

## Lampiran 1

### Daftar Nama Perusahaan yang ada di Industri Logam Dan sejenisnya periode 2012 -2017

NO.	Nama Perusahaan	Kode Saham
1.	Alaska Industrino Tbk.	ALKA
2.	Alumindo Light Metal Industry Tbk.	ALMI
3.	Sarana Central Bajatama Tbk.	BAJA
4.	Beton Jaya Manunggal Tbk.	BTON
5.	Citra Turbindo Tbk.	CTBN
6.	Gunawan Dianjaya Steel Tbk.	GDST
7.	Indal Aluminium Industry Tbk.	INAI
8.	Steel Pipe Industry Tbk.	ISSP
9.	Jakarta Kyoei Steel Work LTD Tbk.	JKSW
10.	Jaya Pari Steel Tbk.	JPRS
11.	Krakatau Steel (persero) Tbk.	KRAS
12.	Lion Metal Works Tbk.	LION
13.	Lionmesh Prima Tbk.	LMSH
14.	Pelat Timah Nusantara Tbk.	NIKL
15.	Pelangi Indah Canindo Tbk.	PICO
16.	Tembaga Mulia semana Tbk.	TBMS

**Daftar Nama Perusahaan Yang Termasuk Kedalam PER positif**

NO.	Nama Perusahaan	Tahun
1.	Alaska Industrino Tbk. (ALKA)	2012
		2014
		2016
		2017
2.	Alumindo Light Metal Industry Tbk. (ALMI)	2012
		2013
		2014
3.	Sarana Central Bajatama Tbk. (BAJA)	2012
		2014
		2016
		2017
4.	Beton Jaya Manunggal Tbk. (BTON)	2012
		2013
		2014
		2015
		2017
5.	Citra Turbindo Tbk. (CTBN)	2012
		2013
		2014
		2015
		2016
6.	Gunawan Dianjaya Steel Tbk. (GDST)	2012
		2013
		2016
		2017
7.	Indal Aluminium Industry Tbk. (INAI)	2012
		2013
		2014
		2015
		2016
		2017

8.	Jakarta Kyoei Steel Work LTD Tbk. (JKSW)	2016
		2017
9.	Jaya Pari Steel Tbk. (JPRS)	2012
		2013
10.	Lion Metal Works Tbk. (LION)	2012
		2013
		2014
		2015
		2016
		2017
11.	Lionmesh Prima Tbk. (LMSH)	2012
		2013
		2014
		2015
		2016
		2017
12.	Pelat Timah Nusantara Tbk. (NIKL)	2013
		2016
		2017
13.	Pelangi Indah Canindo Tbk. (PICO)	2012
		2013
		2014
		2015
		2016
		2017
14.	Tembaga Mulia semana Tbk. (TBMS)	2012
		2014
		2015
		2016
		2017

Sumber : Data Diolah (2018)

### Daftar Nama Perusahaan Yang Termasuk Kedalam PER Negatif

NO.	Nama Perusahaan	Tahun
1.	Alaska Industrino Tbk. (ALKA)	2013
		2015
2.	Alumindo Light Metal Industry Tbk. (ALMI)	2015
		2016
		2017
3.	Sarana Central Bajatama Tbk. (BAJA)	2013
		2015
4.	Beton Jaya Manunggal Tbk. (BTON)	2016
5.	Citra Turbindo Tbk. (CTBN)	2017
6.	Gunawan Dianjaya Steel Tbk. (GDST)	2014
		2015
7.	Jakarta Kyoei Steel Work LTD Tbk. (JKSW)	2012
		2013
		2014
		2015
8.	Jaya Pari Steel Tbk. (JPRS)	2014
		2015
		2016
		2017
9.	Krakatau Steel (persero) Tbk. (KRAS)	2012
		2013
		2014
		2015
		2016
10.	Pelat Timah Nusantara Tbk. (NIKL)	2017
		2012
		2014
11.	Tembaga Mulia semana Tbk. (TBMS)	2015
		2013

Sumber : Data Diolah (2018)

## Lampiran 2. Uji Normalitas Data

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

Model	Variables Entered	Variables Removed	Method
1	KURS, DAR, DER, ROE, NPM, EPS, INFLASI, CR, GPM, ROA <sup>b</sup>	.	Enter

a. Dependent Variable: PER

b. All requested variables entered.

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.709 <sup>a</sup>	.503	.440	.35155

a. Predictors: (Constant), KURS, DAR, DER, ROE, NPM, EPS, INFLASI, CR, GPM, ROA

b. Dependent Variable: PER

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.892	10	.989	8.004	.000 <sup>b</sup>
	Residual	9.763	79	.124		
	Total	19.656	89			

a. Dependent Variable: PER

b. Predictors: (Constant), KURS, DAR, DER, ROE, NPM, EPS, INFLASI, CR, GPM, ROA

Sumber : Hasil Output Software Statistik,2018

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.262	.430		.609	.544
ROA	3.903	1.163	.529	3.355	.001
ROE	-.561	.316	-.148	-1.774	.080
NPM	.617	.418	.170	1.475	.144
GPM	.563	.464	.137	1.213	.229
EPS	-2.627E-005	.000	-.049	-.491	.625
DAR	.012	.080	.015	.151	.880
DER	.038	.018	.176	2.101	.039
CR	-.001	.001	-.069	-.781	.437
INFLASI	-1.564	1.736	-.077	-.901	.370
KURS	2.551E-005	.000	.074	.830	.409

## Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Standardized Predicted Value	90	.0000000	1.0000000	.197	.254	.738	.503
Valid N (listwise)	90						

Sumber : Hasil Output Software Statistik,2018

## Lampiran 3. Uji Diskriminan

## Analysis Case Processing Summary

Unweighted Cases		N	Percent
Valid		90	100.0
	Missing or out-of-range group codes	0	.0
Excluded	At least one missing discriminating variable	0	.0
	Both missing or out-of-range group codes and at least one missing discriminating variable	0	.0
	Total	0	.0
Total		90	100.0

Sumber : Hasil Output Software Statistik,2018

## Group Statistics

PER	Mean	Std. Deviation	Valid N (listwise)		
			Unweighted	Weighted	
.00	ROA	-.039666	.0258268	29	29.000
	ROE	.046610	.1312406	29	29.000
	NPM	-.085917	.1060087	29	29.000
	GPM	.010666	.0633449	29	29.000
	EPS	-129.881724	378.9678112	29	29.000
	DAR	.799655	.7344409	29	29.000
	DER	1.477931	2.3820120	29	29.000
	CR	18.556207	85.9087893	29	29.000
	INFLASI	.051897	.0239305	29	29.000
	KURS	12778.000000	1221.7949325	29	29.000
1.00	ROA	.046770	.0570859	61	61.000
	ROE	.026180	.1214722	61	61.000
	NPM	.063428	.1115721	61	61.000
	GPM	.131393	.1130307	61	61.000
	EPS	428.069836	986.2877067	61	61.000
	DAR	.579016	.4627047	61	61.000
	DER	1.839180	2.0872927	61	61.000
	CR	6.401475	31.4450277	61	61.000
	INFLASI	.051803	.0230426	61	61.000
	KURS	12407.426230	1430.1937218	61	61.000

Total	ROA	.018919	.0636930	90	90.000
	ROE	.032763	.1243323	90	90.000
	NPM	.015306	.1298208	90	90.000
	GPM	.092492	.1144303	90	90.000
	EPS	248.285444	877.3430341	90	90.000
	DAR	.650111	.5698994	90	90.000
	DER	1.722778	2.1796918	90	90.000
	CR	10.318000	54.9647702	90	90.000
	INFLASI	.051833	.0231974	90	90.000
	KURS	12526.833333	1370.7390056	90	90.000

Sumber : Hasil Output Software Statistik,2018

#### Tests of Equality of Group Means

	Wilks' Lambda	F	df1	df2	Sig.
ROA	.593	60.329	1	88	.000
ROE	.994	.528	1	88	.469
NPM	.708	36.342	1	88	.000
GPM	.754	28.684	1	88	.000
EPS	.911	8.631	1	88	.004
DAR	.967	3.013	1	88	.086
DER	.994	.537	1	88	.466
CR	.989	.961	1	88	.330
INFLASI	1.000	.000	1	88	.986
KURS	.984	1.444	1	88	.233

Sumber : Hasil Output Software Statistik,2018

### Log Determinants

PER	Rank	Log Determinant
.00	2	-12.241
1.00	2	-10.348
Pooled within-groups	2	-10.677

The ranks and natural logarithms of determinants printed are those of the group covariance matrices.

Sumber : Hasil Output Software Statistik,2018

### Test Results

Box's M	24.049
Approx.	7.778
F	3
df1	69561.854
df2	.000
Sig.	

Tests null hypothesis of equal population covariance matrices.

### Variables Entered/Removed<sup>a,b,c,d</sup>

Step	Entered	Min. D Squared					
		Statistic	Between Groups	Exact F			
				Statistic	df1	df2	Sig.
1	ROA	3.069	.00 and 1.00	60.329	1	88.000	1.391E-011
2	NPM	3.452	.00 and 1.00	33.544	2	87.000	1.599E-011

At each step, the variable that maximizes the Mahalanobis distance between the two closest groups is entered.

- Maximum number of steps is 20.
- Minimum partial F to enter is 3.84.
- Maximum partial F to remove is 2.71.
- F level, tolerance, or VIN insufficient for further computation.

Sumber : Hasil Output Software Statistik,2018

### Variables in the Analysis

Step		Tolerance	F to Remove	Min. D Squared	Between Groups
1	ROA	1.000	60.329		
2	ROA	.786	22.052	1.849	.00 and 1.00
	NPM	.786	4.416	3.069	.00 and 1.00

### Wilks' Lambda

Step	Number of Variables	Lambda	df1	df2	df3	Exact F			
						Statistic	df1	df2	Sig.
1	1	.593	1	1	88	60.329	1	88.000	.000
2	2	.565	2	1	88	33.544	2	87.000	.000

### Eigenvalues

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	.771 <sup>a</sup>	100.0	100.0	.660

a. First 1 canonical discriminant functions were used in the analysis.

### Standardized Canonical Discriminant Function Coefficients

	Function
	1
ROA	.769
NPM	.376

Sumber : Hasil Output Software Statistik,2018

**Structure Matrix**

	Function
	1
ROA	.943
NPM	.732
GPM <sup>a</sup>	.469
EPS <sup>a</sup>	.380
KURS <sup>a</sup>	-.288
DER <sup>a</sup>	-.221
DAR <sup>a</sup>	-.156
INFLASI <sup>a</sup>	.142
ROE <sup>a</sup>	.093
CR <sup>a</sup>	.060

Pooled within-groups correlations  
between discriminating variables and  
standardized canonical discriminant  
functions

Variables ordered by absolute size of  
correlation within function.

a. This variable not used in the  
analysis.

**Canonical  
Discriminant  
Function  
Coefficients**

	Function
	1
ROA	15.584
NPM	3.422
(Constant)	-.347

Unstandardized  
coefficients

**Functions at Group  
Centroids**

PER	Function
	1
.00	-1.259
1.00	.599

Unstandardized  
canonical discriminant  
functions evaluated at  
group means

**Classification Processing Summary**

Processed		90
Excluded	Missing or out-of-range group codes	0
	At least one missing discriminating variable	0
Used in Output		90

**Prior Probabilities for Groups**

PER	Prior	Cases Used in Analysis	
		Unweighted	Weighted
.00	.500	29	29.000
1.00	.500	61	61.000
Total	1.000	90	90.000

Sumber : Hasil Output Software Statistik,2018

### Classification Function

#### Coefficients

	PER	
	.00	1.00
ROA	-11.398	17.559
NPM	-4.752	1.606
(Constant)	-1.123	-1.155

Fisher's linear discriminant functions

### Classification Results<sup>a,c</sup>

		PER	Predicted Group Membership		Total
			.00	1.00	
Original	Count	.00	29	0	29
		1.00	4	57	61
	%	.00	100.0	.0	100.0
		1.00	6.6	93.4	100.0
Cross-validated <sup>b</sup>	Count	.00	29	0	29
		1.00	4	57	61
	%	.00	100.0	.0	100.0
		1.00	6.6	93.4	100.0

a. 95.6% of original grouped cases correctly classified.

b. Cross validation is done only for those cases in the analysis. In cross validation, each case is classified by the functions derived from all cases other than that case.

c. 95.6% of cross-validated grouped cases correctly classified.

Sumber : Hasil Output Software Statistik,2018