

Analysis of Ownership Structure and Intellectual Capital on Financial Distress: Empirical Evidence From Indonesia Service Company

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ABSTRACT

The aim of this paper is to determine the impact of corporate governance and intellectual capital on financial distress. This research uses Good Corporate Governance (GCG) with the dependent variable financial distress (Modified Altman Z-Score) and the independent variables ownership structure (institutional ownership, managerial ownership, foreign ownership) and modified value-added coefficient (MVAIC). The sample used are service companies listed on the Indonesia Stock Exchange during 2016- 2020. There is a total of 105 observation from 21 sample companies throughout five years. The analysis used is a multiple linear regression model with a panel data approach. The results of the study show that institutional ownership, managerial ownership and foreign ownership has negatively affect financial distress, while MVAIC does not affect financial distress.

Keywords: *Financial distress, Altman Z-Score, Altman II, Intellectual Capital, MVAIC, Ownership Structure*

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I. Introduction

A corporation in financial distress is one that is experiencing financial difficulties. According to Platt and Platt (2002), financial distress is defined as the stage of decline in financial conditions that occurred before bankruptcy or liquidation. In Indonesia, companies that are unable to cope with financial distress can be delisted from the Indonesia Stock Exchange (IDX) (Pranowo, 2010). According to data published by IDX, 12 firms were delisted between 2018 and 2020. These companies were delisted because they cannot show adequate recovery, both financially and legally to the sustainability of the company as a public company or listed company (Rachmawati, 2011). If a company's performance displays negative operating profit, negative net income, negative book value of equity, or entities that have merged, it might be classified as being in financial difficulty (Brahmana, 2007). Another phenomenon of financial distress is the number of companies that tend to experience liquidity difficulties, which is indicated by the decreasing ability of companies to fulfill their obligations to creditors (Hanifah, 2013).

Financial distress occurred in 1997 in Asia, including Indonesia. When this disaster happened, the main culprit was the failure of corporate governance. This calamity was mostly caused by poor company governance. One of the variables that impacts how corporate governance is implemented is the ownership structure (Fadhilah, 2013). The ownership structure can provide an overview of the company's future state (Achyani et al., 2014). When the Asian economic crisis reached Indonesia in mid-1997 to 1998, interest in corporate governance became a source of worry. The economic crisis not only damaged Indonesia's financial condition but also weakened the economy as a whole (Ramadhani and Lukviarman, 2009). The 1998 economic crisis was the worst crisis that Indonesia had ever experienced, resulting in inflation in the Indonesian economy (Helena and Saifi, 2018).

The financial crisis in 2008 and high-profile financial scandals in Enron, World COM, Lehman Brothers, AIG and others have again drawn academic researchers, policy makers, regulatory institutions, and investors to examine the level of corporate governance practices and its impact on firm performance and financial distress. The principles of disclosure and openness, relationships with shareholders and stakeholders, board of director characteristics, rules and compliance, and ownership and control structure may all be used to assess the quality of corporate governance. According to Black et al. (2006) and Hodgson et al. (2011), good corporate governance practices strengthen firm performance. At the same time, these practices protect firms against the risk of financial distress (Parker et al., 2002; Wang and Deng, 2006; Abdullah, 2006).

In Forum for Corporate Governance in Indonesia (FCGI), “Corporate Governance is a set of rules governing the duties and responsibilities of owners, firm supervisors (management), creditors, the authorities, and staff, as well as other internal and external parties”. Corporate Governance (CG) is intended to regulate these relationships and prevent significant errors in corporate strategy and to ensure that errors that occur can be corrected immediately (Triwahyuningtias, 2012). Corporate governance refers to the ideals that guide a corporate organization in its day-to-day operations and how to serve the interests of stakeholders. The goal of governance is for business organizations to operate responsibly, honestly, and transparently in the powerful interest of all stakeholders. Inyang (2017) stated that CG have a specific purpose to promote corporate transparency and accountability in the management of corporate body.

Agency Theory expresses the relationship between the company’s owner (principal) and management (agent). According to Jensen and Meckling (1976), an agency relationship is a contract between the company’s managers (agents) and the company’s owner (principal). As a consequence, an agency relationship was described as an agreement in which a party (the principal) engages second party (the agent) to deliver a service on their account. As part of this, the principal will delegate some decision-making responsibility to the agents. Corporate executives (agents) are engaged to operate on behalf of shareholders (principals), and agency issues arise when executives are unable to act in the best interests of the shareholders. The agent’s and principal’s tasks are regulated in the employment contract based on mutual agreement. One of the most significant components of Agency Theory is the idea that principals and agents have distinct preferences or goals. One of the causes of this problem is the existence of asymmetric information. According to Emirzon (2007), asymmetric information is information that is not balanced owing to unequal information distribution between the principal and the agent, which can cause two difficulties due to the principal’s difficulty monitoring and managing the agent’s actions.

Research of the effect of corporate governance on financial distress has been conducted in many countries such as India (Narayanaswamy et al. (2012)), United States (Fatima et al. (2012)), and China (Hong-xia Li, Zong-jun Wang and Xiao-lan Deng, 2007; Dan Hu & Haiyan

Zheng, 2011). Mostly, they proved that the corporate ownership of banks affects or can reduce their financial condition. Furthermore, Wang and Deng (2006), Swain (2009), Al-Tamimi (2012), Shahwan (2015), and Manzaneque et al. (2016) noted that good corporate governance improves firm’s financial performance and reduce the probability of financial distress.

Shahwan (2020) found that CG efficiency and a firm’s financial distress have insignificant relationship which in line with Manzaneque et al. (2016) and Udin et al. (2017). However, the finding is opposite with the studies from Nasir and Ali (2018). This study aims to examine the impact of corporate governance and intellectual capital on financial distress in Indonesia’s service companies in order to fill the research gap and add to the literature references. The reason for this is that management ownership mechanisms, particularly in Indonesia, are still limited. Managerial ownership can help resolve agency conflicts while also lowering company costs. The higher the degree of managerial ownership in a company, the more active the management will be in serving the interests of its shareholders. Service industries are the biggest industry in Indonesia seen from the number of companies engaged in the service sector. Majority of company in Indonesia Stock Exchange (IDX) are engage in service industry. Because of this large number the service industry is the perfect sample to study on intellect capital as additional component.

The Intellectual Capital (IC) literature demonstrates the importance of ICs to a company’s financial and market performance, and has received increasing attention from both scholars and practitioners over the last two decades. The worldwide recognition and popularity of ICs validates ICs as an academic discipline (Serenko and Bontis, 2013). ICs are recognized as important value drivers by businesses operating in the new economy and are one of the most powerful factors for them to become more competitive and achieve their success (Wang, 2008). The needs and benefits of ICs for companies in the knowledge-intensive sector, including the high-tech and service industries, are important. Therefore, they tend to invest heavily in ICs. This fact makes the high-tech and services sector an attractive industry suitable for IC research (Bontis, 2001; Hermans and Kauranen, 2005).

Intellectual capital (IC) is one of the resources owned by the company. Intellectual capital (IC) is generally known as the gap between the market value of the company and the book value of the company’s assets or its financial capital. Intellectual capital (IC) is frequently the most important factor in determining a company’s profitability. The Value-Added Intellectual Capital (VAIC) measuring approach, which looks at the firm’s intellectual capabilities and value, may help a firm determine its market valuation. Brooking (1996) stated that the IC is the term given to a combination of intangible assets of markets, intellectual property, employees, and infrastructure that enables enterprises to be able to function. This definition clearly implied that IC is not just about human resources/human capital. Human capital is only one component of IC.

In response to the need for IC evaluation, several methods have been developed by various researchers to measure ICs and their performance. For example, Skandia IC Report Method (Edvinsson and Malone, 1997), Value-added Intellectual Coefficient (VAIC™) Model (Pulic, 1998, 2000), and Intangible Asset Monitoring

Approach (Sveiby, 1997). Among these methods, Pulic's VAIC™ is widely adopted by scholars and practitioners as a way to measure ICs and represent the market value of a company. There are several criticisms of VAIC™, but regardless of the criticisms, it provides a standardized and integrated means that enables comparison and analysis between organizations or countries (Chen et al., 2014; Phusavat et al., 2011; Young et al., 2009; Zeghal and Maaloul, 2010). In Indonesia, research on IC in banking sector for example has been done by Ulum (2009), Widarjo (2011), and Santoso (2011). Two latter reviewed studies examining the effect of IC on company performance, while the first only measures the performance of IC based on the original formula of VAIC™. Relatively, it is also done by Basuki and Kusumawardhani (2012) and Sugiarti (2012). In a somewhat

different perspective, Razafindrambinina and Kariodimedjo (2011) analyzed the relationship of IC and corporate social responsibility disclosure. Later, Ulum (2013) proposed the performance measurement model for Islamic banking in Indonesia, which is constructed based on the VAIC™ model and labeled as iB-VAIC. However, there are still no definite type of impact to explain the relationship between intellectual capital and financial distress since the effect of intellectual capital to financial distress rely on the industry category. This study will use Modified Value-Added Intellectual Coefficient (MVAIC) method proposed by Ulum et.al (2014). Although Pulic proposed the use of VAICTM as the total intellectual capital of a company, the MVAIC model and the four individual coefficients, namely physical capital, human capital, structural capital, and relational capital, will be used in this study as a comprehensive measure.

Research on bankruptcy, failure and financial distress uses indicators of the company's financial performance as predictions in predicting the company's condition in the future (Iramani, 2007). This indicator is obtained from the analysis of financial ratios contained in the financial statement information published by the company. Financial statements issued by companies are one source of information about the company's financial position, performance, and changes in financial position, which is very useful to support the right decision making (Almilia, 2006). This is reinforced by the results of Altman's research (1968) showing that financial ratios can be useful to predict failure or bankruptcy of a company with a bankruptcy prediction rate of 94 percent and 95 percent correct in its research. The Altman model is known as the Z-Score, which is a score determined from the standard count of financial ratios that indicates the probability of bankruptcy of the company.

To assess the likelihood of corporate financial distress, the modified Altman Z Score model proposed by Altman et al. (1995) – as one of the best-known distress prediction models

– was employed in the present study. In Indonesia, a number of studies have been carried out using Altman III. Ramadhani (2020) used Altman III in telecommunication subsector company that listed on IDX and found that Altman III have 100% accuracy in Indonesia. On the other side Alfiyanti (2020) using Food & Beverage subsector highest accuracy are 86.16%. In this paper, the proxy to assess the firm financial distress condition are Altman II because there are several companies that have just go public or listed in Indonesia Stock Exchange during the research period.

This study aims to examine the impact of corporate governance and intellectual capital on financial distress in Indonesia's service companies in order to fill a research gap and add to the literature references. To make the analysis results explain the phenomenon more optimally and have higher statistical power, this research uses Return on Asset (ROA), Firm Size, and Leverage as control variables.

II. Methods

This paper is an explanatory study which designed to assess the correlation between variables. Purposive sampling was employed in the sample development process. The target audience for this survey is the financially distressed service companies listed during the Indonesia Stock Exchange (IDX) period from 2016 to 2020. The total number of sample observations is 105, from 21 different companies. Secondary data sources include www.IDX.co.id and Yahoo! Finance. By using Altman II it is found that the sample company in this study are a distressed firms and have a positive correlation with the company real financial condition.

This study uses traditional acceptance tests for data analysis approaches that are classified as normality tests, multicollinearity tests, autocorrelation tests, and heterogeneity tests. We also use multiple regression analysis to develop a direct correlation between each component of ownership structure and intellectual capital on economic difficulties, and use multiple regression analysis to analyze the correlation between ownership structure and intellectual capital on financial distress controlled by size, leverage and return on investment. These coefficients of determination are also used to calculate the proportion of dependent variables that reflect the independent variables. This study will utilize both partial and simultaneous test to evaluate hypotheses on the influence of intellectual capital and ownership structure on financial distress.

The model used in this research:

$$Z = \alpha + \beta_1 IO + \beta_2 MO + \beta_3 FO + \beta_4 MVAIC + \beta_5 SIZE + \beta_6 Lev + \beta_7 ROA + \alpha_i + \alpha_t + \varepsilon_{i,t}$$

Table 1 Definition of variables and data sources

Variables	Symbol	Formula	Source
Z-Score	Z	explained below	Altman and Hotchkiss (2006)
Institutional Ownership	IO	$\frac{\text{number of institutional shares}}{\text{number of shares}} \times 100\%$	Sadjiarto <i>et al</i> (2019)
Managerial Ownership	MO	$\frac{\text{number of managerial shares}}{\text{number of shares}} \times 100\%$	Sadjiarto <i>et al</i> (2019)
Foreign Ownership	FO	$\frac{\text{number of foreign shares}}{\text{number of shares}} \times 100\%$	Sadjiarto <i>et al</i> (2019)
Intellectual Capital	MVAIC	explained below	Nimtrakoon <i>et al</i> (2015)
Firm Size	SIZE	Ln (Total Assets)	Shahwan and Habib (2020)
Leverage	Lev	$\frac{\text{total debt}}{\text{total asset}}$	Shahwan and Habib (2020)
Return on Asset	ROA	$\frac{\text{percentage of net profit after tax}}{\text{total asset}}$	Shahwan and Habib (2020)

Following Altman and Hotchkiss (2006), the Altman Z-Score can be used for assessing a firm's financial distress, in that increasing the value of Z reduces the risk of financial distress. The value of the Z-Score can be mathematically estimated as follows (Altman and Hotchkiss, 2006):

$$Z - score = 0.717X_1 + 0.847X_2 + 3.107X_3 + 0.420X_4 + 0.998X_5$$

Where X1 = net working capital/total assets, X2 = retained earnings/total assets, X3 = earnings before interests and taxes (EBIT)/total assets, X4 = market value of equity/book value of debt, and X5 = sales revenue/total assets.

A z-score value that shows a number above 2.9 is categorized as have a good financial condition meanwhile a company with z-score value below 1.2 is categorized as a distressed company.

Following Nimtrakoon (2015), to estimate the value of MVAIC mathematically:

$$VA = \text{OUT} - \text{IN}$$

$$CEE = VA/CE$$

$$HCE = VA/HC$$

$$SCE = SC/VA$$

$$RCE = RC/VA$$

$$MVAIC = HCE + SCE + RCE + CEE$$

According to Nimtrakoon (2015), VA is the value added of a particular firm; OUT is the total revenue; IN is the total expenses excluding employee expenditures (i.e. recruiting cost,

According to Nimtrakoon (2015), VA is the value added of a particular firm; OUT is the total revenue; IN is the total expenses excluding employee expenditures (i.e. recruiting cost, salary, payroll taxes, incentives, benefit, training and development, etc.) ; CEE is the capital employed efficiency; CE is the capital employed both physical and financial capital, measured by total assets minus intangible assets; HCE is the human capital efficiency; HC is the human capital, measured by total employee expenditures; SCE is the structural capital efficiency; SC is the structural capital, measured by VA minus HC; RC is the relational capital, measured by marketing expenses; RCE is the relational capital efficiency; ICE is the intellectual capital efficiency; and MVAIC is the modified value added intellectual coefficient.

III. Result

a. Statistic Descriptive

The descriptive statistics analysis presented in Table 2 provides information about sample characteristics such as mean, median, maximum, minimum, and standard deviation. Descriptive statistics are also explained in terms of kurtosis and skewness statistics. Table 2 presents summary statistics of Z-Score, Institutional Ownership, Managerial Ownership, Foreign Ownership, MVAIC, Size, Leverage, and Return on Asset of the sampled companies.

Table 2 Statistic Descriptive

Predictor	Mean	Maximum	Minimum	Std. Dev
Z	0.218667	2.62	-7.24	1.287327
IO	0.446857	0.9300	0	0.296477
MO	0.095810	0.7700	0	0.194698
FO	0.216286	0.9	0	0.270975
MVAIC	2.09181	53.83	-17.14	0.194698
SIZE	Rp 8 Trillion	Rp 151 Trillion	Rp 15 Billion	Rp 19 Trillion
Lev	0.673143	3.14	0.01	0.406818
ROA	0.89249	0.07	-0.66	0.123599

The Ownership Structure is represented by Institutional Ownership (IO), Managerial Ownership (MO), and Foreign Ownership (FO). Institutional ownership is represented by the company owner from the institution party who actively participates in its decision-making. In this case, institutional investors are domestic institution including financial institutions, banks, and so on. IO variable has a range of 0.9300- 0.0000 with an average score of 0.446857 and a standard deviation of 0.296477. It indicates that IO trend is still promising (>5%) and will fulfill shareholders' interests. The highest score goes to FORU, which own by institution 93%, and the lowest score goes to BIKA in whole study period, which other institution do not own their company shares. It is because BIKA share ownership mostly concentrated on the managerial.

Meanwhile, Managerial Ownership is represented by the company owner from the managerial party who actively participates in its decision-making. In this case, managers play an essential role because managers can plan, organize, direct, and make decisions. MO variable has same range as IO of 0.7700- 0.0000 with an average score of 0.095810 and a standard deviation of 0.194698. MO trend is still promising (>5%) and will monitor managers and fulfill shareholders' interests. The highest score goes to BIKA, which focused their ownership on the managerial by 77%. The MO has lower average compared to other ownership structure; this can happen because in the study sample more than half sample company have zero ownership.

Foreign Ownership is represented by the company owner from the foreign party. In this case, foreign investors are foreign institutions, groups, or individuals. Foreign ownership has better financial performance than the domestically owned companies. Some company have their company own by foreign institution or even the board of director are foreigner. FO variable on this study range of 0.0000-0.9. There is no company owned 100% by foreign institution or individual. The average foreign ownership is 0.216286, and the standard deviation are 0.270975. FO trend are still promising (>5%) and will increase the company financial performance to avoid the company from the probability of bankruptcy. The highest foreign ownership is ETWA in 2016 where 90.17% of their shares are owned by foreigner. Meanwhile in the study period AIMS, BKDP, and SDMU had the zero foreign share ownership during 2016-2020. It is because AIMS, BKDP, and SDMU ownership was concentrated on the Institution.

Intellectual capital is highly related to competitive advantage and is classified as a strategic intangible asset in Resource-based Theory from the perspective of business strategy. The average for intellectual capital is 2.095810, indicating that the companies considered in this study often have poor performance because the value is less than 2.5. It implies the sample firms did not likely utilize its human and facility-related resources from an intellectual value standpoint and develop it as competitive advantage for the company. The standard deviation of intellectual capital is 0.194698 and the average is 2.09181. Since the standard deviation is smaller than the mean, we can conclude that the intellectual capital data used in this study has acceptable volatility.

Descriptive statistics of the dependents variable, financial distress proxied by z-score, show that in a total of 105 observations, the z-score component shows the positive mean value of 0.218667, companies listed in this study are in the danger zone (<1.2) with z-score value of 0.218667. With this result, the industry average of the study can be reported as unhealthy.

Descriptive statistics result of a control variable which are Size, Leverage, and Return on Asset (ROA). In this study the size of the companies is ranged from medium size company (>1.000.000.000 in assets) to large size company (>10.000.000.000.000 in assets). Maximum company asset has from the observation is Rp 151 Trillion while the lowest asset is Rp 15 Billion. The average asset of the sector is Rp 8 Trillion and the standard deviation of the asset is Rp 19 Trillion. Total assets are a number of assets owned by the company to run its

business (Djarwanto, 2001), through the total assets of the company can be categorized as large or small based on the wealth owned. According to Aprianingsih (2016), the size of a company is reflected in the total assets owned, the greater the company's assets, the greater the size of the company, and vice versa. Assets owned by the company is to run its business. This study show it doesn't matter if they it's a big medium or even small-scale company, financial distress can still occur to the company. But the company size can help the company to survive under financial distress for a while. This is shown by ETWA, although they have negative value for 5 period study, ETWA can still maintain their company and make a comeback from their declining value in 2020. Meanwhile, Leverage has a score range of 0.01 – 3.14 with an average score of 0.673143 and a standard deviation of 0.406818. In this study period shown that majority of company still use their equity as the basis of their operation. Leverage is the use of assets and sources of funds by companies that have fixed costs (fixed expenses) in order to increase shareholder profits. Based on the result majority of the sample company are using their asset as means to increase the profits. This can happen because the company are under financial distress which will make the company harder to issue debt and it will lead the company to use their assets to survive from their condition.

In this study, financial performance is proxied by Return on Assets (ROA) because it can interpret the level of company profitability or can measure how much the company's ability to earn profits is based on all assets owned by the company (total assets). The greater the ROA, the more effective the company is in generating profits from the total assets owned by the company. ROA has a score range of -0.66 - 0.07 with an average score of 0.89249 and a standard deviation of 0.123599. The sample are company under financial distress which will show the turnover of the sample company is on the low side on the study period, this value will affect the company ability in getting profit for the period.

b. Multiple Linier Regression

Table 3 Impact of ownership structure and intellectual capital on firm financial distress

T test	Predictor	Coefficient	Sig
Model	IO	0.922702	0.0446**
	MO	1.518828	0.0161**
	FO	1.216976	0.0074***
	MVAIC	0.011897	0.2789
	SIZE	0.105725	0.0292**
	Lev	-2.2246695	0.0000***
	ROA	1.92309	0.0124**
	C	-1.915251	0.17865
F Stat			0.0000***
Adj R ²			0.618642

The *** denotes 1%, ** denotes 5%, * denotes 10% level of significance.

According to Jarque-Bera test results, it is discovered that the Asymp. Sig values derived by the model in the study are both more than $\alpha= 5\%$. The Asymp value of the model are Sig 0.3101 > 0.05. It is possible to conclude that the residuals are normally distributed because they meet the assumptions of the Jarque-Bera normality test. According to the results of the multicollinearity test, there is no multicollinearity because all predictors have a VIF value less than 10 (based on the multicollinearity normality test assumption). Based on Glejser test result there is no heteroscedasticity occurs since each variable is more than 0.05. The results of the Autocorrelation Assumption Test for the model is 2.1664 < 2.5586 < 2.5716 no autocorrelation occurs. Adjusted R2 value shows the value of 0.7268, which shows the independent variable effect of IO, MO, FO, MVAIC, SIZE, Lev, and ROA on Z of 72.68% simultaneously, where the other 27.32% is influenced by other indicators.

The F-test explains the relation between ownership structure and intellectual capitals on financial distress controlled by firm size, leverage and ROA. This model shows a significant simultaneous relation to financial distress, using IO, MO, FO, MVAIC, SIZE, Lev, and ROA as predictors. It is shown that the assumption of simultaneous relation is fulfilled.

The t-test above indicates that there is indeed a considerable independent effect of ownership structure to the firm value with firm size, leverage and return on asset as control variable. Ownership structure shows a positive significant effect on financial distress sig. IO Value of 0.0446, MO of 0.0161, FO of 0.0074 to z-score. Intellectual capital shows the insignificant sig. Value of MVAIC to z-score of 0.2789. It means that there are other variables other than IC that could affect financial distress. Control variable in this study show significant effect on financial distress. The firm size as one of the control variables shown significant relation since it has sig. value of 0.0292. Furthermore, leverage has shown a significant effect to z-score of 0.000. Lastly, ROA also shown a significant effect with sig. value of 0.0124. It means that the control variable is one of the other variables that could affect financial distress. Agency Theory explained that ownership structure is one of the

concepts of good corporate governance that can be used to avoid information asymmetry between management and shareholders. Based on this study, ownership structure positively affects the z-score value. Which mean that the percentage of share ownership by institutional, management, and foreign parties can reduce financial distress condition. This can happen because the shareholder has the expertise competence in supervising and controlling the company's management and has the possibility to make decision that benefit the company over themselves which will result in better financial condition. The results of the statistical test that supports a positive effect of ownership structure on financial distress is supported by this study's results.

The results of the statistical test that supports a positive effect of intellectual capital on financial distress is not supported by this study's results. Based on the results of testing the second hypothesis, it can be concluded that whether the intellectual capital owned by the company is high or low, it won't affect the company to the risk of possible financial distress. Low intellectual capital does not affect the company's performance in generating profits and creating value in a competitive market. In addition, high intellectual capital does not have impact on the company financial stability in the long term. The results of this study are consistent with Oktarina (2018). However, it is different from the research by Pour, Ghanbari, and Shidinavi (2014), Hasugian (2018), and Shahwan (2020) which shows that intellectual capital has significant negative effect on financial distress. This can happen because it is possible that the Intellectual Capital valuation method used in this study is not appropriate for companies engaged in the service industries.

IV. Discussion

Based on the t-test result, ownership structure does have a significant relation to financial distress, on the other side intellectual capital does not have a significant relation to financial distress. The significant value of ownership structure indicated ownership structure reduces agency conflicts because shareholders can assist oversee the organization, ensuring that company managers do not act in a way that is harmful to the shareholders. The monitoring process is more successfully controlled by the dominant ownership since the manager's performance is more closely monitored. The insignificant value of intellectual capital indicated that stakeholder does not see intellectual capital as a prioritized consideration of strategic assets on operating firm. For example, the increasing of intellectual capital followed by the increasing of production costs and debts of a company cannot show how it affect the financial distress of that company. Firm size, taking a role as a control variable, shows a significant relation to financial distress. The significant relation is likely to appear due to the big gap in the studied industry. The big gap could be interpreted as the value show a significant differentiation value representing an advantage. Leverage, shows a significant value that could be interpreted that the empowerment of debt on funding the assets in the service industry is seen as essential for financial condition. ROA, shows a significant relation with financial distress it seems the large value of return on assets indicates that the company in managing its assets will be better, so that the occurrence of financial distress will be lower. If the value of Return on Assets is low, the company in managing its assets is not effective so that the possibility of the company facing financial distress will be even greater. In the hope for further research, researchers can conduct research by using other control variables, haven't been used, like return on equity and return on investment. In addition, researchers can also use other sectors due to a statement that the contribution of the relationship between intellectual capital and financial distress depends on the sector that being studied.

V. Conclusion

The main purpose of this research is to examine the impact of ownership structure and intellectual capital on financial distress in Indonesia service company that listed on IDX period 2016-2020. This research employs a Fixed Effect Models as the multiple regression method. Based on the result revealed, each variable of the ownership structure is significant at five percent level and has a positive effect on z-score value, but Intellectual Capital shows no effect on the z-score. Thus, this result signifies that an increase in ownership structure holding is associated with a decrease in financial distress probability. Additionally, this research has conducted other two determinants to reduce the financial distress probability such as, firm size, and Return on Assets. All of these variables are significant at five percent and have a negative impact on the financial distress probability.

Based on the findings of this research, there are some implications that the company can adopt to avoid financial distress. Firstly, the firm can start to focused their ownership majority in one category, especially in managerial or management side. Secondly, due to the characteristics of management, when the management start to own a part of the company they will start to work more seriously because of the mindset it is their own company. The monitoring process is more successfully controlled by the dominant ownership since the manager's performance is more closely monitored.

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