

**Lampiran 1**  
**Tabel Durbin Watson**

N	k=1		k=2		k=3		k=4		k=5	
	dl	du	dl	du	dl	du	dl	du	Dl	Du
15	1.08	1.63	0.95	1.54	0.82	1.75	0.69	1.97	0.56	2.21
16	1.10	1.37	0.98	1.54	0.86	1.73	0.74	1.93	0.62	2.15
17	1.13	1.38	1.02	1.54	0.90	1.71	0.78	1.90	0.67	2.10
18	1.16	1.39	1.05	1.53	0.93	1.69	0.82	1.87	0.71	2.02
19	1.18	1.40	1.08	1.53	0.97	1.68	0.86	1.85	0.75	2.02
20	1.20	1.41	1.10	1.54	1.00	1.68	0.90	1.83	0.79	1.99
21	1.22	1.42	1.13	1.54	1.03	1.67	0.93	1.81	0.83	1.96
22	1.24	1.43	1.15	1.54	1.05	1.66	0.96	1.80	0.86	1.94
23	1.26	1.44	1.17	1.54	1.08	1.66	0.99	1.79	0.90	1.92
24	1.27	1.45	1.19	1.55	1.10	1.66	1.01	1.78	0.93	1.90
25	1.29	1.45	1.21	1.55	1.12	1.66	1.04	1.77	0.95	1.89
26	1.30	1.46	1.22	1.55	1.14	1.66	1.06	1.76	0.98	1.88
27	1.32	1.47	1.24	1.56	1.16	1.65	1.08	1.76	1.01	1.86
28	1.33	1.48	1.26	1.56	1.18	1.65	1.10	1.75	1.03	1.85
29	1.34	1.48	1.27	1.56	1.20	1.65	1.12	1.74	1.05	1.84
30	1.35	1.49	1.28	1.57	1.21	1.65	1.14	1.74	1.07	1.83
31	1.36	1.50	1.30	1.57	1.23	1.65	1.16	1.74	1.09	1.83
32	1.37	1.50	1.31	1.57	1.24	1.65	1.18	1.73	1.11	1.82
33	1.38	1.51	1.32	1.58	1.26	1.65	1.19	1.73	1.13	1.81
34	1.39	1.51	1.33	1.58	1.27	1.65	1.21	1.73	1.15	1.81
35	1.40	1.52	1.34	1.58	1.28	1.65	1.22	1.73	1.16	1.80
36	1.41	1.52	1.35	1.59	1.29	1.65	1.24	1.73	1.18	1.80
37	1.42	1.53	1.36	1.59	1.31	1.66	1.25	1.72	1.19	1.80
38	1.43	1.54	1.37	1.59	1.32	1.66	1.26	1.72	1.21	1.79
39	1.43	1.54	1.38	1.60	1.33	1.66	1.27	1.72	1.22	1.79
40	1.44	1.54	1.39	1.60	1.34	1.66	1.29	1.72	1.23	1.79
45	1.48	1.57	1.43	1.62	1.38	1.67	1.34	1.72	1.29	1.79
50	1.50	1.59	1.46	1.63	1.42	1.67	1.38	1.72	1.34	1.77
55	1.53	1.60	1.49	1.64	1.45	1.68	1.41	1.72	1.38	1.77
60	1.55	1.62	1.51	1.65	1.48	1.69	1.44	1.73	1.41	1.77
<b>65</b>	1.57	1.63	1.54	1.66	1.50	1.70	<b>1.47</b>	<b>1.73</b>	1.44	1.77
70	1.58	1.64	1.55	1.67	1.52	1.70	1.49	1.74	1.46	1.77
75	1.60	1.65	1.57	1.68	1.54	1.71	1.51	1.74	1.49	1.77
80	1.61	1.66	1.59	1.69	1.56	1.72	1.53	1.74	1.51	1.77
85	1.62	1.67	1.60	1.70	1.57	1.72	1.55	1.75	1.52	1.77
90	1.63	1.68	1.61	1.70	1.59	1.73	1.57	1.75	1.54	1.78
95	1.64	1.69	1.62	1.71	1.60	1.73	1.58	1.75	1.56	1.78
100	1.65	1.69	1.63	1.72	1.61	1.74	1.59	1.76	1.57	1.78

Sumber : J. Durbin and G.S Watson. "Testing for serial correlation in least squares regression, (II), "Biometrika" dalam J. Supranto (1995)

## Lampiran 2

### Tabel Distribusi t

Df	Alfa = 2,5%	Alfa = 5%	Alfa = 10%
1	12,7062	6,3138	2,0777
2	4,3027	2,9200	1,8856
3	3,1824	2,3534	1,6377
4	2,7764	2,1318	1,5332
5	2,5706	2,0150	1,4759
6	2,4469	1,9432	1,4398
7	2,3646	1,8946	1,4149
8	2,3060	1,8595	1,3968
9	2,2622	1,8331	1,3830
10	2,2281	1,8125	1,3722
11	2,2010	1,7959	1,3634
12	2,1788	1,7823	1,3562
13	2,1604	1,7709	1,3502
14	2,1448	1,7613	1,3450
15	2,1314	1,7531	1,3406
16	2,1199	1,7459	1,3368
17	2,1098	1,7396	1,3334
18	2,1009	1,7341	1,3304
19	2,0930	1,7291	1,3277
20	2,0860	1,7247	1,3253
21	2,0796	1,7207	1,3232
22	2,0739	1,7171	1,3212
23	2,0687	1,7139	1,3195
24	2,0639	1,7109	1,3178
25	2,0595	1,7081	1,3163
26	2,0555	1,7056	1,3150
27	2,0518	1,7033	1,3137
28	2,0484	1,7011	1,3125
29	2,0457	1,6991	1,3114
30	2,0423	1,6973	1,3104
31	2,0395	1,6955	1,3095
32	2,0369	1,6939	1,3086
33	2,0345	1,6924	1,3077
34	2,0322	1,6909	1,3070
35	2,0301	1,6896	1,3062
36	2,0281	1,6883	1,3055
37	2,0262	1,6871	1,3049
38	2,0244	1,6860	1,3042

39	2,0227	1,6849	1,3036
40	2,0211	1,6839	1,3031
41	2,0195	1,6829	1,3025
42	2,0181	1,6820	1,3020
43	2,0167	1,6811	1,3016
44	2,0154	1,6802	1,3011
45	2,0141	1,6794	1,3006
46	2,0129	1,6787	1,3002
47	2,0117	1,6779	1,2998
48	2,0106	1,6772	1,2994
49	2,0096	1,6766	1,2991
50	2,0086	1,6759	1,2987
51	2,0076	1,6753	1,2984
52	2,0066	1,6747	1,2980
53	2,0057	1,6741	1,2977
54	2,0049	1,6736	1,2974
55	2,0040	1,6730	1,2971
56	2,0032	1,6725	1,2969
57	2,0025	1,6720	1,2966
58	2,0017	1,6716	1,2963
59	2,0010	1,6711	1,2961
60	2,0003	1,6706	1,2958
61	1,9996	1,6702	1,2956
62	1,9990	1,6698	1,2954
63	1,9983	1,6694	1,2951
64	1,9977	1,6690	1,2949
65	1,9971	1,6686	1,2947
66	1,9966	1,6683	1,2945
67	1,9960	1,6679	1,2943
68	1,9955	1,6676	1,2941
69	1,9949	1,6672	1,2939
70	1,9944	1,6669	1,2938
71	1,9939	1,6666	1,2936
72	1,9935	1,6663	1,2934
73	1,9930	1,6660	1,2933
74	1,9925	1,6657	1,2931
75	1,9921	1,6654	1,2929
76	1,9917	1,6652	1,2928
77	1,9913	1,6649	1,2926
78	1,9908	1,6646	1,2925
79	1,9905	1,6644	1,2924
80	1,9901	1,6641	1,2922

81	1,9897	1,6639	1,2921
82	1,9893	1,6636	1,2920
83	1,9890	1,6634	1,2918
84	1,9886	1,6632	1,2917
85	1,9883	1,6630	1,2916
86	1,9879	1,6628	1,2915
87	1,9876	1,6626	1,2914
88	1,9873	1,6624	1,2912
89	1,9870	1,6622	1,2911
90	1,9867	1,6620	1,2910
91	1,9864	1,6618	1,2909
92	1,9861	1,6616	1,2908
93	1,9858	1,6614	1,2907
94	1,9855	1,6612	1,2906
95	1,9853	1,6611	1,2905
96	1,9850	1,6609	1,2904
97	1,9847	1,6607	1,2903
98	1,9845	1,6606	1,2902
99	1,9842	1,6604	1,2902
100	1,9840	1,6602	1,2901
110	1,9818	1,6588	1,2893
120	1,9799	1,6577	1,2887
130	1,9784	1,6567	1,2881
140	1,9771	1,6558	1,2876
150	1,9759	1,6551	1,2872
160	1,9749	1,6544	1,2869
170	1,9740	1,6539	1,2866
180	1,9732	1,6534	1,2863
190	1,9725	1,6529	1,2860
200	1,9719	1,6525	1,2893

### Lampiran 3

**Tabel Pengujian Nilai F**

No df	df 2				
	1	2	3	4	5
1	161.448	199.5	215.707	224.583	230.162
2	18.513	19	19.164	19.247	19.296
3	10.128	9.552	9.277	9.117	9.013
4	7.709	6.944	6.591	6.388	6.256
5	6.608	5.786	5.409	5.192	5.05
6	5.987	5.143	4.757	4.534	4.387
7	5.591	4.737	4.347	4.12	3.972
8	5.318	4.459	4.066	3.838	3.687
9	5.117	4.256	3.863	3.633	3.482
10	4.965	4.103	3.708	3.478	3.326
11	4.844	3.982	3.587	3.357	3.204
12	4.747	3.885	3.49	3.259	3.106
13	4.667	3.806	3.411	3.179	3.025
14	4.6	3.739	3.344	3.112	2.958
15	4.543	3.682	3.287	3.056	2.901
16	4.494	3.634	3.239	3.007	2.852
17	4.451	3.592	3.197	2.965	2.81
18	4.414	3.555	3.16	2.928	2.773
19	4.381	3.522	3.127	2.895	2.74
20	4.351	3.493	3.098	2.866	2.711
21	4.325	3.467	3.072	2.84	2.685
22	4.301	3.443	3.049	2.817	2.661
23	4.279	3.422	3.028	2.796	2.64
24	4.26	3.403	3.009	2.776	2.621
25	4.242	3.385	2.991	2.759	2.603
26	4.225	3.369	2.975	2.743	2.587
27	4.21	3.354	2.96	2.728	2.572
28	4.196	3.34	2.947	2.714	2.558
29	4.183	3.328	2.934	2.701	2.545
30	4.171	3.316	2.922	2.69	2.534
40	4.085	3.232	2.839	2.606	2.449
50	4.034	3.183	2.79	2.557	2.4
60	4.001	3.15	2.758	2.525	2.368

70	3.978	3.128	2.736	2.503	2.346
80	3.96	3.111	2.716	2.486	2.329
81	3.959	3.109	2.717	2.484	2.327
82	3.957	3.108	2.716	2.483	2.326
83	3.956	3.107	2.715	2.482	2.324
84	3.955	3.105	2.713	2.48	2.323
85	3.953	3.104	2.712	2.479	2.322
86	3.952	3.103	2.711	2.478	2.321
87	3.951	3.101	2.709	2.476	2.319
88	3.949	3.1	2.708	2.475	2.318
89	3.948	3.099	2.707	2.474	2.317
90	3.947	3.098	2.706	2.473	2.316
91	3.946	3.097	2.705	2.472	2.315
92	3.945	3.095	2.704	2.471	2.313
93	3.943	3.094	2.703	2.47	<b><u>2.312</u></b>
94	3.942	3.093	2.701	2.469	2.311
95	3.941	3.092	2.7	2.467	2.31
96	3.94	3.091	2.699	2.466	2.309
97	3.939	3.09	2.698	2.465	2.308
98	3.938	3.089	2.697	2.465	2.307
99	3.937	3.088	2.626	2.464	2.306
100	3.936	3.087	2.696	2.463	2.305

## Lampiran 4

### Regresi Linier Berganda

#### Regression

##### Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	x1.tota, x4.tota, x3.tota, x2.tota(a)	.	Enter

a All requested variables entered.

b Dependent Variable: y.tota

##### Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.497(a)	.247	.207	1.146	1.983

a Predictors: (Constant), x1.tota, x4.tota, x3.tota, x2.tota

b Dependent Variable: y.tota

##### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.121	4	8.024	6.114	.000 <sup>a</sup>
	Residual	122.061	61	1.312		
	Total	162.182	65			

a. Predictors: (Constant), x1.tota, x4.tota, x3.tota, x2.tota

b. Dependent Variable: y.tota

##### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.733	2.441		.300	.765					
	x1.tota	.183	.091	.194	2.013	.047	.124	.204	.181	.871	1.148
	x2.tota	.227	.098	.236	2.304	.023	.231	.232	.207	.771	1.296
	x3.tota	.166	.081	.208	2.038	.044	.370	.207	.183	.774	1.292
	x4.tota	.212	.100	.201	2.113	.037	.257	.214	.190	.893	1.119
	x5.tota	.178	.086	.188	2.071	.041	.213	.210	.186	.980	1.020

a. Dependent Variable: y.tota

**Coefficient Correlations(a)**

Model			x1.tota	x4.total	x3.total	x2.total
1	Correlations	x1.tota	1.000	.120	-.193	.349
		x4.total	.120	1.000	-.315	.151
		x3.total	-.193	-.315	1.000	-.385
		x2.total	.349	.151	-.385	1.000
	Covariances	x1.tota	.008	.001	-.001	.003
		x4.total	.001	.010	-.003	.001
		x3.total	-.001	-.003	.007	-.003
		x2.total	.003	.001	-.003	.010

a. Dependent Variable: y.total

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	x1.tota	x2.total	x3.total	x4.total	x5.total
1	1	5.948	1.000	.00	.00	.00	.00	.00	.00
	2	.017	18.490	.00	.15	.12	.29	.00	.08
	3	.012	22.106	.00	.13	.23	.35	.02	.20
	4	.011	23.704	.00	.23	.20	.06	.15	.30
	5	.010	24.792	.00	.02	.01	.26	.57	.25
	6	.002	58.950	.99	.47	.44	.04	.25	.16

a. Dependent Variable: y.total

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	10.55	13.88	12.42	.640	99
Residual	-2.757	2.315	.000	1.116	99
Std. Predicted Value	-2.931	2.280	.000	1.000	99
Std. Residual	-2.407	2.020	.000	.974	99

a. Dependent Variable: y.total



## Lampiran 5

### Uji Heteroskedastisitas

### Regression

#### Variables Entered/Removed<sup>b</sup>

Model	Variables Entered	Variables Removed	Method
1	lnx5, lnx1, lnx4 <sup>a</sup> , lnx2, lnx3	.	Enter

a. All requested variables entered.

b. Dependent Variable: lnei2

#### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.206 <sup>a</sup>	.042	-.009	2.321	1.772

a. Predictors: (Constant), lnx5, lnx1, lnx4, lnx2, lnx3

b. Dependent Variable: lnei2

#### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.155	5	4.431	.822	.537 <sup>a</sup>
	Residual	501.052	93	5.388		
	Total	523.207	98			

a. Predictors: (Constant), lnx5, lnx1, lnx4, lnx2, lnx3

b. Dependent Variable: lnei2

#### Coefficients<sup>b</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.904	12.360		-.073	.942					
	lnx1	-.395	2.449	-.018	-.161	.872	-.011	-.017	-.016	.874	1.144
	lnx2	-.096	2.364	-.005	-.040	.968	.054	-.004	-.004	.785	1.274
	lnx3	2.387	1.785	.153	1.337	.184	.151	.137	.136	.785	1.275
	lnx4	.918	2.262	.044	.406	.686	.082	.042	.041	.894	1.119
	lnx5	-2.840	2.177	-.134	-1.304	.195	-.117	-.134	-.132	.983	1.018

a. Dependent Variable: lnei2

**Coefficient Correlations(a)**

Model			lnx5	lnx1	lnx4	lnx2	lnx3
1	Correlations	lnx5	1.000	.019	-.013	.091	-.106
		lnx1	.019	1.000	.114	.344	-.195
		lnx4	-.013	.114	1.000	.145	-.318
		lnx2	.091	.344	.145	1.000	-.367
		lnx3	-.106	-.195	-.318	-.367	1.000
	Covariances	lnx5	4.740	.100	-.066	.469	-.410
		lnx1	.100	5.997	.632	1.992	-.851
		lnx4	-.066	.632	5.114	.775	-1.283
		lnx2	.469	1.992	.775	5.587	-1.547
		lnx3	-.410	-.851	-1.283	-1.547	3.186

a. Dependent Variable: lnei2

**Collinearity Diagnostics**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	lnx1	lnx2	lnx3	lnx4	lnx5
1	1	5.991	1.000	.00	.00	.00	.00	.00	.00
	2	.003	44.626	.00	.09	.05	.50	.00	.09
	3	.002	53.065	.00	.07	.44	.24	.07	.02
	4	.002	58.325	.00	.20	.00	.12	.67	.00
	5	.002	60.555	.00	.16	.06	.09	.04	.71
	6	.000	147.786	.99	.49	.44	.04	.21	.18

a. Dependent Variable: lnei2

**Residuals Statistics**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-2.80	-.33	-1.21	.475	99
Residual	-6.532	3.297	.000	2.261	99
Std. Predicted Value	-3.362	1.846	.000	1.000	99
Std. Residual	-2.814	1.420	.000	.974	99

a. Dependent Variable: lnei2