The effect of return on assets, debt to equity ratio and managerial ownership on price to book value in mining sector companies listed on the Indonesia Stock Exchange (IDX) 2016-2020 period

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Abstract

This study aims to find out and analyze the effect of return on asset, debt to equity ratio and managerial ownership of price to book value in mining sector companies listed on the Indonesian Stock Exchange (IDX) for the period 2016 to 2020. The population in this study used a porposive sampling technique. The data in this study uses annual reports from 20 mining sector companies with a total of 88 samples of observations. This study uses secondary data and data collection techniques. The technique used is multiple linear regression technique and uses the Statistical Product Service Solution program or SPSS version 26.The results of this study indicate that return on assets has a positive and significantly to the price to book value, the debt to equity ratio has no effect on the results positive and not significant to the price to book value. Temporary managerial ownership has no effect on negative and significant results on price to book value.

Keywords
Return On Assets, Debt to Equity Ratio, Managerial Ownership, and Price to Book Value.

INTRODUCTION

The establishment of a company must have goals to be achieved, one of which is the value of the company. Price to book value is a certain condition where the company has been achieved by the company through the process of activities for several years since the company was founded until today. The increase in price to book value is an image of the company's success in running its business. Optimizing price to book value is very meaningful for a company, because optimizing price to book value also means optimizing the prosperity of shareholders which is the main goal of a company (Zisokhi et al., 2019). Table Price to Book Value of Mining Selector Companies Registered on IDX Periode 2016-2020.

Table 1.1
PBV Average Value

YEAR	PBV
2016	27,36255
2017	30,85068
2018	22,39138
2019	25,70845
2020	34,16927

Source: processed by the author in 2022

From Table 1.1 above, it can be seen that the company value of mining companies listed on the Indonesian Elfelk Exchange from 2016 to 2020 has fluctuated (up and down). These things can be influenced by probability, levelragel, and managerial ownership.

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Return On Assets is a measure of how efficient a company is in generating profits by utilizing fixed assets used for operating activities. The greater the ROA, the better the company's performance, because the rate of return on investment (return) is getting bigger (Prapaska, 2012). ROA is thought to affect company value because the higher the company value, the higher the profit generated by the company.

The Debt to Equity Ratio is the debt used by the company to finance its assets in order to carry out its operational activities. The higher the company's debt, the greater the risk experienced by company owners. From time to time the owner will ask for the profit level. This is the same as research from Sutama & Lisa, (2018) which states that a relatively large level of debt-to-eqluity ratio indicates large investment consequences as well, so that investors will prefer to choose companies with small level values.In addition, DER is also an analysis of funds used for debt and equity or the composition of assets and the ability to fulfill all obligations (Wulan & Nabhan, 2021).

Managerial Ownership is the proportion of management who actively participates in making company decisions. The increase in managerial ownership will have repercussions for companies as well as shareholders. Managerial ownership is also a factor that influences price to book value. Saputra, (2019) revealed that managerial ownership has a positive effect on firm value. This study shows a positive coefficient value, meaning that the higher the managerial ownership, the higher the firm value, and vice versa. There have been many studies on variables regarding their impact on company value, but there are also have mixed results. Therefore, the research researcher wants to re-examine the effect of return on assets, debt to equity ratio, and managerial ownership to price to book value. This research was conducted at the mining company sector which is listed on the Indonesian Efek Exchange (BEI).

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Definition of Financial Management

Output management is a succession of processes in managing activities or all of family activities in financial matters.

organization which includes planning activities, analysis and control of return activities which was ultimately carried out by.

Price to Book Value (PBV)

Price to book value is defined as market value, because company value can bring prosperity to stockholders when stock prices increase. Increasing the value of the company also means being able to increase the prosperity of owners as well as shareholders is reflected in the share price (Brigham and Houlsno, 2016-19).

Return On Assets (ROA)

Releasing on assets (ROA) is the main ratio in all return on return reports, because the main objective of facilitation is profit. Success is the end result of the policies and decisions taken by management. Ratio. Expenditure will be used to leverage the company (Delriyarso, 2014) the flexibility of cell company operations so as to generate profitability in the return on assets ratio measures how effectively a company's management operates so that it can achieve targets and provide benefits for the company. So that the greater the return on assets, the better the company's performance (Fitri Prasetyorini, 2013).

Debt to Equity Ratio (DER)

This ratio shows the extent to which the company is financed by external parties or creditors, as explained by capital Rianti, (2014). Debt to Equity Ratio is the ratio used to evaluate debt and overall equity and can provide an ultimate indication of survival and the risk of company survival (Hasanuldin et al., 2020).

Managerial ownership

Managerial ownership is one of the ownership structures in the company which shows tha the company is also owned by company management, even employees. Managers are seen not only as one party external parties who are paid for the interests of the company, but also as shareholders (Rianti, 2014).Managerial ownership arises from the ownership of shares by industrial management. Head of management shares be able to align the interests of stockholders with managers to share the direct benefits of

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the decisions taken and overcoming the consequences of losses that arise as a result of taking the wrong decision. This matter proves that the greater the proportion of management ownership in companies can reflect the importance managers and shareholders, so the company's performance is not getting better (Mullyana & Sapultra, 2018).

Hypotheses

The research hypotheses that were described after the initial analysis of the numbers were as follows:

- Return On Assets has a positive and significant impact on Price to Book Value.
- The debt to equity ratio has a negative and significant effect on the price to book value.
- Managerial Ownership has a positive and significant impact on Price to Book Valuel.

METHODS

Object of research

In addition to the background that has been previously described, this time the object of the research being carried out is Price to Book Value. This research was carried out on mining sectors that were registered at the Indonesian Stock Exchange in 2016-2020.

Population and Sample

The population is the totality of research objects/subjects that have certain qualities and characteristics that determined by the researcher to be studied and after that the conclusion is drawn (Sulgiyono, 2015). The population used in this research is a total of 63 mining selector companies registered at the Indonesian Elfelk Bullion (BEI) in 2016-2020.The sample is part of the population that has characteristics that are similar to the population itself (Sarjono, 2013). If the population is large, it is not possible for the researcher to be able to take the original research due to time constraints and manpower (Krisnandi & Elwisam, 2020).

Therefore, this research uses a purposive sampling method. There are several criteria in sampling in this study, namely:

1. Mining companies that are consistently registered in a consistent manner and registered on the Indonesian Stock Exchange (BEI) in 2016-2020.
2. Companies that publish return reports that are required during 2016-2020.
3. Companies that have complete and clear data have links with research.

Table 3.1
Research Sample

No	Company	Kode
1.	PT Astrindo Nusantara Infarastruktur Tbk	BIPI
2.	PT Mitra Investindi Tbk	MITI
3.	PT Mira Energi Persada Tbk	EINRG
4.	PT Merdeka Copper Gold Tbk	MDKA
5.	PT Indah Aluminium Industry Tbk	INAI
6.	PT Lionmesh Prima Tbk	LMSH
7.	PT Alaska Indulstrindo Tbk	ALKA
8.	PT Citra Tibindo Tbk	CTBN
9.	PT Gunawan Dianjaya Steel Tbk	GDST
10.	PT Betonjaya Manunggal Tbk	BTON
11.	PT Steel Pipe Industry Of Indonesia Tbk	SPINDO
12.	PT Adaro Energy Tbk	ADRO
13.	PT Atlas Resources Tbk	ARII
14.	PT Golden Energy Mines Tbk	GEIMS
15.	PT Resource Alam Indonesia Tbk	KKGI
16.	PT Bumi Resources Tbk	BUIMI
17.	PT Bukit Asam Tbk	PTBA
18.	PT Golden Eagle Energy Tbk	SMMT
19.	PT Trans Power Marine Tbk	TPMA
20.	PT Aneka Tambang Tbk	ANTM

Source: processed from https://www.idx.co.id/.

Based on the criteria that have been determined by researchers from 2016-2020, there are 63 mining sector expansion companies registered at the Elfelk Indonesia Bullion Exchange (BEI), where out of the entire existing population there are 20 companies that meet these criteria.

Data Collection Techniques and Tools

The data collection technique used in this research is a documentation technique which includes annual return reports and audit reports published from company websites. The methyl model used was forgettable data collection method by observing and learning

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the secondary data obtained from the official website of Bursa Efek Indonesia, namely www.idx.co.id. The required selective data is the return information from the company report that is included in the sample according to the variables to be studied.

RESULTS AND DISCUSSION

Descriptive Statistical Analysis

The interpretation of the results of the equation above presents the results of various descriptive statistical analysis:

a. Return On Asset

The results from the output in the table above are known to be variable relative to asset, with a total N cell of 88 having a minimum value of 0.03 and a maximum value of 0.46. The average value (mean) is 0.2106 and the standard deviation value is 0.0689.

b. Debt To Equity Ratio

From the output results in the table above, it can be seen that the debt to equity ratio with the number of observations of 88 has a minimum value of 0.41 and a maximum value of 6.08. The average value (mean) is 1.1403 and the standard deviation has a value of 0.91709.

c. Managerial Ownership

The results of the output in the table above can be seen that managerial ownership with a total of 88 has a minimum value of 0.01 and has a maximum value of 1.46. The average value (mean) is 0.2789 while the standard deviation has a value of 0.28684.

d. Price to Book Value

From the results of the output in the table above, we can see that the price to book value with a total of 88 observations has a minimum value of before 0.00 and has a maximum value of 2.03. The average value (mean) is 1.0560 and the standard deviation value is 0.41927.

The multiple linear analysis method used in this study has the main objective of highlighting the relationship between the independent and dependent variables. The relationship between the real effect on assets, debt to equity ratio, and managerial ownership, in terms of price to book value, is measured by using formulas as follows:

$$PBV = 0.403 \, ROA + 0.173 \, DER - 0.005 \, KM$$

Requirements:

PBV = Pricel to Book Value X1 = Reltulrn On Asselt
X2 = Debt to Equity Ratio X3 = Managerial Ownership.From the relational equation that has been followed up above, it can be interpreted as follows:

- The coefficient of real on assets has a value of 0.403, so it shows that for every addition of 1 value to the real variable on assets, it will increase the value of the price to book valule with a total of 0.403.
- The coefficient of Debt to Equity Ratio has a value of 0.173 indicating that each addition of 1 value.Regarding the variable delbt to equity ratio, it will increase the price to book value by a total of 0.173.
- The managerial ownership coefficient has a value of -0.005 to show that for each additional 1 value in the managerial ownership variable, it will increase the price-to-book value by a total of -0.005.

As it is known, in the multiple linear regression equation, the highest Standardize Coefficient of Assets is found in the non-asset variable with a value of 0.403, so this can be interpreted that the higher the profitability obtained by the company, the better the yield value.

Normality test

The results show that Asymp. Sig. (2-tailed) with a value of 0.200> 0.05. So this has the meaning that the independent and independent variables in this research have normal distribution of samples.

Multicollinearity test

The results stated that each of the independent variables did not occur multicollinearity. This can be seen from Tolerance and VIF. If Tolerance > 0.1 and VIF < 10 then it can indicate the presence of multicollinearity.

Heteroscedasticity test

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It can be seen that the result of each independent variable is Return on asset (X1), debt to equity ratio (X2), and managerial ownership (X3) obtained real results greater than 0.05 (Sig > 0.05), which means in this model there is no heteroscedastic which in the end this study can be continued

Autocorrelation test

It is known that the Durbin-Waston (DW) value is 1.897. Where the value of k or the number of independent variables is 3 and the value (n) or the number of samples is 88 with a significant value (a) of 5%. So that in the end, the value of dl = 1.583 and the value of dul = 1.724 then the value of 4-dul = 2.276. When it is included in the criterion which in the end gets the result du<dw<4-du is (1.724<1.897<2.276) then the regression model is said to have no autocorrelation.

Simultaneous significance test f

As we can see, we obtained f counts of (6.069) with a Sig value of 0.001 <0.05. Then compare f arithmetic with f table where if F absolute > F table then simultaneously the variables independent and towards variable dependen.l If compare F count g with F table then use 0.05, (n-k) 88-3-1 = 84 (n is the amount of data and k is the number of delpelndeln variables). So that the obtained F table value is 2.71.So, the calculated F value (6.069) and the F tablel value (2.71) means that F calculated > F table (6.069 > 2.71) so that the hypothesis
accepted. This means that the independent variables in this research are return on assets, debt to equity ratios, and ownership management has equally significant influence on the variables or the price to book value.

Coefficient of Determination

It is known that the Adjusted R Square in the Model Summary table above is the value of the detenification coefficient (R2). So the table above shows the Adjusted R Square value of 0.106. Then the value represents 14.9% of the price to book value variance variable is caused by the influence of the real value on assets, debt to equity ratio,and managerial ownership and is related to 85.1% is carried out by other variables that are not included in the regression model.

Hypothesis test t

Based on, the explanation of the hypothesis can be known
- The First Variable Return On Asset in the following studies:Based on the test results, it can be seen that the relative variable on asset has a T count of 3.977 with a T table of I.663 (t 0.05; df 84). Then 3.977> 1.663 and a sig value of 0.000 <0.05. So that Ha is accepted while Ho is rejected, which means that Relturn on asset has a positive and significant effect on Price to Book Value
- Second Debt to Equity Ratio, Based on the results of the test, it can be seen that the variable debt to equity ratio has a t count of 1.756 with a t table of 1.663 (t 0.05; df 84). So 1.756> 1.674 and a Sig value of 0.083> 0.05. So that Ha is accepted and Ho is rejected, which means that the debt to equity ratio has no effect on the positive results and is not significant to the price to book value.
- Third Variable Head of Managerial Ownership,Based on the test results in the table above, it can be seen that the variable Managerial Ownership has a T count of -0.05 with a T table of 1.663 (t 0.05:df 84). So -0.051<1.663 and the Sig value is 0.959> 0.05. So that Ha is rejected and Ho is accepted, which means that managerial ownership does not have an impact on the negative and significant results on the price to book value.

CONCLUSION

Based on the results of the research and discussion, various conclusions can be drawn:

1. Based on the results of the test, it can be seen that the variable return on assets has t of 3.977 with t table before .663 (t 0.05; df 84). Then 3.977> 1.663 and a sig value of 0.000 <0.05. Return On Asset has a positive and significant effect on price to book value in mining sector companies that registered at the Efect Indonesia bullion for the 2016-2020 period.
2. Based on the results of the test, it can be seen that the variable delbt to efficiency ratio has a ttable of 1.756 with a t table of 1.663 (t 0.05; df 84). So 1.756> 1.674 and a Sig value of 0.083> 0.05. Sel so has the meaning debt

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3. To equity ratio does not significantly affect the positive results and is not significant to the price to book value on mining selector companies registered at the Efect Indonesia Stock Exchange 2016-2020 period.

4. Based on the results of the test in the table above, it can be seen that the Managerial Kep variable has T calculate the seldom of -0.05 with the T table of 1.663 selec (t 0.05:df 84). So -0.051<1.663 and the Sig value is 0.959> 0.05. So that Ha is rejected and Ho is accepted, which means that managerial ownership does not have negative results and significant to the price-to-book value of the mining sector companies registered at the Indonesian Stock Exchange for the 2016-2020 period.

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