

Critical Durbin-Watson values at 5% significance level

	k=1		k=2		k=3		k=4		k=5	
	Lower limit	Upper limit	Lower limit	Upper limit	Lower limit	Upper limit	Lower limit	Upper limit	Lower limit	Upper limit
n=20	1.201	1.411	1.100	1.537	0.998	1.676	0.894	1.828	0.792	1.991
n=21	1.221	1.420	1.125	1.538	1.026	1.669	0.927	1.812	0.829	1.964
n=22	1.239	1.429	1.147	1.541	1.053	1.664	0.958	1.797	0.863	1.940
n=23	1.257	1.437	1.168	1.543	1.078	1.660	0.986	1.785	0.895	1.920
n=24	1.273	1.446	1.188	1.546	1.101	1.656	1.013	1.775	0.925	1.902
n=25	1.288	1.454	1.206	1.550	1.123	1.654	1.038	1.767	0.953	1.886
n=26	1.302	1.461	1.224	1.553	1.143	1.652	1.062	1.759	0.979	1.873
n=27	1.316	1.469	1.240	1.556	1.162	1.651	1.084	1.753	1.004	1.861
n=28	1.328	1.476	1.255	1.560	1.181	1.650	1.104	1.747	1.028	1.850
n=29	1.341	1.483	1.270	1.563	1.198	1.650	1.124	1.743	1.050	1.841
n=30	1.352	1.489	1.284	1.567	1.214	1.650	1.143	1.739	1.071	1.833
n=35	1.402	1.519	1.343	1.584	1.283	1.653	1.222	1.726	1.160	1.803
n=40	1.442	1.544	1.391	1.600	1.338	1.659	1.285	1.721	1.230	1.786
n=45	1.475	1.566	1.430	1.615	1.383	1.666	1.336	1.720	1.287	1.776
n=50	1.503	1.585	1.462	1.628	1.421	1.674	1.378	1.721	1.335	1.771
n=55	1.528	1.601	1.490	1.641	1.452	1.681	1.414	1.724	1.374	1.768
n=60	1.549	1.616	1.514	1.652	1.480	1.689	1.444	1.727	1.408	1.767
n=65	1.567	1.629	1.536	1.662	1.503	1.696	1.471	1.731	1.438	1.767
n=70	1.583	1.641	1.554	1.672	1.525	1.703	1.494	1.735	1.464	1.768
n=75	1.598	1.652	1.571	1.680	1.543	1.709	1.515	1.739	1.487	1.770
n=80	1.611	1.662	1.586	1.688	1.560	1.715	1.534	1.743	1.507	1.772
n=85	1.624	1.671	1.600	1.696	1.575	1.721	1.550	1.747	1.525	1.774
n=90	1.635	1.679	1.612	1.703	1.589	1.726	1.566	1.751	1.542	1.776
n=95	1.645	1.687	1.623	1.709	1.602	1.732	1.579	1.755	1.557	1.778
n=100	1.654	1.694	1.634	1.715	1.613	1.736	1.592	1.758	1.571	1.780
n=150	1.72	1.747	1.706	1.760	1.693	1.774	1.679	1.788	1.665	1.802
n=200	1.758	1.779	1.748	1.789	1.738	1.799	1.728	1.809	1.718	1.820

(continued)

	k=6		k=7		k=8		k=9		k=10	
	Lower limit	Upper limit	Lower limit	Upper limit	Lower limit	Upper limit	Lower limit	Upper limit	Lower limit	Upper limit
n=20	0.691	2.162	0.595	2.339	0.502	2.521	0.416	2.704	0.336	2.885
n=21	0.731	2.124	0.637	2.290	0.546	2.461	0.461	2.633	0.380	2.806
n=22	0.769	2.090	0.677	2.246	0.588	2.407	0.504	2.571	0.424	2.735
n=23	0.804	2.061	0.715	2.208	0.628	2.360	0.545	2.514	0.465	2.670
n=24	0.837	2.035	0.750	2.174	0.666	2.318	0.584	2.464	0.506	2.613
n=25	0.868	2.013	0.784	2.144	0.702	2.280	0.621	2.419	0.544	2.560
n=26	0.897	1.992	0.816	2.117	0.735	2.246	0.657	2.379	0.581	2.513
n=27	0.925	1.974	0.845	2.093	0.767	2.216	0.691	2.342	0.616	2.470
n=28	0.951	1.959	0.874	2.071	0.798	2.188	0.723	2.309	0.649	2.431
n=29	0.975	1.944	0.900	2.052	0.826	2.164	0.753	2.278	0.681	2.396
n=30	0.998	1.931	0.926	2.034	0.854	2.141	0.782	2.251	0.712	2.363
n=35	1.097	1.884	1.034	1.967	0.971	2.054	0.908	2.144	0.845	2.236
n=40	1.175	1.854	1.120	1.924	1.064	1.997	1.008	2.072	0.952	2.149
n=45	1.238	1.835	1.189	1.895	1.139	1.958	1.089	2.022	1.038	2.088
n=50	1.291	1.822	1.246	1.875	1.201	1.930	1.156	1.986	1.110	2.044
n=55	1.334	1.814	1.294	1.861	1.253	1.909	1.212	1.959	1.170	2.010
n=60	1.372	1.808	1.335	1.850	1.298	1.894	1.260	1.939	1.222	1.984
n=65	1.404	1.805	1.370	1.843	1.336	1.882	1.301	1.923	1.266	1.964
n=70	1.433	1.802	1.401	1.838	1.369	1.874	1.337	1.910	1.305	1.948
n=75	1.458	1.801	1.428	1.834	1.399	1.867	1.369	1.901	1.339	1.935
n=80	1.480	1.801	1.453	1.831	1.425	1.861	1.397	1.893	1.369	1.925
n=85	1.500	1.801	1.474	1.829	1.448	1.857	1.422	1.886	1.396	1.916
n=90	1.518	1.801	1.494	1.827	1.469	1.854	1.445	1.881	1.420	1.909
n=95	1.535	1.802	1.512	1.827	1.489	1.852	1.465	1.877	1.442	1.903
n=100	1.550	1.803	1.528	1.826	1.506	1.850	1.484	1.874	1.462	1.898
n=150	1.651	1.817	1.637	1.832	1.622	1.846	1.608	1.862	1.593	1.877
n=200	1.707	1.831	1.697	1.841	1.686	1.852	1.675	1.863	1.665	1.874

	k=11		k=12		k=13		k=14		k=15	
	Lower limit	Upper limit	Lower limit	Upper limit	Lower limit	Upper limit	Lower limit	Upper limit	Lower limit	Upper limit
n=20	0.263	3.063	0.200	3.234	0.145	3.395	0.100	3.542	0.063	3.676
n=21	0.307	2.976	0.240	3.141	0.182	3.300	0.132	3.448	0.091	3.583
n=22	0.349	2.897	0.281	3.057	0.220	3.211	0.166	3.358	0.120	3.495
n=23	0.391	2.826	0.322	2.979	0.259	3.128	0.202	3.272	0.153	3.409
n=24	0.431	2.761	0.362	2.908	0.297	3.053	0.239	3.193	0.186	3.327
n=25	0.470	2.702	0.400	2.844	0.335	2.983	0.275	3.119	0.221	3.251
n=26	0.508	2.649	0.438	2.784	0.373	2.919	0.312	3.051	0.256	3.179
n=27	0.544	2.600	0.475	2.730	0.409	2.859	0.348	2.987	0.291	3.112
n=28	0.578	2.555	0.510	2.680	0.445	2.805	0.383	2.928	0.325	3.050
n=29	0.612	2.515	0.544	2.634	0.479	2.755	0.418	2.874	0.359	2.992
n=30	0.643	2.477	0.577	2.592	0.512	2.708	0.451	2.823	0.392	2.937
n=35	0.783	2.330	0.722	2.425	0.662	2.521	0.604	2.619	0.547	2.716
n=40	0.896	2.228	0.840	2.309	0.785	2.391	0.731	2.473	0.678	2.557
n=45	0.988	2.156	0.938	2.225	0.887	2.296	0.838	2.367	0.788	2.439
n=50	1.064	2.103	1.019	2.163	0.973	2.225	0.927	2.287	0.882	2.350
n=55	1.129	2.062	1.087	2.116	1.045	2.170	1.003	2.225	0.961	2.281
n=60	1.184	2.031	1.145	2.079	1.106	2.127	1.068	2.177	1.029	2.227
n=65	1.231	2.006	1.195	2.049	1.160	2.093	1.124	2.138	1.088	2.183
n=70	1.272	1.987	1.239	2.026	1.206	2.066	1.172	2.106	1.139	2.148
n=75	1.308	1.970	1.277	2.006	1.247	2.043	1.215	2.080	1.184	2.118
n=80	1.340	1.957	1.311	1.991	1.283	2.024	1.253	2.059	1.224	2.093
n=85	1.369	1.946	1.342	1.977	1.315	2.009	1.287	2.040	1.260	2.073
n=90	1.395	1.937	1.369	1.966	1.344	1.995	1.318	2.025	1.292	2.055
n=95	1.418	1.930	1.394	1.956	1.370	1.984	1.345	2.012	1.321	2.040
n=100	1.439	1.923	1.416	1.948	1.393	1.974	1.371	2.000	1.347	2.026
n=150	1.579	1.892	1.564	1.908	1.550	1.924	1.535	1.940	1.519	1.956
n=200	1.654	1.885	1.643	1.896	1.632	1.908	1.621	1.919	1.610	1.931

(continued)

	k=16		k=17		k=18		k=19		k=20	
	Lower limit	Upper limit	Lower limit	Upper limit	Lower limit	Upper limit	Lower limit	Upper limit	Lower limit	Upper limit
n=20	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n=21	0.058	3.705	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n=22	0.083	3.619	0.052	3.731	n/a	n/a	n/a	n/a	n/a	n/a
n=23	0.110	3.535	0.076	3.650	0.048	3.753	n/a	n/a	n/a	n/a
n=24	0.141	3.454	0.101	3.572	0.070	3.678	0.044	3.773	n/a	n/a
n=25	0.172	3.376	0.130	3.494	0.094	3.604	0.065	3.702	0.041	3.790
n=26	0.205	3.303	0.160	3.420	0.120	3.531	0.087	3.632	0.060	3.724
n=27	0.238	3.233	0.191	3.349	0.149	3.460	0.112	3.563	0.081	3.658
n=28	0.271	3.168	0.222	3.283	0.178	3.392	0.138	3.495	0.104	3.592
n=29	0.305	3.107	0.254	3.219	0.208	3.327	0.166	3.431	0.129	3.528
n=30	0.337	3.050	0.286	3.160	0.238	3.266	0.195	3.368	0.156	3.465
n=35	0.492	2.813	0.439	2.910	0.388	3.005	0.340	3.099	0.295	3.190
n=40	0.626	2.641	0.575	2.724	0.525	2.808	0.477	2.829	0.430	2.974
n=45	0.740	2.512	0.692	2.586	0.644	2.659	0.598	2.733	0.553	2.807
n=50	0.836	2.414	0.792	2.479	0.747	2.544	0.703	2.610	0.660	2.675
n=55	0.919	2.338	0.877	2.396	0.836	2.454	0.795	2.512	0.754	2.571
n=60	0.990	2.278	0.951	2.330	0.913	2.382	0.874	2.434	0.836	2.487
n=65	1.052	2.229	1.016	2.276	0.980	2.323	0.944	2.371	0.908	2.419
n=70	1.105	2.189	1.072	2.232	1.038	2.275	1.005	2.318	0.971	2.362
n=75	1.153	2.156	1.121	2.195	1.090	2.235	1.058	2.275	1.027	2.315
n=80	1.195	2.129	1.165	2.165	1.136	2.201	1.106	2.238	1.076	2.275
n=85	1.232	2.105	1.205	2.139	1.177	2.172	1.149	2.206	1.121	2.241
n=90	1.266	2.085	1.240	2.116	1.213	2.148	1.187	2.179	1.160	2.211
n=95	1.296	2.068	1.271	2.097	1.247	2.126	1.222	2.156	1.197	2.186
n=100	1.324	2.053	1.301	2.080	1.277	2.108	1.253	2.135	1.229	2.164
n=150	1.504	1.972	1.489	1.989	1.474	2.006	1.458	2.023	1.443	2.040
n=200	1.599	1.943	1.588	1.955	1.576	1.967	1.565	1.979	1.554	1.991

Take n=200 if n>200 as an approximation