

## LAMPIRAN 1

### Daftar Populasi Penelitian

#### 1. Sub Sektor Makanan dan Minuman

NO	KODE	NAMA
1	AISA	PT Tiga Pilar Sejahtera Food Tbk
2	ALTO	PT Tri Bayan Tirta Tbk
3	CEKA	PT Cahaya Kalbar Tbk
4	DLTA	PT Delta Djakarta Tbk
5	ICBP	PT Indofood Sukses Makmur Tbk
6	INDF	PT Indofood Sukses Makmur Tbk
7	MLBI	PT Muliti Bintang Indonesia Tbk
8	MYOR	PT Mayora Indah Tbk
9	PSDN	PT Prashida Aneka Niaga Tbk
10	ROTI	PT Nippon Indosari Corporindo Tbk
11	SKBM	PT Sekar Bumi Tbk
12	SKLT	PT Sekar Laut Tbk
13	STTP	PT Siantar Top Tbk
14	ULTJ	PT Ultrajaya Milk Industry and Trading Company Tbk

#### 2. Sub Sektor Rokok

NO	KODE	NAMA
1	GGRM	PT Gudang Garam Tbk
2	HMSP	PT Handjaya Mandala Sampoerna Tbk
3	RMBA	PT Bentoel International Investama Tbk
4	WIIM	PT Wismilak Inti Makmur Tbk

#### 3. Sub Sektor Farmasi

NO	KODE	NAMA
1	DVLA	PT Darya Varia Laboratoria Tbk
2	INAF	PT Indofarma (Persero) Tbk
3	KAEF	PT Kimia Farma (Persero) Tbk
4	KLBF	PT Kalbe Farma Tbk
5	MERK	PT Merck Indonesia Tbk
6	PYFA	PT Pyridam Farma Tbk
7	SCPI	PT Merck Sharp Dohme Pharma Tbk
8	SIDO	PT Industri Jamu & Farmasi Sido Muncul Tbk
9	SQBB	PT Tisho Pharmaceutical Indonesia Tbk (saham Biasa)
10	TSPC	PT Tempo Scan Pasific Tbk

4. Sub Sektor Kosmetik dan Barang Keperluan Rumah Tangga

NO	KODE	NAMA
1	ADES	PT Ades Waters Indonesia Tbk
2	KINO	PT Kino Indonesia Tbk
3	MBTO	PT Martina Berto Tbk
4	MRAT	PT Mustika Ratu Tbk
5	TCID	PT Mandom Indonesia Tbk
6	UNVR	PT Unilever Indonesia Tbk

5. Sub Sektor Peralatan Rumah Tangga

NO	KODE	NAMA
1	CINT	PT Chitose International Tbk
2	KICI	PT Kedaung Indah Can Tbk
3	LMPI	PT Langgeng Makmur Industry Tbk



## Lampiran 2

### Daftar Sampel Penelitian

Perusahaan Manufaktur Sektor Industri Barang Konsumsi yang Terdaftar di BEI  
tahun 2011-2015

No.	Kode	Nama Perusahaan
1	AISA	PT Tiga Pilar Sejahtera Food, Tbk
2	ICBP	PT Indofood Sukses Makmur, Tbk
3	INDF	PT Indofood Sukses Makmur, Tbk
4	MYOR	PT Mayora Indah, Tbk
5	ROTI	PT Nippon Indosari Corporindo, Tbk
6	SKLT	PT Sekar Laut, Tbk
7	STTP	PT Siantar Top, Tbk
8	ULTJ	PT Ultrajaya Milk Industry and Trading Company, Tbk
9	GGRM	PT Gudang Garam, Tbk
10	DVLA	PT Darya Varia Laboratoria, Tbk
11	KAEP	PT Kimia Farma (Persero), Tbk
12	KLBF	PT Kalbe Farma, Tbk
13	TSPC	PT Tempo Scan Pasific, Tbk
14	TCID	PT Mandom Indonesia, Tbk

### LAMPIRAN 3 “Data Pengolahan Variabel Independen dan Dependen”

#### 1. Data DER Perusahaan Manufaktur Sektor Industri Barang Konsumsi Tahun 2011-2015 (dalam jutaan rupiah)

No.	Kode Saham	Tahun 2011			Tahun 2012			Tahun 2013			Tahun 2014			Tahun 2015		
		Total Hutang	Total Ekuitas	Hasil (x)	Total Hutang	Total Ekuitas	Hasil (x)	Total Hutang	Total Ekuitas	Hasil (x)	Total Hutang	Total Ekuitas	Hasil (x)	Total Hutang	Total Ekuitas	Hasil (x)
1	AISA	1.757.492	1.832.817	0,96	1.834.132	2.033.453	0,90	2.664.051	2.356.733	1,13	3.779.017	3.592.829	1,05	5.094.072	3.966.907	1,28
2	ICBP	4.513.084	10.709.733	0,42	5.766.682	11.986.798	0,48	8.001.729	13.265.731	0,60	9.870.264	15.039.947	0,66	10.173.713	16.386.911	0,62
3	INDF	21.975.708	31.610.225	0,70	25.181.533	34.142.674	0,74	39.719.660	38.373.129	1,04	44.710.509	41.228.376	1,08	48.709.933	43.121.593	1,13
4	MYOR	4.175.176	2.424.669	1,72	5.234.656	3.067.850	1,71	5.771.077	3.938.761	1,47	6.190.553	4.100.555	1,51	6.148.255	5.194.459	1,18
5	ROTI	212.696	546.441	0,39	538.337	666.608	0,81	1.822.689	787.338	2,32	1.182.772	960.122	1,23	1.517.788	1.188.534	1,28
6	SKLT	91.338	122.900	0,74	120.264	129.483	0,93	162.339	139.650	1,16	178.207	153.368	1,16	225.066,00	152.044,00	1,48
7	STTP	444.701	490.065	0,91	670.149	579.691	1,16	775.931	694.128	1,12	882.610	817.594	1,08	910.758,00	1.008.809,00	0,90
8	ULTJ	776.735	1.402.447	0,55	744.274	1.676.519	0,44	796.474	2.015.147	0,40	851.271	2.186.286	0,39	742.490,00	2.797.505,00	0,27
9	GGRM	14.537.777	24.550.928	0,59	14.903.612	26.605.713	0,56	21.353.980	29.416.271	0,73	24.991.880	33.228.720	0,75	25.497.504	38.007.909	0,67
10	DVLA	200.374	727.917	0,28	233.145	841.546	0,28	275.351	914.703	0,30	273.816	962.431	0,28	402.761	973.517	0,41
11	KAEF	541.737	1.252.506	0,43	643.493	1.437.066	0,45	847.585	1.624.355	0,52	1.157.041	1.811.144	0,64	1.374.127	1.862.097	0,74
12	KLBF	1.758.619	6.515.935	0,27	2.046.314	7.371.644	0,28	2.815.103	8.499.958	0,33	2.607.557	9.817.476	0,27	2.758.131	10.938.286	0,25
13	TSPC	1.204.439	3.045.936	0,40	1.279.829	3.353.156	0,38	1.545.006	3.862.952	0,40	1.527.429	4.088.166	0,37	1.947.588	4.337.142	0,45
14	TCID	110.452	1.020.413	0,11	164.751	1.096.822	0,15	282.962	1.182.991	0,24	569.731	1.283.504	0,44	367.226	1.714.871	0,21

2. Data ROE Perusahaan Manufaktur Sektor Industri Barang Konsumsi Tahun 2011-2015 (dalam jutaan rupiah)

No.	Kode Saham	Tahun 2011			Tahun 2012			Tahun 2013			Tahun 2014			Tahun 2015		
		EAT	Total Ekuitas	Hasil (%)	EAT	Total Ekuitas	Hasil (%)	EAT	Total Ekuitas	Hasil (%)	EAT	Total Ekuitas	Hasil (%)	EAT	Total Ekuitas	Hasil (%)
1	AISA	149.951	1.832.817	8,18	253.664	2.033.453	12,47	346.728	2.356.733	14,71	378.142	3.592.829	10,52	373.750	3.966.907	9,42
2	ICBP	2.064.049	10.709.773	19,27	2.282.371	11.986.798	19,04	2.235.040	13.265.731	16,85	2.531.681	15.039.947	16,83	2.923.148	16.386.911	17,84
3	INDF	4.891.673	31.610.225	15,47	4.779.446	34.142.674	14,00	3.416.635	38.373.129	8,90	5.146.323	41.228.376	12,48	3.709.501	43.121.593	8,60
4	MYOR	483.486	2.424.669	19,94	744.428	3.067.850	24,27	1.058.419	3.938.761	26,87	409.825	4.100.555	9,99	1.250.233	5.194.459	24,07
5	ROTI	115.933	546.441	21,22	149.150	666.608	22,37	158.015	787.338	20,07	188.578	960.122	19,64	263.710	1.188.534	22,19
6	SKLT	5.977	122.900	4,86	7.963	129.483	6,15	11.440	139.650	8,19	16.481	153.368	10,75	18.202	152.044	11,97
7	STTP	42.675	490.065	8,71	74.626	579.691	12,87	114.437	694.128	16,49	123.465	817.594	15,10	83.516	1.008.809	18,19
8	ULTJ	101.323	1.402.447	7,22	353.432	1.676.519	21,08	325.127	2.015.147	16,13	130.313	2.186.286	5,96	523.100	2.797.505	18,70
9	GGRM	6.614.971	24.550.928	26,94	4.068.711	26.605.713	15,29	4.383.932	29.416.271	14,90	5.395.293	33.228.720	16,24	6.452.834	38.007.909	16,98
10	DVLA	120.915	727.917	16,61	148.909	841.546	17,69	125.796	914.703	13,75	80.929	962.431	8,41	107.894	973.517	11,08
11	KAEF	232.007	1.252.506	18,52	201.296	1.437.066	14,01	215.642	1.624.355	13,28	236.531	1.811.144	13,06	252.973	1.862.097	13,59
12	KLBF	1.522.957	6.515.935	23,37	1.775.099	7.371.644	24,08	1.970.452	8.499.958	23,18	2.121.091	9.817.476	21,61	2.057.694	10.938.286	18,81
13	TSPC	586.362	3.045.936	19,25	635.176	3.353.156	18,94	638.535	3.862.952	16,53	580.064	4.088.166	14,19	529.219	4.337.142	12,20
14	TCID	140.039	1.020.413	13,72	150.374	1.096.822	13,71	160.148	1.182.991	13,54	174.314	1.283.504	13,58	544.474	1.714.871	31,75

3. Data Pertumbuhan Perusahaan Manufaktur Sektor Industri Barang Konsumsi Tahun 2011-2013 (dalam jutaan rupiah)

No.	Kode Saham	Tahun 2011			Tahun 2012			Tahun 2013		
		Total Aset t (2011)	Total Aset t-1 (2010)	Hasil (%)	Total Aset t (2012)	Total Aset t-1 (2011)	Hasil (%)	Total Aset t (2013)	Total Aset t-1 (2012)	Hasil (%)
1	AISA	3.590.309	1.936.950	85,36	3.867.576	3.590.309	7,72	5.020.824	3.867.576	29,82
2	ICBP	15.222.857	13.361.313	13,93	17.753.480	15.222.857	16,62	21.267.470	17.753.480	19,79
3	INDF	53.585.933	47.275.955	13,35	59.324.207	53.585.933	10,71	78.092.789	59.324.207	31,64
4	MYOR	6.599.846	4.399.191	50,02	8.302.506	6.599.846	25,80	9.709.838	8.302.506	16,95
5	ROTI	759.137	568.265	33,59	1.204.945	759.137	58,73	1.822.689	1.204.945	51,27
6	SKLT	214.238	199.375	7,45	249.746	214.238	16,57	301.989	249.746	20,92
7	STTP	934.766	649.274	43,97	1.249.841	934.766	33,71	1.470.059	1.249.841	17,62
8	ULTJ	2.179.182	2.006.596	8,60	2.420.793	2.179.182	11,09	2.811.621	2.420.793	16,14
9	GGRM	39.088.705	30.741.679	27,15	41.509.325	39.088.705	6,19	50.770.251	41.509.325	22,31
10	DVLA	928.291	854.110	8,69	1.074.691	928.291	15,77	1.190.054	1.074.691	10,73
11	KAEF	1.794.242	1.657.292	8,26	2.080.558	1.794.242	15,96	2.471.940	2.080.558	18,81
12	KLBF	8.274.554	7.032.497	17,66	9.417.957	8.274.554	13,82	11.315.061	9.417.957	20,14
13	TSPC	4.250.374	3.589.596	18,41	4.632.985	4.250.374	9,00	5.407.958	4.632.985	16,73
14	TCID	1.130.865	1.047.238	7,99	1.261.573	1.130.865	11,56	1.465.952	1.261.574	16,20

Data Pertumbuhan Perusahaan Manufaktur Sektor Industri Barang Konsumsi Tahun 2014-2015 (dalam jutaan rupiah)

No.	Kode Saham	Tahun 2014			Tahun 2015		
		Total Aset t (2014)	Total Aset t-1 (2013)	Hasil (%)	Total Aset t (2015)	Total Aset t-1 (2014)	Hasil (%)
1	AISA	7.371.846	5.020.824	46,83	9.060.979	7.371.846	22,91
2	ICBP	24.910.211	21.267.470	17,13	26.560.624	24.910.211	6,63
3	INDF	85.938.885	78.092.789	10,05	91.831.526	85.938.885	6,86
4	MYOR	10.291.108	9.709.838	5,99	11.324.715	10.291.108	10,04
5	ROTI	2.142.894	1.822.689	17,57	2.706.323,00	2.142.894	26,29
6	SKLT	331.575	301.989	9,80	377.110	336.932	11,92
7	STTP	1.700.204	1.470.059	15,66	1.919.568	1.700.204	12,90
8	ULTJ	3.037.558	2.811.621	8,04	3.539.995,00	2.918.133	21,31
9	GGRM	58.220.600	50.770.251	14,67	63.505.413	58.220.600	9,08
10	DVLA	1.236.248	1.190.054	3,88	1.376.278	1.236.248	11,33
11	KAEF	2.968.185	2.471.940	20,08	3.236.224	2.968.185	9,03
12	KLBF	12.425.032	11.315.061	9,81	13.696.417	12.425.032	10,23
13	TSPC	5.609.557	5.407.958	3,73	6.284.729	5.609.557	12,04
14	TCID	1.853.235	1.465.952	26,42	2.028.097	1.853.235	9,44

4. Data PBV Perusahaan Manufaktur Sektor Industri Barang Konsumsi Tahun 2011-2013 (dalam jutaan rupiah)

No.	Kode Saham	Tahun 2011				Tahun 2012				Tahun 2013			
		Closing Price	Total Ekuitas	Jumlah saham Beredar	Hasil (x)	Closing Price	Total Ekuitas	Jumlah saham Beredar	Hasil (x)	Closing Price	Total Ekuitas	Jumlah saham Beredar	Hasil (x)
1	AISA	495	1.832.817	2.777	0,75	1.080	2.033.453	2.926	1,55	1.430	2.356.733	2.926	1,78
2	ICBP	5.200	10.709.733	5.831	2,83	7.800	11.986.798	5.831	3,79	10.200	13.265.731	5.831	4,48
3	INDF	4.600	31.610.225	8.780	1,28	5.850	34.142.674	8.780	1,50	6.600	38.373.129	8.780	1,51
4	MYOR	14.250	2.424.669	767	4,51	20.000	3.067.850	767	5,00	26.000	3.938.761	894	5,90
5	ROTI	3.325	546.441	1.012	6,16	6.900	666.608	1.012	10,48	1.020	787.338	5.062	6,56
6	SKLT	140	122.900	691	0,79	180	129.483	691	0,96	180	139.650	691	0,89
7	STTP	690	490.065	1.310	1,84	1.050	579.691	1.310	2,37	1.550	694.128	1.310	2,93
8	ULTJ	1.080	1.402.447	2.888	2,22	1.330	1.676.519	2.888	2,29	4.500	2.015.147	2.888	6,45
9	GGRM	62.050	24.550.928	1.924	4,86	56.300	26.605.713	1.924	4,07	42.000	29.416.271	1.924	2,75
1 0	DVLA	1.150	727.917	1.120	1,77	1.690	841.546	1.120	2,25	2.200	914.703	1.120	2,69
1 1	KAEF	340	1.252.506	5.554	1,51	740	1.437.066	5.554	2,86	590	1.624.355	5.554	2,02
1 2	KLBF	3.400	6.515.935	10.156	5,30	1.060	7.371.644	50.780	7,30	1.250	8.499.958	46.875	6,89
1 3	TSPC	2.550	3.045.936	4.500	3,77	3.725	3.353.156	4.500	5,00	3.250	3.862.952	4.500	3,79
1 4	TCID	7.700	1.020.413	201	1,52	11.000	1.096.822	201	2,02	11.900	1.182.991	201	2,02



Data PBV Perusahaan Manufaktur Sektor Industri Barang Konsumsi Tahun 2014-2015 (dalam jutaan rupiah)

No.	Kode Saham	Tahun 2014				Tahun 2015			
		Closing Price	Total Ekuitas	Jumlah saham Beredar	Hasil (x)	Closing Price	Total Ekuitas	Jumlah saham Beredar	Hasil (x)
1	AISA	2.095	3.592.829	3.515	2,05	1.120	3.966.907	3.471	0,98
2	ICBP	13.100	15.039.947	6.039	5,26	13.475	16.386.911	5.831	4,79
3	INDF	6.750	41.228.376	8.856	1,45	5.175	43.121.593	8.780	1,05
4	MYOR	20.900	4.100.555	930	4,74	30.500	5.194.459	894	5,25
5	ROTI	1.385	960.122	5.379	7,76	1.265	1.188.534	5.061	5,39
6	SKLT	300	153.368	697	1,36	370	152.044	690	1,68
7	STTP	2.880	817.594	1.362	4,80	3.015	1.008.809	1.310	3,92
8	ULTJ	3.720	2.186.286	2.888	4,91	3.945	2.797.505	2.888	4,07
9	GGRM	60.700	33.228.720	2.003	3,66	55.000	38.007.909	1.924	2,78
10	DVLA	1.690	962.431	1.120	1,97	1.300	973.517	1.120	1,50
11	KAEF	1.465	1.811.144	5.872	4,75	870	1.862.097	5.554	2,59
12	KLBF	1.830	9.817.476	49.892	9,30	1.320	10.938.286	46.875	5,66
13	TSPC	2.865	4.088.166	4.500	3,15	1.750	4.337.142	4.500	1,82
14	TCID	17.525	1.283.504	205	2,80	16.500	1.714.871	201	1,93

## LAMPIRAN 4

### HASIL UJI ASUMSI KLASIK

#### 1. Uji Normalitas (NPar Test)

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		70
Normal Parameters <sup>a</sup>	Mean	.0000000
	Std. Deviation	1.64714431
Most Extreme Differences	Absolute	.145
	Positive	.145
	Negative	-.082
Kolmogorov-Smirnov Z		1.210
Asymp. Sig. (2-tailed)		.107
a. Test distribution is Normal.		

#### 2. Uji Autokorelasi

##### a. Hasil Pengolahan Uji Autokorelasi Sebelum Lag

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.626 <sup>a</sup>	.392	.365	1.68416	1.610
a. Predictors: (Constant), Pertumbuhan Perusahaan, ROE, DER					
b. Dependent Variable: PBV					

b. Uji Autokorelasi Setelah Penyembuhan dengan Metode Lag

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.667 <sup>a</sup>	.445	.419	1.63990	1.773

a. Predictors: (Constant), Pertumbuhan Perusahaan, ROE, DER  
b. Dependent Variable: Lag\_Y

3. Uji Multikolinearitas

Coefficients <sup>a</sup>							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-.551	.623		-.884	.380		
DER	-.311	.520	-.062	-.598	.552	.789	1.268
ROE	.227	.037	.589	6.202	.000	.947	1.056
Pertumbuhan Perusahaan	.043	.019	.235	2.230	.029	.771	1.298

a. Dependent Variable: Lag\_Y

4. Uji Heterokedastisitas

Variables Entered/Removed <sup>a</sup>			
Model	Variables Entered	Variables Removed	Method
1	Pertumbuhan Perusahaan, ROE, DER <sup>b</sup>		Enter

a. Dependent Variable: ABSResidual

b. All requested variables entered.

ANOVA <sup>b</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.090	3	2.030	1.954	.130 <sup>a</sup>
	Residual	67.542	65	1.039		
	Total	73.632	68			

a. Predictors: (Constant), PertumbuhanPerusahaan, ROE, DER

b. Dependent Variable: ABSResidual

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.860	.388		2.218	.030
	DER	-.467	.323	-.193	-1.445	.153
	ROE	.037	.023	.201	1.647	.104
	Pertumbuhan Perusahaan	.008	.012	.096	.707	.482

a. Dependent Variable: ABSResidual



## LAMPIRAN 5

### HASIL UJI HIPOTESIS

#### 1. Analisis Regresi Linear Berganda

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Pertumbuhan Perusahaan, ROE, DER <sup>b</sup>		Enter

a. Dependent Variable: Lag\_Y

b. All requested variables entered.

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.551	.623		-.884	.380
	DER	-.311	.520	-.062	-.598	.552
	ROE	.227	.037	.589	6.202	.000
	Pertumbuhan Perusahaan	.043	.019	.235	2.230	.029

a. Dependent Variable: Lag\_Y

2. Uji Hipotesis Parsial (Uji T)

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.551	.623		-.884	.380
DER	-.311	.520	-.062	-.598	.552
ROE	.227	.037	.589	6.202	.000
Pertumbuhan Perusahaan	.043	.019	.235	2.230	.029

a. Dependent Variable: Lag\_Y

3. Uji Hipotesis Serempak (Uji F)

ANOVA <sup>b</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	140.040	3	46.680	17.358	.000 <sup>a</sup>
	Residual	174.804	65	2.689		
	Total	314.843	68			

a. Predictors: (Constant), Pertumbuhan Perusahaan, ROE, DER  
b. Dependent Variable: Lag\_Y

4. Koefisien Determinasi

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.667 <sup>a</sup>	.445	.419	1.63990

a. Predictors: (Constant), Pertumbuhan Perusahaan, ROE, DER  
b. Dependent Variable: Lag\_Y

LAMPIRAN 6

TABEL T STUDENT

d.f	$t_{0.10}$	$t_{0.05}$	$t_{0.025}$	$t_{0.01}$	$t_{0.005}$	d.f
1	3,078	6,314	12,706	31,821	63, 657	1
2	1,886	2,920	4,303	6,965	9,925	2
3	1,638	2,353	3,182	4,541	5,841	3
4	1,533	2,132	2,776	3,747	4,604	4
5	1,476	2,015	2,571	3,365	4,032	5
6	1,440	1,943	2,447	3,143	3,707	6
7	1,415	1,895	2,365	2,998	3,499	7
8	1,397	1,860	2,306	2,896	3,355	8
9	1,383	1,833	2,262	2,821	3,250	9
10	1,372	1,812	2,228	2,764	3,169	10
11	1,363	1,796	2,201	2,718	3,106	11
12	1,356	1,782	2,179	2,681	3,055	12
13	1,350	1,771	2,160	2,650	3,012	13
14	1,345	1,761	2,145	2,624	2,977	14
15	1,341	1,753	2,131	2,602	2,947	15
16	1,337	1,746	2,120	2,583	2,921	16
17	1,333	1,740	2,110	2,567	2,898	17
18	1,330	1,734	2,101	2,552	2,878	18
19	1,328	1,729	2,093	2,539	2,861	19
20	1,325	1,725	2,086	2,528	2,845	20
21	1,323	1,721	2,080	2,518	2,831	21
22	1,321	1,717	2,074	2,508	2,819	22
23	1,319	1,714	2,069	2,500	2,807	23
24	1,318	1,711	2,064	2,492	2,797	24
25	1,316	1,708	2,060	2,485	2,787	25
26	1,315	1,706	2,056	2,479	2,779	26
27	1,314	1,703	2,052	2,473	2,771	27
28	1,313	1,701	2,048	2,467	2,763	28
29	1,311	1,699	2,045	2,462	2,756	29
30	1,310	1,697	2,042	2,457	2,750	30
31	1,309	1,696	2,040	2,453	2,744	31
32	1,309	1,694	2,037	2,449	2,738	32
33	1,308	1,692	2,035	2,445	2,733	33
34	1,307	1,691	2,032	2,441	2,728	34
35	1,306	1,690	2,030	2,438	2,724	35
36	1,306	1,688	2,028	2,434	2,719	36
37	1,305	1,687	2,026	2,431	2,715	37
38	1,304	1,686	2,024	2,429	2,712	38
39	1,303	1,685	2,023	2,426	2,708	39

<b>d.f</b>	$t_{0.10}$	$t_{0.05}$	$t_{0.025}$	$t_{0.01}$	$t_{0.005}$	<b>d.f</b>
<b>40</b>	1,303	1,684	2,021	2,423	2,704	<b>40</b>
<b>41</b>	1,303	1,683	2,020	2,421	2,701	<b>41</b>
<b>42</b>	1,302	1,682	2,018	2,418	2,698	<b>42</b>
<b>43</b>	1,302	1,681	2,017	2,416	2,695	<b>43</b>
<b>44</b>	1,301	1,680	2,015	2,414	2,692	<b>44</b>
<b>45</b>	1,301	1,679	2,014	2,412	2,690	<b>45</b>
<b>46</b>	1,300	1,679	2,013	2,410	2,687	<b>46</b>
<b>47</b>	1,300	1,678	2,012	2,408	2,685	<b>47</b>
<b>48</b>	1,299	1,677	2,011	2,407	2,682	<b>48</b>
<b>49</b>	1,299	1,677	2,010	2,405	2,680	<b>49</b>
<b>50</b>	1,299	1,676	2,009	2,403	2,678	<b>50</b>
<b>51</b>	1,298	1,675	2,008	2,402	2,676	<b>51</b>
<b>52</b>	1,298	1,675	2,007	2,400	2,674	<b>52</b>
<b>53</b>	1,298	1,674	2,006	2,399	2,672	<b>53</b>
<b>54</b>	1,297	1,674	2,005	2,397	2,670	<b>54</b>
<b>55</b>	1,297	1,673	2,004	2,396	2,668	<b>55</b>
<b>56</b>	1,297	1,673	2,003	2,395	2,667	<b>56</b>
<b>57</b>	1,297	1,672	2,002	2,394	2,665	<b>57</b>
<b>58</b>	1,296	1,672	2,002	2,392	2,663	<b>58</b>
<b>59</b>	1,296	1,671	2,001	2,391	2,662	<b>59</b>
<b>60</b>	1,296	1,671	2,000	2,390	2,660	<b>60</b>
<b>61</b>	1,296	1,670	2,000	2,389	2,659	<b>61</b>
<b>62</b>	1,295	1,670	1,999	2,388	2,657	<b>62</b>
<b>63</b>	1,295	1,669	1,998	2,387	2,656	<b>63</b>
<b>64</b>	1,295	1,669	1,998	2,386	2,655	<b>64</b>
<b>65</b>	1,295	1,669	1,997	2,385	2,654	<b>65</b>
<b>66</b>	1,295	1,668	1,997	2,384	2,652	<b>66</b>
<b>67</b>	1,294	1,668	1,996	2,383	2,651	<b>67</b>
<b>68</b>	1,294	1,668	1,995	2,382	2,650	<b>68</b>
<b>69</b>	1,294	1,667	1,995	2,382	2,649	<b>69</b>
<b>70</b>	1,294	1,667	1,994	2,381	2,648	<b>70</b>
<b>71</b>	1,294	1,667	1,994	2,380	2,647	<b>71</b>
<b>72</b>	1,293	1,666	1,993	2,379	2,646	<b>72</b>
<b>73</b>	1,293	1,666	1,993	2,379	2,645	<b>73</b>
<b>74</b>	1,293	1,666	1,993	2,378	2,644	<b>74</b>
<b>75</b>	1,293	1,665	1,992	2,377	2,643	<b>75</b>
<b>76</b>	1,293	1,665	1,992	2,376	2,642	<b>76</b>
<b>77</b>	1,293	1,665	1,991	2,376	2,641	<b>77</b>
<b>78</b>	1,292	1,665	1,991	2,375	2,640	<b>78</b>
<b>79</b>	1,292	1,664	1,990	2,374	2,640	<b>79</b>
<b>80</b>	1,292	1,664	1,990	2,374	2,639	<b>80</b>
<b>81</b>	1,292	1,664	1,990	2,373	2,638	<b>81</b>
<b>82</b>	1,292	1,664	1,989	2,373	2,637	<b>82</b>
<b>83</b>	1,292	1,663	1,989	2,372	2,636	<b>83</b>
<b>84</b>	1,292	1,663	1,989	2,372	2,636	<b>84</b>
<b>85</b>	1,292	1,663	1,988	2,371	2,635	<b>85</b>
<b>86</b>	1,291	1,663	1,988	2,370	2,634	<b>86</b>
<b>87</b>	1,291	1,663	1,988	2,370	2,634	<b>87</b>
<b>88</b>	1,291	1,662	1,987	2,369	2,633	<b>88</b>



**TABEL F dengan  $\alpha = 5\%$**

Df untuk penyebut (N2)	df untuk pembilang (N1)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	161	199	216	225	230	234	237	239	241	242	243	244	245	245	246
2	18.51	19.00	19.16	19.25	19.30	19.33	19.35	19.37	19.38	19.40	19.40	19.41	19.42	19.42	19.43
3	10.13	9.55	9.28	9.12	9.01	8.94	8.89	8.85	8.81	8.79	8.76	8.74	8.73	8.71	8.70
4	7.71	6.94	6.59	6.39	6.26	6.16	6.09	6.04	6.00	5.96	5.94	5.91	5.89	5.87	5.86
5	6.61	5.79	5.41	5.19	5.05	4.95	4.88	4.82	4.77	4.74	4.70	4.68	4.66	4.64	4.62
6	5.99	5.14	4.76	4.53	4.39	4.28	4.21	4.15	4.10	4.06	4.03	4.00	3.98	3.96	3.94
7	5.59	4.74	4.35	4.12	3.97	3.87	3.79	3.73	3.68	3.64	3.60	3.57	3.55	3.53	3.51
8	5.32	4.46	4.07	3.84	3.69	3.58	3.50	3.44	3.39	3.35	3.31	3.28	3.26	3.24	3.22
9	5.12	4.26	3.86	3.63	3.48	3.37	3.29	3.23	3.18	3.14	3.10	3.07	3.05	3.03	3.01
10	4.96	4.10	3.71	3.48	3.33	3.22	3.14	3.07	3.02	2.98	2.94	2.91	2.89	2.86	2.85
11	4.84	3.98	3.59	3.36	3.20	3.09	3.01	2.95	2.90	2.85	2.82	2.79	2.76	2.74	2.72
12	4.75	3.89	3.49	3.26	3.11	3.00	2.91	2.85	2.80	2.75	2.72	2.69	2.66	2.64	2.62
13	4.67	3.81	3.41	3.18	3.03	2.92	2.83	2.77	2.71	2.67	2.63	2.60	2.58	2.55	2.53
14	4.60	3.74	3.34	3.11	2.96	2.85	2.76	2.70	2.65	2.60	2.57	2.53	2.51	2.48	2.46
15	4.54	3.68	3.29	3.06	2.90	2.79	2.71	2.64	2.59	2.54	2.51	2.48	2.45	2.42	2.40
16	4.49	3.63	3.24	3.01	2.85	2.74	2.66	2.59	2.54	2.49	2.46	2.42	2.40	2.37	2.35
17	4.45	3.59	3.20	2.96	2.81	2.70	2.61	2.55	2.49	2.45	2.41	2.38	2.35	2.33	2.31
18	4.41	3.55	3.16	2.93	2.77	2.66	2.58	2.51	2.46	2.41	2.37	2.34	2.31	2.29	2.27
19	4.38	3.52	3.13	2.90	2.74	2.63	2.54	2.48	2.42	2.38	2.34	2.31	2.28	2.26	2.23
20	4.35	3.49	3.10	2.87	2.71	2.60	2.51	2.45	2.39	2.35	2.31	2.28	2.25	2.22	2.20
21	4.32	3.47	3.07	2.84	2.68	2.57	2.49	2.42	2.37	2.32	2.28	2.25	2.22	2.20	2.18
22	4.30	3.44	3.05	2.82	2.66	2.55	2.46	2.40	2.34	2.30	2.26	2.23	2.20	2.17	2.15
23	4.28	3.42	3.03	2.80	2.64	2.53	2.44	2.37	2.32	2.27	2.24	2.20	2.18	2.15	2.13
24	4.26	3.40	3.01	2.78	2.62	2.51	2.42	2.36	2.30	2.25	2.22	2.18	2.15	2.13	2.11
25	4.24	3.39	2.99	2.76	2.60	2.49	2.40	2.34	2.28	2.24	2.20	2.16	2.14	2.11	2.09

Df untuk penyebut (N2)	df untuk pembilang (N1)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
26	4.23	3.37	2.98	2.74	2.59	2.47	2.39	2.32	2.27	2.22	2.18	2.15	2.12	2.09	2.07
27	4.21	3.35	2.96	2.73	2.57	2.46	2.37	2.31	2.25	2.20	2.17	2.13	2.10	2.08	2.06
28	4.20	3.34	2.95	2.71	2.56	2.45	2.36	2.29	2.24	2.19	2.15	2.12	2.09	2.06	2.04
29	4.18	3.33	2.93	2.70	2.55	2.43	2.35	2.28	2.22	2.18	2.14	2.10	2.08	2.05	2.03
30	4.17	3.32	2.92	2.69	2.53	2.42	2.33	2.27	2.21	2.16	2.13	2.09	2.06	2.04	2.01
31	4.16	3.30	2.91	2.68	2.52	2.41	2.32	2.25	2.20	2.15	2.11	2.08	2.05	2.03	2.00
32	4.15	3.29	2.90	2.67	2.51	2.40	2.31	2.24	2.19	2.14	2.10	2.07	2.04	2.01	1.99
33	4.14	3.28	2.89	2.66	2.50	2.39	2.30	2.23	2.18	2.13	2.09	2.06	2.03	2.00	1.98
34	4.13	3.28	2.88	2.65	2.49	2.38	2.29	2.23	2.17	2.12	2.08	2.05	2.02	1.99	1.97
35	4.12	3.27	2.87	2.64	2.49	2.37	2.29	2.22	2.16	2.11	2.07	2.04	2.01	1.99	1.96
36	4.11	3.26	2.87	2.63	2.48	2.36	2.28	2.21	2.15	2.11	2.07	2.03	2.00	1.98	1.95
37	4.11	3.25	2.86	2.63	2.47	2.36	2.27	2.20	2.14	2.10	2.06	2.02	2.00	1.97	1.95
38	4.10	3.24	2.85	2.62	2.46	2.35	2.26	2.19	2.14	2.09	2.05	2.02	1.99	1.96	1.94
39	4.09	3.24	2.85	2.61	2.46	2.34	2.26	2.19	2.13	2.08	2.04	2.01	1.98	1.95	1.93
40	4.08	3.23	2.84	2.61	2.45	2.34	2.25	2.18	2.12	2.08	2.04	2.00	1.97	1.95	1.92
41	4.08	3.23	2.83	2.60	2.44	2.33	2.24	2.17	2.12	2.07	2.03	2.00	1.97	1.94	1.92
42	4.07	3.22	2.83	2.59	2.44	2.32	2.24	2.17	2.11	2.06	2.03	1.99	1.96	1.94	1.91
43	4.07	3.21	2.82	2.59	2.43	2.32	2.23	2.16	2.11	2.06	2.02	1.99	1.96	1.93	1.91
44	4.06	3.21	2.82	2.58	2.43	2.31	2.23	2.16	2.10	2.05	2.01	1.98	1.95	1.92	1.90
45	4.06	3.20	2.81	2.58	2.42	2.31	2.22	2.15	2.10	2.05	2.01	1.97	1.94	1.92	1.89
46	4.05	3.20	2.81	2.57	2.42	2.30	2.22	2.15	2.09	2.04	2.00	1.97	1.94	1.91	1.89
47	4.05	3.20	2.80	2.57	2.41	2.30	2.21	2.14	2.09	2.04	2.00	1.96	1.93	1.91	1.88
48	4.04	3.19	2.80	2.57	2.41	2.29	2.21	2.14	2.08	2.03	1.99	1.96	1.93	1.90	1.88
49	4.04	3.19	2.79	2.56	2.40	2.29	2.20	2.13	2.08	2.03	1.99	1.96	1.93	1.90	1.88
50	4.03	3.18	2.79	2.56	2.40	2.29	2.20	2.13	2.07	2.03	1.99	1.95	1.92	1.89	1.87
51	4.03	3.18	2.79	2.55	2.40	2.28	2.20	2.13	2.07	2.02	1.98	1.95	1.92	1.89	1.87
52	4.03	3.18	2.78	2.55	2.39	2.28	2.19	2.12	2.07	2.02	1.98	1.94	1.91	1.89	1.86

Df untuk penyebut (N2)	df untuk pembilang (N1)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
53	4.02	3.17	2.78	2.55	2.39	2.28	2.19	2.12	2.06	2.01	1.97	1.94	1.91	1.88	1.86
54	4.02	3.17	2.78	2.54	2.39	2.27	2.18	2.12	2.06	2.01	1.97	1.94	1.91	1.88	1.86
55	4.02	3.16	2.77	2.54	2.38	2.27	2.18	2.11	2.06	2.01	1.97	1.93	1.90	1.88	1.85
56	4.01	3.16	2.77	2.54	2.38	2.27	2.18	2.11	2.05	2.00	1.96	1.93	1.90	1.87	1.85
57	4.01	3.16	2.77	2.53	2.38	2.26	2.18	2.11	2.05	2.00	1.96	1.93	1.90	1.87	1.85
58	4.01	3.16	2.76	2.53	2.37	2.26	2.17	2.10	2.05	2.00	1.96	1.92	1.89	1.87	1.84
59	4.00	3.15	2.76	2.53	2.37	2.26	2.17	2.10	2.04	2.00	1.96	1.92	1.89	1.86	1.84
60	4.00	3.15	2.76	2.53	2.37	2.25	2.17	2.10	2.04	1.99	1.95	1.92	1.89	1.86	1.84
61	4.00	3.15	2.76	2.52	2.37	2.25	2.16	2.09	2.04	1.99	1.95	1.91	1.88	1.86	1.83
62	4.00	3.15	2.75	2.52	2.36	2.25	2.16	2.09	2.03	1.99	1.95	1.91	1.88	1.85	1.83
63	3.99	3.14	2.75	2.52	2.36	2.25	2.16	2.09	2.03	1.98	1.94	1.91	1.88	1.85	1.83
64	3.99	3.14	2.75	2.52	2.36	2.24	2.16	2.09	2.03	1.98	1.94	1.91	1.88	1.85	1.83
65	3.99	3.14	2.75	2.51	2.36	2.24	2.15	2.08	2.03	1.98	1.94	1.90	1.87	1.85	1.82
66	3.99	3.14	2.74	2.51	2.35	2.24	2.15	2.08	2.03	1.98	1.94	1.90	1.87	1.84	1.82
67	3.98	3.13	2.74	2.51	2.35	2.24	2.15	2.08	2.02	1.98	1.93	1.90	1.87	1.84	1.82
68	3.98	3.13	2.74	2.51	2.35	2.24	2.15	2.08	2.02	1.97	1.93	1.90	1.87	1.84	1.82
69	3.98	3.13	2.74	2.50	2.35	2.23	2.15	2.08	2.02	1.97	1.93	1.90	1.86	1.84	1.81
70	3.98	3.13	2.74	2.50	2.35	2.23	2.14	2.07	2.02	1.97	1.93	1.89	1.86	1.84	1.81
71	3.98	3.13	2.73	2.50	2.34	2.23	2.14	2.07	2.01	1.97	1.93	1.89	1.86	1.83	1.81
72	3.97	3.12	2.73	2.50	2.34	2.23	2.14	2.07	2.01	1.96	1.92	1.89	1.86	1.83	1.81
73	3.97	3.12	2.73	2.50	2.34	2.23	2.14	2.07	2.01	1.96	1.92	1.89	1.86	1.83	1.81
74	3.97	3.12	2.73	2.50	2.34	2.22	2.14	2.07	2.01	1.96	1.92	1.89	1.85	1.83	1.80
75	3.97	3.12	2.73	2.49	2.34	2.22	2.13	2.06	2.01	1.96	1.92	1.88	1.85	1.83	1.80
76	3.97	3.12	2.72	2.49	2.33	2.22	2.13	2.06	2.01	1.96	1.92	1.88	1.85	1.82	1.80
77	3.97	3.12	2.72	2.49	2.33	2.22	2.13	2.06	2.00	1.96	1.92	1.88	1.85	1.82	1.80
78	3.96	3.11	2.72	2.49	2.33	2.22	2.13	2.06	2.00	1.95	1.91	1.88	1.85	1.82	1.80
79	3.96	3.11	2.72	2.49	2.33	2.22	2.13	2.06	2.00	1.95	1.91	1.88	1.85	1.82	1.79
80	3.96	3.11	2.72	2.49	2.33	2.21	2.13	2.06	2.00	1.95	1.91	1.88	1.84	1.82	1.79

**Tabel DW (Durbin Watson),  $\alpha = 5\%$**

n	k=1		k=2		k=3		k=4		k=5	
	dL	dU	dL	dU	DI	dU	dL	dU	dL	dU
50	1.5035	1.5849	1.4625	1.6283	1.4206	1.6739	1.3779	1.7214	1.3346	1.7708
51	1.5086	1.5884	1.4684	1.6309	1.4273	1.6754	1.3855	1.7218	1.3431	1.7701
52	1.5135	1.5917	1.4741	1.6334	1.4339	1.6769	1.3929	1.7223	1.3512	1.7694
53	1.5183	1.5951	1.4797	1.6359	1.4402	1.6785	1.4000	1.7228	1.3592	1.7689
54	1.5230	1.5983	1.4851	1.6383	1.4464	1.6800	1.4069	1.7234	1.3669	1.7684
55	1.5276	1.6014	1.4903	1.6406	1.4523	1.6815	1.4136	1.7240	1.3743	1.7681
56	1.5320	1.6045	1.4954	1.6430	1.4581	1.6830	1.4201	1.7246	1.3815	1.7678
57	1.5363	1.6075	1.5004	1.6452	1.4637	1.6845	1.4264	1.7253	1.3885	1.7675
58	1.5405	1.6105	1.5052	1.6475	1.4692	1.6860	1.4325	1.7259	1.3953	1.7673
59	1.5446	1.6134	1.5099	1.6497	1.4745	1.6875	1.4385	1.7266	1.4019	1.7672
60	1.5485	1.6162	1.5144	1.6518	1.4797	1.6889	1.4443	1.7274	1.4083	1.7671
61	1.5524	1.6189	1.5189	1.6540	1.4847	1.6904	1.4499	1.7281	1.4146	1.7671
62	1.5562	1.6216	1.5232	1.6561	1.4896	1.6918	1.4554	1.7288	1.4206	1.7671
63	1.5599	1.6243	1.5274	1.6581	1.4943	1.6932	1.4607	1.7296	1.4265	1.7671
64	1.5635	1.6268	1.5315	1.6601	1.4990	1.6946	1.4659	1.7303	1.4322	1.7672
65	1.5670	1.6294	1.5355	1.6621	1.5035	1.6960	1.4709	1.7311	1.4378	1.7673
66	1.5704	1.6318	1.5395	1.6640	1.5079	1.6974	1.4758	1.7319	1.4433	1.7675
67	1.5738	1.6343	1.5433	1.6660	1.5122	1.6988	1.4806	1.7327	1.4486	1.7676
68	1.5771	1.6367	1.5470	1.6678	1.5164	1.7001	1.4853	1.7335	1.4537	1.7678
69	1.5803	1.6390	1.5507	1.6697	1.5205	1.7015	1.4899	1.7343	1.4588	1.7680
70	1.5834	1.6413	1.5542	1.6715	1.5245	1.7028	1.4943	1.7351	1.4637	1.7683