# The Effect of Profitability and Managerial Ownership on Financial Distress with Capital Structure as Moderating Variable

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**Abstract**

This study is being conducted as a continuation of previous research and intends to ascertain the impact of management ownership and profitability on financial distress moderation of capital structure. ROE predicts profitability, while DER predicts the capital structure. Financial reports and yearly reports are used in the research to round out the facts. The Indonesia Stock Exchange's (IDX) tourist industry was the population and sample, and the observation period was from 2019 to 2021. SPSS software is used for data analysis to evaluate the hypothesis. The findings demonstrate that managerial ownership and profitability have an impact on financial distress in tourism sector enterprises, and that the capital structure modifies the relationship between managerial ownership and profitability in this regard.

***Keywords***: *Profitability, Managerial Ownership, Capital Structure, Financial Distress.*

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## A. INTRODUCTION

Due to the sharp decline in demand from both domestic and international travelers, the coronavirus pandemic has had a profound and wide-ranging effect on the tourism industry globally. Due to numerous travel restrictions put in place by many nations in an effort to stop the spread and transmission of the potentially lethal illness, demand has dramatically decreased. This effect also had an effect on Indonesia, one of the popular tourism destinations. The Indonesian economy depends heavily on the tourism industry. The tourism industry's contribution has greatly expanded in recent years. This is demonstrated by the tourist sector's significant increase in the percentage of overall exports of goods and services from 10% in 2005 to 17% in 2012. In 2019, the tourist industry made a direct contribution to GDP of 4.8 percent, up 0.30 percentage points from the 4.5 percent it made in the previous year (Figure 1), (Kemenparekraf, 2020). This increase in contribution is primarily being supported by an increase in both domestic and international tourism arrivals as well as an increase in tourism-related investments.

The breakout of the COVID-19 virus at the start of 2020 shook the entire planet. The so-called corona virus, also known as COVID-19, is a sizable family of viruses that can harm both humans and animals, according to the WHO. The common cold and more serious illnesses like the Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) are all caused by coronaviruses in humans (Nicola et al., 2020). Covid-19 is a global outbreak that started in the Chinese city of

Wuhan at the end of 2019 and quickly expanded to 210 nations, including Indonesia, in a few of months. In some parts of the world, particularly Indonesia, practically all joints of life are paralyzed as a result of COVID-19, which has had a significant impact. Governments all over the world are taking steps to stop the spread of covid-19, including implementing lockdowns or banning all citizens from the covid-affected nations or cities from accessing their border regions. In order to prevent the spread of COVID-19, this is being done (Fotiadis et al., 2021).

From the phenomenon of the Covid-19 pandemic, the tourism sector in Indonesia experienced a drastic decrease in turnover and there were even several companies engaged in the tourism sector that were declared bankrupt, the disruption of the Company's cash flow with the lack of tourists made tourism companies close their businesses. Researchers have found that studying companies in the tourism sector that may go bankrupt when financial distress arises is very interesting because this threat can affect any company, regardless of its size or industry, and it can happen at any time. The idea that financial hardship can be predicted through predictive models should be developed in the hope that it can be used as a guide to identify early situations that lead to bankruptcy is sparked by the observation of very high losses for various parties.

A profit is what every business strives for. In order to reach the intended goals, the company's management is necessary. This ratio gauges the firm's capacity to turn a profit (profits) at a specific level of sales, assets, and share capital, or it gauges the management's efficiency in turning a profit. A declining return on assets ratio, which measures profitability, indicates inefficient use of company resources and a decrease in productivity in generating profits. These circumstances will complicate the company's finances and internal funding sources for investment, increasing the risk of getting into financial trouble and possibly increasing the likelihood of bankruptcy (Amir and Bambang, 2013). Financial distress is said to be influenced by profitability, or the company's capacity to create profits. The more profit a firm makes, the more effectively it uses its assets to do so, lowering the likelihood that it may experience financial difficulties in the future. In this study, the association between profitability and financial difficulty is also moderated by capital structure. The first sign of a company's financial performance declining is financial difficulty. To prevent insolvency, the company must reverse the downturn in financial performance as soon as possible. Financial statements can show how this was done. A high degree of profitability, particularly in the profitability ratio, can show that the business is secure and insulated against financial trouble. A high level of profitability indicates that the company has significant internal resources, allowing it to pay for its needs out of these resources and reduce its debt load, which lowers its capital structure and lowers its risk exposure. According to this, capital structure and profitability have a mutually impacting relationship (Fadhilah et al., 2020).

Management shares, such as those of directors and commissioners who actively participate in company decision-making, are referred to as being owned by management. Various studies reveal no effect of managerial ownership on financial

distress (Loman & Malelak, 2015). However, research by Khairuddin et al. (2019) and Jodjana et al. (2021) revealed that the ownership of an influential board of directors and independent commissioners increases the likelihood of financial distress. Lausiri and Nahda (2020) examined that financial distress problems can occur with various causes that can be caused by economic failure or failure of company management in decision making, in general, companies that experience such conditions try to overcome these problems in various ways such as making loans to other parties or by improving management performance. Therefore, this study uses managerial ownership where shares owned at the managerial level are expected to overcome financial distress, because management as the owner has interests other than as company managers so that they will be encouraged to work better so as to increase company profits so as not to experience financial distress. This study uses capital structure moderation in moderating the influence of managerial ownership on financial distress, because the capital structure will certainly strengthen managerial level commitment to monitor capital adequacy in the Company so that financial distress does not occur.

## B. LITERATURE REVIEW

### 1. Managerial Ownership

According to Hanafi (2014: 75) states that in other words, managers are also shareholders who actively participate in decision-making, directly experience the benefits of those decisions, and bear the risk if there are losses as a result of poor decision-making. Managerial ownership is the amount of shares owned by management. The number of shares held by the company's management itself, as revealed by Hanafi, is what is known as managerial ownership. According to Imanta and Satwiko (2011: 68), The manager is a shareholder and has management ownership, which is the ownership of company shares by the manager. From this perspective, it is clear that managerial ownership refers to the percentage of management's shares that are owned by shareholders who actively participate in decision-making. The managerial ownership formula is:

$$Managerial\ ownership = \frac{\text{Board of Directors Shares} + \text{Shares of Commissioners}}{\text{Outstanding shares}}$$

### 2. Profitability

The ability of a business to turn a profit in relation to the sale of all of its assets and own capital is known as profitability (Sartono 2010). An evaluation of a company's capacity to pursue profit is done using the profitability ratio (Kasmir 2019). Profitability is a measure that connects revenue and investment to profit. The size of the level of profit realized in relation to sales and investment is how this ratio assesses the performance of overall management. The better the profitability ratio, the more accurately it conveys the company's strong potential for profit. As a result, it may be inferred from the experts' understanding that profitability refers to a company's

capacity to make money through its operations, sales, investments, or other assets (Fahmi 2017).

$$Return\ on\ Equity = \frac{\text{Net profit after tax}}{\text{Total equity}}\ x\ 100\%$$

**3. Capital Structure**

The Debt-to-Equity Ratio (DER) is used in this study as a proxy for capital structure. The source of funds obtained by the company comes from internal and external funds. In this study, the capital structure is emphasized as the company's external funds. DER is a ratio used to compare all debt with all equity (Hanafi, 2018). Every rupiah of own capital utilized as debt collateral is determined using the debt to equity ratio. For businesses, the lower the level of owner funding, the higher the value of the Debt to Equity Ratio. Formula for calculating debt to equity ratio according to Kasmir (2019):

$$Debt\ to\ equity\ ratio = \frac{\text{Total debt}}{\text{Total equity}}\ x\ 100\%$$

**4. Financial Distress**

The prediction model developed by Zmijewski in 1983 is the outcome of ongoing research conducted over a 20-year period. Zmijewski (1984) assesses a company's performance and uses leverage and a liquidity ratio study. According to Zmijewski's predictions using a sample of 75 bankrupt companies and 73 healthy companies from 1972 to 1978, the F-Test indicator on group ratios of rate of return, liquidity, leverage turnover, fixed payment coverage, trends, firm size, and stock return volatility reveals significant differences between healthy and unhealthy companies. Then this model produces the following formula:

$$\mathbf{X = -4.3 - 4.5X1 + 5.7X2 + 0.004X3}$$

Information:
X1 = ROA (Return on Assets)
X2 = Leverage (Debt Ratio)
X3 = Liquidity (Current Ratio)

**5. Research Hypothesis**

The profitability ratio is a ratio that assesses the efficiency of management. It does this by examining the return on investment for all business activities as well as the management of capital and debt. Sales profit creation and investment income provide an indication of managerial effectiveness (Kasmir, 2019). Based on research conducted by Agustini and Wirawati (2019) stated that A high profitability ratio might demonstrate the company's capacity to effectively and efficiently use and manage its resources to produce profits and lower costs. A company's performance may be less successful in managing its assets to generate profits if its profitability ratio is low, which could lead to losses that result in negative cash flow and the company's financial crisis. Research by Kurniasanti &; Musdholifah (2018), Masita &

Purwohandoko (2020) and Agustini &; Wirawati (2019) shows that financial distress is negatively impacted by profitability (return on assets) and efficiency (asset turnover). Based on the above statement, the following hypothesis is formulated:

***H1. Profitability has a significant negative effect on financial distress***

According to Rad et al. (2013Since insider ownership is known to have a favorable impact on the cost of capital both during and after the financial crisis, it can be seen that the current ownership structure helps protect from the effects of the global financial crisis. The expectation of managers and shareholders is to determine the best ownership structure to protect the company in both normal circumstances and crisis situations. In addition, increasing insider ownership (managerial) will minimize the occurrence of financial distress, because it can unite the interests of managers and shareholders so that the possibility of financial difficulties can be reduced (Manurung &; Wibisono, 2014). According to Purnamasari in Prastiwi & Dewi (2019), managerial ownership is an important ownership structure. Defined as the number of shareholders on the part of directors and commissioners who participate in decision-making. The greater the proportion of managerial ownership can make management deliver better performance. The interests of shareholders and management can be aligned through managerial ownership, because management will also bear the risk and enjoy the benefits of the decisions taken (Tarigan, 2013). According to Emrinaldi in Hastuti (2014) stated that if there is a higher ownership relationship from the management, it can minimize the occurrence of financial distress in the company. Based on the above statement, the following hypothesis is formulated:

***H2. Managerial ownership has a significant negative effect on financial distress***

Muthmainnah (2016) states that the company's status is impacted by internal finance sources. According to the pecking order theory, which is backed by the fact that businesses that rely on retained earnings as a source of funding indicate a healthy state of affairs because of their high profitability, such businesses are in strong financial shape. High profitability indicates that a company can meet its economic objectives, which include maximizing profits. A company's ability to finance its operational activities might be aided by high profits. Profits can also assist the business in meeting its obligations, reducing the danger of default. As a result, businesses with strong profitability can reduce the risk of financial difficulties (Pandey, 2009). Forsaith & McMahon (2002) conducted a study aimed at identifying various sources of funding that affect the growth conditions of their companies. This research shows that internal equity increases a company's growth rate which reflects good conditions. Good company growth and conditions are certainly beneficial for the company, so it can result in a low possibility of financial distress. These results are in line with research conducted by Cosh & Hughes (1994) which describes the use of internal equity that is profitable for companies. Based on the above statement, the following hypothesis is formulated:

***H3. Capital structure is able to moderate the effect of profitability on financial distress***

Policies related to capital structure and asset structure play an important role in determining the condition of a company both short-term and long-term (Rajan &; Zingales, 1995), because the capital structure and asset structure are related to financing and wealth (assets) owned by the company. If the company can manage and handle well its sources of financing and assets, the company can be in a good condition or even more developed than before, otherwise if the company cannot do well, financial distress can be experienced by the company. Memba & Nyanumba (2013) stated that capital structure is one of the main causes of financial difficulties in companies. Therefore, it is necessary to apply an optimal capital structure so as to minimize the occurrence of potential financial distress. For this reason, this study uses moderation of ownership structure because companies need a good management control to maintain and to achieve their business goals. Examples of forms of management control that can be carried out are related to the capital structure policy and asset structure of a company and for that the managerial level must be able to control so that financial distress does not occur. Based on the above statement, the following hypothesis is formulated:

***H4. Capital structure is able to moderate the effect of managerial ownership on financial distress***

## C. METHOD

In this study, manufacturing firms that trade on the Indonesia Stock Exchange (IDX) and work in a variety of industrial sectors were the main subject. The observation period used in this study is for three years, namely 2019–2021, as it is believed that this timeframe will be able to provide an overview of data that satisfies the requirements of this study. The sample for this study consisted of companies in the tourism industry that were listed on the Indonesia Stock Exchange (IDX) between 2019 and 2021. A variety of sources are used to gather information, including the company's financial statements and performance studies that are accessible on the IDX website and the official websites of the pertinent companies.

The sample selection in this study uses the purposive sampling strategy, which is sampling based on certain considerations where the conditions made are criteria that the sample must meet, in order to achieve a representative sample that is consistent with the goals of the research (Sugiyono, 2017). The sample criteria used in this study are as follows:

1. During the research year periods, companies in the tourism sector listed on the Indonesia Stock Exchange (IDX)
2. Companies in the tourism sector that release annual financial statements over multiple research year periods

This study uses data analysis using Moderated Regression Analysis (MRA) with the IBM SPSS Statistics 24 application. The test begins with the classic assumption test to determine the regression model with several assumptions used. Then, to determine the effect of the moderating variable with multiple regression using MRA.

Then test the hypothesis using the F test, t test and also the coefficient of determination.

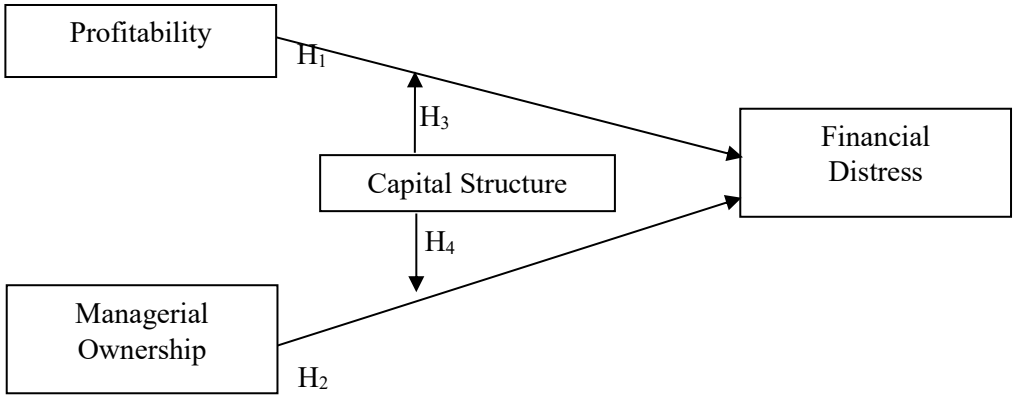


**Figure 1. Research Model**

Source: Processed by researcher, 2023.

## D. RESULTS AND DISCUSSIONS

Classical Assumption Test The data normality test shows that it is not normally distributed, so outliers must be performed by removing some of the extreme data. Then the number of data becomes 78 because of the outlier process which shows the data is normally distributed. The multicollinearity test also meets the requirements for tolerance and VIF values. The regression model also shows no heteroscedasticity and no autocorrelation. The following is a summary of the regression test table:

**Table 1. Moderation Test Results Stages 1 and 2**

| Regression Process Stages | Note | Coefficients Std. Error | t | Sig. | Note |
|---|---|---|---|---|---|
| Stage 1 | (Constant) | 0.174 | 14.095 | 0.000 | |
| | PROF | 0.097 | 4.130 | 0.000 | H1 accepted |
| | MAN | 0.084 | 5.244 | 0.000 | H2 accepted |
| | CS | 0.225 | 9.875 | 0.006 | |
| R Square | 0.235 | | | | |
| Adjusted R Square | 0.203 | | | | |
| Stage 2 | (Constant) | 0.186 | 15.546 | 0.000 | |
| | PROF | 0.101 | 3.932 | 0.000 | |
| | MAN | 0.032 | -1.187 | 0.239 | |
| | CS | 0.044 | -1.736 | 0.134 | |
| | PROF*CS | 0.334 | 2.188 | 0.010 | H3 accepted |
| | MAN*CS | 0.264 | 1.990 | 0.020 | H4 accepted |
| R Square | 0.305 | | | | |
| Adjusted R Square | 0.223 | | | | |

Source: Processed by SPSS, 2023.

Based on the results of the stage 1 test, it was found that the Adjusted R Square value was 0.203 or 20.3%, meaning that the ability to explain the independent variables in the form of profitability, managerial ownership and capital structure together on the financial distress variable was 20.3% while the remaining amount was explained

by variables other than the research model . Whereas in the stage 2 test it was found that the Adjusted R Square value was 0.223 or 22.3% meaning that the ability to explain the independent variables in the form of profitability, managerial ownership and capital structure together on the financial distress variable was 22.3% while the remaining amount was explained by variables other than the research model . Based on the calculation results for the moderation test with the following equation:

$$Y = a + b1X1 + b2X2 + b3Z1 + b4X1Z1 + b5X2Z1 + e$$

Information:

Y = Dependent Variable (financial distress)
X1 = Independent Variable (profitability)
X2 = Independent Variable (managerial ownership)
Z1 = Independent Variable as moderating variable (capital structure)
a = Constanta
b = Regression Coefficients
e = error

From this table an equation can be formed, namely:

FD = 0.174 + 0.097PROF + 0.084MAN + 0.225CS ……(1)

FD = 0.186 + 0.101PROF + 0.032MAN + 0.032MAN + 0.044CS + 0.334PROF*CS + 0.264MAN*CS……...(2)

As evidenced by the sig value in the moderation test table that the capital structure variable has a sig value < 0.05, namely 0.010 (H3) and 0.020 (H4). This shows that the capital structure moderates the relationship between profitability and managerial ownership of financial distress. So that the relationship between the dependent variable and moderation is achieved. If the variable capital structure (Z) interacts with the financial distress variable and also functions as a predictor, it is called a Quasi Moderator (pseudo moderator). It can be concluded that the existence of capital structure as a moderating variable is a quasi moderator. From the SPSS calculations as shown in the table, it can be concluded that the variable capital structure moderation is able to strengthen the relationship of profitability and managerial ownership to Financial Distress. It can be seen from the t value and the significance of the two independent variables that the significance value is below than 0.05.

**The Effect of Profitability on Financial Distress**

Based on the test, it was found that the first hypothesis was accepted, as indicated by the significance value of the t test of 0.000, meaning that profitability has an effect on financial distress. This research is in accordance with what was conducted by Agustini and Wirawati (2019), Kurniasanti & Musdholifah (2018), Masita & Purwohandoko (2020) and Agustini & Wirawati (2019) stating that a firm's capacity to utilise and manage its resources profitably while minimizing expenditures spent by the company can be indicated by a high profitability ratio. Other industries would be affected by the impact on the tourism sector. Numerous studies have shown that the pandemic's consequences on Indonesian tourism, whether direct or indirect,

contributed to the country's high unemployment rates. This has an impact on the low value of a company's profitability ratio which can enable the company's performance to be less effective in managing its assets to generate profits so that it can cause losses resulting in negative cash flow and the company will experience financial distress.

**The Effect of Managerial Ownership on Financial Distress**

Based on the test, the results show that the second hypothesis is accepted, which is indicated by the significance value of the t test of 0.000, meaning that financial distress is impacted by management ownership. According to research, insider ownership has a favorable impact on the cost of capital both during and after the financial crisis, so it can be seen that the current ownership structure helps shield against the effects of the global financial crisis. Managers and shareholders hope to identify the best ownership structure to protect the company in both normal circumstances and crisis situations. In addition, increasing insider (managerial) ownership will minimize the occurrence of financial distress, because it can unite the interests of managers and shareholders so that the possibility of financial difficulties can be reduced. The results of this study are consistent with the research by Emrinaldi in Hastuti (2014) and also Purnamasari in Prastiwi & Dewi (2019) that managerial ownership affects financial distress. The COVID-19 outbreak in Indonesia also had an impact on the stock market, causing the Indonesia Stock Exchange to adjust its trading hours. This was a bad indicator that made investors more eager to sell their shares, including share ownership by the company's managerial level. The conditions of the COVID-19 pandemic also affected the dynamics of the stock market which caused stocks around the world to experience a decline, and increased efficiency in the stock market. Ownership of shares with a nominal value that is not as large as other shares affects the financial distress of companies in the tourism sector that go public in Indonesia.

**The Effect of Profitability on Financial Distress with Moderated Capital Structure**

Based on the test, it was found that the third hypothesis was accepted, as indicated by the significance value of the t test of 0.010, meaning that capital structure moderates the relationship between managerial ownership and financial distress. The Indonesian Hotel and Restaurant Association (PHRI) reported that the country's tourist sector will have lost a total of IDR 85.7 trillion up until April 2020. Numerous airlines and travel operators also suffered losses, and thousands of hotels and restaurants were forced to close. According to data from The World Tourism Organization (UNWTO), the number of tourists visiting countries worldwide plummeted by 44% during the epidemic, which will certainly reduce the Company's profitability in the tourism sector. The decline in profitability certainly affects the level of debt repayment for a number of companies that have obligations. This capital structure can encourage and strengthen profitability which tends to continue to decline which causes financial distress in a number of tourism sector companies in Indonesia.

**The Effect of Managerial Ownership on Financial Distress with Moderated Capital Structure**

Based on the test, it was found that the fourth hypothesis was accepted, as indicated by the significance value of the t test of 0.022, meaning that capital structure moderates the relationship between managerial ownership and financial distress. Managerial share ownership can moderate the relationship between profitability and financial distress. This is because the capital structure strengthens stock decisions owned by the managerial level in influencing financial distress. The capital structure during the Covid19 pandemic required managers to carry out a defensive strategy or survive with the decline in the tourism sector due to Indonesian government policies. The capital structure that is owned must be able to be managed by managers in overcoming the financial distress of a company by carrying out efficiency and cutting daily operational costs. There are even several tourism sector companies in Indonesia that have carried out large-scale layoffs of a number of their employees.

## E. CONCLUSION

This study aims to see the effect of management share ownership with financial distress conditions moderated by capital structure in tourism sector companies going public. The results of this study reject the research hypothesis and it can be concluded that capital structure can moderate the effect of profitability and managerial ownership on financial distress. As the end of this research, manufacturing sector companies are expected to increase managerial ownership because the go public tourism sector companies have a low level of profitability due to the Covid-19 pandemic.

In further research it is suggested to add variables such as financial ratios and so on. Additions to the sample can also be made by increasing the length of the period or the industrial sector studied. In addition, it is also possible to add new moderating variables related to the effect of managerial ownership on financial distress such as the variable disclosure of good corporate governance or other variables that can moderate research.

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