

Lampiran 1. Perhitungan ROA

Nama Perusahaan	Tahun	Lab a Setelah Pajak	Total Aset	ROA
ALTO	2017	-Rp62,849,581,665	Rp1,109,383,971,111	-0.06
	2018	-Rp33,021,220,862	Rp1,109,843,522,344	-0.03
	2019	-Rp7,383,289,239	Rp1,103,450,087,164	-0.01
	2020	-Rp10,506,939,189	Rp1,105,874,415,256	-0.01
BTEK	2017	-Rp42,843,793,031	Rp5,306,055,112,389	-0.01
	2018	Rp76,001,730,866	Rp5,165,236,468,706	0.01
	2019	-Rp83,843,800,594	Rp4,975,248,130,342	-0.02
	2020	-Rp509,507,890,912	Rp4,223,727,970,626	-0.12
BUDI	2017	Rp45,691,000,000	Rp2,939,456,000,000	0.02
	2018	Rp50,467,000,000	Rp3,392,980,000,000	0.01
	2019	Rp64,021,000,000	Rp2,999,767,000,000	0.02
	2020	Rp67,093,000,000	Rp2,963,007,000,000	0.02
CEKA	2017	Rp107,420,886,839	Rp1,392,636,444,501	0.08
	2018	Rp92,649,656,775	Rp1,168,956,042,706	0.08
	2019	Rp215,459,200,242	Rp1,393,079,542,074	0.15
	2020	Rp181,812,593,992	Rp1,566,673,828,068	0.12
CLEO	2017	Rp50,173,730,829	Rp660,917,775,322	0.08
	2018	Rp63,261,752,474	Rp833,933,861,594	0.08
	2019	Rp130,756,461,708	Rp1,245,144,303,719	0.11
	2020	Rp132,772,234,495	Rp1,310,940,121,622	0.10
DLTA	2017	Rp279,772,635,000	Rp1,340,842,765,000	0.21
	2018	Rp338,129,985,000	Rp1,523,517,170,000	0.22
	2019	Rp317,815,177,000	Rp1,425,983,722,000	0.22
	2020	Rp123,465,762,000	Rp1,225,580,913,000	0.10
ICBP	2017	Rp3,543,173,000,000	Rp31,619,514,000,000	0.11
	2018	Rp4,658,781,000,000	Rp34,367,153,000,000	0.14
	2019	Rp5,360,029,000,000	Rp38,709,314,000,000	0.14
	2020	Rp7,418,574,000,000	Rp103,588,325,000,000	0.07
INDF	2017	Rp5,097,264,000,000	Rp88,400,877,000,000	0.06
	2018	Rp4,961,851,000,000	Rp96,537,796,000,000	0.05
	2019	Rp5,902,729,000,000	Rp96,198,559,000,000	0.06
	2020	Rp8,752,066,000,000	Rp163,136,516,000,000	0.05
MYOR	2017	Rp1,630,953,830,893	Rp14,915,849,800,251	0.11
	2018	Rp1,760,434,280,304	Rp17,591,706,426,634	0.10
	2019	Rp2,051,404,206,764	Rp19,037,918,806,473	0.11
	2020	Rp2,098,168,514,645	Rp19,777,500,514,550	0.11
ROTI	2017	Rp135,364,021,139	Rp4,559,573,709,411	0.03
	2018	Rp127,171,436,363	Rp4,393,810,380,883	0.03

	2019	Rp236,518,557,420	Rp4,682,083,844,951	0.05
	2020	Rp168,610,282,478	Rp4,452,166,671,985	0.04
SKBM	2017	Rp25,880,464,791	Rp1,623,027,475,045	0.02
	2018	Rp15,954,632,472	Rp1,771,365,972,009	0.01
	2019	Rp9,571,690,580	Rp1,820,383,352,811	0.01
	2020	Rp5,415,741,808	Rp1,768,660,546,754	0.00
ULTJ	2017	Rp718,402,000,000	Rp5,175,896,000,000	0.14
	2018	Rp701,607,000,000	Rp5,555,871,000,000	0.13
	2019	Rp1,035,865,000,000	Rp6,608,422,000,000	0.16
	2020	Rp1,109,666,000,000	Rp8,754,116,000,000	0.13

Lampiran 2. Hasil Perhitungan VACA

Nama Perusahaan	Tahun	VA	CE	VACA
ALTO	2017	-Rp18,502,028,145	Rp356,435,207,035	-0.05
	2018	-Rp10,113,937,082	Rp354,105,456,683	-0.03
	2019	Rp19,226,487,443	Rp373,347,234,375	0.05
	2020	Rp10,217,331,902	Rp362,376,141,151	0.03
BTEK	2017	Rp7,086,752,123	Rp1,944,775,615,997	0.00
	2018	Rp119,396,386,218	Rp2,336,530,400,244	0.05
	2019	-Rp91,254,471,195	Rp2,058,772,120,383	-0.04
	2020	-Rp598,673,846,733	Rp1,152,863,748,942	-0.52
BUDI	2017	Rp150,393,000,000	Rp1,240,391,000,000	0.12
	2018	Rp151,407,000,000	Rp1,276,951,000,000	0.12
	2019	Rp180,181,000,000	Rp1,349,339,000,000	0.13
	2020	Rp175,249,000,000	Rp1,389,249,000,000	0.13
CEKA	2017	Rp195,151,847,592	Rp1,010,465,073,906	0.19
	2018	Rp185,711,414,750	Rp1,069,297,232,617	0.17
	2019	Rp330,374,169,048	Rp1,346,753,897,076	0.25
	2020	Rp284,315,261,730	Rp1,442,527,588,856	0.20
CLEO	2017	Rp108,432,621,029	Rp348,143,258,992	0.31
	2018	Rp139,977,283,813	Rp698,740,222,366	0.20
	2019	Rp239,504,278,343	Rp897,055,897,734	0.27
	2020	Rp240,515,133,289	Rp1,027,518,345,175	0.23
DLTA	2017	Rp449,849,870,000	Rp1,424,418,028,000	0.32
	2018	Rp514,175,400,000	Rp1,622,293,799,000	0.32
	2019	Rp478,447,502,000	Rp1,531,378,509,000	0.31
	2020	Rp246,295,153,000	Rp1,143,364,725,000	0.22
ICBP	2017	Rp7,059,156,000,000	Rp23,867,503,000,000	0.30
	2018	Rp8,540,319,000,000	Rp27,365,931,000,000	0.31
	2019	Rp9,604,475,000,000	Rp32,031,133,000,000	0.30
	2020	Rp12,646,346,000,000	Rp57,736,627,000,000	0.22
INDF	2017	Rp11,768,209,000,000	Rp52,200,030,000,000	0.23
	2018	Rp12,007,984,000,000	Rp54,878,651,000,000	0.22
	2019	Rp13,551,686,000,000	Rp60,105,217,000,000	0.23
	2020	Rp17,767,115,000,000	Rp87,890,110,000,000	0.20
MYOR	2017	Rp2,700,529,192,579	Rp8,985,300,196,965	0.30
	2018	Rp2,941,455,252,252	Rp10,302,978,761,998	0.29
	2019	Rp3,627,818,088,939	Rp11,963,344,402,082	0.30
	2020	Rp3,265,863,179,562	Rp13,369,636,564,603	0.24
ROTI	2017	Rp494,273,633,353	Rp2,955,469,736,568	0.17
	2018	Rp557,571,830,831	Rp3,044,072,556,474	0.18
	2019	Rp762,988,433,573	Rp3,329,115,936,517	0.23

	2020	Rp605,757,117,343	Rp3,396,281,330,209	0.18
SKBM	2017	Rp134,887,424,848	Rp1,049,117,925,190	0.13
	2018	Rp128,531,131,687	Rp1,056,531,185,043	0.12
	2019	Rp129,235,746,843	Rp1,036,777,550,058	0.12
	2020	Rp136,501,741,801	Rp967,397,401,143	0.14
ULTJ	2017	Rp1,223,297,000,000	Rp4,916,113,000,000	0.25
	2018	Rp1,176,193,000,000	Rp5,476,563,000,000	0.21
	2019	Rp1,630,250,000,000	Rp6,691,004,000,000	0.24
	2020	Rp1,598,823,000,000	Rp5,891,403,000,000	0.27

Lampiran 3. Hasil Perhitungan VAHU

Nama Perusahaan	Tahun	VA	HC	VAHU
ALTO	2017	-Rp18,502,028,145	Rp51,227,133,346	-0.36
	2018	-Rp10,113,937,082	Rp27,547,841,915	-0.37
	2019	Rp19,226,487,443	Rp30,316,049,687	0.63
	2020	Rp10,217,331,902	Rp19,057,913,409	0.54
BTEK	2017	Rp7,086,752,123	Rp48,190,631,795	0.15
	2018	Rp119,396,386,218	Rp41,678,254,600	2.86
	2019	-Rp91,254,471,195	Rp22,389,928,526	-4.08
	2020	-Rp598,673,846,733	Rp25,754,380,171	-23.25
BUDI	2017	Rp150,393,000,000	Rp89,649,000,000	1.68
	2018	Rp151,407,000,000	Rp91,978,000,000	1.65
	2019	Rp180,181,000,000	Rp99,617,000,000	1.81
	2020	Rp175,249,000,000	Rp103,333,000,000	1.70
CEKA	2017	Rp195,151,847,592	Rp51,447,784,731	3.79
	2018	Rp185,711,414,750	Rp62,839,760,948	2.96
	2019	Rp330,374,169,048	Rp44,598,253,533	7.41
	2020	Rp284,315,261,730	Rp51,430,321,036	5.53
CLEO	2017	Rp108,432,621,029	Rp51,481,730,201	2.11
	2018	Rp139,977,283,813	Rp55,703,946,078	2.51
	2019	Rp239,504,278,343	Rp58,062,408,046	4.12
	2020	Rp240,515,133,289	Rp66,492,672,966	3.62
DLTA	2017	Rp449,849,870,000	Rp85,421,633,000	5.27
	2018	Rp514,175,400,000	Rp79,000,788,000	6.51
	2019	Rp478,447,502,000	Rp68,361,970,000	7.00
	2020	Rp246,295,153,000	Rp78,513,510,000	3.14
ICBP	2017	Rp7,059,156,000,000	Rp1,667,733,000,000	4.23
	2018	Rp8,540,319,000,000	Rp2,063,933,000,000	4.14
	2019	Rp9,604,475,000,000	Rp2,119,627,000,000	4.53
	2020	Rp12,646,346,000,000	Rp2,557,502,000,000	4.94
INDF	2017	Rp11,768,209,000,000	Rp4,070,151,000,000	2.89
	2018	Rp12,007,984,000,000	Rp4,466,279,000,000	2.69
	2019	Rp13,551,686,000,000	Rp4,697,173,000,000	2.89
	2020	Rp17,767,115,000,000	Rp5,087,140,000,000	3.49
MYOR	2017	Rp2,700,529,192,579	Rp605,008,088,455	4.46
	2018	Rp2,941,455,252,252	Rp723,203,180,559	4.07
	2019	Rp3,627,818,088,939	Rp716,989,561,996	5.06
	2020	Rp3,265,863,179,562	Rp698,959,849,585	4.67
ROTI	2017	Rp494,273,633,353	Rp300,932,618,037	1.64
	2018	Rp557,571,830,831	Rp377,678,002,490	1.48
	2019	Rp762,988,433,573	Rp413,751,694,009	1.84
	2020	Rp605,757,117,343	Rp398,191,872,904	1.52

SKBM	2017	Rp134,887,424,848	Rp103,126,402,694	1.31
	2018	Rp128,531,131,687	Rp107,643,678,040	1.19
	2019	Rp129,235,746,843	Rp124,072,545,108	1.04
	2020	Rp136,501,741,801	Rp123,380,975,540	1.11
ULTJ	2017	Rp1,223,297,000,000	Rp172,082,000,000	7.11
	2018	Rp1,176,193,000,000	Rp196,900,000,000	5.97
	2019	Rp1,630,250,000,000	Rp202,883,000,000	8.04
	2020	Rp1,598,823,000,000	Rp231,175,000,000	6.92

Lampiran 4. Hasil Perhitungan STVA

Nama Perusahaan	Tahun	SC	VA	STVA
ALTO	2017	-Rp69,729,161,491	-Rp18,502,028,145	3.77
	2018	-Rp37,661,778,997	-Rp10,113,937,082	3.72
	2019	-Rp11,089,562,244	Rp19,226,487,443	-0.58
	2020	-Rp8,840,581,507	Rp10,217,331,902	-0.87
BTEK	2017	-Rp41,103,879,672	Rp7,086,752,123	-5.80
	2018	Rp77,718,131,618	Rp119,396,386,218	0.65
	2019	-Rp113,644,399,721	-Rp91,254,471,195	1.25
	2020	-Rp624,428,226,904	-Rp598,673,846,733	1.04
BUDI	2017	Rp60,744,000,000	Rp150,393,000,000	0.40
	2018	Rp59,429,000,000	Rp151,407,000,000	0.39
	2019	Rp80,564,000,000	Rp180,181,000,000	0.45
	2020	Rp71,916,000,000	Rp175,249,000,000	0.41
CEKA	2017	Rp143,704,062,861	Rp195,151,847,592	0.74
	2018	Rp122,871,653,802	Rp185,711,414,750	0.66
	2019	Rp285,775,915,515	Rp330,374,169,048	0.87
	2020	Rp232,884,940,694	Rp284,315,261,730	0.82
CLEO	2017	Rp56,950,890,828	Rp108,432,621,029	0.53
	2018	Rp84,273,337,735	Rp139,977,283,813	0.60
	2019	Rp181,441,870,297	Rp239,504,278,343	0.76
	2020	Rp174,022,460,323	Rp240,515,133,289	0.72
DLTA	2017	Rp364,428,237,000	Rp449,849,870,000	0.81
	2018	Rp435,174,612,000	Rp514,175,400,000	0.85
	2019	Rp410,085,532,000	Rp478,447,502,000	0.86
	2020	Rp167,781,643,000	Rp246,295,153,000	0.68
ICBP	2017	Rp5,391,423,000,000	Rp7,059,156,000,000	0.76
	2018	Rp6,476,386,000,000	Rp8,540,319,000,000	0.76
	2019	Rp7,484,848,000,000	Rp9,604,475,000,000	0.78
	2020	Rp10,088,844,000,000	Rp12,646,346,000,000	0.80
INDF	2017	Rp7,698,058,000,000	Rp11,768,209,000,000	0.65
	2018	Rp7,541,705,000,000	Rp12,007,984,000,000	0.63
	2019	Rp8,854,513,000,000	Rp13,551,686,000,000	0.65
	2020	Rp12,679,975,000,000	Rp17,767,115,000,000	0.71
MYOR	2017	Rp2,095,521,104,124	Rp2,700,529,192,579	0.78
	2018	Rp2,218,252,071,693	Rp2,941,455,252,252	0.75
	2019	Rp2,910,828,526,943	Rp3,627,818,088,939	0.80
	2020	Rp2,566,903,329,977	Rp3,265,863,179,562	0.79
ROTI	2017	Rp193,341,015,316	Rp494,273,633,353	0.39
	2018	Rp179,893,828,341	Rp557,571,830,831	0.32
	2019	Rp349,236,739,564	Rp762,988,433,573	0.46
	2020	Rp207,565,244,439	Rp605,757,117,343	0.34

SKBM	2017	Rp31,761,022,154	Rp134,887,424,848	0.24
	2018	Rp20,887,453,647	Rp128,531,131,687	0.16
	2019	Rp5,163,201,735	Rp129,235,746,843	0.04
	2020	Rp13,120,766,261	Rp136,501,741,801	0.10
ULTJ	2017	Rp1,051,215,000,000	Rp1,223,297,000,000	0.86
	2018	Rp979,293,000,000	Rp1,176,193,000,000	0.83
	2019	Rp1,427,367,000,000	Rp1,630,250,000,000	0.88
	2020	Rp1,367,648,000,000	Rp1,598,823,000,000	0.86

Lampiran 5. Eviews

STATISTIK DESKRIPTIF

Date: 08/07/23
Time: 12:19
Sample: 2017 2020

	Y	X1	X2	X3
Mean	0.090118	0.174109	2.586509	0.584725
Median	0.092883	0.208460	2.888209	0.718609
Maximum	0.289625	0.316943	8.035419	3.768731
Minimum	-0.147838	-0.519293	-23.24552	-5.800101
Std. Dev.	0.092984	0.142386	4.495176	1.194267
Skewness	0.085869	-2.600745	-3.997261	-2.543893
Kurtosis	2.903074	12.84251	23.98535	19.95844
Jarque-Bera	0.077777	247.8611	1008.594	626.9488
Probability	0.961858	0.000000	0.000000	0.000000
Sum	4.325674	8.357234	124.1524	28.06682
Sum Sq. Dev.	0.406367	0.952866	949.7107	67.03486
Observations	48	48	48	48

CEM

Dependent Variable: Y
Method: Panel Least Squares
Date: 08/07/23 Time: 12:16
Sample: 2017 2020
Periods included: 4
Cross-sections included: 12
Total panel (balanced) observations: 48

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.003778	0.015871	-0.238072	0.8129
X1	0.501545	0.125373	4.000441	0.0002
X2	0.001329	0.003971	0.334556	0.7395
X3	0.005364	0.006544	0.819805	0.4167
R-squared	0.689300	Mean dependent var		0.090118
Adjusted R-squared	0.668116	S.D. dependent var		0.092984
S.E. of regression	0.053568	Akaike info criterion		-2.936084
Sum squared resid	0.126258	Schwarz criterion		-2.780151
Log likelihood	74.46603	Hannan-Quinn criter.		-2.877157
F-statistic	32.53857	Durbin-Watson stat		0.494009
Prob(F-statistic)	0.000000			

FEM

Dependent Variable: Y
Method: Panel Least Squares
Date: 08/07/23 Time: 12:17
Sample: 2017 2020
Periods included: 4
Cross-sections included: 12
Total panel (balanced) observations: 48

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.013790	0.019389	1.555898	0.1293
X1	0.449184	0.151795	2.234037	0.0324
X2	0.001292	0.003512	0.044913	0.9644
X3	0.002499	0.003859	0.221883	0.8258

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.942077	Mean dependent var	0.090118
Adjusted R-squared	0.917503	S.D. dependent var	0.092984
S.E. of regression	0.026707	Akaike info criterion	-4.157461
Sum squared resid	0.023538	Schwarz criterion	-3.572711
Log likelihood	114.7791	Hannan-Quinn criter.	-3.936483
F-statistic	38.33715	Durbin-Watson stat	2.001334
Prob(F-statistic)	0.000000		

REM

Dependent Variable: Y
Method: Panel EGLS (Cross-section random effects)
Date: 08/07/23 Time: 12:18
Sample: 2017 2020
Periods included: 4
Cross-sections included: 12
Total panel (balanced) observations: 48
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.013790	0.020270	0.680328	0.4999
X1	0.449184	0.123663	3.632329	0.0007
X2	-0.001292	0.003074	-0.420173	0.6764
X3	0.002499	0.003731	0.669849	0.5065

Effects Specification

	S.D.	Rho
Cross-section random	0.044751	0.7374
Idiosyncratic random	0.026707	0.2626

Weighted Statistics

R-squared	0.580713	Mean dependent var	0.025768
Adjusted R-squared	0.552125	S.D. dependent var	0.041535
S.E. of regression	0.027797	Sum squared resid	0.033997

F-statistic	20.31335	Durbin-Watson stat	1.429032
Prob(F-statistic)	0.000000		

Unweighted Statistics

R-squared	0.646981	Mean dependent var	0.090118
Sum squared resid	0.143455	Durbin-Watson stat	0.338660

UJI CHOW (menang FEM)

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	13.092000	(11,33)	0.0000
Cross-section Chi-square	80.626077	11	0.0000

UJI HAUSMAN (Menang FEM)

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	6.663061	3	0.0834

UJI LAGRANGE MULTIPLIER

Lagrange Multiplier Tests for Random Effects			
Null hypotheses: No effects			
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives			

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	51.21901 (0.0000)	2.042231 (0.1530)	53.26124 (0.0000)

UJI MULTIKOLINERITAS

Variance Inflation Factors
Date: 08/29/23 Time: 12:45
Sample: 1 48
Included observations: 41

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.064622	75.05939	NA
LOGX1	0.010374	32.05753	1.717171
LOGX2	0.009677	18.55810	3.801764
LOGX3	0.006912	6.112285	3.188742

UJI AUTOKORELASI

R-squared	0.580713	Mean dependent var	0.025768
Adjusted R-squared	0.552125	S.D. dependent var	0.041535
S.E. of regression	0.027797	Sum squared resid	0.033997
F-statistic	20.31335	Durbin-Watson stat	1.429032
Prob(F-statistic)	0.000000		