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The Moderating Role of Firm Value in the Effect of Profitability Ratios, Macroeconomics, and Firm Size on Financial Distress

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ABSTRACT

One of the main contributors to the country's economic health is the banking industry. During 2017-2021, 8 banking companies were liquidated. So it needs to be anticipated from the start so that bankruptcy does not occur. One way to see if there is financial distress in a company can be done by using the Altman's Z-Score method. This study was conducted with the aim of measuring and knowing the extent of the influence of profitability, macroeconomics, and firm size on financial distress through a moderating variable in the form of firm value. This is a quantitative study that relies on secondary data collected through a literature review. The population of this study is the entire banking industry in Indonesia, with a total sample of 23 companies obtained using a purposive sampling approach. This study uses panel data using the Moderated Regression Analysis (MRA) approach, which was carried out using Econometric Views (Eviews) version 10. According to the findings of this study, profitability has a beneficial effect on financial distress, but macroeconomics, business size, and firm value no effect. While the firm value is considered unable to moderate the independent variable on the dependent variable in this study.

INTRODUCTION

In the business world, capital is something that is important for a company. The company obtains capital from internal and external sources. One of the external capital acquisitions can be obtained from a loan, especially a bank loan (Sari & Subardjo, 2018). This is what makes banking very essential in the economy of a country. This is reinforced by the Undang-Undang Republik Indonesia Number 7 of 1992 concerning Banking in articles 3 and 4, which emphasizes that one of the objectives of the existence of banking is to improve the country's economy through the collection and distribution of funds to the public. Therefore, the ability of a bank to continue operating becomes crucial.

Based on the Indonesian Banking Statistics (SPI) the number of banks in 2021 is 107 banks, this number is reduced by 2 banks where the total bank in 2020 is 109 banks. During a period of 5 years the number of banks decreased by 8 banks (Otoritas Jasa Keuangan, 2021). This means that there are about 8 companies engaged in the banking sector that went bankrupt or went into liquidation.

There are several ways to see the possibility of a company going bankrupt by assessing its profits and assets. Where profit before tax and total assets are two of the many indicators in predicting financial distress (Altman et al., 2019). Based on the SPI, the profit before tax of Commercial Banks in Indonesia in 2021 will reach Rp. 174,271 billion. This profit rose 24.8% from the previous year which was only Rp139,616 billion. If we look at the last 5 years, the amount of net profit before tax has fluctuated, especially in 2020 where there was a decrease of 30.4% from the previous year, namely 2019, where net profit before tax was around Rp. 200,514 billion (Financial Services Authority, 2021). While the total assets of Commercial Banks from 2017 to 2021 continue to increase every year, for example in 2020 the total assets of Commercial Banks reached Rp. 10,112,304 billion, this figure increased by 10.18% from the previous year which only recorded Rp. 9,177,894 billion (Otoritas Jasa Keuangan, 2020).

In line with the condition of profit before tax of commercial banks in Indonesia, one of the banks that experienced the same thing was experienced by PT Bank Ganesha Tbk. Where in 2020 Bank Ganesha experienced a decrease in profit reaching 65.6% from the previous year, which was Rp. 14,526 million in 2019, and decreased in 2020 to Rp. 5,002 million. However, in 2021, Bank Ganesha's profit before tax increased compared to 2020 by 192.9% or to Rp. 14,651 million in 2021. The increase in profit in 2021 was due to improved credit quality and increased efficiency. The condition of the total assets of Bank Ganesha also experienced the same condition as the condition of profit before tax which experienced fluctuations, where in 2018 the total assets of Bank Ganesha reached Rp4,497 billion, decreased by 1.82% from the initial Rp4,582 billion in 2017. Thus, from 2019 to 2021 the total assets of Bank Ganesha increased YoY. Where the total assets in 2021 reached Rp8,576 billion, an increase of 59.84% from the previous year which was only Rp5,365 billion.

Inflation is an example of an external element that influences a company's likelihood of bankruptcy in addition to internal considerations. According to Sudarmanto et al. (2021) an increase in the amount of money circulating in the community in the short term can increase public consumption, credit and investment due to a decrease in interest rates. That is, if there is inflation caused by an increase in the amount of money circulating in the community, it will increase the value of investment or credit made by the community because of low interest rates. Thus, banking performance will be more optimal due to an increase in banking operational activities. For example, in 2021 the inflation rate in Indonesia will reach 1.87%, up from 2020 which was only 1.68% (Bank Indonesia, 2022). Then this increase was followed by Bank Indonesia (BI) policy by reducing interest rates in 2021 by 3.5% from the initial 3.75% in 2020 (Bank Indonesia, 2022). This also made the level of lending provided by banks to customers increase from the initial Rp5,481,560 billion, up 5.2% to Rp5,768,585 billion (Otoritas Jasa Keuangan, 2021).

Predicting financial distress can be done by assessing how the effect of profitability ratios, Indonesia's macroeconomic conditions to firm size. Based on a related earlier study done by Pertiwi (2018), it was found that when the ROA value and inflation are high, financial distress. However, referring to this study, financial distress is unaffected by a company's size. The company value is used as a moderating variable in this study, which makes a difference. The research of Syuhada et al. (2020) shows that the larger the business, the lower the likelihood of bankruptcy. The difference in this study is in the X variable where the researcher uses macroeconomic variables and uses firm value as a moderating variable. Then the last research is Nisak (2021) it implies that the likelihood of bankruptcy is low if the condition of the company's worth is strong. This study is different from the variable X where the researcher adds profitability and macroeconomic variables and uses moderating variables.

Considering the context of the issue at hand, the researcher will carry out a study entitled "The Moderating Role of Firm Value in the Effect of Profitability Ratios, Macroeconomics, and Firm Size on Financial Distress" which aims to assess and determine the effect of profitability ratios, macroeconomics, and firm size. proxied by ROA, inflation and total assets on financial distress using the Altman's Z-Score method through the moderating variable in the form of firm value proxied by PBV.

MATERIALS AND METHODS

Scope of the Study

Research this study uses quantitative research, which generalizes the population in a structured and quantitative way in order to prove the theory or research hypothesis. In addition, this study includes quantitative data in the form of numbers and secondary data, which is information that was gathered from sources other than the initial party or was made publicly available by an organization.

such as from the official website of the Indonesia Stock Exchange (IDX), the Financial Services Authority (OJK), and so on. . In obtaining research data, researchers use literature studies, namely by looking for sources that can underlie research such as banking financial reports for 2017-2022, books to the results of previous research (Kurniawan & Puspitaningtyas, 2016).

Population and Sample

All banks that are listed on the IDX serve as the population. The population itself is all units that meet the criteria set by the researcher which are then used in the study and conclusions can be drawn afterwards (Kurniawan & Puspitaningtyas, 2016). From the total population of 47 companies, the researchers conducted sampling so that 23 companies were obtained as research samples. Purposive sampling is used to determine the sample, and it has predetermined benchmarks. Purposive sampling is taking samples according to special criteria set by the researcher (Kurniawan & Puspitaningtyas, 2016).

Analysis technique

Studies using panel data. Panel data is a combination of two data, namely time series with a cross section (Gujarati & Porter, 2009). The data analysis process is assisted by the application of Econometric Views (Eviews) version 10 with the Moderated Regression Analysis (MRA) method. There are two regression equation models in this study, namely:

The first regression, testing the effect of the independent and moderating variables on the dependent variable.

$$Y = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 Z_{it} + \varepsilon \ldots \ldots \ldots \ldots \ldots \ldots (1)$$

The second regression, tested the effect of the independent variable on the dependent variable by using a moderating variable.

$$Y = \alpha + \beta_5 X_1 Z_{it} + \beta_6 X_2 Z_{it} + \beta_7 X_3 Z_{it} + \varepsilon \ldots \ldots \ldots \ldots \ldots \ldots (2)$$

Where:
Y	: Financial Distress
α	: Constant
β_{1-7}	: Regression Coefficient
X_1	: Return On Asset (ROA)
X_2	: Inflation
X_3	: Total Assets
Z	: Moderating Variable
i	: Time
t	: Company
ε	: Standard Error

RESULTS AND DISCUSSION

Table 1. Descriptive Statistic

	X1	X2	X3	M	Y
Mean	-0.009607	0.02602	17533626	888.0635	4.72305
Median	0.0035	0.0272	13149503	1.3794	4.64286
Maximum	0.0474	0.0361	1.01E+08	38,071.25	9.42727
Minimum	-0.9544	0.0168	664673.0	0.0002	1.45203
Std. Dev.	0.093645	0.007373	16658391	5,420.278	1.31170
Observations	115	115	115	115	115

Descriptive statistical analysis is a description or description of the collection , summary and presentation of the results of a data presented in the form of a table or graphic presentation which previously had to be summarized first so that the data became better and more organized so that it could be used in decision making (Gunawan, 2018). In this study, the mean, middle, largest, smallest, standard deviation of each variable and the number of observations are described. For example, As can be observed, the median value for the dependent variable financial distress (Y) in Table 1 is in the range of 4.72 then for the independent variable ROA (X1) -0.0096 or -0.96%, inflation (X2) 0.026 and a total assets (X3) Rp17,533,262 million, while for the moderating variable, PBV (M) has an average of 888,0635. In this study, 115 observational data were used with 23 company samples and with a time span 2017-2021.

Table 2. Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	7,313,748	-22.88	0.0000
Cross-section Chi-square	119,568,293	22	0.0000

The Chow is an analysis to test which model is best used whether Common Effect (CE) or Fixed Effect (FE). If the P-value of Chi Square > 0.05 then the best model used is CE. On the other hand, if the P-value of Chi Square <0.05, FE is used. If the results state that the best model is CE, then the test is enough to Chow , but if the results show that FE is better then it is continued with the Hausman (Ismanto & Pebruary, 2021). Based on table 2, it can be seen that the P-value of Chi Square is 0.00, which means <0.05. So a good model according to this test is FE, therefore to get the most appropriate model for this research it will be continued with the Hausman.

Table 3. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	8,731,148	4	0.0682

The Hausman is intended to test the best models for research, namely the Fixed Effect (FE) and Random Effect (RE) models. Where if the P-value of the random cross-section > 0.05 then the best model used is RE, while if the P-value of the random cross-section < 0.05 then FE is used. If the results of the Chow explain the best model, namely CE and the Hausman states RE, then the test is continued with The Lagrange Multiplier (LM) test, but if the results of the Chow explain FE and the Hausman test Hasuman, because the RE model is better than the CE and FE models (Ismanto & Pebruary, 2021). Based on table 3, it is known that the best model used in RE mode is because the P-value of the random cross-section is > 0.05, which is 0.0682. If you look at the previous test, namely the Chow, where it is stated that the best model is FE and in the Hausman the right model is RE, the best model testing in this study is only up to the Hausman.

In this study the researcher did not include the classical assumption test, this is in line with the theory of Gujarati & Porter (2009) which explains about panel data which has advantages in the form of informative data, has many variables, less collinearity between variables, more degrees of freedom and is more efficient. This is reinforced by the research of Kasmiarno & Mintaroem (2017) which states that panel data is not required to test classical assumptions because it has the advantage that panel data is able to study complex behavior of the model under study more than time series and cross section.

Table 4. Coefficient of Determination Results

R-squared	0.089779
Adjusted R-squared	0.05668

How much the independent variable contributes to the dependent variable is shown by the coefficient of determination Firdaus (2019). In this study, it is seen how much ROA, inflation, total assets, and PBV contribute to financial distress, with a coefficient of determination of 0.05668 or 5.67%. This means that the independent variables in this study only contributed 5.67% to financial distress and the remaining 94.33% was affected by unresearched additional factors.

Table 5. Simultaneous Test Results

F-statistic	2.712455
Prob(F-statistic)	0.033628

Simultaneous test (F test) is a form of testing to see how the influence of independent variables on the dependent variable as a whole (Basuki, 2015). Based on table 5, it is found that the P-value is in the range of 0.033 <0.05, while the calculated F value is 2.71 > F table 2.45. So that all independent variables have an effect on financial distress.

Table 6. Partial Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Results
C	4.855504	0.326114	14.88898	0.0000	
X1	2.148275	0.945036	2.273221	0.0254	Accepted
X2	-19.89039	12.50005	-1.591224	0.1151	Rejected
X3	2.35E-08	1.84E-08	1.277331	0.2048	Rejected
M	-6.28E-06	2.21E-05	-0.283887	0.7772	Rejected

This partial test is a test carried out in revealing each independent variable to the dependent variable (Gunawan, 2018). Based on the data above, it is known that the only influential independent variable is the ROA variable with a P-value of 0.025 < 0.05 while other variables such as inflation, total assets and PBV have no effect on variable Y.

Table 7. Test Moderated Regression Analysis Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Results
X1M	0.000196	0.00101	0.194399	0.8462	Rejected
X2M	0.001179	0.003376	0.349221	0.7276	Rejected
X3M	-1.30E-11	4.88E-11	-0.267207	0.7898	Rejected

Based on table 7, the results obtained if the firm value is not able to moderate the profitability, macroeconomic, and firm size on financial distress. This is because the t-count value of each variable, namely X1M, X2M, and X3M has a value that is smaller than the t table. In addition, the P-value of each variable is > from 0.05.

Based on table 6, it is known that the t-count X1 value is 2.27 and the P-value is 0.0254 <0.05 and the t-count value > t table is 1.98. As a consequence, X1 affects Y, and it can be observed from the outcomes in table 6 that X1 indicates a favourable direction. This indicates that as corporate earnings rise, Altman's score rises, which affects the likelihood of low financial hardship. This suggests that X1 has a positive and substantial impact on Y. Based on these results, the first hypothesis is **accepted**.

The theory put forward by Wahlen et al. (2015) supports this research by stating that profits are able to attract investors, where when company profits rise, investors will be lured into investing in companies that cause the possibility of bankruptcy to be small. In addition, this study also supports signalling theory where when profitability increases, the score obtained from Altman's Z-Score can be high and the possibility of bankruptcy is smaller and thus conveyed a signal that convinces investors to invest in the company. This research is in line with the research of Kurniasanti & Musdholifah (2018), Pertiwi (2018) and Rahma (2020) which suggest that every increase in profitability will make financial distress smaller. But this research is inversely proportional to the research of Ginting & Mawardi (2021), Nisak (2021), and Suryani (2020) that argue that a company's financial difficulty is unaffected by profitability. According to Suryani (2020) this ROA cannot be used as an indicator in predicting financial distress because high profits do not ensure that a business will not experience financial difficulties. In addition, this ROA only me asures how the company makes profits with the assets it owns.

Based on table 6, it is known that the P-value of X2 is 0.1151 > 0.05 while the value of t count < t table is -1.59 < 1.98 so that X1 has no effect on Y. This means the second hypothesis is rejected. Because the rise and fall of inflation does not cause the company to go bankrupt. If viewed during 2017-2021 the increase in inflation in the five years is not significant, so the company issued various policies

to overcome the increase in inflation, so that the increase in inflation did not affect financial distress. So in this study the second hypothesis was **rejected**.

This study refutes the signalling theory, where when inflation rises, the score obtained by Altman's Z-Score will be high so that the possibility of bankruptcy is small, but in this study no effect of inflation and financial distress so that this information cannot be used as a signal for investing in the business. This study is different from the research of Pamungkas et al. (2021), Ulaya & Nurfauziah (2022), and Pertiwi (2018) where the study's findings show that inflation has a negative and considerable impact on financial hardship. When there is an increase in inflation, the company will take advantage of it by increasing the price of the product in order to get a little more profit so that operational activities are not disrupted and the company earns a profit to defend the company from financial distress. However, the outcomes of this research are supported by research by Kurniasanti & Musdholifah (2018), Nisak (2021) and Qur'anna & Isbanah (2021) which suggest that inflation has no effect on financial distress. Rising inflation rates cannot affect financial distress because banking fundamentals are very strong when facing economic conditions (Nisak, 2021).

Based on table 6, it can be seen that firm size has no effect on financial distress because the value of t count < t table is 1.28 < 1.98 and with P-value 0.2 > 0.05. This means that the increase or decrease in firm size as proxied by total assets will not affect the financial distress of a company. So in this study the third hypothesis was **rejected**.

This study refutes the signalling theory, where when total assets increase, the score obtained from Altman's Z-Score will be higher, while in this study there was no influence between total assets and financial distress so investors should not take this information as a cue to buy the firm. This study is in accordance with the research of Suryani (2020), Suryani (2020) and Kurniasanti & Musdholifah (2018) which suggest that firm size has no effect on any increase or decrease in the financial distress . This can be caused by large and small companies that have many investors and good operating conditions (Amanda & Tasman, 2019). However, this result is also inversely proportional to the theory issued by Ginting & Mawardi (2021) it implies that the entire assets will demonstrate the degree of stability and the business's capacity for profit. Investors will be interested in investing in a firm if it is more stable and successful at making profits, which reduces the likelihood that it would fail. The results of this study are also not the same as those of Syuhada et al. (2020) and S. N. Salim & Dillak (2021) which show that there firm size is a negative and significant financial distress.

Firm value which is the moderating variable in this study was found to have no effect on financial distress. This is because the P-value is 0.78 > 0.05 and the t table value is higher than the t count, namely 1.98 > -0.28. This means that any increase or decrease in the value of the company as proxied by PBV will not affect the financial distress of a company. Thus, the fourth hypothesis is **rejected**.

This study is not in line with signalling theory, where when PBV increases, the probability of bankruptcy decreases, but in this study there was no effect between PBV and financial distress so that this information could not be used as a signal to investors to invest in the company. The findings of this investigation are consistent with previous studies of Lestari & Kusrini (2021), Kuncoro & Agustina (2017), and Yulitasari R.M & Yulistina (2019) which claimed that financial difficulty was unaffected by corporate worth. This is because the high and low market prices often have an impact on stock prices in the capital market, not by the performance of the company's management. So that the rising stock price is caused by an increase in market prices and not solely because of an increase in profitability (Kuncoro & Agustina, 2017). This study does not support the findings of Nisak (2021), Jonathan & Militina (2018), and Yemima & Jogi (2020)which stated the results of the negative and significant effect of firm value on financial distress. This research also does not match Husnan (2019) theory, which states that companies that can generate good profits will increase the value of the company so that investors have an interest in investing.

Based on table 7 it can be stated if firm value is not able to moderate profitability in influencing financial distress. This is because the P-value X1M is 0.846 > 0.05 and the t count value is 0.194 < t table 1.98. The inability of firm value in moderating profitability on financial distress is caused by the value of the company itself which also has no influence on financial distress. Due to the inability of firm value to moderate profitability, it cannot be known whether firm value weakens or strengthens the influence of profitability on financial distress. So it is concluded that the fifth hypothesis is **rejected**.

If seen in previous research conducted by Kuncoro & Agustina (2017) where in this study it was stated that firm value had no influence on financial distress because firm value reflected stock price conditions in the capital market. Meanwhile, the high and low market prices often have an impact on stock prices in the capital market, not by the performance of the company's management. While the profitability represented by ROA is a reflection of management's efforts to profitably manage the company's assets (Golin & Delhaise, 2013). Due to the absence of the influence of firm value on financial distress, similarly the impact of profitability on financial hardship cannot be moderated by firm

value so it cannot be known whether firm value is able to strengthen or weaken profitability on financial distress. This study does not support signalling theory, where firm value is not able to moderate profitability in influencing financial distress, so this information cannot be used as a signal to investors in investing in the company.

Based on table 7, it can be seen that the P-value of X2M is 0.7276 > 0.05 and the value of t count < t table is 0.349 < 1.98. This means that firm value cannot moderate the effect of macroeconomics on financial distress. If we look at the partial test of firm value on financial distress , we can get results if there is no influence of firm value on financial distress, this also makes firm value unable to moderate the macroeconomic effect on financial distress. Based on these results, it is not known whether the value of the company can strengthen or weaken the macro-economy against financial distress. Thus, the sixth hypothesis is **rejected**.

In this study, both firm and macroeconomic values have no effect on financial distress. Therefore, it is unknown if the company's worth may enhance or detract from the macroeconomics' impact on financial distress. Macroeconomics proxied by inflation cannot affect financial distress because banking fundamentals are quite strong when facing economic conditions (Nisak, 2021). While the value of the company does not have an effect on financial distress because when the value of the company is high due to rising stock prices in the capital market, it is not only caused by the condition of the company's performance but also because of rising market prices in general. So that the rising stock price is caused by an increase in market prices and not solely because of an increase in profitability (Kuncoro & Agustina, 2017). This study rejects signalling theory, where firm value is unable to moderate macroeconomics in influencing financial distress, so this information cannot be used as a signal to investors in investing in companies.

Based on table 7, it can be seen that firm value cannot moderate the effect of firm size on financial distress. This is because the P-value X3M is 0.79 > 0.05 then the t value is -0.267 < the t table value is 1.98. This could be because there is no partial effect of firm value on financial distress, so firm value cannot moderate the effect of firm size on financial distress. Because of this inability, it is not known whether firm value can strengthen or weaken the influence of firm size on financial distress. Thus, the seventh hypothesis is **rejected**.

In this study, based on the partial test, the results showed that firm size and firm value had no effect on financial distress. Thus, in this study it cannot be determined whether firm value strengthens or weakens the influence of firm size on financial distress. There is no effect of firm size on financial distress because large and small companies have many investors and good operating conditions (Amanda & Tasman, 2019). The value of the company does not have an effect on financial distress because when the company's value is high due to rising stock prices in the capital market, it is not only caused by the condition of the company's performance but also because of rising market prices in general. So that the rising stock price is caused by an increase in market prices and not solely because of an increase in profitability (Kuncoro & Agustina, 2017). This study rejects signalling theory, where firm value is not able to moderate profitability in influencing financial distress, so this information cannot be used as a signal to investors to invest in the company.

CONCLUSIONS AND SUGGESTION

Considering the outcomes of this study, it can be concluded that only the profitability variable has an influence on financial distress with a P-value of 0.254 > 0.05. However, other variables such as macroeconomics, firm size and firm value have no effect on financial distress because the P-value is > 0.05. Then the firm value cannot moderate each variable, namely profitability, macroeconomics and firm size on financial distress. So it cannot be known whether the firm value strengthens or weakens the independent variable on the dependent variable in this study.

For further researchers to add other variables related to financial distress and expand the research subject. As for the company to continue to improve its management performance so that the company continues to operate well.

REFERENCES

Altman, E. I., Hotchkiss, E., & Wang, W. (2019). *Corporate Financial Distress, Restructuring, and Bankruptcy* (Fourth). John Wiley & Sons, inc.

Amanda, Y., & Tasman, A. (2019). Pengaruh Likuiditas, Leverage, Sales Growth dan Ukuran Perusahaan Terhadap Financial Distress Pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia (BEI) Periode 2015-2017. *EcoGen*, 2(3), 453–462.

Arifin, A. Z. (2018). *Manajemen Keuangan*. Zahir Publishing.

Bank Indonesia. (2022). *Data Inflasi*. Bank Indonesia.

Basuki, A. T. (2015). *Pengantar Ekonometrika (Dilengkapi Penggunaan Eviews)*. Danisa Media.

Ceylan, I. E. (2021). The impact of firm-specific and macroeconomic factors on financial distress risk: A case study from Turkey. *Universal Journal of Accounting and Finance*, 9(3), 506–517. https://doi.org/10.13189/ujaf.2021.090325

Ekawarna, & Fachruddiansyah. (2008). *Pengantar Teori Ekonomi Makro*. Gaung Persada (GP Press).

Fahmi, I. (2020). *Analisis Laporan Keuangan* (D. Handi (ed.)). ALFABETA, cv.

Firdaus, M. (2019). *Ekonometrika: Suatu Pendekatan Aplikatif* (R. Damayanti (ed.)). PT Bumi Aksara.

Ginting, D., & Mawardi, W. (2021). Analisis pengaruh rasio camel dan firm size terhadap financial distress pada perusahaan perbankan di indonesia (studi pada bank umum yang listing di bursa efek indonesia tahun 2015-2019). *DIPONEGORO JOURNAL OF MANAGEMENT Volume*, 10(3), 1–11.

Golin, J., & Delhaise, P. (2013). *The Bank Credit Analysis Handbook* (2th editio). John Wiley & Sons Singapore Pte. Ltd. Published.

Graubner, M. (2006). *Task, Firm Size, and Organizational Structure in Management Consulting*. Deutscher Universitats-Verlag.

Gujarati, D. N., & Porter, D. C. (2009). *Basic Econometrics* (5th ed.). McGraw-Hill Irwin.

Gunawan, C. (2018). *Mahir Menguasai SPSS (Mudah Mengolah Data dengan IBM SPSS Statistic 25)*. Penerbit Deepublish.

Husnan, S. (2019). *Manajemen Keuangan* (3rd ed.). Universitas Terbuka.

Ismanto, H., & Pebruary, S. (2021). *Aplikasi SPSS dan Eviews dalam Analisis Data Penelitian*. Penerbit Deepublish.

Jonathan, L. R., & Militina, T. (2018). Pengaruh Utang Terhadap Nilai Perusahaan dan Financial Distress Perusahaan Batubara Yang Go-Public Di Indonesia. *Dedikasi*, 19(1), 49–65.

Kasmiarno, K. S., & Mintaroem, K. (2017). Analisis Pengaruh Indikator Ekonomi Dan Kinerja Perbankan Syariah Terhadap Penyerapan Tenaga Kerja Pada Perbankan Syariah Di Indonesia Tahun 2008-2014. *Jurnal Ekonomi Syariah Teori Dan Terapan*, 3(10), 816. https://doi.org/10.20473/vol3iss201610pp816-828

Kuncoro, S., & Agustina, L. (2017). Factors to Predict the Financial Distress Condition of the Banking Listed in The Indonesia Stock Exchange. *Accounting Analysis Journal*, 6(1), 39–47. https://journal.unnes.ac.id/sju/index.php/aaj/article/view/11343

Kurniasanti, A., & Musdholifah, M. (2018). Pengaruh Corporate Governance, Rasio Keuangan, Ukuran Perusahaan dan Makroekonomi Terhadap Financial Distress. *Jurnal Ilmu Manajemen*, 6(3), 197–212.

Kurniawan, A. W., & Puspitaningtyas, Z. (2016). *Metode Penelitian Kuantitatif*. Pandiva Buku.

Lessambo, F. I. (2018). *Financial Statements Analysis and Reporting*. Springer Nature Switzerland AG. https://doi.org/10.1007/978-3-319-99984-5

Lestari, A. A., & Kusrini, D. E. (2021). Analisis Financial Distress Menggunakan Regresi Data Panel. *Seminar Nasional Official Statistics*, 2021(1), 264–273. https://doi.org/10.34123/semnasoffstat.v2021i1.855

Mufidah, N. M., & Purnamasari, P. E. (2018). Pengaruh Profitabilitas Terhadap Nilai Perusahaan Dengan Pengungkapan Corporate Social Responsibility Dan Good Corporate Governance Sebagai Variabel Moderating. *El Dinar*, 6(1), 64. https://doi.org/10.18860/ed.v6i1.5454

Nisak, W. H. (2021). Pengaruh Rasio RGEC, Bank Size, Market Value, serta Variabel Makroekonomi terhadap Prediksi Financial Distress Menggunakan CD-Index. *Jurnal Ilmu Manajemen*, 9(2), 342. https://doi.org/10.26740/jim.v9n2.p342-358

Oktaviani, M., Rosmaniar, A., & Hadi, S. (2019). Pengaruh Ukuran Perusahaan (Size) Dan Struktur Modal Terhadap Nilai Perusahaan. *BALANCE: Economic, Business, Management and Accounting Journal*, 16(1). https://doi.org/10.30651/blc.v16i1.2457

Otoritas Jasa Keuangan. (2020). *Statistik Perbankan Indonesia 2020* (Vol. 19, Issue 01). https://www.ojk.go.id/id/kanal/perbankan/data-dan-statistik/statistik-perbankan-indonesia/Pages/Statistik-Perbankan-Indonesia---Desember-2020.aspx

Otoritas Jasa Keuangan. (2021). Statistik Perbankan Indonesia - Desember 2021. In *Statistik Perbankan Indonesia* (Vol. 19, Issue 13). https://www.ojk.go.id/id/kanal/perbankan/data-dan-statistik/statistik-perbankan-indonesia/Pages/Statistik-Perbankan-Indonesia---Desember-2021.aspx

Pamungkas, D. R. W., Hadiani, F., & Purbayati, R. (2021). Analisis Faktor Internal dan Eksternal yang Mempengaruhi Financial Distress Bank Umum Syariah Periode 2014-2018. *Journal of Applied Islamic Economics and Finance*, 1(2), 446–457.

Pertiwi, D. A. (2018). Pengaruh Rasio Keuangan, Growth, Ukuran Perusahaan Dan Inflasi Terhadap Financial Distress Di Sektor Pertambangan Yang Terdaftar Di Bursa Efek Indonesia (BEI) Periode 2012 - 2016. *Jurnal Ilmu Manajemen*, 6(3), 359–366.

Qur'anna, W. W., & Isbanah, Y. (2021). Pengaruh Rasio CAMEL dan Faktor Makroekonomi terhadap Kondisi Financial Distress pada Bank BUSN Non Devisa Tahun 2014-2019. *Jurnal Ilmu Manajemen*, 9(2), 451. https://doi.org/10.26740/jim.v9n2.p451-466

Rahma, A. (2020). Analisis Pengaruh Profitabilitas, Leverage dan Likuiditas terhadap Financial Distress. *JABI (Jurnal Akuntansi Berkelanjutan Indonesia)*, 3(3), 253. https://doi.org/10.32493/jabi.v3i3.y2020.p253-266

Salim, S. N., & Dillak, V. J. (2021). Pengaruh Ukuran Perusahaan , Biaya Agensi Manajerial , Struktur Modal Dan Gender Diversity Terhadap Financial Distress. *Jurnal Ilmiah MEA (Manajemen, Ekonomi, Dan Akuntansi)*, 5(3), 182–198. https://drive.google.com/file/d/1xRA_rggUw2KIEcvk93OFhsimrJrKfKTj/view

Salim, U. (2011). *Manajemen Keuangan Strategik*. Universitas Brawijaya Press (UB Press).

Sari, E. W. D., & Subardjo, A. (2018). Pengaruh Keputusan Investasi, Keputusan Pendanaan, Dan Kebijakan Dividen Terhadap Nilai Perusahaan. *Jurnal Ilmu Dan Riset Akuntansi*, 7(10), 1–16.

Sartika, U. D., Siddik, S., & Choiriyah, C. (2019). Pengaruh Inflasi, Suku Bunga, Nilai Tukar, Dan Produk Domestik Bruto Terhadap Nilai Perusahaan. *Jurnal Ilmu Manajemen*, 8(2), 75. https://doi.org/10.32502/jimn.v8i2.1821

Sudarmanto, E., Syaiful, M., Fazira, N., Hasan, M., Muhammad, A., Faried, A. I., Tamara, S. Y., Mulianta, A., Nainggolan, L. E., Prasetyo, I., SN, A., Ahmad, M. I. S., Damanik, L. F. D., Basmar, E., Zaman, N., & Purba, B. (2021). Teori Ekonomi:Mikro dan Makro. In A. Karim (Ed.), *Paper Knowledge . Toward a Media History of Documents*. Yayasan Kita Menulis.

Suryani. (2020). Pengaruh Profitabilitas, Leverage, Sales Growth dan Ukuran Perusahaan terhadap Financial Distress. *Jurnal Online Insan Akuntansi*, 5(2), 229–244.

Susilowati, P. I. M., & Fadlillah, M. R. (2019). Faktor-Faktor Yang Mempengaruhi Financial Distress Pada Perusahaan Manufaktur Di Indonesia. *Jurnal AKSI (Akuntansi Dan Sistem Informasi)*, 4(1), 19–28.

Syuhada, P., Muda, I., & Rujiman. (2020). Pengaruh Kinerja Keuangan dan Ukuran Perusahaan Terhadap Financial Distress pada Perusahaan Property dan Real Estate di Bursa Efek Indonesia. *Jurnal Riset Akuntansi Dan Keuangan*, 8(2), 319–336. www.bps.go.id

Taufik, M., & Sugianto, C. V. (2021). Do Accounting, Market, and Macroeconomic Factors Affect Financial Distress? Evidence in Indonesia. *TIJAB (The International Journal of Applied Business)*, 5(2), 166. https://doi.org/10.20473/tijab.v5.i2.2021.31061

Ulaya, D., & Nurfauziah. (2022). Faktor Makroekonomi dan Kinerja Keuangan dalam. *Selekta Manajemen: Jurnal Mahasiswa Bisnis & Manajemen*, 01(02), 62–77.

Wahlen, J., Baginski, S., & Bradshaw, M. (2015). *Financial Reporting, Financial Statement Analysis and Valuation*. Cengage Learning.

Yemima, A., & Jogi, Y. (2020). Pengaruh Firm Value Terhadap Financial Distress. *Business Accounting Review*, 8(1), 159–172.

Yulitasari R.M, & Yulistina. (2019). Pengaruh Kinerja Keuangan Terhadap Financial Distress Pada Perusahaan Sektor Semen Listed Bei 2012-2017. *Jurnal Media Ekonomi*, 24(2), 18–26.