FINANCIAL DISTRESS AND ITS EFFECT ON STOCK RETURN OF CONSTRUCTION AND BUILDING COMPANIES BEFORE AND DURING PANDEMIC COVID-19

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Abstract

This study aims to analyze financial distress conditions and stock returns of the construction and building sub-sector companies before and during COVID-19 pandemic, analyze the factors that affect financial distress conditions, and analyze the effect of financial distress on stock returns. The study was conducted on 14 construction and building sub-sector companies listed on IDX from 2018q1 to 2021q4 using the panel data regression and two stages least square method. During the Covid-19 pandemic, there is a decrease in DSCR average value and an increase in the number of companies classified as distressed. Safe companies had negative average stock returns, while distressed companies had positive average stock returns. Meanwhile, factors that affect financial distress are profitability, liquidity, and rupiah exchange rate. Therefore, the company is expected to increase profitability and maintain optimal liquidity value in order to avoid financial distress condition. To improve the accuracy of investment decision, investors need to pay attention to the fundamental conditions and operational performance of the company. The interaction variable between financial distress proxied by predictive value of DSCR and the growth rate of confirmed cases of COVID-19 has a significant negative effect on stock returns.

Keywords : *Covid-19 growth, DSCR, Exchange rate, Financial ratio, Real interest rate*

1. PENDAHULUAN

Indonesia is known as the most productive country and the most profitable in terms of construction works because of the many ongoing projects from both residential and non-residential sectors. One of the government's roles in infrastructure development is to allocate a budget for infrastructure development and maintenance. In 2020 the Ministry of Public Works and Public Housing (PUPR) received the largest APBN allocation of 120.217,54 billion rupiahs (PUPR, 2021a). However, contrary to this, the GDP of the construction sector from 2017 to 2020 has decreased every year causes by three main problems, namely a decline in demand for construction services in general, high competition, and building material prices fluctuation (BPS, 2021). In addition, the COVID-19 pandemic has also caused a decline in construction GDP due to government regulations regarding large-scale social restrictions to stop the spread of the COVID-19 outbreak, causing delays or suspensions of building projects. In this case, the government is reallocating and refocusing programs and budgets for the 2020 Fiscal Year by postponing projects that can technically be postponed to 2021 (PUPR, 2021b). The decline in construction sector performance due to several business problems and the COVID-19 pandemic can trigger companies to enter financial distress condition (Hariandja et al., 2022; Utomo et al., 2022). Financial distress is a situation when the company's cash flow cannot meet its debt obligations that can be measured among others by using the debt service coverage ratio (DSCR) (Ufo et al., 2015).

The decline in net income and negative net income conditions is one of the early symptoms of a company experiencing financial difficulties. The existence of COVID-19 and construction business problems caused a significant decline in the construction and building sub-sector company's net income (Romadhon, 2022). The decline in the company's net income can be reflected in the decrease in financial ratios such as profitability and activity ratio. The profitability ratio measures the company's ability to generate sales through assets and measures how efficiently these assets can be used to earn income (Almilia & Kristijadi, 2003). The higher the net income to total assets the more effective company is in utilizing its assets to generate profits (Ardiyanto & Prasetiono, 2011). Meanwhile, the low level of profitability causes the company not to have good economic strength and causes the occurrence of financial distress (Mas'ud & Srengga, 2015). Furthermore, the activity ratio is a comparison between retained earnings and total assets which shows the company's ability to generate retained earnings after deducted expenses (Suprihatin, 2016). The ratio of retained earnings to total assets indicates that investment is mostly financed by retained earnings rather than equity and external debt (Baimwera & Muriuki, 2014). Meanwhile, low retained earnings to total assets ratio indicates that there is a possibility that the company's growth is not sustainable because the company's growth is financed by increasing debt not by reinvesting the profits (Kumar & Anand, 2013).

Short-term difficulties that are temporary and not too severe if not handled as quickly as possible will develop into a more severe condition and cause the company to be liquidated or reorganized (Hidayat & Meiranto, 2014). Another internal factor that can increase the company's potential to enter financial distress condition is a large amount of debt that causes the company's inability to cover it (Hadi & Andayani, 2014). The size of the company's debt can be reflected through the ratio of liquidity and leverage. The liquidity ratio is a comparison between current liabilities and current assets owned by the company to meet these obligations (Andre & Taqwa, 2017). The greater the value of the liquidity ratio, the greater the company's ability to pay debts that are due, thereby reducing the potential for financial distress (Santosa et al., 2020). Conversely, low liquidity indicates that the company has too large liabilities and is not supported by an increase in the company's performance, so the number of current assets is not proportional to the number of liabilities makes the company vulnerable to financial difficulties (Jannah & Dhiba, 2021). Furthermore, the leverage ratio is used as a measure that shows the number of assets available to creditors as collateral for the company's debt (Samara, 2021). A higher leverage ratio indicates the use of too high debt, thereby increasing the difficulty of the company releasing the debt burden (Samara, 2021). This means that increasing the company's leverage will increase the company's opportunity to enter financial distress condition (Amanda & Tasman, 2019).

Financial distress is also influenced by external factors such as the rupiah exchange rate and interest rates. Fluctuations in the price of building materials are closely related to the rupiah exchange rate because the building materials used to fulfill the company's inventory needs are still imported from overseas. For example, the need for iron and steel materials still relies on imported quality. This can be seen from the increase in the volume of imports of iron and steel in the first semester of 2021 by 51,18% or reaching US$ 5.36 billion compared to the same period last year (Supriyanto, 2021). The decline in the value of the rupiah exchange rate against the value of foreign currencies will cause imported goods to become expensive so it has an impact on increasing the company's production costs (Putri et al., 2021). Furthermore, the interest rate is an expense or fee expressed in a certain percentage that describes the borrowing of money within a certain period of time between creditors and customers (www.bi.go.id). Low level of interest rates will reduce borrowing costs, in addition to triggering investment and economic growth

(Aoki et al., 2004). However, a high level of interest rates will increase the loan burden, thereby increasing the company's potential to enter financial distress condition (Santosa et al., 2020).

The condition of financial distress or financial difficulties must be known early so that actions can be taken to anticipate conditions that lead to bankruptcy (Haryetti & Efni, 2010). If financial distress condition is not handled properly, it will become a sentiment for investors that can influence their investment decisions. Especially in a situation of economic uncertainty during the Covid-19 pandemic. The existence of a pandemic has been shown to have a negative impact on increasing the likelihood of bankruptcy and loan defaults by businesses and individuals (Nigmonov & Shams, 2021). In addition, the COVID-19 pandemic also had a negative impact on the capital market where investment decisions by investors were influenced by emotions and anxiety about the pandemic which formed negative sentiments, resulting in a decrease in stock returns and an increase in stock volatility (Cevik et al., 2022). However, the risk-return trade-off theory states that the higher the risk, the higher the expected return expected by investors, indicating that the risk of financial distress can increase stock returns. According to Mselmi, et al. (2019) and Duong, et al. (2022) a stock portfolio consisting of companies with financial difficulties provides positive rewards that caused higher stock returns.

Based on the background described, the purpose of this study is to analyze financial distress and stock returns of the construction and building sub-sector companies before and during the COVID-19 pandemic, analyze the factors that affect the financial distress, and analyze the effect of financial distress on stock returns. The novelty in the research is the use of an interaction variable between the debt service coverage ratio for measuring financial distress debt service coverage ratio with the growth rate of confirmed cases of COVID-19 to see its effect on stock returns.

2. METHOD

The sample used is 14 construction and building sub-sector companies listed on the Indonesia Stock Exchange during 2018q1 – 2021q4. Research was conducted using mapping analysis and panel data regression methods. Mapping analysis is used to map the company's financial distress condition where the DSCR value < 1,2 means the company is experiencing financial distress (Ruster, 1996). Mapping analysis is also used to map the period before and during the COVID-19 pandemic, then t-test difference test is carried out to see the average difference before and during the pandemic. Panel data regression analysis begins with the selection of the best regression model with Chow test, Hausman test, and Lagrange multiplier test, then classical assumption test is carried out consisting of multicollinearity test, heteroscedasticity test, autocorrelation test, and normality test. Finally, a hypothesis is tested by t-test, f-test, and coefficient determination test. Dependent variable in financial distress panel regression model is debt service coverage ratio (DSCR) as a proxy for financial distress. Independent variable used is internal and external factors of financial distress. Internal factors consist of profitability ratios proxied by net income to total assets (NI/TA), activity ratios proxied by retained earnings to total assets (RE/TA), liquidity ratios proxied by total current assets to current liabilities (CR), and leverage ratios proxied by total debt to total assets (DAR). External factors consist of Bank Indonesia’s 7 Days Repo Rate of Interest (SB), and exchange rate of the rupiah against the US dollar (NTR). The data used in the research model is quarterly data derived from the company's financial report retrieved from www.idx.co.id and company's official website, macroeconomic data retrieved from www.bps.go.id and www.bi.go.id. The equation of financial distress panel data regression model is:

$$DSCR_{it} = \alpha + \beta 1\ NI/TA_{it} + \beta 2\ RE/TA_{it} + \beta 3\ CR_{it} + \beta 4\ DAR_{it} + \beta 5\ SB_t + \beta 6\ NTR_t + \beta 7 COVID_t + \varepsilon it\ 1 \quad (1)$$

To avoid endogeneity problems in the stock returns regression model, the predictive value of the DSCR variable is used as a proxy for financial distress which is calculated using the 2SLS approach, then the DSCR prediction variable interacted with the growth rate of confirmed cases of COVID-19. The dependent variable in return stock data panel regression model is stock return measured as the difference between current stock price and previous stock price. The independent variable is the interaction between growth rate of Covid-19 and DSCR predictive value adapted from Duong et al. (2022). Variable growth rate of Covid-19 cases is measured from the confirmed cases of Covid-19 refer to Song, et al. (2021). The control variable used is company's size proxied by capital market (Uk) and company's value proxied by market-to-book ratio (Ni). The measurement of returns of stock-i uses t+1, i.e. Rit = Pit+1-Pit, where Pit is the price of stock-i at time-t. The time interval t+1 over t is used to assume that it needs a period of t for absorption of information from a company to investors. Covid-19 confirmed case data retrieved from www.covid-19.go.id and stock prices data retrieved from www.yahoo-finance.com. The equation of return stock panel data regression model is:

$$R_{it} = \alpha + \beta 1\ Uk_{it} + \beta 2\ Ni_{it} + \beta 3\ DSCR_{it} \times COVID\text{-}19_t + \varepsilon it \quad (2)$$

3. HASIL DAN PEMBAHASAN

3.1. Descriptive Analysis of Financial Distress Internal and External Factors

Differences in conditions before and during the Covid-19 pandemic were tested with a different t-test on the average value of each variable.

Table 1. Descriptive Analysis of Financial Distress internal factor

	Before pandemic	During pandemic	Differences	Prob. t test
Profitability	0,014	-0,010	-0,024	0,000
Activity	0,157	0,089	-0,069	0,012
Liquidity	1,703	1,650	-0,053	0,295
Leverage	0,589	0,592	0,002	0,926
DSCR	7,630	2,771	-4,859	0,012

Source: Process data, 2022.

Profitability ratio decreased significantly by -0,024. This is due to the company's current-year losses caused by a decrease in income due to the policy of restricted social activities in order to cope with Covid-19 cases resulting in a negative profitability ratio. This is in line with the previous research by Thi Xuan Nguyen (2022), which stated that there was a decrease in the average company profitability ratio proxied by return on assets during the Covid-19 pandemic. If the decrease in company income is not followed by cost efficiency, it will increase the company's losses (Utomo et al., 2022). The activity ratio decreased significantly by -0,069. This was caused by a decrease in the company's net income due to the pandemic which resulted in a decrease in retained earnings. If the company suffers a loss, the value of retained earnings decreases (Restianti & Agustina, 2018). The company's liquidity ratio during the Covid-19 pandemic experienced an insignificant decrease of -0,053. This was caused by a decrease in current assets, especially in cash and cash equivalents due to sluggish cash receipts from customers, thereby decreasing the liquidity ratio. This is in line with previous finding by Utomo et al. (2022) which states that the average liquidity ratio of companies during the Covid-19

pandemic decreased due to changes in the cash component as a result of a decline in sales. The company's leverage ratio during the Covid-19 pandemic experienced an insignificant increase of 0,002. The increase in the leverage ratio was caused by a decrease in the company's total assets which was more significant than the decrease in the company's total liabilities. According to Malikah (2021), the change in DAR occurs due to a decrease in short-term liabilities which is one of the company's strategy to avoid the risk of default when the economy is deteriorating. The DSCR value decreased significantly by -4,850. Before the Covid-19 pandemic, the number of companies classified as safe consisting of five companies, namely PBSA, NRCA, IDPR, TOTL, and WEGE, while during the Covid-19 pandemic there was a decrease in the average DSCR value so that were two companies classified as safe, namely PBSA and TOTL.

Indonesia's macroeconomic conditions also experienced significant differences during Covid-19 pandemic. When the Covid-19 pandemic first occurred in Indonesia, there was a decline in real interest rates and a significant weakening of the rupiah exchange rate. The reduction in nominal interest rates is a government strategy to restore the economy in order to increase the credit demand for the productive economic sector (www.bi.go.id, 2020). The decline in nominal interest rates and inflation rates continued until the end of 2021, causing a decrease in real interest rates. According to Haryanto (2020) the growth of Covid-19 cases caused the rupiah exchange rate against the United States dollar to depreciate, resulting in monetary and fiscal policies by Bank Indonesia, one of which was by lowering the nominal interest rate.

3.2. Factors Affecting Financial Distress

Regression analysis of panel data begins with selecting the best model using the Chow test. Based on the Chow test, it can be seen that the value of Prob. of 0,0234 < 0,05, meaning that the fixed effects chosen as the best model. The fixed effect model passed the classical assumption test except for the normality test which showed that the data were not normally distributed. According to Ghasemi & Zahediasl (2012) if the sample used is large which more than 100 observations, the normality test can be ignored.

Table 2. Estimation Results of Equation 1: Factors Affecting Financial Distress

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	19,6600	9,956777	1,9745	0,0498**
NITA	4,1914	1,912326	2,1917	0,0296**
RETA	-0,4929	0,522767	-0,9429	0,3469
CR	0,3357	0,176389	1,9034	0,0585*
DAR	1,1206	1,358640	0,8248	0,4105
SB	-8,5251	10,91276	-0,7812	0,4357
LOG(NTR)	-1,8500	1,068368	-1,7316	0,0850*
COVID	-0,2197	0,118984	-1,8471	0,0663*
AR (1)	0,4537	0,152218	2,9807	0,0033**
R-squared	0,6117	Mean dependent var		3,6301
Adjusted R-squared	0,5684	S.D. dependent var		8,1360
F-statistic	14,107	Durbin-Watson stat		1,8922
Prob(F-statistic)	0,0000			

Note: * significant at 10% significance level
** significant at 5% significance level
Source: Output Eviews, 2022.

Based on Table 2 it is known that the Adjusted R-Square value is 0,568 with Prob. F statistic < 0,05. This shows that simultaneously the independent variables affect the financial distress of the construction and building sub-sector companies with an effect of 56,8%, while 43,2% is influenced by other variables outside the research model. AR (1) represented autoregressive

variable with one lagged time used for correcting negative autocorrelation. It can be inferred that the value of DSCR influenced negatively by the value of DSCR in previous period.

Profitability ratio or NITA has Prob value of (0,0296) <0,05 with a coefficient of 4,1914, meaning that the profitability ratio has a significant positive effect on the company's DSCR value at a significance level of 5%. This shows that an increase in the profitability ratio can increase the DSCR value and reduce the potential for the company to experience financial distress. In this study, fluctuations of ROA are more influenced by fluctuations in net income generated by the company. The higher the net profit generated by the company, the higher the company's ability to pay its loans. According to Isayas (2021) an increase in profitability can reduce financial distress whereas companies with low profitability can increase the level of financial distress, thus can lead the company to go bankrupt.

Activity ratio or RETA has a value of Prob. (0,3469) > 0,05 with a coefficient of -0,4929, meaning that the activity ratio has no significant effect on the DSCR value. This shows that an increase in the activity ratio can increase financial distress with no significant effect. This is in line with the research of Chabachib et al. (2019) which states that the ratio of retained earnings to total assets has no significant effect on financial distress because the composition of retained earnings is determined for business expansion or equipment procurement so that it does not affect the financial distress. In addition, retained earnings are part of shareholder equity not part of cash so it cannot be used to pay company debts or other interests (Restianti & Agustina, 2018).

Liquidity ratio or CR has a value of Prob. (0,0585) < 0,1 with a coefficient of 0,3357, meaning that the liquidity ratio has a significant positive effect on the DSCR value. This shows that the more liquid a company is, the more opportunity a company has to cover its liabilities, thereby reducing the probability of the company entering financial distress condition. A high liquidity ratio indicates that the company has low short-term liabilities so that it can reduce the risk of the company's default. This is in line with the research of Masdupi et al. (2018) which states that a high liquidity ratio reduces the potential for financial distress. According to Hosea et al. (2020) a high liquidity ratio can reduce the level of financial distress because the company has larger current assets that can reduce or prevent the sale of important assets when the company enters financial difficulty.

Leverage ratio or DAR has a value of Prob. (0,410) > 0,05 with a coefficient of 1,1206, meaning that the leverage has no significant effect on the DSCR value. This shows that the low total debt of the company which is indicated by the low ratio of DAR if it does not generate sufficient profit, it will cause the company to continue to produce a low DSCR value, thus enabling the company to enter into a state of financial distress. According to Hosea et al. (2020) and Ceylan (2021) the leverage has no effect on financial distress because high debt if it used effectively, it can increase the company's opportunity to earn large profits thereby reducing the risk of financial distress.

Interest rate or SB has a value of Prob. (0,4357) > 0,05 with a coefficient of -8,5251, meaning that the interest rate has no significant effect on the DSCR value. This shows that an increase in the interest rate can increase the company's loan value, thereby reducing the DSCR value with an insignificant decrease. In addition, during the Covid-19 pandemic, the government lowered interest rates to ease the burden on companies and boost the economy's productivity. But in the other hand, construction companies recorded a decrease in revenue due to project delays, resulting in a low DSCR value. The results of this study are in line with the research of Priyatnasari & Hartono (2019) which states that the interest rate does not affect financial distress

but affects the loan value. In addition, an increase in interest rates can reduce the company's interest in making loans so companies tend to use internal funding or the use of equity (Ikpesu et al., 2020).

Rupiah exchange rate or log (NTR) has a value of Prob. (0,0850) < 0,1 with a coefficient of -1,8500, meaning that the rupiah exchange rate has a significant negative effect on the DSCR value. This shows that the decreasing exchange rate of the rupiah against the United States dollar can reduce the value of the DSCR, causing the company to experience financial distress. The decline in the rupiah exchange rate can increase production costs because there are still many production materials that are procured by import. In addition, the rupiah exchange rate also affects the number of loan expenses and operating expenses transacted in foreign currencies. The results of this study are in line with Žiković (2018) which states that the exchange rate has a positive effect on increasing the probability of companies entering financial distress conditions, especially in developed countries that still rely on imported goods.

Dummy Covid-19 or COVID has a value of Prob. (0,066) < 0,1 with a coefficient of -0,2197. This shows that the Covid-19 pandemic has a negative effect on the DSCR value, causing the company to experience financial distress. During the Covid-19 pandemic, there was a government policy regarding large-scale social restrictions that disrupted the company's operational activities, including the suspension of construction projects and delays in construction contract auction activities. This causes a decrease in the company's income which causes a decrease in the company's ability to cover its loans. According to Rababah, et al. (2020), the existence of quarantine and social restrictions causes a reduction in economic activity so as to reduce consumer demand which can lead to a cessation of production in the industry causing losses.

3.3. Descriptive Analysis of Stock Returns

Table 3. Descriptive Analysis of Stock Returns

	Distress			Safe			Diff.
Description	**Average**	**Max**	**Min**	**Average**	**Max**	**Min**	**Average**
Before pandemic	-9,2	45,0	-90,0	1,7	97,0	-66,0	-10,9
During pandemic	0,3	165,0	-105,0	-7,5	27,0	-9,2	7,9
Difference	9,5			-9.2			

Source: Processed data, 2022.

Based on research results, there is a difference in stock returns between companies classified as distressed and safe before and during the Covid-19 pandemic. Based on the results of the different t-tests, it is known that the return stock on safe companies has a Prob value. (0,951) > 0,05 while the return on distressed companies has a Prob value (0,022) < 0,05. This means that during the Covid-19 pandemic, companies classified as distressed experienced a significant increase in average stock returns of 9,5%. Meanwhile, the average stocks return of companies classified as safe experienced an insignificant decrease of -9,2%. However, after a different test of stock returns for each company, companies that are classified as safe have increased their average stock return but still record low or negative average returns in before and during pandemic period. Companies that have high profitability (classified as safe companies) before the pandemic will be more affected due to the conditions of uncertainty during the Covid-19 pandemic (Song et al., 2021). The uncertainty during the covid-19 pandemic caused a decrease in profitability and decreasing investor trust in companies classified as safe. In addition, the construction and building sub-sector companies that are classified as distressed still record good

operational performance, which can be known through information and news regarding the achievement of the company's new contract which generated a positive signal for investors about the company's growth during the Covid-19 pandemic. This makes investors interested in distressed companies. According to Yun & Kim (2022) the risk of systematic distress provides positive rewards, thereby increasing stock returns, while the increased risk of unsystematic distress causes lower stock returns. This shows that during the Covid-19 pandemic, the characteristics of financial distress as seen from an increase in debt were considered a positive sentiment which indicated the company was working on a business expansion, while the characteristics of financial distress were seen from a decrease in company profitability considered as a negative sentiment that can reduce stock returns.

3.4. The Effect of Financial Distress and the Covid-19 Pandemic on Stock Returns

The data used to describe the financial distress of construction and building sub-sector companies uses the DSCR prediction value obtained by the two-stages least square, then interacts with the Covid-19 growth rate variable. Based on the test results of selecting the best model, FEM was chosen to be the best model and has passed a series of classical assumption tests.

Table 4. Estimation Results of Equation 2: Factors Affecting Stock Returns

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	9.6411	0.9793	9.8443	0.0000
UK	-0.3423	0.0345	-9.9060	0.0000**
LOG(NI)	0.0813	0.0110	7.3392	0.0000**
DSCRXCOVID	-0.0051	0.0012	-4.3057	0.0000**
R-squared	0.3775	Mean dependent var		-0.0295
Adjusted	0.3294	SD dependent var		0.2812
F-statistic	7.8488	Durbin-Watson stat		1.8077
Prob(F-statistic)	0.0000			

Note: * significant at 10% significance level
** significant at 5% significance level
Source: Output Eviews, 2022

Based on Table 4, it is known that the Adjusted R-squared value is 0,329 with Prob. F statistic is 0,000 < 0,05. This shows that simultaneously the independent variables affect stock returns with an effect of 32.9%, the remaining 67,1% is influenced by other variables outside the research model.

Based on Table 4, it can be seen that the variable financial distress which is interacted with the growth rate of Covid-19 has a Prob value (0.0273) < 0,05 with a coefficient of -0,0051. This shows that during the Covid-19 pandemic, the higher the DSCR value, the lower the stock returns. This shows that safe companies have negative stock returns, while distressed have positive stock returns during the Covid-19 pandemic. According to Nugroho, et al. (2021) financial distress as measured through systematic risk has a positive effect on stock returns, meaning that financial distress that occurs during economic turmoil such as the Covid-19 pandemic will result in positive stock returns. During a pandemic, there is a change in investor behavior where a high level of company financial difficulty will generate higher returns than companies with low financial distress conditions (Duong et al., 2022).

4. CONCLUSION

The conclusion that can be drawn from the results of the study is that there is a decrease in the financial health condition of the construction and building sub-sector companies during the Covid-19 pandemic, which can be seen from the decrease in the average DSCR value and an increase in the number of companies classified as distress. In addition, there are differences in investor reactions to the condition of the company classified as safe and distressed, which can be seen from the differences in the average stock returns. Prior to the Covid-19 pandemic, safe companies had positive average stock returns and distressed companies had negative average stock returns, while during the Covid-19 pandemic, safe companies had negative average stock returns, while distressed companies had positive average stock returns. This is supported by the results of panel data regression analysis which states that the interaction between DSCR predictive value and the Covid-19 growth rate has a significant negative effect on stock returns, meaning that during the Covid-19 pandemic, distressed companies with low DSCR value have higher stock returns compared to safe companies with high DSCR. Meanwhile, the factors that affect the financial distress of the construction and building sub-sector companies are the profitability ratio, liquidity ratio, rupiah exchange rate.

It may be implied from the results of this study that management stock issuers could maintain the company's good performance in order to increase investor trust in a sustainable manner. This can be done by maintaining performance of the company in order to avoid prolonged financial difficulties that can lead to the risk of bankruptcy. Increasing operating income by innovating and improving marketing strategies as well as continuously implementing cost efficiency to reduce the company's burden and ensuring that the project is done on time according to the initial contract so there is no additional cost incurred. In addition, it is necessary to maintain the optimization of the liquidity ratio by increasing the effectiveness of the use of short-term debt and managing an efficient amount of inventory. The negative effect of the depreciation of rupiah exchange rate on financial distress can be minimized by using hedging contracts and also reducing loans that require foreign currency in transaction process. In addition, the government is expected to be able to support fair business competition between state-owned companies (BUMN) and the national private sector by establishing regulations and improving the monitoring system for classifying projects that can be participated by BUMN as well as improving the monitoring system so that there is no cartel and collusion in contract bidding activities.

Furthermore, investors who are interested in investing in construction and building sub-sector companies can consider the financial distress condition to formulate investment decisions. In addition, it is necessary to consider company's fundamental performance such as profitability and liquidity ratios as a measurement of the company's financial health condition so that investors can formulate more accurate investment decisions. Additional information can be seen on the achievement of new contracts obtained by the company as a signal about the company's performance and can be used to predict company’s income in the future. The government also expected to be able to maintain the stability of the Indonesian economy in order to ease the burden on companies in the construction and building sector, especially in the condition of the rupiah exchange rate against the United States dollar.

REFERENCES

Almilia, L. S., & Kristijadi, E. (2003). Analisis Rasio Keuangan Untuk Memprediksi Kondisi Financial Distress Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Jakarta. *Jurnal*

Akuntansi & Auditing Indonesia, *7*(2).

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. *Jurnal Ecogen*, *2*(3). https://doi.org/10.24036/jmpe.v2i3.7417

Andre, O., & Taqwa, S. (2017). Pengaruh Profitabilitas , Likuiditas , dan Leverage Dalam Memprediksi Financial Distress (Studi Empiris Pada Perusahaan Aneka Industri yang Terdaftar di BEI Tahun 2006-2010). *Jurnal Wahana Riset Akuntansi*, *2*(1).

Aoki, K., Proudman, J., & Vlieghe, G. (2004). House prices, consumption, and monetary policy: a financial accelerator approach. *Journal of Financial Intermediation*, *13*(4), 414–435.

Ardiyanto, F. D., & Prasetiono. (2011). Prediksi Rasio Keuangan Terhadap Kondisi Financial Distress Perusahaan Manufaktur Yang Terdaftar Di Bei. *Jurnal Dinamika Ekonomi Dan Bisnis*, *8*(1).

Baimwera, B., & Muriuki, A. M. (2014). Analysis of Corporate Financial Distress Determinants : a Survey of Non-Financial Firms Listed in the Nse. *International Journal of Current Business and Social Sciences*, *1*(2).

BPS. (2021). *Indikator Konstruksi I-2021*. https://www.bps.go.id/publication/2021/08/19/7de59a0a986b286e9329d2f9/indikator-konstruksi-triwulan-i-2021.html

Cevik, E., Kirci Altinkeski, B., Cevik, E. I., & Dibooglu, S. (2022). Investor sentiments and stock markets during the COVID-19 pandemic. *Financial Innovation*, *8*(1), 1–34.

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). https://doi.org/10.13189/ujaf.2021.090325

Chabachib, M., Kusmaningrum, R. H., Hersugondo, H., & Pamungkas, I. D. (2019). Financial distress prediction in Indonesia. *WSEAS Transactions on Business and Economics*, *16*.

Duong, K. D., Truong, L. T. D., Huynh, T. N., & Luu, Q. T. (2022). Financial constraints and the financial distress puzzle: Evidence from a frontier market before and during the Covid-19 pandemic. *Investment Analysts Journal*, *51*(1). https://doi.org/10.1080/10293523.2022.2037202

Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: A guide for non-statisticians. *International Journal of Endocrinology and Metabolism*, *10*(2). https://doi.org/10.5812/ijem.3505

Hadi, S. A. F., & Andayani. (2014). Mekanisme Corporate Governance Dan Kinerja Keuangan Pada Perusahaan Yang Mengalami Financial Distress. *Jurnal Ilmu Dan Riset Akuntansi*, *3*(5).

Hariandja, N. M., Siregar, H., Suroso, A. I., & Manurung, A. H. (2022). Construction capital structure; soe and non-soe in the pandemic era. *Jurnal Manajemen Industri Dan Logistik*, *6*(1).

Haryanto, H. (2020). Dampak Covid-19 terhadap Pergerakan Nilai Tukar Rupiah dan Indeks Harga Saham Gabungan (IHSG). *Jurnal Perencanaan Pembangunan: The Indonesian Journal of Development Planning*, *4*(2). https://doi.org/10.36574/jpp.v4i2.114

Haryetti, & Efni, Y. (2010). Analisa Dampak Pengumuman Right Issue terhadap Abnormal Return, Likuiditas Saham dan Reaksi Pasar pada Perusahaan yang Issuer di Bursa Efek Indonesia Periode 2007-2008. *Pekbis Jurnal*, *2*(3).

Hidayat, M. A., & Meiranto, W. (2014). Prediksi Financial Distress Perusahaan Manufaktur Di Indonesia. *Diponegoro Journal of Accounting*, *3*(3), 538–548.

Hosea, I. A., Siswantini, T., & Murtatik, S. (2020). Leverage, Profitabilitas, Pertumbuhan Penjualan Terhadap Financial Distress Pada Perusahaan Ritel Di Bei. *Prosiding BIEMA*

(Business Management, Economic, and Accounting National Seminar), *1*, 60–74.

Ikpesu, F., Vincent, O., & Dakare, O. (2020). Financial Distress Overview, Determinants, and Sustainable Remedial Measures: Financial Distress. In *Corporate Governance Models and Applications in Developing Economies* (pp. 102–113). IGI Global.

Isayas, Y. N. (2021). Financial distress and its determinants: Evidence from insurance companies in Ethiopia. *Cogent Business & Management*, *8*(1), 1951110.

Jannah, A. M., & Dhiba, Z. F. (2021). Pengaruh Struktur Kepemilikan, Likuiditas Dan Leverage Terhadap Financial Distress Pada Perusahaan Manufaktur Di Bei. *Jurnal Akuntansi, Keuangan Dan Perpajakan*, *4*(1), 14–23.

Kumar, M., & Anand, M. (2013). Assessing financial health of a firm using Altman's original and revised Z-score models: A case of Kingfisher Airlines Ltd (India). *Journal of Applied Management and Investments*, *2*(1), 36–48.

Malikah, A. (2021). Comparison of Financial Performance Before and During COVID-19: Case Study of Hospitality Business, Indonesia. *Golden Ratio of Finance Management*, *1*(1), 51–60.

Mas'ud, I., & Srengga, R. M. (2015). Analisis rasio keuangan untuk memprediksi kondisi financial distress perusahaan manufaktur yang terdaftar di bursa efek indonesia. *Jurnal Akuntansi Universitas Jember*, *10*(2), 139–154.

Masdupi, E., Tasman, A., & Davista, A. (2018). The influence of liquidity, leverage and profitability on financial distress of listed manufacturing companies in Indonesia. *First Padang International Conference On Economics Education, Economics, Business and Management, Accounting and Entrepreneurship (PICEEBA 2018)*, 389–394.

Mselmi, N., Hamza, T., Lahiani, A., & Shahbaz, M. (2019). Pricing corporate financial distress: Empirical evidence from the French stock market. *Journal of International Money and Finance*, *96*. https://doi.org/10.1016/j.jimonfin.2019.04.008

Nigmonov, A., & Shams, S. (2021). COVID-19 pandemic risk and probability of loan default: evidence from marketplace lending market. *Financial Innovation*, *7*(1), 1–28.

Nugroho, M., Arif, D., & Halik, A. (2021). The effect of financial distress on stock returns, through systematic risk and profitability as mediator variables. *Accounting*, *7*(7). https://doi.org/10.5267/j.ac.2021.4.026

Priyatnasari, S., & Hartono, U. (2019). Rasio Keuangan, Makroekonomi dan Financial Distress: Studi Pada Perusahaan Perdagangan, Jasa dan Investasi di Indonesia. *Jurnal Ilmu Manajemen*, *7*(4).

PUPR. (2021a). *Informasi statistik infrastruktur PUPR 2021*.

PUPR. (2021b). *Menteri Basuki: pekerjaan konstruksi yang ditunda akibat realokasi anggaran pembangunan infrastruktur sebesar Rp44,58 triliun akan jadi prioritas di tahun 2021*. https://eppid.pu.go.id/page/kilas_berita/1730/Menteri-Basuki-Pekerjaan Kons

Putri, I. Y., Suharti, S., Suryani, F., & Hanif, R. A. (2021). Pengaruh Inflasi, Nilai Tukar Rupiah, BOPO, dan NPL Terhadap Profitabilitas dan Dampaknya pada Financial Distress. *Bilancia: Jurnal Ilmiah Akuntansi*, *5*(4), 380–396.

Rababah, A., Al-Haddad, L., Sial, M. S., Chunmei, Z., & Cherian, J. (2020). Analyzing the effects of COVID-19 pandemic on the financial performance of Chinese listed companies. *Journal of Public Affairs*, *20*(4). https://doi.org/10.1002/pa.2440

Restianti, T., & Agustina, L. (2018). The effect of financial ratios on financial distress conditions in sub industrial sector company. *Accounting Analysis Journal*, *7*(1), 25–33.

Romadhon, A. (2022). The Role Of Directorate General Of Customs And Excise In Handling Covid-19 Pandemic As A Trade Facilitator And Industrial Assistance In Indonesia. *MARGINAL : Journal Of Management, Accounting, General Finance And International*

Economic Issues, *1*(2), 53–58. https://doi.org/https://doi.org/10.55047/marginal.v1i2.133

Ruster, J. (1996). Mitigating commercial risks in project finance. *Public Policy for Private Sector. New York (US): The World Bank*.

Samara, A. (2021). Pengaruh Modal Kerja Bersih Terhadap Aset, Likuiditas dan Financial Leverage terhadap Financial Distress:(Studi Empiris pada Sektor Industri Sub Sektor Healthchare Tahun 2017-2020). *Jurnal Ekonomi Bisnis, Manajemen Dan Akuntansi (JEBMA)*, *1*(3), 222–230.

Santosa, D. F., Anggraeni, L., & Pranowo, K. (2020). Determinan Financial Distress Perusahaan Subsektor Ritel di Bursa Efek Indonesia. *Jurnal Aplikasi Bisnis Dan Manajemen (JABM)*, *6*(1), 128.

Song, H. J., Yeon, J., & Lee, S. (2021). Impact of the COVID-19 pandemic: Evidence from the US restaurant industry. *International Journal of Hospitality Management*, *92*, 102702.

Suprihatin, N. S. (2016). Pengaruh Rasio Keuangan dan Reputasi Underwriter Terhadap Financial Distress pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia (BEI) Periode 2005-2008. *JAK (Jurnal Akuntansi) Kajian Ilmiah Akuntansi*, *3*(1).

Supriyanto, H. (2021). Impor Baja Konstruksi Terus Naik Bisa Berdampak Negatif pada Industri Nasional. *Times*. https://www.timesindonesia.co.id/read/news/371678/impor-baja-konstruksi-terus-naik-bisa-berdampak-negatif-pada-industri-nasional

Thi Xuan Nguyen, H. (2022). The Effect of COVID-19 Pandemic on Financial Performance of Firms: Empirical Evidence from Vietnamese Logistics Enterprises. *Journal of Asian Finance*, *9*(2).

Tomas Žiković, I. (2018). Challenges in predicting financial distress in emerging economies: The case of Croatia. *Eastern European Economics*, *56*(1), 1–27.

Ufo, A., No, A., & Sodo, W. (2015). Determinants of financial distress in manufacturing firms of Ethiopia. *Research Journal of Finance and Accounting*, *6*(17), 9–17.

Utomo, N. S., Devi, S. S., & Siregar, H. (2022). Financial Performance Analysis of Construction State-Owned Enterprises Listed in Indonesia Stock Exchange During Covid-19. *Amwaluna: Jurnal Ekonomi Dan Keuangan Syariah*, *6*(2), 244–268.

Yun, S. H., & Kim, J. M. (2022). Conditional relationship between distress risk and stock returns. *Global Business and Finance Review*, *27*(1), 16.