



Leverage Influence, Company Size and Corporate Governance on Company Performance in the Mining Sector 2016-2019

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ABSTRACT

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This research was conducted to determine and examine the effect of leverage ratios, company size and corporate governance on the performance of mining sector companies for the 2016-2019 period. This research is a deductive, quantitative and descriptive research that uses secondary data from financial reports obtained from the financial statements of the mining sector. For data processing using multiple linear regression analysis techniques. The results of the research findings individually that the leverage ratio has negative implications for company performance, corporate governance has positive implications for financial performance and company size has no impact on financial performance. Simultaneous research results show that the leverage ratio, company size and corporate governance have implications for financial performance of 20.2%.

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1. Introduction

Measurement of the performance of an entity has several benefits including, it can be used as a benchmark to assess the effectiveness and efficiency of the company, besides that it can also be used to ensure that every ongoing activity has been running in accordance with the company's goals. There are several factors that affect financial performance, including leverage ratios, company size and corporate governance.

Leverage is the use of the origin of funds where the company is obliged to bear a fixed portion or expense. The smaller this ratio, the better because there are fewer long-term liabilities according to own capital. The use of hyperbolic leverage will place the company at enormous risk.

Company size can be used as one of the factors that determine investor interest in investing, which is divided into small, medium and large companies. Companies that are included in the large category are assumed to have better performance because they are considered more able to generate profits compared to small companies. The size of the company is seen from its total assets where the greater the total assets, the greater the size of the company.

The implementation of corporate governance is carried out as an effort to control the company's internal so that performance increases. Through the implementation of good governance, the risks arising from the behavior of managers who tend to seek personal gain can be minimized while in general investor confidence can be increased.



Table 1
Phenomenon data in dollars

Code	Year	Debt	Asset	Independent Commissioner	Net profit
GEMS	2016	112,751,314	377,670,000	3	34,988,248
	2017	298.251.273	590,469,384	3	120,106,040
	2018	385,233,714	701,046,630	3	100,548,578
	2019	422,379,157	780,646.167	3	66,765.857
KKGI	2016	14,299,044	98,708,750	2	9,472,864
	2017	16,433,699	105.053,598	2	13,439,975
	2018	30,558,484	117,265,221	2	475,600
	2019	32,971,463	16,354.537	2	5,414,352
DSSA	2016	949,178,800	2,232,507.010	2	64,776,826
	2017	1,282,671,892	2,736,992,648	2	129,237,369
	2018	1,873,497,037	3,386.790,883	2	120,745,047
	2019	2,080,864,382	3,718,973,064	3	71,654,412

It can be seen that the problems that occur in companies with the GEMS code are PT. Golden Energy Mines, Tbk in the value of its debt in 2016 to 2017 increased but its net profit also increased. At PT. Resource Alam Indonesia, Tbk or KKGI code which experienced an increase in assets in 2018 to 2018 but the net profit decreased significantly. Likewise at PT. Dian Swantika Sentosa, Tbk with the code DSSA which has 1 additional commissioner member in 2019, but its net profit has actually decreased. The purpose of this study is to examine the impact of leverage ratios on the performance of mining sector companies, examine the impact of company size on the performance of mining sector companies, examine the impact of corporate governance on the performance of mining sector companies and examine the impact of leverage ratios.

2. Method

2.1 Place and time of research

This research was conducted on mining companies listed on the Indonesia Stock Exchange through the website www.idx.co.id. The research period is from October 2020 to April 2021.

2.2 Population and Sample

The total population of the mining sector for the 2016-2019 period is 47 issuers. The sampling technique in this study was based on purposive sampling. The considerations of researchers in the mining sector are:

Table 2
Sample Selection Table

No	Information	Amount
1	Mining companies listed on the IDX for the period 2016-2019	47
2	Mining companies that do not publish complete financial reports in a row during the 2016-2019 period	-4
3	Mining companies that did not earn a net profit in the 2016-2019 period	-18
	Number of samples	25
	Number of Periods	4
	Number of Observations = 25 x 4	100

2.3 Data Collection Techniques

The data collection method is carried out by studying documentation sourced from the financial statements of the mining sector published by the official website of the Indonesia Stock Exchange.

2.4 Types and Sources of Research Data

The type of data used in this research is secondary data. The secondary data was obtained from the [website.idx.co.id](http://www.idx.co.id) in the form of audited financial statements for the 2016-2019 period

2.5 Identification and Operational Definition of Research Variables

The definitions, indicators and scales used for each variable can be seen in the following table:

Table 3

Operational Definition and Measurement of Variables

Variable	Draft	Indicator	Scale
Leverage Ratio (X1)	Leverage ratio measures how much debt is used in company spending Source: Sudana (2015:23)	Debt ratio = $\frac{\text{Total debt}}{\text{Total Asset}}$ Source: Sudana (2015:23)	Ratio
Company Size (X2)	To see the size of the company, investors look at the size of the company Source: Sunyoto (2013:6)	$\text{Natural Asset Logarithm}$ Source: Rodoni (2014:193)	Ratio
Corporate Governance (X3)	GCG is basically a system (input, process, output) and a set of rules that regulate the relationship between various interested parties (stakeholders), especially in the narrow sense of the relationship between shareholders, the board of commissioners, and the board of directors in order to achieve company goals. Source: Zarkasyi (2019:36)	Number of Independent Commissioners of mining companies for the 2016-2019 period	Ratio
Company Performance (Y)	Company performance is the effectiveness of the company as a whole to meet the defined needs of each group with regard to systemic efforts and improve the organization's ability to continuously achieve its needs effectively. Source : Fahmi (2018:3)	$\text{ROA} = \frac{\text{Net Profit}}{\text{Total Assets}}$ Source : Kariyoto (2017:114)	Ratio

2.6 Classic assumption test

The classical assumption test in this study consisted of 4 test instruments namely normality test, multicollinearity test, autocorrelation test and heteroscedasticity test.

a. Normality test

This test is to see whether the residual value is normally distributed or not. A good regression model is to have a normally distributed residual value. The normality test in this study used the histogram test, the P Plot normal test, and the Kolmogorov Smirnov test.

b. Multicollinearity Test

Test this is to see whether or not correlation high between the independent variables in a multiple linear regression model. To detect the absence of multicollinearity in the regression model, it can be seen from the tolerance value > 0.10 or equal to the VIF value < 10.

c. Correlation Auto Test

This test is to see whether there is a correlation between a period t and the previous period (t -1). The autocorrelation test in this study used a run test. Decision making is done by looking at the Asymp. Sig (2-tailed) test Run Test. If the Asymp. Sig (2-tailed) value is greater than the 0.05 significance level, it can be concluded that there is no autocorrelation.



d. Heteroscedasticity Test

This test is to see if there is an inequality variance from the residual of one observation to another observation. Detection of heteroscedasticity can be done using the scatterplot method by plotting the ZPRED value (prediction value) with SRESID (residual value). In addition to using the heteroscedasticity test graph, this study also uses the Glejser test where if the significant value of the SPSS calculation is greater than 0.05, it can be concluded that there is no heteroscedasticity.

2.7 Research Data Analysis Model

a. Research Model

The regression model used is multiple regression analysis with the formula:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Information:

- Y = Company Performance
- = Constant
- X1 = Ratio *Leverage*
- X2 = Company Size
- X3 = Corporate Governance
- 1,β2,β3 = Regression coefficient
- e = Confounding variable

b. Coefficient of Determination

Coefficient of determination in linear regression is often interpreted as how much the ability of all independent variables in explaining the variance of the dependent variable. In this study, the coefficient of determination is seen in the Adjusted R Square value because the independent variables used are 3 variables. (Ghozali, 2016:95)

c. t test

The t test is to test how the effect of each independent variable is partially on the dependent variable. This test can be done by comparing t count with t table or by looking at the significance column in each t count. The criteria as guidelines for the t test are as follows:

H0 is accepted if tcount < ttable and significant > 0.05

Ha is accepted if tcount > ttable and significant < 0.05 (Ghozali, 2016:97)

d. F Uji test

The F test is a test to see whether all of the independent variables together have an effect on the dependent variable. The F test can be done by comparing the calculated F with the F table. if F count > from F table, (Ho is rejected, Ha is accepted) and vice versa if F count < F table (Ho is accepted and Ha is rejected). (Ghozali, 2016:9)

3. Results and Analysis

3.1 Descriptive statistics

The total number of observed data is 76 data quoted from 19 samples multiplied by 4 years period from 2016-2019. The following is a description of each variable:

Table 4
Descriptive statistics
Descriptive Statistics

	N	Minimum	Maximum	mean	Std. Deviation
RatioLeverage	76	.106	.857	.43303	.179110
Company Size	76	27,590	32,258	29.74629	1.169438
Corporate governance	76	1	3	2.00	.611
Company performance	76	.000	.456	.10196	.104144
Valid N (listwise)	76				



The lowest value in the leverage ratio (Debt Ratio) of 0.106 obtained by PT. Harum Energy, Tbk in 2019 and a maximum value of 0.857 obtained by PT. Delta Dunia Makmur, Tbk in 2016. The average leverage ratio is 0.43303.

The minimum company size is 27,590 obtained by PT. Radiant Utama Interinsco, Tbk in 2017 and a maximum value of 32.258 obtained by PT. Adaro Energy, Tbk in 2018. The average value is 29,74629.

Corporate governance with independent commissioner proxies, in this sector the average is 2 people.

The company's performance with the lowest score is 0.000, namely at PT. Surya Esa Perksaa, Tbk. In 2016 with the highest score of 0.456 at PT. Bayan Resources, Tbk. in 2018 and the average value is 0.10196.

3.2 Classic assumption test

a. Normality test

Hasil data processing in normality testing along with the following table:

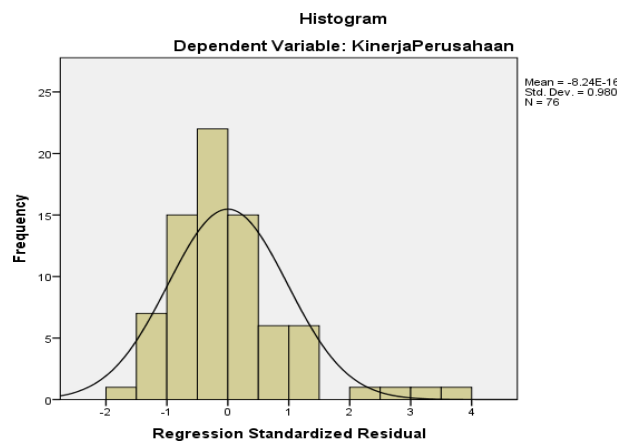


Fig 1 Histogram Normality Test

The histogram graph shows that after the transformation the data has a normal distribution because the visual graph is symmetrical and does not sway to the right or to the left. In addition to the histogram of normality assumptions, it can also be seen from the P-Plot graph.

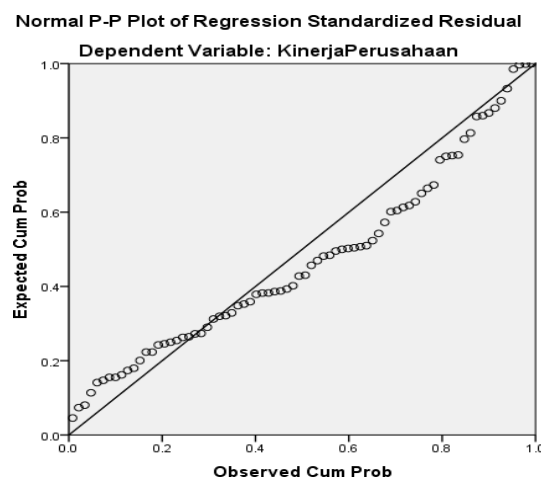


Fig 2. PP Plot Normality Test

From the graph P Plot shows the data has a normal distribution which can be seen from the plot that moves along the diagonal line.

Table 5
KS Testing
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		76
Normal Parameters, b	mean	.09114154
	Std. Deviation	.135
	Absolute Positive	.135
Most Extreme Differences	Negative	-.084
		1.174
Kolmogorov-Smirnov Z		.127
Asymp. Sig. (2-tailed)		

- Test distribution is Normal.
- Calculated from data.

The results of the processed data obtained a significant value, namely $0.127 > 0.05$, so it can be concluded if the data after the transformation has met the assumption of normality.

b. Multicollinearity Test

Multicollinearity test is the second assumption requirement after normality. To see whether the independent variables have no correlation, the tolerance and VIF values can be seen.

Table 6
Multicollinearity Test
Coefficientsa

Model		Collinearity Statistics	
		Tolerance	VIF
1	RatioLeverage	.937	1.067
	Company Size	.904	1.106
	Corporate governance	.963	1.038

- Dependent Variable: Company Performance

The results of the multicollinearity test show that the independent variables are not correlated with each other because the tolerance value of each independent variable is greater than 0.10 and the VIF value of each independent variable is less than 10.

c. Autocorrelation Test

The correct regression must meet the third assumption, namely that there is no error in the observation period, as shown in the table below.

Table 7
Autocorrelation Test
Model Summaryb

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.484a	.234	.202	.093021	1,863

- Predictors: (Constant), Corporate Governance, Leverage Ratio, Company Size
- Dependent Variable: Company Performance

Data processing resulted in the Durbin Watson value of 1.863 where if you look at the magnitude of the dL and dU values in the table, the dL value is 1.5467 and dU is 1.7104. Because it can be concluded if $d1U < 1d < 4 - dU$ or $1,7104 < 1,863 < 2,2896$ so that the results of this test show that this regression data is free from autocorrelation problems.

d. Heteroscedasticity Test

Test Heteroscedasticity in this study used graphs and statistical methods, where the statistical method selected used the Spearman's rho test.

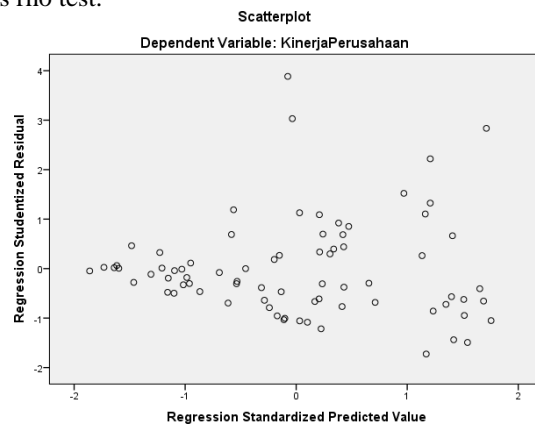


Fig 3.Scatterplot Heteroscedasticity Test

From result The scatterplot graph test shows that the plots have been randomly distributed so that the data in this study has met the requirements of the classic assumption test because there is no heteroscedasticity.

Table 8
Spearman's rho . test
Correlations

	RatioLeverage	Company Size	Corporate governance	Unstandardized Residual
Correlation Coefficient	1,000	.292*	-.001	.076
RatioLeverage		.011	.993	.514
N	76	76	76	76
Correlation Coefficient	.292*	1,000	.181	.060
SizeCompany			.118	.607
Spearman's	76	76	76	76
N				
rho	-.001	.181	1,000	-.099
Correlation Governance				
Coefficient				
Company		.118	.	.396
N	76	76	76	76
Correlation Unstandardized	.076	.060	-.099	1,000
Coefficient				
Residual	.514	.607	.396	.



	RatioLeverage	Company Size	Corporate governance	Unstandardized Residual
N	76	76	76	76

*. Correlation is significant at the 0.05 level (2-tailed).

From the results of the Spearman's rho test, it shows that the data in this study does not occur heteroscedasticity because the significant values of the leverage ratio, company size and corporate governance all exceed the provisions of the significant value.

3.3 Multiple Linear Regression Analysis

Table 9
Multiple Linear Regression Analysis Equations
Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
(Constant)	.496	.277		1,789	.078
RatioLeverage	-.227	.062		-3,660	.000
1	-.013	.010	-.390	-1.308	.195
Company Size	.040	.018	-.142	2.217	.030
Corporate governance			.233		

a. Dependent Variable: Company Performance

The multiple regression equations of this study are:

$$\text{Company Performance} = 0.496 - 0.227 \text{ Leverage Ratio} - 0.013 \text{ Company Size} + 0.040$$

3.4 Corporate governance

The conclusion of the multiple regression results are:

- Kolnstanta(a) sebesar 0.496. This means that if the leverage ratio, company size and corporate governance are stable and produce a value of 0, then finances provide a value of 0.496 units.
- b1X1 of -0.227 means that every increase in the leverage ratio of 1 unit will cause a decrease in financial performance of 0.227 units.
- b2X2 of -0.013 means that every increase in company size by 1 unit will cause a decrease in financial performance by 0.013 units.
- b3X3 of 0.040 means that each increase in corporate governance / the number of independent commissioners by 1 unit will cause an increase in financial performance of 0.040 units.

3.5 Hypothesis testing

a. Determinant Coefficient

Table 10
Determinant Coefficient Test
Summer model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.484a	.234	.202	.093021

a. Predictors: (Constant), Corporate Governance, Leverage Ratio, Company size

The impact on the dependent variable from the independent variable can be seen from the Adjusted R Square value of 0.202 which means 20.2% of the variation in financial performance which can be explained by the leverage ratio variable, the size of the company and the governance of a company where the

remaining 79.8% influenced by other factors such as liquidity variables, ownership structure, accounts receivable turnover and other variables.

b. F Uji test

Table 11
F Uji test
ANOVAa

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.190	3	.063	7.336	.000b
Residual	.623	72	.009		
Total	.813	75			

a. Dependent Variable: Company Performance

b. Predictors: (Constant), Corporate Governance, Leverage Ratio, Company Size

The value of F table for df 1 = 3 and df 2 = 72 is 2.73. By looking at the results of the F test, the calculated F value (7.336) > F table 2.73 and a significant value of 0.000 < 0.05 then Ha is accepted which means simultaneously the leverage ratio, company size and corporate governance have a significant effect on company performance for the sector. mines for the 2016-2019 period.

c. t test

Table 12
t test
Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.496	.277		1,789	.078
RatioLeverage	-.227	.062		-3,660	.000
1	-.013	.010	-.390	-1.308	.195
Company Size	.040	.018	-.142	2.217	.030
Corporate governance			.233		

a. Dependent Variable: Company Performance

The magnitude of t table at alpha 0.05 (sig two tailed), df 72 is 1.99346. By comparing the partial test results with the magnitude of t table, then:

1. $-t \text{ valuehit}1ng < -t\text{table}$ or $-3.660 < -1.99346$ and a significant value of $0.000 < 0.05$ makes Ha acceptable, which means that the leverage ratio has negative implications for the company's performance in the mining sector for the 2016-2019 period.
2. $-t \text{ valueh}1\text{that}ng > -t\text{table}$ or $-1.308 > -1.99346$ and a significant value of $0.195 > 0.05$ resulted in H0 . accepted, it means that the size of the company has no implications for the company's performance in the mining sector for the 2016-2019 period
3. $Nilali \text{ thcount} > t \text{ table}$ or $2.217 > 1.99346$ and a significant value of $0.030 < 0.05$, then Ha is accepted, meaning that corporate governance has positive implications for the company's performance in the mining sector for the 2016-2019 period.

3.6 Discussion

a. The Effect of Leverage Ratio on Company Performance

Ha'sil Research proves that the level of income ratio has a negative impact on the performance of companies in the mining sector. In previous research, Asizz and Hartono (2017) also showed that the DAR variable had a bad effect on company performance.



When the company has used a leverage ratio that is too high, there is a possibility of default (debt default) because the interest expense paid by the company is getting higher and reduces income.

b. The Effect of Company Size on Company Performance

The results of the study prove that the size of the company has no significant implications on the financial performance of the mining sector. The results of previous research by Oktaviana (2016) show that the size of the company does not have any implications on company performance.

This shows that large companies are not certain to have good performance, it can be caused by the larger the company, the company's financial needs will also increase, at the same time the risk of the company will also be high if there is a decline in sales. On the other hand, small companies also sometimes have good company performance because the company is able to manage its company well by making the best use of existing assets.

c. Influence of Corporate Governance on Company Performance

Results research proves the number of independent commissioners has a positive implication on the performance of the company's mining sector. The results of previous research Hendratni, et al (2018) pointed to an independent board of commissioners having a positive influence on company performance. The better corporate governance, the better the level of supervision of the company's operations.

4. Conclusion

- a. The Leverage Ratio (Debt Ratio) has negative implications for the company's performance in the mining sector for the 2016-2019 period.
- b. The size of the company has no significant implications on the company's performance in the mining sector for the 2016-2019 period.
- c. Corporate governance (independent commissioners) has positive implications on the performance of mining sector companies for the 2016-2019 period.
- d. Simultaneously the leverage ratio (Debt Ratio), the scale of the company and corporate governance affect the performance of the mining sector companies for the 2016-2019 period.

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