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The Influence of Sales Growth, Profitability, Liquidity and Firm Size Towards Financial Distress

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A B S T R A C T

There are several models that can be used in analyzing a company's Financial Distress, the most widely used is the Altman model. The study aims to analyze and identify the influence of fundamental factors represented by ratios such as Sales Growth Analysis, ROA Ratio, Current Ratio, and Firm size on Financial Distress conditions. This research was conducted on financial statements of oil and gas mining sector. Data was collected using data panel with multiple linear regression technique analysis. Data was proceed using Eviews 12. The result show Sales growth, ROA, Current Ratio and TATO ratio have a partially significant effect on Financial Distress. Sales growth ROA, Current Ratio and TATO ratio together and a simultaneous have an effect on Financial Distress

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INRODUCTION

Financial Distress is an initial condition or situation that indicates that the business is experiencing financial difficulties and is likely to experience failure in the future, which can ultimately lead to business bankruptcy. If the company experiences a lack of capital, the company will rely on funding sources from external parties by borrowing funds or using debt (Endri, 2019). Bankruptcy and business failure are a scourge and common in a competitive business environment. The problem of financial distress arises when the company can no longer fulfill its payment commitments or cannot fulfill its debts (Michael, et al, 2020).

Challenges with liquidity often characterize financial distress, which may ultimately result in insolvency. This situation, indicative of a struggling financial performance, signals that bankruptcy could be imminent for the business (Suot, et al, 2020). As a result of financial difficulties, many public companies in the stock market are delisted. Associated with this phenomenon is a crucial thing for investors, creditors and company stakeholders, a mechanism is needed that can provide early warning (Kamaluddin, A, et al, 2019). For investors it is very important to have financial knowledge (Hirdinis, M. 2019).

To evaluate the plausibility of liquidation, analyzing the financial disclosures of publicly traded companies on the Indonesia Stock Exchange becomes essential. A key strategy employed in assessing a company's financial health involves utilizing bankruptcy analysis, which aims to determine whether the company's performance is at risk of liquidation. For internal companies, this bankruptcy analysis serves as an early warning signal for potential insolvency issues. So that the risk of bankruptcy can be minimized and improvements can be made immediately. Predicting financial difficulties is a compelling area of research for investors. This prediction is not only significant for potential investors but also holds great importance for regulators, stock market stakeholders, and the companies themselves. (Arief, H. 2019).

In order to effectively evaluate these decisions, it is necessary to analyze the company's financial statements using various ratio analyses, including profitability, solvency, liquidity, activity and market ratios. By analyzing these ratios, information can be obtained about the strengths and weaknesses of the company, as well as the possibility that in the future the company will experience risks, which will affect investors' expectations of the company in the future (Lumbantobing, 2020).

LITERATURE REVIEW

The purpose of previous studies is to analyze and add information to the discussion of current research, as well as help distinguish between the current research and previous research. This research includes some previous research as follows:

Sales Growth

The relative sales growth is used to evaluate the demand situation and competitiveness of enterprises in the industry. This relates to the sales growth of goods, which gives information about the possible profits a company may make. It also make net income growth less attractive for investors because to

achieve this kind of growth, companies have to invest a lot in fixed assets while sales growth, though positive, can attract investors by indicating companies' potential. It can be effectively used for the measurement as well as for the future prognosis of the company's performance. An increase in sales, where the current year's sales are higher than the previous year is termed as a positive sales trend, while a decline in sales, where, the current year's sales are less that the previous year is referred to as negative sales trend.

Profitability - Return on Asset (ROA)

The meaning of profitability is the ability or prospect of achieving high levels of returns for investments put in business or business opportunity. This is just a way of saying that investors are often found to be more willing to invest in such companies that appear to them with a high profitability ratio. (Hirdinis, M. 2019). In business sector, Return on Assets 'ROA' is used to determine profitability level that a business enterprise earns in relation to the total amount of assets it holds. Used to compare the efficiency of management in generating revenues from the assets, the ROA holds value. It can be interpreted in two primary ways: first, as one of the measures of the effectiveness of management in using assets to generate operating profit; second, as one of the measures of the total amount of actual returns to all common providers of capital, including shareholders and creditors regardless of the source.

Prior studies define Return on Assets (ROA) as one of the significant measures used in the assessment of organizational performance. ROA is used to assess performance and the utilization of assets and is also used as a standard for comparing the returns on new asset acquisitions. Studies conducted by Arief, H., et al. (2020) showed that Return on Assets (ROA) has no effect on stock prices, particularly when it comes to financial distress.

Liquidity - Current Ratio

The current ratio is used as an indicator to assess the likelihood of financial difficulties. A higher liquidity value suggests that a company is more capable of meeting its short-term obligations. Research by Rike Yudiawati & Astiwi Indriani (2016) found that the current ratio has a positive and significant impact on the likelihood of financial distress.

Firm Size

The activity ratio is one component of the financial ratio used to measure and determine the efficiency of the use of the company's various operational assets in its balance sheet and convert them into sales and cash. The Activity Ratio refers to the asset management ratio which aims to effectively measure how the company manages its assets to generate profits (Brigham & Ehrhardt, 2017).

This ratio can measure the turnover of all assets owned by the company and can also measure the amounts of sales obtained. This shows that if the company can manage assets well, it can minimize the potential for Financial Distress to occur.

Financial Distress - Discriminant Analysis for Financial Distress Prediction

The first model that was introduced to forecasting of failure was formulated by Altman in 1968 and named Z-Score model. This model has been implemented and applied frequently and is still valuable to estimate a company's risk of bankruptcy, its essential financial status, or its well-being. Later in 1995, Altman developed this model with an improved capability to predict failure among the manufacturing as well as non-manufacturing companies. It is by the same year, 1968 that Altman proposed a discriminant function model for measuring financial risks of distress, as explained by Sawi (2001). The first equation was the formula Z = 1,2X1 + 1,4X2 + 3,3X3 + 0,6X4 + 1.0X5. Afterwards, Altman develop an improved model with a new formula to expand this concept to companies that are not manufacturing, either limited or public companies. The new equation that can be derived from the above integrated model. The equation obtained is as follows: Z = 6.56X1 + 3.26X2 + 6.72X3 +1.05X4.

Hypothesis Testing

This consider utilized Relationship to analyze the relationship between factors. The point is to recognize solid connections between the factors, whether positive or negative, as well as frail connections, whether positive or negative. Based on the description above, the following is the research hypothesis:

H1: Sales growth has a partial influence on financial risk (financial distress)

According to the results of a research conducted by Ramadhani, A. L (2019) as mentioned in "the Effect Of Operating Capacity percent capacity utilization On Sales Growth And Earningtaperdi Fdjlene Firm Doresido"Sales Growth did not significantly influence Financial Distress Meanwhile, based on the results of the researchmodels above it is known that Giarto, R., & Fachrurrozie,F. (2020) in their study The Effect of Leverage,Sales Growth,Cash Flow to Financial Distress with Corporate Governance as Moderating Variable concluded Sales Growthdoes not effect financial distress. On the other side, Handayani; Widiasmara, A., & Amah (2019) in their research that Sales Growth have a significant positive impact on Financial Distress.

H2: Net income / Total Asset partially affects Financial Distress in oil and gas mining companies

In the study by Rizki Kartika & Hssanudin (2019), into the effect of Return on Assets on financial distress in the Infrastructure, Utilities, and Transportation sectors, their results showed that ROA has a negative and significant influence on financial distress. The result from the research by Amalia, F. N. (2020), on the influence of Return On Asset and debt to equity ratio on Islamic commercial banks, gave a positive significant effect of ROA on financial distress.

H3: The ratio of current assets to current liabilities has a partial influence on financial risk (financial distress) in oil and gas mining companies.

Rahayu, W. P., and Sopian, D. (2017) found that the liquidity ratio has a positive but statistically insignificant effect on financial distress. In contrast, Rohmadini et al. (2018) observed that higher liquidity reduces the likelihood of financial distress, and vice versa. Additionally, Mesak & Sukarta (2019)

reported that the liquidity ratio negatively influences the probability of financial distress.

H4 = Firm size has a partial influence on financial risk (financial distress) in oil and gas mining companies.

Abbas & Sari (2019) found that firm size has a significant negative impact on financial distress. Firm size refers to the size of the firm, which can be measured by factors such as total assets, share price, and total sales. It reflects the size of the company's total assets.

H5 = Together or simultaneously, Sales Growth, Return on Assets, Liquidity, and Activity ratio affect financial distress in oil and gas companies.

Based on the hypothesis submission above, Multiple Linear Regression Analysis is used using a 95% confidence level or 5% Alpha. The Multiple Linear Regression formula, as follows:

$Y = c + a.X1 + b.X2 + c.X3 + d.X4 + e$

Financial Distress= Y, Independent variabel = X1, X2, X3, X4

Constanta = c, Error = e

Conceptual Framework

Based on the description above, the framework of this research can be seen in figure below

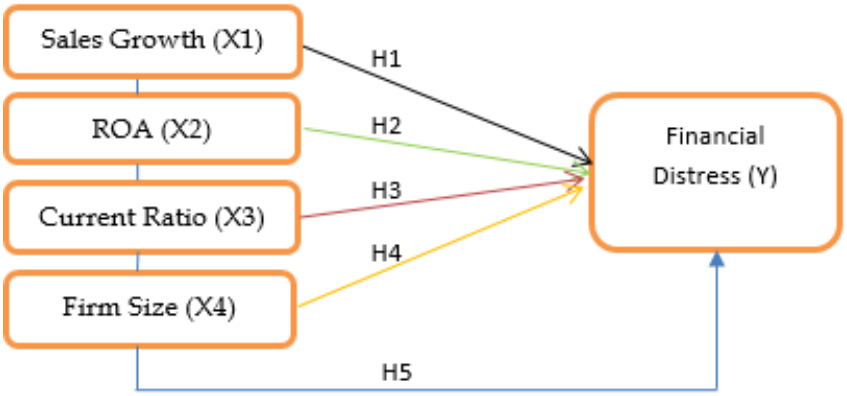

Figure 1. Conceptual Framework

METHODOLOGY

This descriptive approach attempts to analyze events that are in the nature of events. This study seeks to provide information from corporate financial statements and to analyze their financial distress using models. The study focuses on financial reporting of oil and gas and mining companies listed on the Indonesian Stock Exchange, using panel data regression models with balance sheets and income reporting of capital, good assets, profitability and liquidity, where common effect (CEM), fixed effects (FEM), and random effects (REM) methods are used. The fit of these models is evaluated using the Chow test, the Hausmann test, and the Lagrange multiplier test to determine the most appropriate model.

The stages of data analysis in this case are as follows:

1. Collecting data obtained from the financial statements of telecommunication subsector companies listed on the Indonesia Stock Exchange in 2018-2022 through the website www.idx.co.id.

2. Analyzing financial ratios to get the required variables from Altman Z-Score.
3. Analyzing the effect of Sales Growth, Profitability, Liquidity, and Firm Size on financial distress using the Altman Z-Score model.

Population and Sample

The population of this study were all companies engaged in oil and gas mining and research samples taken based on purposive sampling technique. Sampling is determined based on criteria:

- Oil and gas mining sector companies listed on the IDX which are listed on the IDX during 2018-2022.
- Oil and gas mining sector companies that during the period 2018-2022 have never experienced delisting.

RESULT

The objective of this study is to analyze and discuss the impact of financial performance metrics—including Sales Growth, Profitability (represented by Return on Assets), Liquidity (measured by the Current Ratio), and Activity (indicated by the Total Asset Turnover Ratio) —on the predicted probability of bankruptcy, as assessed by the Altman Z-Score model, for oil and gas mining companies listed on the Indonesia Stock Exchange. The independent variable in this study is the Altman Z-Score, while the dependent variables include Sales Growth, Return on Assets (ROA), Current Ratio, and Firm Size.

Table 1. Dependent Variable

Dependent Variable: Y
Method: Panel EGLS (Cross-section random effects)
Date: 06/13/23 Time: 23:03
Sample: 2018 2022
Periods included: 5
Cross-sections included: 7
Total panel (balanced) observations: 35
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.003287	0.073612	0.044648	0.9647
X1	6.563988	0.008612	762.1571	0.0000
X2	3.259839	0.000395	8257.008	0.0000
X3	6.719295	0.003551	1892.014	0.0000
X4	1.050011	0.005025	208.9495	0.0000

Effects Specification		
	S.D.	Rho
Cross-section random	0.000000	0.0000
Idiosyncratic random	0.034576	1.0000

Weighted Statistics

R-squared	0.899877	Mean dependent var	16.76114
Adjusted R-squared	0.998713	S.D. dependent var	61.59719
S.E. of regression	0.034126	Sum squared resid	0.034937
F-statistic	27693599	Durbin-Watson stat	2.441643
Prob(F-statistic)	0.000000		
Unweighted Statistics			
R-squared	0.899877	Mean dependent var	16.76114
Sum squared resid	0.034937	Durbin-Watson stat	2.441643

Variable Sales Growth (X1) has probability value 0.0000 <0.05 so that sales growth has an effect on financial distress. Variable ROA (X2) has probability value 0.0000 <0.05 so that ROA has an effect on financial distress. Variable Current Ratio (X3) has probability value 0.0000 <0.05 so that Current Ratio has an effect on financial distress. Variable Firm Size (X4) has probability value 0.0000 <0.05 so that Firm Size has an effect on financial distress. If t-count> t-table (1.96) at the significance level (Alpha 5%), the estimated path coefficient value is significant. In this study, all independent variables are at the T-count> T-table value, which means that all independent variable used in this research has a significant effect.

Prop (F-Statistic) of 0.00000 <0.05 means that the Sales Growth, ROA, Current Ratio and TATO Variables Together or simultaneously affect Financial distress.

DISCUSSION

The results of this study found that Sales growth affects financial distress in line with the results of research by Handayani, R. R, Widiasmara, A., & Amah (2019). Sales growth is an indicator to measure performance. An increase in sales value from time to time will make a business or business experience development. Without sales growth, of course, the business will experience difficulties. If the sales growth rate is positive where the current sales figure is higher than the previous year's sales figure, of course, it will increase the company's value. Conversely, if the sales growth rate is negative where the current sales figure is smaller than the previous year's sales, it will cause the company's value, which in turn the company will not be able to survive. In this study ROA has a significant effect on financial distress, this is in line with Amalia FN's research (2020). Return on Asset with a positive value means that if the ROA value shows a number of positive assets, the company will have great potential to continue to earn profits and will avoid the risk of financial distress.

The current ratio variable shows an influence on financial distress, this is indicated by a positive coefficient value and a probability value of 0.0000 <0.05. These results are in line with the research of Rahayu, W. P. and Sopian, D. (2017). This ratio shows how the ability of current assets to pay the company's short-term liabilities. Low liquidity will have an impact on the company's ability to pay

its short-term obligations. The inability to pay the company's short-term obligations that are due will have an impact on total liabilities so that the risk of financial difficulties or financial distress will increase.

Firm Size has an effect on financial distress. This shows the similarity of the results with Abbas & Sari (2019) and Susilawati et,al (2017) their result stated Firm size has a significant effect on Financial Distress. The higher the amount or value of total asset, the more effective the total assets will be to generate high sales. With a high level of sales, the company's profits will also increase. This will make the adequacy of funds for company operations good. In the end, the firm size getting greater it will reduce the possibility of financial distress risk.

CONCLUSION AND RECOMENDATION

Variable Sales Growth (X1) has probability value 0.0000 <0.05 so that sales growth has an effect on financial distress.

Variable ROA (X2) has probability value 0.0000 <0.05 so that ROA has an effect on financial distress.

Variable Current Ratio (X3) has probability value 0.0000 <0.05 so that Current Ratio has an effect on financial distress.

Variable Firm Size (X4) has probability value 0.0000 <0.05 so that Firm Size has an effect on financial distress.

If t-count> t-table (1.96) at the significance level (Alpha 5%), the estimated path coefficient value is significant. In this study, all independent variables are at the T-count> T-table value, which means that all independent variable used in this research has a significant effect.

Prop (F-Statistic) of 0.00000 <0.05 means that the Sales Growth, ROA, Current Ratio and TATO Variables Together or simultaneously affect Financial distress.

FURTHER STUDY

There is a phenomenon where issuers of oil and gas mining stocks experience price strengthening or increases when world oil prices fall. To provide more comprehensive findings for future studies are advised to consider this phenomenon and use other financial stress method in addition to involving more companies across industries to be used as study samples because different industry sectors have different characteristics. In addition, future studies are also advised to use a longer data period so as to provide a clearer picture of bankruptcy prediction and its relationship with stock prices and world oil prices

REFERENCES

Abbas, D. S., & Sari, P. A. (2019). Pengaruh Likuiditas, Komisaris Independen, Kepemilikan Institusional dan Ukuran Perusahaan Terhadap Financial Distress. 7(2), 119–127, ISSN: 2599-1922.

Aji, P. S., & Anwar, S. (2022). Pengaruh Leverage, Profitabilitas, Likuiditas, Sales growth dan Firm size terhadap Financial distress pada perusahaan pulp & kertas dan plastik & kemasan yang terdaftar di bursa efek indonesia. Jurnal Bina Bangsa Ekonomika, 15(1), 43-51.

Amalia, F. N. (2020). Analisa Pengaruh Capital Adequacy Ratio (CAR), Return on Asset (ROA). Beban Operasional terhadap Pendapatan operasional (BOPO) dan Financing to Deposit Ratio (FDR) terhadap Financial Distress pada Bank Umum Syariah Priode 2015-2019. Fakultas Ekonomi dan Bisnis Islam Strata Satu Perbankan Syariah Institut Agama Islam Negeri (IAIN) Salatiga.

Arief, H. (2019). Pengaruh Kinerja Keuangan terhadap Harga Saham dengan Metode Diskriminan Springate pada Industri Migas di Pasar Saham Indonesia. Jurnal Ilmiah Manajemen Bisnis, 5(1).

Arief, H., et al. (2020). Pengaruh ROA, DER, dan Tobin's Q-Ratio Terhadap Harga Saham pada Industri Pertambangan Migas di Bursa Efek Indonesia. Jurnal Ilmiah Manajemen Bisnis, 6(02), 174-183.

Asfali, I. (2019). Pengaruh Profitabilitas, Likuiditas, Leverage, Aktivitas, Pertumbuhann Penjualan Terhadap Financial Distress Perusahaan Kimia. Jurnal Ekonomi Dan Manajemen, 20(2), 56–66, ISSN : 1411-5794

Asmarani, S. A., & Purbawati, D. (2020). Analisis Pengaruh Likuiditas, Leverage Dan Profitabilitas Terhadap Financial Distress (Studi Pada Perusahaan Manufaktur Sektor Industri Barang Konsumsi Yang Terdaftar Di BEI Pada Periode Tahun 2014-2018). Jurnal Ilmu Administrasi Bisnis, 9(3), 369-379.

Brigham, E. F., &Ehrhardt, M. C. (2017). Financial management: Theory and practice, 15thEdition. United States: Cengage Learning

Endri, E., Mustafa, B., & Rynandi, O. (2019). Determinants of Debt Policy of Real Estate and Property Companies Listed on the Indonesia Stock Exchange. International Journal of Economics and Financial Issues, 9(2), 96-104.

Erayanti, R. (2019). Pengaruh Likuiditas, Profitabilitas dan Leverage terhadap Prediksi Financial Distress. Jurnal Riset Akuntansi & Perpajakan (JRAP), 6(01).

Fatimah, Fatimah & Toha, Akhmad & Prakoso, Aryo. (2019). The Influence of Liquidity, Leverage and Profitability Ratio on Finansial Distress. Owner. 3. 103. 10.33395/owner.v3i1.102.

Giarto, R. V. D., & Fachrurrozie, F. (2020). The Effect of Leverage, Sales Growth, Cash Flow on Financial Distress with Corporate Governance as a Moderating Variable. Accounting Analysis Journal, 9(1), 15-21.

Hakim, R., Wiralestari, W., & Yetti, S. (2022). Pengaruh Firm Size, Leverage, Sales growth dan Profitabilitas terhadap Financial Distress (Studi Empiris pada Perusahaan Sektor Property dan Real Estate yang terdaftar di BEI Tahun 2015-2019). Jambi Accounting Review (JAR), 2(2), 128-143. Retrieved from https://online-journal.unja.ac.id/JAR/article/view/17256

Hirdinis, M. (2019). Capital structure and firm size on firm value moderated by profitability. International Journal of Economics and Business Administration, 7(1), 174-191.

Kamaluddin, A., Ishak, N., & Mohammed, N. F. (2019). Financial distress prediction through cash flow ratios analysis. International Journal of Financial Research, 10(3), 63-76.

Kartika, R., & Hasanudin, H. (2019). Analisis Pengaruh Likuiditas, Leverage, Aktivitas dan Profitabiltas terhadap Financial Distress pada Perusahaan terbuka Sektor Infrastruktur, Utilitas dan Transportasi Priode 2011-2015. Oikonomia: Jurnal Manajemen, 15(1).

Lubis, N. H., & Patrisia, D. (2019). Pengaruh Likuiditas, Leverage, dan Profitabilitas terhadap Financial Distress (Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di BEI periode 2013-2016). Jurnal Kajian Manajemen Dan Wirausaha, 01(01), 173–182, ISSN : 26555-64999.

Lumbantobing, R. (2020). The effect of financial ratios on the possibility of financial distress in selected manufacturing companies which listed in Indonesia Stock Exchange. Advances in Economics, Business and Management Research, 132(AICMaR 2019), 60–63.

Mesak, D., & Sukartha, I. M. (2019). Financial Ratio Analysis in Predicting Financial Conditions Distress in Indonesia Stock Exchange. Russian

Journal of Agricultural and Socio-Economic Sciences, 86(2), 155–165. https://doi.org/10.18551/rjoas.2019-02.18

Michael, O. U., Ezeji, C. E., Benedict, O. A., & Success, K. I. (2020). Financial ratios as predictor of financial distress: a study on some select deposit money banks in Nigeria (1991-2014). International Journal of Management Science and Business Administration, 6(3), 29–42. https://doi.org/10.18775/ijmsba.1849-5664-5419.2014.63.1003

Nufus, K., Audina, N., & Muchtar, A. (2018). Effect of Financial Distress Ratio Banking Company in Indonesia Period 2011-2015. Research Journal of Finance and Accounting, 9(16), 68-75.

Ponziani, R. M., & Azizah, R. (2017). Nilai Perusahaan pada Perusahaan Non Keuangan yang Terdaftar di BEI. Jurnal Bisnis Dan Akuntansi, Vol. 19(No. 1a-3:), 200– 211.

Prasetyantoko, A., & Parmono, R. (2012). Does firm size matter? An empirical study of firm performance in Indonesia. International Research Journal of Business Studies, 2(2).

Ramadhani, A. L. (2019). Pengaruh Operating Capacity, Sales Growth Dan Arus Kas Operasi Terhadap Financial Distress. Jurnal Riset Keuangan Dan Akuntansi, 5(1).

Rohmadini, A., Saifi, M., & Darmawan, A. (2018). Pengaruh Profitabilitas, Likuiditas Dan Leverage Terhadap Financial Distress (Studi Pada Perusahaan Food & Beverage Yang Terdaftar Di Bursa Efek Indonesia Periode 2013-2016). Jurnal Administrasi Bisnis, 61(2),11–19.

Sari, A, P., Sembiring, F, M. (2022). Pengaruh Likuiditas, Leverage dan Aktivitas terhadap Kondisi Financial Distress yang Dimoderasi oleh Profitabilitas: Studi pada Perusahaan Pertambangan yang Terdaftar di BEI Periode 2015- 2019. Studi Ilmu Manajemen dan Organisasi, 3(1), 199-211.

Septiani, N. M. I., & Dana, I. M. (2019). Pengaruh likuiditas, leverage, dan kepemilikan institusional terhadap financial distress pada perusahaan property dan real estate (Doctoral dissertation, Udayana University).

Sugiyono. (2018). Metode PenelitianKuantitatif, Kualitatif Dan R&D. Bandung: Alfabeta.

Suot, L. Y., Koleangan, R. A., & Palandeng, I. D. (2020). Analisis rasio keuangan dalam memprediksi kondisi financial distress pada industri perbankan yang terdaftar di Bursa Efek Indonesia. Jurnal EMBA, 8(1), 501–510.

Susilawati, D., Sofianty, D., & Sukarmanto, E. (2017). Pengaruh Profitabilitas , Ukuran Perusahaan dan Leverage Terhadap Financial Distress Pada Perusahaan yang Terdaftar di Bursa Efek Indonesia (BEI) (Studi Empiris Pada Perusahaan Sub Sektor Minyak dan Gas Bumi Periode Tahun 2010-2015). Prosiding Akuntansi, 2(2), 208–214, ISSN: 2460-6561.

Widiastari, P. A., & Yasa, G. W. (2018). Pengaruh Profitabilitas, Free Cash Flow, dan Ukuran Perusahaan Pada Nilai Perusahaan. E-Jurnal Akuntansi. https://doi.org/10.24843/eja.2018.v23.i02.p06