.589	0.369	2.783	0.290	2.974
20	1.201	1.411	1.100	1.537	0.998	1.676	0.894	1.828	0.792	1.991	0.691	2.162	0.595	2.339	0.502	2.521	0.416	2.704	0.336	2.885
21	1.221	1.420	1.125	1.538	1.026	1.669	0.927	1.812	0.829	1.964	0.731	2.124	0.637	2.290	0.546	2.461	0.461	2.633	0.380	2.806
22	1.239	1.429	1.147	1.541	1.053	1.664	0.958	1.797	0.863	1.940	0.769	2.090	0.677	2.246	0.588	2.407	0.504	2.571	0.424	2.735
23	1.257	1.437	1.168	1.543	1.078	1.660	0.986	1.785	0.895	1.920	0.804	2.061	0.715	2.208	0.628	2.360	0.545	2.514	0.465	2.670
24	1.273	1.446	1.188	1.546	1.101	1.656	1.013	1.775	0.925	1.902	0.837	2.035	0.750	2.174	0.666	2.318	0.584	2.464	0.506	2.613
25	1.288	1.454	1.206	1.550	1.123	1.654	1.038	1.767	0.953	1.886	0.868	2.013	0.784	2.144	0.702	2.280	0.621	2.419	0.544	2.560
26	1.302	1.461	1.224	1.553	1.143	1.652	1.062	1.759	0.979	1.873	0.897	1.992	0.816	2.117	0.735	2.246	0.657	2.379	0.581	2.513
27	1.316	1.469	1.240	1.556	1.162	1.651	1.084	1.753	1.004	1.861	0.925	1.974	0.845	2.093	0.767	2.216	0.691	2.342	0.616	2.470
28	1.328	1.476	1.255	1.560	1.181	1.650	1.104	1.747	1.028	1.850	0.951	1.959	0.874	2.071	0.798	2.188	0.723	2.309	0.649	2.431
29	1.341	1.483	1.270	1.563	1.198	1.650	1.124	1.743	1.050	1.841	0.975	1.944	0.900	2.052	0.826	2.164	0.753	2.278	0.681	2.396
30	1.352	1.489	1.284	1.567	1.214	1.650	1.143	1.739	1.071	1.833	0.998	1.931	0.926	2.034	0.854	2.141	0.782	2.251	0.712	2.363
31	1.363	1.496	1.297	1.570	1.229	1.650	1.160	1.735	1.090	1.825	1.020	1.920	0.950	2.018	0.879	2.120	0.810	2.226	0.741	2.333
32	1.373	1.502	1.309	1.574	1.244	1.650	1.177	1.732	1.109	1.819	1.041	1.909	0.972	2.004	0.904	2.102	0.836	2.203	0.769	2.306
33	1.383	1.508	1.321	1.577	1.258	1.651	1.193	1.730	1.127	1.813	1.061	1.900	0.994	1.991	0.927	2.085	0.861	2.181	0.796	2.281
34	1.393	1.514	1.333	1.580	1.271	1.652	1.208	1.728	1.144	1.808	1.079	1.891	1.015	1.978	0.950	2.069	0.885	2.162	0.821	2.257
35	1.402	1.519	1.343	1.584	1.283	1.653	1.222	1.726	1.160	1.803	1.097	1.884	1.034	1.967	0.971	2.054	0.908	2.144	0.845	2.236
36	1.411	1.525	1.354	1.587	1.295	1.654	1.236	1.724	1.175	1.799	1.114	1.876	1.053	1.957	0.991	2.041	0.930	2.127	0.868	2.216
37	1.419	1.530	1.364	1.590	1.307	1.655	1.249	1.723	1.190	1.795	1.131	1.870	1.071	1.948	1.011	2.029	0.951	2.112	0.891	2.197
38	1.427	1.535	1.373	1.594	1.318	1.656	1.261	1.722	1.204	1.792	1.146	1.864	1.088	1.939	1.029	2.017	0.970	2.098	0.912	2.180
39	1.435	1.540	1.382	1.597	1.328	1.658	1.273	1.722	1.218	1.789	1.161	1.859	1.104	1.932	1.047	2.007	0.990	2.085	0.932	2.164
40	1.442	1.544	1.391	1.600	1.338	1.659	1.285	1.721	1.230	1.786	1.175	1.854	1.120	1.924	1.064	1.997	1.008	2.072	0.952	2.149
45	1.475	1.566	1.430	1.615	1.383	1.666	1.336	1.720	1.287	1.776	1.238	1.835	1.189	1.895	1.139	1.958	1.089	2.022	1.038	2.088
50	1.503	1.585	1.462	1.628	1.421	1.674	1.378	1.721	1.335	1.771	1.291	1.822	1.246	1.875	1.201	1.930	1.156	1.986	1.110	2.044
55	1.528	1.601	1.490	1.641	1.452	1.681	1.414	1.724	1.374	1.768	1.334	1.814	1.294	1.861	1.253	1.909	1.212	1.959	1.170	2.010
60	1.549	1.616	1.514	1.652	1.480	1.689	1.444	1.727	1.408	1.767	1.372	1.808	1.335	1.850	1.298	1.894	1.260	1.939	1.222	1.984
65	1.567	1.629	1.536	1.662	1.503	1.696	1.471	1.731	1.438	1.767	1.404	1.805	1.370	1.843	1.336	1.882	1.301	1.923	1.266	1.964
70	1.583	1.641	1.554	1.672	1.525	1.703	1.494	1.735	1.464	1.768	1.433	1.802	1.401	1.838	1.369	1.874	1.337	1.910	1.305	1.948
75	1.598	1.652	1.571	1.680	1.543	1.709	1.515	1.739	1.487	1.770	1.458	1.801	1.428	1.834	1.399	1.867	1.369	1.901	1.339	1.935
80	1.611	1.662	1.586	1.688	1.560	1.715	1.534	1.743	1.507	1.772	1.480	1.801	1.453	1.831	1.425	1.861	1.397	1.893	1.369	1.925
85	1.624	1.671	1.600	1.696	1.575	1.721	1.550	1.747	1.525	1.774	1.500	1.801	1.474	1.829	1.448	1.857	1.422	1.886	1.396	1.916
90	1.635	1.679	1.612	1.703	1.589	1.726	1.566	1.751	1.542	1.776	1.518	1.801	1.494	1.827	1.469	1.854	1.445	1.881	1.420	1.909
95	1.645	1.687	1.623	1.709	1.602	1.732	1.579	1.755	1.557	1.778	1.535	1.802	1.512	1.827	1.489	1.852	1.465	1.877	1.442	1.903
100	1.654	1.694	1.634	1.715	1.613	1.736	1.592	1.758	1.571	1.780	1.550	1.803	1.528	1.826	1.506	1.850	1.484	1.874	1.462	1.898
150	1.720	1.747	1.706	1.760	1.693	1.774	1.679	1.788	1.665	1.802	1.651	1.817	1.637	1.832	1.622	1.846	1.608	1.862	1.593	1.877
200	1.758	1.779	1.748	1.789	1.738	1.799	1.728	1.809	1.718	1.820	1.707	1.831	1.697	1.841	1.686	1.852	1.675	1.863	1.665	1.877

*k' is the number of regressors excluding the intercept

Durbin-Watson Significance Tables

n	k*=11		k*=12		k*=13		k*=14		k*=15		k*=16		k*=17		k*=18		k*=19		k*=20	
	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU	dL	dU
16	0.098	3.503	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
17	0.138	3.378	0.087	3.557	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
18	0.177	3.265	0.123	3.441	0.078	3.603	----	----	----	----	----	----	----	----	----	----	----	----	----	----
19	0.220	3.159	0.160	3.335	0.111	3.496	0.070	3.642	----	----	----	----	----	----	----	----	----	----	----	----
20	0.263	3.063	0.200	3.234	0.145	3.395	0.100	3.542	0.063	3.676	----	----	----	----	----	----	----	----	----	----
21	0.307	2.976	0.240	3.141	0.182	3.300	0.132	3.448	0.091	3.583	0.058	3.705	----	----	----	----	----	----	----	----
22	0.349	2.897	0.281	3.057	0.220	3.211	0.166	3.358	0.120	3.495	0.083	3.619	0.052	3.731	----	----	----	----	----	----
23	0.391	2.826	0.322	2.979	0.259	3.128	0.202	3.272	0.153	3.409	0.110	3.535	0.076	3.650	0.048	3.753	----	----	----	----
24	0.431	2.761	0.362	2.908	0.297	3.053	0.239	3.193	0.186	3.327	0.141	3.454	0.101	3.572	0.070	3.678	0.044	3.773	----	----
25	0.470	2.702	0.400	2.844	0.335	2.983	0.275	3.119	0.221	3.251	0.172	3.376	0.130	3.494	0.094	3.604	0.065	3.702	0.041	3.790
26	0.508	2.649	0.438	2.784	0.373	2.919	0.312	3.051	0.256	3.179	0.205	3.303	0.160	3.420	0.120	3.531	0.087	3.632	0.060	3.724
27	0.544	2.600	0.475	2.730	0.409	2.859	0.348	2.987	0.291	3.112	0.238	3.233	0.191	3.349	0.149	3.460	0.112	3.563	0.081	3.658
28	0.578	2.555	0.510	2.680	0.445	2.805	0.383	2.928	0.325	3.050	0.271	3.168	0.222	3.283	0.178	3.392	0.138	3.495	0.104	3.592
29	0.612	2.515	0.544	2.634	0.479	2.755	0.418	2.874	0.359	2.992	0.305	3.107	0.254	3.219	0.208	3.327	0.166	3.431	0.129	3.528
30	0.643	2.477	0.577	2.592	0.512	2.708	0.451	2.823	0.392	2.937	0.337	3.050	0.286	3.160	0.238	3.266	0.195	3.368	0.156	3.465
31	0.674	2.443	0.608	2.553	0.545	2.665	0.484	2.776	0.425	2.887	0.370	2.996	0.317	3.103	0.269	3.208	0.224	3.309	0.183	3.406
32	0.703	2.411	0.638	2.517	0.576	2.625	0.515	2.733	0.457	2.840	0.401	2.946	0.349	3.050	0.299	3.153	0.253	3.252	0.211	3.348
33	0.731	2.382	0.668	2.484	0.606	2.588	0.546	2.692	0.488	2.796	0.432	2.899	0.379	3.000	0.329	3.100	0.283	3.198	0.239	3.293
34	0.758	2.355	0.695	2.454	0.634	2.554	0.575	2.654	0.518	2.754	0.462	2.854	0.409	2.954	0.359	3.051	0.312	3.147	0.267	3.240
35	0.783	2.330	0.722	2.425	0.662	2.521	0.604	2.619	0.547	2.716	0.492	2.813	0.439	2.910	0.388	3.005	0.340	3.099	0.295	3.190
36	0.808	2.306	0.748	2.398	0.689	2.492	0.631	2.586	0.575	2.680	0.520	2.774	0.467	2.868	0.417	2.961	0.369	3.053	0.323	3.142
37	0.831	2.285	0.772	2.374	0.714	2.464	0.657	2.555	0.602	2.646	0.548	2.738	0.495	2.829	0.445	2.920	0.397	3.009	0.351	3.097
38	0.854	2.265	0.796	2.351	0.739	2.438	0.683	2.526	0.628	2.614	0.575	2.703	0.522	2.792	0.472	2.880	0.424	2.968	0.378	3.054
39	0.875	2.246	0.819	2.329	0.763	2.413	0.707	2.499	0.653	2.585	0.600	2.671	0.549	2.757	0.499	2.843	0.451	2.929	0.404	3.013
40	0.896	2.228	0.840	2.309	0.785	2.391	0.731	2.473	0.678	2.557	0.626	2.641	0.575	2.724	0.525	2.808	0.477	2.829	0.430	2.974
45	0.988	2.156	0.938	2.225	0.887	2.296	0.838	2.367	0.788	2.439	0.740	2.512	0.692	2.586	0.644	2.659	0.598	2.733	0.553	2.807
50	1.064	2.103	1.019	2.163	0.973	2.225	0.927	2.287	0.882	2.350	0.836	2.414	0.792	2.479	0.747	2.544	0.703	2.610	0.660	2.675
55	1.129	2.062	1.087	2.116	1.045	2.170	1.003	2.225	0.961	2.281	0.919	2.338	0.877	2.396	0.836	2.454	0.795	2.512	0.754	2.571
60	1.184	2.031	1.145	2.079	1.106	2.127	1.068	2.177	1.029	2.227	0.990	2.278	0.951	2.330	0.913	2.382	0.874	2.434	0.836	2.487
65	1.231	2.006	1.195	2.049	1.160	2.093	1.124	2.138	1.088	2.183	1.052	2.229	1.016	2.276	0.980	2.323	0.944	2.371	0.908	2.419
70	1.272	1.987	1.239	2.026	1.206	2.066	1.172	2.106	1.139	2.148	1.105	2.189	1.072	2.232	1.038	2.275	1.005	2.318	0.971	2.362
75	1.308	1.970	1.277	2.006	1.247	2.043	1.215	2.080	1.184	2.118	1.153	2.156	1.121	2.195	1.090	2.235	1.058	2.275	1.027	2.315
80	1.340	1.957	1.311	1.991	1.283	2.024	1.253	2.059	1.224	2.093	1.195	2.129	1.165	2.165	1.136	2.201	1.106	2.238	1.076	2.275
85	1.369	1.946	1.342	1.977	1.315	2.009	1.287	2.040	1.260	2.073	1.232	2.105	1.205	2.139	1.177	2.172	1.149	2.206	1.121	2.241
90	1.395	1.937	1.369	1.966	1.344	1.995	1.318	2.025	1.292	2.055	1.266	2.085	1.240	2.116	1.213	2.148	1.187	2.179	1.160	2.211
95	1.418	1.930	1.394	1.956	1.370	1.984	1.345	2.012	1.321	2.040	1.296	2.068	1.271	2.097	1.247	2.126	1.222	2.156	1.197	2.186
100	1.439	1.923	1.416	1.948	1.393	1.974	1.371	2.000	1.347	2.026	1.324	2.053	1.301	2.080	1.277	2.108	1.253	2.135	1.229	2.164
150	1.579	1.892	1.564	1.908	1.550	1.924	1.535	1.940	1.519	1.956	1.504	1.972	1.489	1.989	1.474	2.006	1.458	2.023	1.443	2.040
200	1.654	1.885	1.643	1.896	1.632	1.908	1.621	1.919	1.610	1.931	1.599	1.943	1.588	1.955	1.576	1.967	1.565	1.979	1.554	1.991

K is the number of regressors excluding the intercept

Table A-3
Models with no intercept (from Farebrother): Positive serial correlation

Durbin-Watson One Per Cent Minimal Bound																						
N	K=0	K=1	K=2	K=3	K=4	K=5	K=6	K=7	K=8	K=9	K=10	K=11	K=12	K=13	K=14	K=15	K=16	K=17	K=18	K=19	K=20	K=21
2	0.001	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
3	0.034	0.000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
4	0.127	0.022	0.000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
5	0.233	0.089	0.014	0.000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
6	0.322	0.175	0.065	0.010	0.000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
7	0.398	0.253	0.135	0.049	0.008	0.000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
8	0.469	0.324	0.202	0.106	0.038	0.006	0.000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
9	0.534	0.394	0.268	0.164	0.086	0.031	0.005	0.000	----	----	----	----	----	----	----	----	----	----	----	----	----	
10	0.591	0.457	0.333	0.223	0.136	0.070	0.025	0.004	0.000	----	----	----	----	----	----	----	----	----	----	----	----	
11	0.643	0.515	0.394	0.284	0.189	0.114	0.059	0.021	0.003	0.000	----	----	----	----	----	----	----	----	----	----	----	
12	0.691	0.568	0.451	0.341	0.244	0.161	0.097	0.050	0.018	0.003	0.000	----	----	----	----	----	----	----	----	----	----	
13	0.733	0.617	0.503	0.396	0.298	0.212	0.139	0.083	0.043	0.015	0.002	0.000	----	----	----	----	----	----	----	----	----	
14	0.773	0.662	0.552	0.448	0.350	0.262	0.185	0.121	0.072	0.037	0.013	0.002	0.000	----	----	----	----	----	----	----	----	
15	0.809	0.703	0.598	0.496	0.400	0.311	0.232	0.163	0.107	0.063	0.032	0.011	0.002	0.000	----	----	----	----	----	----	----	
16	0.842	0.741	0.640	0.541	0.447	0.358	0.278	0.206	0.145	0.094	0.056	0.028	0.010	0.002	0.000	----	----	----	----	----	----	
17	0.873	0.776	0.679	0.583	0.491	0.404	0.323	0.249	0.184	0.129	0.084	0.050	0.025	0.009	0.001	0.000	----	----	----	----	----	
18	0.901	0.808	0.715	0.623	0.533	0.447	0.366	0.292	0.225	0.166	0.116	0.075	0.044	0.023	0.008	0.001	0.000	----	----	----	----	
19	0.928	0.839	0.749	0.660	0.572	0.488	0.408	0.333	0.265	0.204	0.150	0.105	0.068	0.040	0.020	0.007	0.001	0.000	----	----	----	
20	0.952	0.867	0.780	0.694	0.609	0.527	0.448	0.374	0.304	0.241	0.185	0.136	0.095	0.062	0.036	0.018	0.006	0.001	0.000	----	----	
21	0.976	0.893	0.810	0.727	0.644	0.564	0.486	0.413	0.343	0.279	0.221	0.169	0.124	0.087	0.056	0.033	0.017	0.006	0.001	0.000	----	
22	0.997	0.918	0.838	0.757	0.677	0.599	0.523	0.450	0.381	0.316	0.257	0.203	0.155	0.114	0.079	0.051	0.030	0.015	0.005	0.001	0.000	----
23	1.018	0.942	0.864	0.786	0.709	0.632	0.558	0.486	0.417	0.352	0.292	0.237	0.187	0.143	0.104	0.073	0.047	0.027	0.014	0.005	0.001	0.000
24	1.037	0.964	0.889	0.813	0.738	0.664	0.591	0.520	0.452	0.387	0.327	0.270	0.219	0.172	0.131	0.096	0.067	0.043	0.025	0.013	0.004	0.001
25	1.056	0.984	0.912	0.839	0.766	0.693	0.622	0.553	0.486	0.421	0.361	0.304	0.251	0.203	0.160	0.122	0.089	0.062	0.040	0.023	0.012	0.004
26	1.073	1.004	0.934	0.863	0.792	0.722	0.652	0.584	0.518	0.454	0.394	0.336	0.283	0.233	0.189	0.148	0.113	0.083	0.057	0.037	0.022	0.011
27	1.089	1.023	0.955	0.886	0.817	0.749	0.681	0.614	0.549	0.486	0.426	0.368	0.314	0.264	0.218	0.176	0.138	0.105	0.077	0.053	0.034	0.020
28	1.105	1.040	0.974	0.908	0.841	0.774	0.708	0.643	0.579	0.517	0.457	0.400	0.345	0.294	0.247	0.204	0.164	0.129	0.098	0.071	0.050	0.032
29	1.120	1.057	0.993	0.929	0.864	0.798	0.734	0.670	0.607	0.546	0.487	0.430	0.376	0.324	0.276	0.232	0.191	0.154	0.120	0.091	0.067	0.046
30	1.134	1.073	1.011	0.948	0.885	0.822	0.759	0.696	0.635	0.574	0.516	0.460	0.405	0.354	0.305	0.260	0.217	0.179	0.144	0.113	0.086	0.062
31	1.147	1.088	1.028	0.967	0.905	0.844	0.782	0.721	0.661	0.602	0.544	0.488	0.434	0.383	0.334	0.288	0.244	0.205	0.168	0.135	0.106	0.080
32	1.160	1.103	1.044	0.985	0.925	0.865	0.805	0.745	0.686	0.628	0.571	0.516	0.462	0.411	0.362	0.315	0.271	0.230	0.193	0.158	0.127	0.100
33	1.173	1.117	1.060	1.002	0.944	0.885	0.826	0.768	0.710	0.653	0.597	0.542	0.489	0.438	0.389	0.342	0.298	0.256	0.218	0.182	0.149	0.120
34	1.185	1.130	1.075	1.018	0.961	0.904	0.847	0.790	0.733	0.677	0.622	0.568	0.516	0.465	0.416	0.369	0.324	0.282	0.243	0.206	0.172	0.141
35	1.196	1.143	1.089	1.034	0.978	0.923	0.867	0.811	0.755	0.700	0.646	0.593	0.541	0.491	0.442	0.395	0.350	0.308	0.268	0.230	0.195	0.163
36	1.207	1.155	1.102	1.049	0.995	0.940	0.886	0.831	0.777	0.723	0.669	0.617	0.566	0.516	0.467	0.421	0.376	0.333	0.292	0.254	0.218	0.185
37	1.217	1.167	1.116	1.063	1.010	0.957	0.904	0.850	0.797	0.744	0.692	0.640	0.590	0.540	0.492	0.446	0.401	0.358	0.317	0.278	0.241	0.207
38	1.228	1.178	1.128	1.077	1.026	0.974	0.921	0.869	0.817	0.765	0.713	0.663	0.613	0.564	0.516	0.470	0.425	0.382	0.341	0.302	0.265	0.230
39	1.237	1.189	1.140	1.090	1.040	0.989	0.938	0.887	0.836	0.785	0.734	0.684	0.635	0.587	0.540	0.494	0.449	0.406	0.365	0.325	0.288	0.252
40	1.247	1.200	1.152	1.103	1.054	1.004	0.954	0.904	0.854	0.804	0.754	0.705	0.657	0.609	0.562	0.517	0.473	0.430	0.388	0.349	0.311	0.275
45	1.289	1.247	1.204	1.160	1.116	1.071	1.026	0.981	0.936	0.890	0.845	0.800	0.755	0.710	0.666	0.623	0.581	0.539	0.499	0.459	0.421	0.384
50	1.325	1.287	1.248	1.208	1.168	1.128	1.087	1.046	1.004	0.963	0.921	0.880	0.838	0.797	0.756	0.715	0.675	0.636	0.597	0.559	0.521	0.485
55	1.356	1.321	1.286	1.250	1.213	1.176	1.139	1.101	1.063	1.025	0.987	0.948	0.910	0.872	0.833	0.796	0.758	0.721	0.684	0.647	0.611	0.576
60	1.383	1.351	1.319	1.285	1.252	1.218	1.183	1.149	1.114	1.078	1.043	1.008	0.972	0.936	0.901	0.865	0.830	0.795	0.760	0.725	0.691	0.657
65	1.408	1.378	1.348	1.317	1.286	1.254	1.222	1.190	1.158	1.125	1.092	1.059	1.026	0.993	0.960	0.927	0.894	0.861	0.828	0.795	0.762	0.730
70	1.429	1.401	1.373	1.345	1.316	1.286	1.257	1.227	1.197	1.166	1.136	1.105	1.074	1.043	1.012	0.981	0.950	0.919	0.888	0.857	0.826	0.795
75	1.448	1.423	1.396	1.369	1.342	1.315	1.287	1.260	1.231	1.203	1.174	1.146	1.117	1.088	1.058	1.029	1.000	0.971	0.941	0.912	0.883	0.854
80	1.466	1.442	1.417	1.392	1.367	1.341	1.315	1.289	1.262	1.236	1.209	1.182	1.155	1.127	1.100	1.072	1.045	1.017	0.989	0.962	0.934	0.907
85	1.482	1.459	1.436	1.412	1.388	1.364	1.340	1.315	1.290	1.265	1.240	1.214	1.189	1.163	1.137	1.111	1.085	1.059	1.033	1.006	0.980	0.954
90	1.497	1.475	1.453	1.431	1.408	1.385	1.362	1.339	1.315	1.292	1.268	1.244	1.220	1.195	1.171	1.146	1.121	1.097	1.072	1.047	1.022	0.997
95	1.510	1.490	1.469	1.448	1.426	1.405	1.383	1.361	1.338	1.316	1.293	1.271	1.248	1.225	1.201	1.178	1.155	1.131	1.108	1.084	1.060	1.037
100	1.523	1.503	1.483	1.463	1.443	1.422	1.402	1.381	1.359	1.338	1.317	1.295	1.273	1.251	1.229	1.207	1.185	1.162	1.140	1.118	1.095	1.072
150	1.611	1.598	1.585	1.571	1.558	1.544	1.530	1.516	1.502	1.488	1.474	1.460	1.445	1.431	1.416	1.402	1.387	1.372	1.357	1.342	1.327	1.312
200	1.664	1.654	1.644	1.634	1.624	1.613	1.603	1.593	1.582	1.572	1.561	1.551	1.540	1.529	1.519	1.508	1.497	1.486	1.475	1.464	1.453	1.442

Table A-4
Models with no intercept (from Farebrother): Positive serial correlation

Durbin-Watson Five Per Cent Minimal Bound																						
N	K=0	K=1	K=2	K=3	K=4	K=5	K=6	K=7	K=8	K=9	K=10	K=11	K=12	K=13	K=14	K=15	K=16	K=17	K=18	K=19	K=20	K=21
2	0.012	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
3	0.168	0.006	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
4	0.355	0.105	0.004	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
5	0.478	0.248	0.070	0.002	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
6	0.584	0.358	0.180	0.050	0.002	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
7	0.677	0.462	0.275	0.136	0.037	0.001	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
8	0.754	0.556	0.371	0.217	0.106	0.029	0.001	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
9	0.820	0.635	0.460	0.303	0.175	0.085	0.023	0.001	----	----	----	----	----	----	----	----	----	----	----	----	----	
10	0.877	0.706	0.539	0.385	0.251	0.143	0.069	0.019	0.001	----	----	----	----	----	----	----	----	----	----	----	----	
11	0.927	0.768	0.610	0.460	0.326	0.211	0.120	0.058	0.016	0.001	----	----	----	----	----	----	----	----	----	----	----	
12	0.972	0.823	0.674	0.530	0.397	0.279	0.180	0.101	0.049	0.013	0.001	----	----	----	----	----	----	----	----	----	----	
13	1.012	0.872	0.731	0.593	0.464	0.345	0.241	0.154	0.087	0.042	0.011	0.001	----	----	----	----	----	----	----	----	----	
14	1.047	0.916	0.783	0.651	0.525	0.408	0.302	0.210	0.134	0.075	0.036	0.010	0.001	----	----	----	----	----	----	----	----	
15	1.079	0.955	0.829	0.704	0.583	0.467	0.361	0.266	0.185	0.118	0.066	0.031	0.008	0.001	----	----	----	----	----	----	----	
16	1.109	0.992	0.872	0.752	0.635	0.523	0.418	0.322	0.237	0.164	0.104	0.058	0.028	0.007	0.000	----	----	----	----	----	----	
17	1.136	1.024	0.911	0.797	0.684	0.575	0.472	0.376	0.288	0.211	0.146	0.093	0.052	0.025	0.007	0.000	----	----	----	----	----	
18	1.160	1.055	0.946	0.837	0.729	0.624	0.523	0.427	0.339	0.260	0.190	0.131	0.083	0.046	0.022	0.006	0.000	----	----	----	----	
19	1.183	1.082	0.979	0.875	0.771	0.669	0.570	0.476	0.388	0.307	0.235	0.171	0.118	0.075	0.041	0.020	0.005	0.000	----	----	----	
20	1.204	1.108	1.010	0.910	0.810	0.711	0.615	0.523	0.436	0.354	0.280	0.213	0.156	0.107	0.067	0.037	0.018	0.005	0.000	----	----	
21	1.224	1.132	1.038	0.942	0.846	0.751	0.657	0.567	0.481	0.400	0.324	0.256	0.195	0.142	0.097	0.061	0.034	0.016	0.004	0.000	----	
22	1.242	1.154	1.064	0.972	0.879	0.787	0.697	0.609	0.524	0.443	0.368	0.298	0.235	0.178	0.130	0.089	0.056	0.031	0.015	0.004	0.000	
23	1.259	1.175	1.088	1.000	0.911	0.822	0.734	0.648	0.565	0.485	0.410	0.339	0.274	0.216	0.164	0.119	0.081	0.051	0.028	0.014	0.004	
24	1.275	1.194	1.111	1.026	0.940	0.854	0.769	0.685	0.604	0.525	0.450	0.380	0.314	0.254	0.199	0.151	0.110	0.075	0.047	0.026	0.012	
25	1.290	1.212	1.132	1.050	0.967	0.884	0.802	0.720	0.641	0.563	0.489	0.419	0.353	0.291	0.235	0.184	0.140	0.101	0.069	0.044	0.024	
26	1.304	1.229	1.152	1.073	0.993	0.913	0.833	0.753	0.676	0.600	0.527	0.457	0.390	0.328	0.271	0.218	0.171	0.130	0.094	0.064	0.040	
27	1.318	1.245	1.171	1.094	1.017	0.940	0.862	0.785	0.709	0.635	0.563	0.493	0.427	0.365	0.306	0.252	0.203	0.159	0.120	0.087	0.060	
28	1.330	1.260	1.188	1.115	1.040	0.965	0.889	0.815	0.741	0.668	0.597	0.529	0.463	0.400	0.341	0.286	0.236	0.190	0.148	0.112	0.081	
29	1.342	1.275	1.205	1.134	1.062	0.989	0.916	0.843	0.770	0.699	0.630	0.562	0.497	0.435	0.376	0.320	0.268	0.221	0.177	0.139	0.105	
30	1.354	1.288	1.221	1.152	1.082	1.011	0.940	0.869	0.799	0.729	0.661	0.595	0.530	0.468	0.409	0.353	0.301	0.252	0.207	0.166	0.130	
31	1.365	1.301	1.236	1.169	1.101	1.033	0.964	0.895	0.826	0.758	0.691	0.626	0.562	0.501	0.442	0.386	0.333	0.283	0.237	0.195	0.156	
32	1.375	1.313	1.250	1.185	1.120	1.053	0.986	0.919	0.852	0.785	0.720	0.653	0.593	0.532	0.474	0.418	0.364	0.314	0.267	0.223	0.183	
33	1.385	1.325	1.264	1.201	1.137	1.072	1.007	0.942	0.876	0.811	0.747	0.684	0.623	0.563	0.504	0.449	0.395	0.344	0.297	0.252	0.211	
34	1.394	1.336	1.277	1.216	1.153	1.091	1.027	0.963	0.900	0.836	0.774	0.712	0.651	0.592	0.534	0.479	0.425	0.374	0.326	0.280	0.238	
35	1.403	1.347	1.289	1.230	1.169	1.108	1.046	0.984	0.922	0.860	0.799	0.738	0.678	0.620	0.563	0.508	0.455	0.404	0.355	0.309	0.266	
36	1.412	1.357	1.301	1.243	1.184	1.125	1.064	1.004	0.943	0.883	0.823	0.763	0.705	0.647	0.591	0.536	0.483	0.432	0.384	0.337	0.293	
37	1.420	1.367	1.312	1.256	1.199	1.141	1.082	1.023	0.964	0.905	0.846	0.787	0.730	0.673	0.618	0.564	0.511	0.460	0.412	0.365	0.321	
38	1.428	1.376	1.323	1.268	1.212	1.156	1.099	1.041	0.983	0.925	0.868	0.811	0.754	0.698	0.644	0.590	0.538	0.488	0.439	0.392	0.347	
39	1.436	1.385	1.333	1.280	1.225	1.170	1.114	1.058	1.002	0.945	0.889	0.833	0.778	0.723	0.669	0.616	0.564	0.514	0.466	0.419	0.374	
40	1.443	1.394	1.343	1.291	1.238	1.184	1.130	1.075	1.020	0.965	0.909	0.854	0.800	0.746	0.693	0.641	0.590	0.540	0.492	0.445	0.400	
45	1.476	1.432	1.387	1.341	1.294	1.246	1.197	1.148	1.099	1.049	1.000	0.950	0.900	0.851	0.802	0.753	0.706	0.658	0.612	0.567	0.523	
50	1.504	1.464	1.424	1.382	1.340	1.297	1.253	1.209	1.164	1.120	1.075	1.029	0.984	0.939	0.894	0.849	0.804	0.760	0.717	0.674	0.631	
55	1.528	1.492	1.455	1.417	1.379	1.340	1.300	1.260	1.219	1.179	1.138	1.096	1.055	1.013	0.972	0.930	0.889	0.848	0.807	0.766	0.726	
60	1.549	1.516	1.482	1.447	1.412	1.376	1.340	1.303	1.266	1.229	1.191	1.153	1.115	1.077	1.038	1.000	0.962	0.923	0.885	0.847	0.810	
65	1.568	1.537	1.505	1.474	1.441	1.408	1.375	1.341	1.307	1.272	1.238	1.202	1.167	1.132	1.096	1.061	1.025	0.989	0.953	0.918	0.882	
70	1.584	1.555	1.526	1.497	1.467	1.436	1.405	1.374	1.342	1.310	1.278	1.245	1.213	1.180	1.147	1.113	1.080	1.047	1.013	0.980	0.947	
75	1.599	1.572	1.545	1.517	1.489	1.461	1.432	1.403	1.373	1.344	1.313	1.283	1.253	1.222	1.191	1.160	1.129	1.098	1.066	1.035	1.004	
80	1.612	1.587	1.561	1.536	1.509	1.483	1.456	1.429	1.401	1.373	1.345	1.317	1.288	1.259	1.230	1.201	1.172	1.143	1.113	1.084	1.054	
85	1.624	1.600	1.576	1.552	1.527	1.502	1.477	1.452	1.426	1.400	1.373	1.347	1.320	1.293	1.266	1.238	1.211	1.183	1.155	1.128	1.100	
90	1.635	1.613	1.590	1.567	1.544	1.520	1.497	1.472	1.448	1.423	1.399	1.373	1.348	1.323	1.297	1.271	1.245	1.219	1.193	1.167	1.141	
95	1.645	1.624	1.603	1.581	1.559	1.537	1.514	1.491	1.468	1.445	1.422	1.398	1.374	1.350	1.326	1.301	1.277	1.252	1.227	1.202	1.177	
100	1.654	1.634	1.614	1.593	1.573	1.551	1.530	1.508	1.487	1.465	1.442	1.420	1.397	1.374	1.352	1.328	1.305	1.282	1.258	1.235	1.211	
150	1.720	1.706	1.693	1.679	1.666	1.652	1.638	1.624	1.609	1.595	1.580	1.566	1.551	1.536	1.521	1.506	1.491	1.476	1.461	1.445	1.430	
200	1.759	1.748	1.738	1.728	1.718	1.708	1.697	1.687	1.676	1.666	1.655	1.644	1.633	1.622	1.611	1.600	1.589	1.578	1.567	1.556	1.544	

Table A-5
Models with no intercept (from Farebrother): Negative serial correlation

Durbin-Watson Ninety Five Per Cent Minimal Bound																						
N	K=0	K=1	K=2	K=3	K=4	K=5	K=6	K=7	K=8	K=9	K=10	K=11	K=12	K=13	K=14	K=15	K=16	K=17	K=18	K=19	K=20	K=21
2	1.988	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
3	2.761	0.994	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
4	2.871	1.836	0.582	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
5	2.857	2.178	1.267	0.380	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
6	2.844	2.320	1.655	0.917	0.266	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
7	2.828	2.398	1.871	1.283	0.690	0.197	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
8	2.805	2.453	2.008	1.521	1.017	0.537	0.151	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
9	2.783	2.483	2.110	1.687	1.251	0.823	0.429	0.120	----	----	----	----	----	----	----	----	----	----	----	----	----	
10	2.762	2.501	2.181	1.816	1.427	1.044	0.678	0.350	0.097	----	----	----	----	----	----	----	----	----	----	----	----	
11	2.742	2.511	2.231	1.913	1.569	1.218	0.881	0.567	0.291	0.080	----	----	----	----	----	----	----	----	----	----	----	
12	2.723	2.516	2.268	1.987	1.682	1.364	1.049	0.752	0.481	0.245	0.068	----	----	----	----	----	----	----	----	----	----	
13	2.705	2.518	2.296	2.044	1.771	1.484	1.193	0.911	0.649	0.413	0.210	0.058	----	----	----	----	----	----	----	----	----	
14	2.688	2.517	2.316	2.090	1.843	1.582	1.316	1.051	0.797	0.565	0.358	0.181	0.050	----	----	----	----	----	----	----	----	
15	2.672	2.515	2.332	2.126	1.902	1.664	1.419	1.172	0.931	0.703	0.497	0.314	0.158	0.043	----	----	----	----	----	----	----	
16	2.657	2.512	2.344	2.155	1.950	1.732	1.506	1.276	1.049	0.829	0.624	0.439	0.277	0.139	0.038	----	----	----	----	----	----	
17	2.644	2.508	2.353	2.179	1.990	1.789	1.580	1.367	1.153	0.944	0.743	0.557	0.391	0.246	0.124	0.034	----	----	----	----	----	
18	2.631	2.504	2.359	2.199	2.024	1.838	1.644	1.445	1.244	1.045	0.852	0.669	0.501	0.351	0.220	0.110	0.030	----	----	----	----	
19	2.618	2.499	2.364	2.215	2.053	1.880	1.699	1.513	1.324	1.136	0.951	0.773	0.605	0.452	0.316	0.198	0.099	0.027	----	----	----	
20	2.607	2.494	2.368	2.228	2.077	1.916	1.747	1.573	1.395	1.216	1.040	0.868	0.704	0.550	0.410	0.286	0.179	0.090	0.025	----	----	
21	2.596	2.489	2.370	2.239	2.098	1.947	1.789	1.625	1.457	1.289	1.120	0.955	0.796	0.644	0.502	0.373	0.260	0.162	0.081	0.022	----	
22	2.585	2.484	2.372	2.249	2.116	1.974	1.825	1.671	1.513	1.353	1.193	1.034	0.880	0.731	0.591	0.460	0.341	0.238	0.148	0.074	0.020	
23	2.575	2.479	2.373	2.257	2.131	1.998	1.858	1.712	1.563	1.411	1.258	1.107	0.957	0.813	0.674	0.544	0.422	0.313	0.218	0.136	0.068	
24	2.566	2.474	2.373	2.263	2.145	2.019	1.886	1.749	1.607	1.463	1.318	1.172	1.029	0.888	0.753	0.623	0.502	0.389	0.289	0.201	0.125	
25	2.557	2.470	2.373	2.269	2.156	2.037	1.912	1.782	1.647	1.510	1.371	1.232	1.094	0.958	0.826	0.699	0.578	0.465	0.360	0.267	0.185	
26	1.073	1.004	0.934	0.863	0.792	0.722	0.652	0.584	0.518	0.454	0.394	0.336	0.283	0.233	0.189	0.148	0.113	0.083	0.057	0.037	0.022	
27	1.089	1.023	0.955	0.886	0.817	0.749	0.681	0.614	0.549	0.486	0.426	0.368	0.314	0.264	0.218	0.176	0.138	0.105	0.077	0.053	0.034	
28	1.105	1.040	0.974	0.908	0.841	0.774	0.708	0.643	0.579	0.517	0.457	0.400	0.345	0.294	0.247	0.204	0.164	0.129	0.098	0.071	0.050	
29	1.120	1.057	0.993	0.929	0.864	0.798	0.734	0.670	0.607	0.546	0.487	0.430	0.376	0.324	0.276	0.232	0.191	0.154	0.120	0.091	0.067	
30	1.134	1.073	1.011	0.948	0.885	0.822	0.759	0.696	0.635	0.574	0.516	0.460	0.405	0.354	0.305	0.260	0.217	0.179	0.144	0.113	0.086	
31	1.147	1.088	1.028	0.967	0.905	0.844	0.782	0.721	0.661	0.602	0.544	0.488	0.434	0.383	0.334	0.288	0.244	0.205	0.168	0.135	0.106	
32	1.160	1.103	1.044	0.985	0.925	0.865	0.805	0.745	0.686	0.628	0.571	0.516	0.462	0.411	0.362	0.315	0.271	0.230	0.193	0.158	0.127	
33	1.173	1.117	1.060	1.002	0.944	0.885	0.826	0.768	0.710	0.653	0.597	0.542	0.489	0.438	0.389	0.342	0.298	0.256	0.218	0.182	0.149	
34	1.185	1.130	1.075	1.018	0.961	0.904	0.847	0.790	0.733	0.677	0.622	0.568	0.516	0.465	0.416	0.369	0.324	0.282	0.243	0.206	0.172	
35	1.196	1.143	1.089	1.034	0.978	0.923	0.867	0.811	0.755	0.700	0.646	0.593	0.541	0.491	0.442	0.395	0.350	0.308	0.268	0.230	0.195	
36	1.207	1.155	1.102	1.049	0.995	0.940	0.886	0.831	0.777	0.723	0.669	0.617	0.566	0.516	0.467	0.421	0.376	0.333	0.292	0.254	0.218	
37	1.217	1.167	1.116	1.063	1.010	0.957	0.904	0.850	0.797	0.744	0.692	0.640	0.590	0.540	0.492	0.446	0.401	0.358	0.317	0.278	0.241	
38	1.228	1.178	1.128	1.077	1.026	0.974	0.921	0.869	0.817	0.765	0.713	0.663	0.613	0.564	0.516	0.470	0.425	0.382	0.341	0.302	0.265	
39	1.237	1.189	1.140	1.090	1.040	0.989	0.938	0.887	0.836	0.785	0.734	0.684	0.635	0.587	0.540	0.494	0.449	0.406	0.365	0.325	0.288	
40	1.247	1.200	1.152	1.103	1.054	1.004	0.954	0.904	0.854	0.804	0.754	0.705	0.657	0.609	0.562	0.517	0.473	0.430	0.388	0.349	0.311	
45	1.289	1.247	1.204	1.160	1.116	1.071	1.026	0.981	0.936	0.890	0.845	0.800	0.755	0.710	0.666	0.623	0.581	0.539	0.499	0.459	0.421	
50	1.325	1.287	1.248	1.208	1.168	1.128	1.087	1.046	1.004	0.963	0.921	0.880	0.838	0.797	0.756	0.715	0.675	0.636	0.597	0.559	0.521	
55	1.356	1.321	1.286	1.250	1.213	1.176	1.139	1.101	1.063	1.025	0.987	0.948	0.910	0.872	0.833	0.796	0.758	0.721	0.684	0.647	0.611	
60	1.383	1.351	1.319	1.285	1.252	1.218	1.183	1.149	1.114	1.078	1.043	1.008	0.972	0.936	0.901	0.865	0.830	0.795	0.760	0.725	0.691	
65	1.408	1.378	1.348	1.317	1.286	1.254	1.222	1.190	1.158	1.125	1.092	1.059	1.026	0.993	0.960	0.927	0.894	0.861	0.828	0.795	0.762	
70	1.429	1.401	1.373	1.345	1.316	1.286	1.257	1.227	1.197	1.166	1.136	1.105	1.074	1.043	1.012	0.981	0.950	0.919	0.888	0.857	0.826	
75	1.448	1.423	1.396	1.369	1.342	1.315	1.287	1.260	1.231	1.203	1.174	1.146	1.117	1.088	1.058	1.029	1.000	0.971	0.941	0.912	0.883	
80	1.466	1.442	1.417	1.392	1.367	1.341	1.315	1.289	1.262	1.236	1.209	1.182	1.155	1.127	1.100	1.072	1.045	1.017	0.989	0.962	0.934	
85	1.482	1.459	1.436	1.412	1.388	1.364	1.340	1.315	1.290	1.265	1.240	1.214	1.189	1.163	1.137	1.111	1.085	1.059	1.033	1.006	0.980	
90	1.497	1.475	1.453	1.431	1.408	1.385	1.362	1.339	1.315	1.292	1.268	1.244	1.220	1.195	1.171	1.146	1.121	1.097	1.072	1.047	1.022	
95	1.510	1.490	1.469	1.448	1.426	1.405	1.383	1.361	1.338	1.316	1.293	1.271	1.248	1.225	1.201	1.178	1.155	1.131	1.108	1.084	1.060	
100	1.523	1.503	1.483	1.463	1.443	1.422	1.402	1.381	1.359	1.338	1.317	1.295	1.273	1.251	1.229	1.207	1.185	1.162	1.140	1.118	1.095	
150	1.611	1.598	1.585	1.571	1.558	1.544	1.530	1.516	1.502	1.488	1.474	1.460	1.445	1.431	1.416	1.402	1.387	1.372	1.357	1.342	1.327	
200	1.664	1.654	1.644	1.634	1.624	1.613	1.603	1.593	1.582	1.572	1.561	1.551	1.540	1.529	1.519	1.508	1.497	1.486	1.475	1.464	1.453	

Table A-6
Models with no intercept (from Farebrother): Negative serial correlation

Durbin-Watson Ninety Nine Per Cent Minimal Bound																						
N	K=0	K=1	K=2	K=3	K=4	K=5	K=6	K=7	K=8	K=9	K=10	K=11	K=12	K=13	K=14	K=15	K=16	K=17	K=18	K=19	K=20	K=21
2	1.999	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
3	2.951	0.999	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
4	3.221	1.967	0.586	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
5	3.261	2.462	1.359	0.382	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
6	3.235	2.682	1.878	0.983	0.268	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
7	3.198	2.776	2.177	1.459	0.740	0.198	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
8	3.166	2.817	2.347	1.776	1.158	0.576	0.153	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
9	3.133	2.837	2.448	1.983	1.465	0.937	0.460	0.121	----	----	----	----	----	----	----	----	----	----	----	----	----	----
10	3.101	2.847	2.514	2.121	1.684	1.224	0.773	0.375	0.098	----	----	----	----	----	----	----	----	----	----	----	----	----
11	3.071	2.847	2.560	2.220	1.842	1.441	1.035	0.647	0.312	0.081	----	----	----	----	----	----	----	----	----	----	----	----
12	3.043	2.843	2.592	2.294	1.961	1.607	1.244	0.885	0.549	0.263	0.069	----	----	----	----	----	----	----	----	----	----	----
13	3.017	2.836	2.612	2.349	2.054	1.737	1.410	1.082	0.764	0.471	0.225	0.059	----	----	----	----	----	----	----	----	----	----
14	2.992	2.828	2.626	2.391	2.127	1.842	1.544	1.244	0.948	0.666	0.409	0.195	0.051	----	----	----	----	----	----	----	----	----
15	2.969	2.818	2.635	2.423	2.185	1.928	1.656	1.379	1.104	0.837	0.585	0.358	0.170	0.044	----	----	----	----	----	----	----	----
16	2.948	2.808	2.640	2.447	2.231	1.997	1.749	1.494	1.237	0.985	0.743	0.517	0.316	0.150	0.039	----	----	----	----	----	----	----
17	2.927	2.797	2.643	2.466	2.269	2.055	1.827	1.591	1.351	1.114	0.883	0.664	0.461	0.281	0.133	0.035	----	----	----	----	----	----
18	2.908	2.787	2.644	2.480	2.299	2.102	1.893	1.675	1.451	1.227	1.007	0.796	0.597	0.413	0.251	0.119	0.031	----	----	----	----	----
19	2.890	2.776	2.643	2.492	2.324	2.142	1.948	1.746	1.538	1.327	1.118	0.915	0.721	0.539	0.372	0.226	0.107	0.028	----	----	----	----
20	2.874	2.766	2.641	2.500	2.344	2.176	1.996	1.807	1.613	1.415	1.217	1.022	0.834	0.656	0.489	0.337	0.204	0.096	0.025	----	----	----
21	2.858	2.756	2.638	2.506	2.361	2.204	2.036	1.861	1.678	1.492	1.305	1.119	0.937	0.763	0.598	0.446	0.307	0.185	0.087	0.023	----	----
22	2.842	2.746	2.635	2.511	2.375	2.228	2.071	1.907	1.736	1.561	1.384	1.207	1.032	0.862	0.700	0.548	0.408	0.280	0.169	0.080	0.021	----
23	2.828	2.736	2.631	2.515	2.387	2.249	2.102	1.947	1.786	1.621	1.454	1.285	1.118	0.954	0.796	0.645	0.504	0.374	0.257	0.155	0.073	0.019
24	2.814	2.727	2.627	2.517	2.396	2.267	2.128	1.983	1.831	1.675	1.516	1.356	1.196	1.038	0.884	0.736	0.596	0.465	0.345	0.237	0.143	0.067
25	2.801	2.717	2.623	2.518	2.404	2.282	2.151	2.014	1.871	1.723	1.572	1.420	1.267	1.115	0.966	0.821	0.683	0.552	0.430	0.319	0.218	0.132
26	2.789	2.709	2.618	2.519	2.411	2.295	2.171	2.042	1.906	1.766	1.623	1.478	1.331	1.186	1.042	0.901	0.765	0.635	0.512	0.399	0.295	0.202
27	2.777	2.700	2.614	2.519	2.416	2.306	2.189	2.066	1.938	1.805	1.669	1.530	1.390	1.250	1.111	0.975	0.842	0.714	0.592	0.477	0.371	0.274
28	2.766	2.692	2.609	2.519	2.421	2.316	2.205	2.088	1.966	1.839	1.710	1.577	1.444	1.309	1.176	1.043	0.914	0.788	0.667	0.553	0.445	0.346
29	2.755	2.684	2.604	2.518	2.425	2.325	2.219	2.107	1.991	1.871	1.747	1.621	1.493	1.364	1.235	1.107	0.981	0.858	0.739	0.625	0.517	0.416
30	2.745	2.676	2.600	2.517	2.428	2.332	2.231	2.125	2.014	1.899	1.781	1.660	1.537	1.414	1.290	1.166	1.044	0.924	0.807	0.695	0.587	0.485
31	2.735	2.668	2.595	2.515	2.430	2.339	2.242	2.140	2.035	1.925	1.812	1.696	1.579	1.460	1.340	1.221	1.102	0.986	0.872	0.761	0.654	0.552
32	2.725	2.661	2.590	2.514	2.432	2.344	2.252	2.155	2.053	1.948	1.840	1.729	1.616	1.502	1.387	1.272	1.157	1.043	0.932	0.823	0.718	0.617
33	2.716	2.654	2.586	2.512	2.433	2.349	2.260	2.167	2.070	1.970	1.866	1.759	1.651	1.541	1.430	1.319	1.208	1.097	0.989	0.882	0.779	0.678
34	2.707	2.647	2.581	2.510	2.434	2.353	2.268	2.179	2.086	1.989	1.889	1.787	1.683	1.577	1.470	1.363	1.255	1.148	1.042	0.938	0.836	0.737
35	2.699	2.640	2.576	2.508	2.435	2.357	2.275	2.189	2.100	2.007	1.911	1.813	1.713	1.611	1.507	1.404	1.299	1.196	1.093	0.991	0.891	0.794
36	2.690	2.634	2.572	2.506	2.435	2.360	2.281	2.199	2.113	2.023	1.931	1.837	1.740	1.642	1.542	1.442	1.341	1.240	1.140	1.041	0.943	0.847
37	2.683	2.627	2.567	2.503	2.435	2.363	2.287	2.207	2.124	2.038	1.950	1.859	1.765	1.670	1.574	1.477	1.379	1.282	1.184	1.088	0.992	0.898
38	2.675	2.621	2.563	2.501	2.435	2.365	2.292	2.215	2.135	2.052	1.967	1.879	1.789	1.697	1.604	1.510	1.416	1.321	1.226	1.132	1.039	0.947
39	2.667	2.615	2.559	2.499	2.435	2.367	2.296	2.222	2.145	2.065	1.982	1.898	1.811	1.722	1.632	1.541	1.450	1.358	1.266	1.174	1.083	0.993
40	2.660	2.609	2.555	2.496	2.434	2.369	2.300	2.229	2.154	2.077	1.997	1.915	1.831	1.746	1.659	1.570	1.482	1.392	1.303	1.213	1.124	1.036
45	2.628	2.583	2.535	2.484	2.430	2.374	2.315	2.253	2.190	2.124	2.056	1.986	1.914	1.841	1.767	1.691	1.614	1.537	1.459	1.381	1.302	1.224
50	2.600	2.559	2.516	2.471	2.424	2.374	2.323	2.269	2.214	2.157	2.098	2.037	1.975	1.911	1.847	1.781	1.714	1.646	1.578	1.509	1.439	1.370
55	2.575	2.538	2.500	2.459	2.417	2.373	2.327	2.280	2.231	2.180	2.128	2.075	2.020	1.964	1.907	1.849	1.790	1.730	1.669	1.608	1.546	1.484
60	2.553	2.519	2.484	2.448	2.409	2.370	2.329	2.286	2.242	2.197	2.151	2.103	2.054	2.004	1.954	1.902	1.849	1.796	1.742	1.687	1.631	1.576
65	2.534	2.503	2.470	2.437	2.402	2.366	2.329	2.290	2.250	2.210	2.168	2.125	2.081	2.036	1.990	1.944	1.896	1.848	1.799	1.750	1.700	1.650
70	2.516	2.487	2.458	2.427	2.395	2.361	2.327	2.292	2.256	2.219	2.181	2.142	2.102	2.061	2.020	1.977	1.934	1.891	1.846	1.802	1.756	1.710
75	2.500	2.473	2.446	2.417	2.387	2.357	2.325	2.293	2.260	2.226	2.191	2.155	2.118	2.081	2.043	2.005	1.965	1.926	1.885	1.844	1.802	1.760
80	2.486	2.461	2.436	2.408	2.380	2.352	2.323	2.293	2.262	2.231	2.198	2.165	2.132	2.098	2.063	2.027	1.991	1.954	1.917	1.879	1.841	1.803
85	2.473	2.449	2.425	2.399	2.374	2.347	2.320	2.292	2.263	2.234	2.204	2.174	2.143	2.111	2.079	2.046	2.012	1.979	1.944	1.909	1.874	1.838
90	2.460	2.438	2.415	2.391	2.367	2.342	2.317	2.291	2.264	2.237	2.209	2.181	2.152	2.122	2.092	2.061	2.030	1.999	1.967	1.935	1.902	1.869
95	2.449	2.428	2.406	2.384	2.361	2.338	2.314	2.289	2.264	2.239	2.212	2.186	2.159	2.131	2.103	2.075	2.046	2.016	1.986	1.956	1.926	1.895
100	2.438	2.418	2.398	2.377	2.355	2.333	2.310	2.287	2.264	2.240	2.215	2.190	2.165	2.139	2.113	2.086	2.059	2.031	2.003	1.975	1.946	1.917
150	2.363	2.349	2.336	2.322	2.308	2.294	2.279	2.265	2.250	2.235	2.220	2.204	2.188	2.173	2.156	2.140	2.124	2.107	2.090	2.073	2.056	2.039
200	2.317	2.307	2.296	2.286	2.276	2.265	2.255	2.244	2.233	2.222	2.211	2.200	2.189	2.177	2.166	2.154	2.142	2.131	2.119	2.106	2.094	2.082