

The Effect of Intellectual Capital, Good Corporate Governance, and Free Cash Flow on Financial Distress

Rizky Wijayanti¹, Fatchan Achyani²

¹*Faculty of Economic and Business, Universitas Muhammadiyah Surakarta, Indonesia*

²*Faculty of Economic and Business, Universitas Muhammadiyah Surakarta, Indonesia*

Abstract: The research objective to be achieved is to provide knowledge about the effect of intellectual capital, institutional ownership, managerial ownership, independent board of commissioners and free cash flow on financial distress and can be used as a reference for future researchers and stakeholders (investors, creditors and governments) in making relevant and reliable decisions. The method used is quantitative research with secondary data taken from the financial statements of issuers on the IDX with data collection technique using purposive sampling method. The data analysis used is multiple linear regression. Population in this study are manufacturing companies listed on the Indonesian Stock Exchange. The exchange was carried out for 3 years of observation, namely 2019-2021. The sample is determined by purposive sampling so that as many as 159 samples were obtained. The analysis technique used is the classical assumption tests which include the normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. The results of this study shows that the variables of intellectual capital, institutional ownership, independent board of commissioners, and free cash flow have no effect on financial distress; while managerial ownership affects financial distress

Keywords: Intellectual Capital, Institutional Ownership, Managerial Ownership, Independent Board of Commissioners, Free Cash Flow, and Financial Distress

1. Introduction

Financial reporting is closely related to accounting. Financial statements are the result of the activity of recording all financial transactions of the company. Financial statements compiled by a company can be used as a tool for management decision-making internally or for external parties. Financial statements can serve as the basis for measuring the health of a company through the financial ratio contained in the report. Financial ratio is one of the forms of accounting information that is important in evaluating the performance of a company, so it can reveal the financial health of the company and the performance achieved by the company in a certain period of time.

The health of a company will reflect the ability to manage its employees, distribute assets, use assets effectively, performance, payment obligations and potential financial distress. Financial distress that is left to last can lead to bankruptcy. Usually companies that have problems in the finances of some companies will try to solve the problem by making loans and mergers, or otherwise someone will close their business.

In 2019, the outbreak of a pandemic at the end of 2019 known as Corona Virus Disease (Covid-19) caused negative economic uncertainty felt worldwide, due to slow activity and even bankruptcy. Indonesia is one of the countries affected by Covid-19. According to the Ministry of Employment (Kemenaker), there are 88% of companies in Indonesia affected by Covid-19, the cause is because of the decline in demand so that the production process and profit of the company continues to deteriorate. (Yuniartha, 2021). Therefore, the researchers chose manufacturing companies because many of the few manufacturing firms experienced negative operating profits during the Covid-19 pandemic, which means many manufacturing enterprises are experiencing financial distress conditions.

In Indonesia itself, registered since 2009-2018, there are 40 companies that have to delist from the Indonesian Stock Exchange and on average have a tendency to be exposed to financial distress and potentially undergo bankruptcy. (Damayanti dan Kusumaningtiyas, 2020). The case of bankruptcy in Indonesia is the case of PT Citra Maharlika Nusantara Corpora Tbk., a taxi owner and a co-operative "Cipaganti" who had to be bankrupted and liquidated in 2017 because it was unable to pay the obligations of Rp245 billion. (Kontan.co.id, 2017). According to the signalling theory, the management of a company will voluntarily provide information in the form of a financial report and an annual report to reduce information asymmetry and help shareholders to make good business decisions. (Sutra dan Mais, 2019).

Financial distress is a condition in which a company is experiencing financial difficulties and conditions that occur before the company actually goes bankrupt. (Lubis 2019). Financial distress can be experienced by any company, both small and large companies because the causes of financial distress may come from inside and outside the company. Financial distress can occur due to the inability of the company to manage and pay attention to the consistency of financial capabilities so as to result in a company experiencing operational losses

up to net losses in the running year Santosa, et al., (2018). This condition is expected to be an evaluation material to regulate operational activities and increase productivity. In this study, the researchers focused on three factors that influence financial distress: intellectual capital, good corporate governance, and free cash flow.

Intellectual capital itself plays an important role in creating value for a company, which can subsequently improve the performance of the company and provide a competitive advantage for the company. Intellectual capital is an attribute of an organization, a group of knowledge resources that contribute significantly to competitiveness by providing value to its stakeholders. In order to cope with competition and technology trade while avoiding financial distress, the company must manage and use all its assets effectively and efficiently. Not just material assets, but intangible assets such as intellectual capital. Companies capable of managing knowledge and intellectual resources are believed to be able to create added value. Several studies have been conducted on the impact of intellectual capital on financial distress. Purba and Muslih (2019), Nazaruddin and Daulay (2019) and Hatane et al., (2000). (2018) argued that intellectual capital has a significant negative impact on financial distress. In the study, et al. (2021). Intellectual capital has a positive impact on financial distress.

Financial distress and bankruptcy are closely related to management and management skills in managing a company. Good corporate governance is a rule that regulates and controls the company's affairs and relations between internal and external parties. If good corporate governance is implemented by the management, the external part of the company will have more confidence in the governance, with the confidence that the investor will not hesitate to implant its modes into the company. When good corporate governance is excellent, the likelihood of corporate strategy errors is smaller. The performance of the company will increase, as evidenced by higher profits, so the likelihood of financial distress will decrease. In the study Widhiastuti, el al., (2019), the results showed good corporate governance negative impact both directly and indirectly on financial distress. In Munawar et al., 2018, the results of this study showed that good corporate governance simultaneously has a positive impact on financial distress.

In addition, financial distress can also be predicted through free cash flow. According to Sayari & Mugan (2017) cash flows have relevant information in identifying a company's financial health or downturn. If the company has a good amount of cash flow, then the creditor will gain confidence that the company is able to perform its obligations and the company will be avoided from financial distress. (Tutliha & Rahayu, 2019). This increasingly illustrates the importance of the role of cash flows in determining the smoothness of the company's activities. Bernardin et al., (2019) in his research stated that a good free cash flow can minimize the potential for future financial difficulties. in research (Dirman, el al., 2020). Free cash flow has a negative impact on financial distress. by Maryana el al. (2021). Free cash flow has a positive effect on financial distress.

2. Literature

Positive Accounting Theory

Positive Accounting Theory (PAT) is an established accounting theory that aims to explain and predict accounting practices. Explaining accounting practice means justifying observed accounting practices and predicting means the theory predicts unobserved phenomena. (Watts da Zimmerman, 1988 dalam Astika, 2007). Positive accounting theory strives to understand and predict policy decisions made by companies. Policy is determined by the organization structure of the company, which is influenced by the company's environment.

Theory of agency

The agency theory is a theory that explains the separation of interests between the owner of a company and the management of the company. (Bodroastuti, 2009). The theory of agency uses three assumptions of human nature (Elsenhardt, 1989), namely (1) humans are generally selfish, (2) humans have limited thoughts about the future, and (3) humans always avoid risks. (risk averse). These three qualities enable humans to act opportunistically with selfishness. Therefore, in order to monitor the behavior of managers, shareholders must pay for the monitoring called agency fees. (Yudiana dan Yadnyana, 2016). Mistakes in decision-making by managers can result in huge losses for the company resulting in financial distress.

This theory arose after the phenomenon of the separation of ownership of a company from management everywhere, especially in modern large corporations, so that classical business theory is no longer used as the basis for such company analysis. There are many ways to understand corporate governance, but the closest one is to understand the theory of agency first. The theory of agency is one of the pillars of financial theory. The agency theory responds by providing insight into what can happen, both between agents (managers) and principals (shareholders) and with lenders.

Financial Distress

A stage in which the financial condition of the company deteriorates, and if not immediately corrected, it will experience financial distress and end in bankruptcy. Financial distress is an early symptomatic condition in

which the company is unable to meet its obligations to the creditors caused by the company's failure to earn profits so that the company does not have enough capital to carry out business operations and can not its economic goals. Financial distress is the initial stage before a company goes bankrupt. (Akmalia, 2020). If the company cannot survive under these conditions, it may have to close the factory and dismiss employees. Companies that generate a negative profit per share can be credited that the company is in financial distress. Negative earnings per share can represent poor performance and make it difficult for companies to obtain funds from both investors and lenders. (Indriani & Mildawati, 2019).

Intellectual Capital

Intellectual capital is defined as an asset derived from humans because it is a knowledge-based capital owned by a company. IFAC (International Federation of Accountants) stated that at present the value of companies is more determined by the management of intellectual capital owned by Mustika, et al., (2018). Intellectual capital can be considered in predicting the financial distress of a company, as it can help the allocation of the financial resources of the company and invest it properly and correctly Cenciarelli, et al., (2017). The higher intellectual capital is considered the better the company holds the knowledge capital, the less financial distress occurs[9]. This is because intellectual capital is considered to play an important role in the creation of company value that affects the success of the company. The results of this study are consistent with studies conducted by Purba and Muslih (2019), Nazaruddin and Daulay (2019) and Hatane et al., (2000). (2018) suggest that intellectual capital has a negative impact on financial distress.

H1: Intellectual capital has no influence on financial distress

Institutional ownership

Institutional ownership is the ownership of corporate shares by institutions such as insurance companies, banks, investment firms, funds, and other institutions. Institutional ownership can reduce the agency problems that occur as institutional shareholders can reduce agency issues that occur because institutional Shareholders will oversee the company so that the actions of self-sufficient company managers. (Ulandari, 2017). If the entire component of intellectual capital is well managed by the company, it can create a competitive advantage that can create added value for the company. Therefore, the better the company holds knowledge capital, the less financial distress occurs. This is because the company can defend and continue to compete because it has added value.

H1: Intellectual capital influences financial distress

Management ownership

Management ownership is an effective mechanism of good corporate governance as one of the monitoring that can bring better quality of financial reporting, because the owner usually acts as a supervisor of the management of the company involved in the activities of reporting to the process of making financial reports. So management ownership can improve the effectiveness of management performance while reducing the problems that lead to financial distress. With the presence of managerial ownership a company will be able to solve the problems of the agency manager. With this, the company hopes that the management ownership can solve the problems that occur in the agency. If a company has a good performance, then the responsibility of managers in managing the company will be increasing. Therefore, managerial ownership in an increasingly large company will be avoided from financial distress.

H3: Managerial ownership influences financial pressures

The Independent Board of Commissioners

The Independent Board of Commissioners is the board that can act as the supervisor of managers in implementing the corporate governance system. Companies that have an increasing proportion of independent commissioners can maximize the role of the independent commissioner in acting independently in overseeing the board of directors in the interests of the company so as to minimize financial distress. The high proportion of independent commissioners do not avoid the company from financial distress. As there is supervision in the management decision-making by the Board of Commissioners, the supervision is also carried out by an independent external entity to ensure that the decisions taken are accurate and away from possible financial distress.

H4: The Board of Independent Commissioners influence on financial distress

Free cash flow

Free cash flow according to Ross et al in Nisa & Triyanto (2018) is a company cash that can be distributed to creditors or shareholders that is well used for working capital or investments in fixed assets.

Operational cash flow information is an indicator for creditors to know the financial condition of the company. If the company has a good amount of cash flow, then the lender will be confident that the company is able to fulfill its obligations and the company will be avoided from financial distress[13]. Free cash flow of the company can be seen whether the value of the FCF has a positive or negative impact and all that is an impact on financial distress.

H5: Free cash flow influences financial tensions

3. Methodology

The population in this study consists of all manufacturing companies listed on the Indonesia Stock Exchange in the period 2019-2021. The sampling method used in this study is the non-probability sampling method with saturated sample technique. The sample of this research is the entire manufacturing company listed on the Indonesia Stock Exchange and the financial report for the period 2019-2021. The sample-taking technique in this study is by using purposive sampling which is a technique of taking samples from a population randomly by considering certain criteria. Sample determination is based on a number of criteria:

1. Manufacturing companies listed on the Indonesia Stock Exchange for the period 2019-2021.
2. An entity that publishes financial statements and annual reports that have been audited for the period 2019-2021, because the audited annual reports are reliable and errors have been minimized by the entity's auditors.
3. Companies whose financial statements are presented in currency. This is due to the foreign currency exchange rate that is constantly changing, so it can cause a difference in the nominal amount after it is converted to the currency.
4. The company provides data information that will be used as an analysis of each variable during the 2019-2021 period.

Measurement of Financial Distress

Table1: Independent Variable Measurement

Variabel	Variabel Operational Definitions	Source
Intellectual Capital	Value Added = Output – Input Output (OUT) : Total sales and other revenue Input (IN) : Charges and costs (selain beban karyawan) Value Added (VA): Difference between output and input Capital Employed (Value Added Capital Employed) $VACA = \frac{VA}{CE}$ Human Capital (Value Added Human Capital), $VAHU = \frac{VA}{HC}$ Structural Capital (Structural Capital Value Added) $STVA = \frac{SC}{VA}$ The Explanation : CE: Total equity HC: Salary and salary SC: CE + HC $VAIC^{TM} = VACA + VAHU + STVA$	Oktaviana et al., (2021)
Institutional ownership	Institutional ownership = (sum of initiated shares)/(sum of circulating shares) x100%	Widianingsih et al., (2022)
Management ownership	Managerial ownership = (sum of management shares)/(sum of circulating shares) x100%	Widianingsih et al., (2022)
The Independent Board of Commissioners	Council of Independent Commissioners= (number of independent Commissioners)/(sum of total Board of Commissioners) x100%	Widianingsih et al., (2022)
Free Cash Flow	Free cash flow = Free Cash Flow – Cash Flows from Operations	Putri et al.,(2022)

In predicting the level of financial distress in manufacturing companies can use X-Score or Zmijewskin

method. Systematically, the Zmijewskin prediction model can be formulated as follows:

$$X\text{-Score} = -4.3 - 4.5X_1 + 5.7X_2 + 0,004X_3$$

See also:

X1 = Return on Asset (ROA)

X2 = Total Liabilities / Total Assets

X3 = Current Asset/Current Liabilities

According to Grice and Dugan (in Edi and May, 2018), if the calculation outcome score of the Zmijewskin model is more than 0 (zero) then the company is potentially bankrupt and if the resulting score is less than 0.

Data Analysis Technique

In this study, hypothesis testing used multiple linear regression analysis. This analysis is a regression model that involves more than one independent variable. Multiple linear regression analysis is used because it intend to determine the direction and how much influence the independent variable has on the dependent variable. The feasibility of the regression model is determined from the results of the model feasibility test (F test) and the coefficient of determination used by the coefficient of determination (R²) test. The regression model equation in this study is as follows:

$$FD = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + e$$

4. Result and Discussion

Descriptive Statistical Analysis

Manufacturing companies listed on the Indonesian Stock Exchange (BEI) that issued complete reports in a row during the 2019–2021 totaled 516 companies and which used the value of the currency of the rupee amounted to 423. After calculating the X-Score, there were 264 companies that did not refine their financial statements according to the information required. Based on these criteria, there were 159 companies selected as a sample.

Table 2: Descriptive Statistical Test Results

Variabel	N	Minimum	Maximum	Mean	Std. Dev
Intellectual Capital	159	-59,9540	423,4985 1,0251	34,099862	50,4128017
Institutional ownership	159	0,0001		0,652023	0, 2998181
Management ownership	159	0,0000	1,9951	0, 163097	0, 3258466
The Independent Board of Commissioners	159	0,3333	0, 6000	0, 392101	0, 0754250
Free Cash Flow	159	2365179000 000,0000	1212629800 0000,0000	4587102832 65,006300	173567634 3032,5054 000
Valid N (listwise)	159				

Source: Data process, 2023.

Based on the descriptive statistical test results in Table 2, there is information about the minimum, maximum, average, and standard deviation values of each variable studied. Intellectual Capital of 159 units of analysis has a minimum value of -59, 9540 in the amount owned by the company Golden Flower tbk in 2021. The standard deviation value is 50, 4128017 and the average Intellectual Capital value is 483, 4526. Institutional ownership of 159 analytical units has a minimum value of 0,0001 owned by the company Gunawan Dianjaya Steel Tbk in 2020. Maximum value of 1, 0251 on the company Saraswanti Anugerah Makmur Tbk in 2019. The standard value of the deviation is 0.2998181 and the average shareholding of the institution is 1.0251. The average ownership value of the institution was 102.51%. Managerial ownership of 159 analytical units has a minimum value of 0,000 owned by the company Alakasa Industrindo Tbk in 2019. Maximum value of 1, 9951 on the company Safe Perfect Tbk in 2019. The standard deviation value is 0.3258466 and the average value of Managerial Ownership is 1.9951. The average management ownership value was 199, 51%. The Board of Independent Commissioners of 159 analytical units had a minimum value of 0.3333 owned by Akasha Wira International Tbk in 2019. Maximum value of 0.6000 at the company Japfa Comfeed Indonesia Tbk in 2020. The standard deviation value is 0.754250 and the average return on assets is 0.2667. Average return rate of 26.67% Free Cash Flow of 159 units of analysis has a minimum value of 2.365.179.000.000 owned by the

company Japfa Comfeed Indonesia Tbk in 2021. Maximum value of 12.126.298.000.000 on the Gudang Garam Tbk in 2019. The standard deviation value is 1.735.676.343.032 and the average value of Free Cash Flow is 1.449.147.700, 000.

Discussion

Hypothesis Testing

Table 3: Hypothesis Test Results

Variabel	Sig.	Decision
Intellectual Capital	0,099	H ₁ Rejected
Institutional ownership	0,365	H ₂ Rejected
Management ownership	0,019	H ₃ Accepted
The Independent Board of Commissioners	0,707	H ₄ Rejected
Free Cash Flow	0,151	H ₅ Rejected

Source: Data process, 2023.

Table three's findings for the test of the variable Intellectual Capital has a significance value of 0.099, which means greater than 0.05 or 5% ($0.099 < 0.05$). **H₁ is rejected**, meaning Intellectual Capital has no influence on financial distress. The results of the test of the hypothesis found evidence that there was no influence of Institutional Ownership on Financial Distress on manufacturing companies listed in the BEI period 2019-2021. This is because institutional ownership is assessed will encourage more professional surveillance activities. High institutional ownership does not diminish the likelihood of the company to experience financial distress, due to the lack of effective supervision so that there is opportunistic behavior carried out by the management in the use or negligent management of debt, as a result of which the debt increases, which leads to funds used to pay loans or higher interest. A large or small percentage of institutional ownership cannot be used as a measure that the company is in financial distress or not. The results of this study are consistent with studies conducted by Purba and Muslih (2019), Nazaruddin and Daulay (2019) and Hatane et al., (2000). (2018) suggested that intellectual capital has a significant negative impact on financial distress.

The test results state that the variable Institutional Ownership has a significance value of 0.365 which means greater than 0.05 or 5% ($0.365 < 0.05$). Thus it can be concluded that **H₂ is rejected**, meaning the Institution's ownership has no influence on financial distress. The test results of the hypothesis found evidence that there was no influence of Institutional Ownership on Financial Distress on manufacturing companies listed in the BEI period 2019-2021. This is because the institution's ownership assessment will encourage more professional surveillance activities. High institutional ownership does not decrease the likelihood of the company to experience financial distress, due to the presence of opportunistic behavior carried out in the use or negligent management of debt, so that the debt increases, which leads to funds used to pay out loans or higher interest. A large or small percentage of institutional ownership cannot be used as a measure that the company is in financial distress or not. The results of this study are consistent with studies conducted by Radnadi et al., (2018) and Muslih et. al. (2018) which concluded that institutional ownership has no impact on financial distress.

The test results state that the variable Management Ownership has a significance value of 0.019 which means less than 0.05 or 5% ($0.019 < 0.05$). Thus it can be concluded that **H₃ is accepted**, meaning Management Ownership has an influence on financial distress. The results of the test of the hypothesis found evidence that there was no influence of Managerial Ownership on the financial distress of shares in manufacturing companies listed in the BEI period 2019-2021. This is because managerial ownership is the presence of large ownership expected to reduce the occurrence of financial difficulties of the company. This is because the greater management ownership will be able to unite the wishes of managers and shareholders. In contrast, if management ownership is small then information asymmetry between managers and shareholders will occur. This asymmetric information can trigger the emergence of agency costs so that the potential of the company to suffer financial distress also must exist. The findings of the study are consistent with the research conducted by Handayani, et., al. (2017) and Purwohandoko, et al. (2020), which concluded that managerial ownership influences financial distress.

The test results state that the variable of the Independent Board of Commissioners has a significance value of 0.707 which means greater than 0.05 or 5% ($0.707 > 0.05$). Thus it can be concluded that **H₄ was rejected**, meaning the Council of Independent Commissioners had an influence on financial distress. The test results of the hypothesis found evidence that there was no influence of the independent board of commissioners on the financial distress of shares in manufacturing companies listed in the EIB for the period 2019-2021. This

is because the high proportion of independent commissioners do not prevent the company from financial distress. The addition of members of the Board of Independent Commissioners is possible only if the formal requirements are met, while the majority shareholders (controller/founders) still play an important role so that the performance of the board does not increase or decrease, and the activities of the Independent Commissary does not reduce the existence of agency problems. The results of this study are consistent with studies conducted by Setiyorini et al., (2019) and Widhiadnyana and Ratnadi (2019) which concluded that independent councils had no influence on financial distress.

The company's free cash flow variable has a significance value of 0.151 which means greater than 0.05 or 5% ($0.151 > 0.05$). **H5 is rejected**, meaning free cash flow has an impact on financial distress. The test of the hypothesis found evidence that there was no influence of free cash flow on financial distress on manufacturing companies listed in the BEI period 2019-2021. This is because free cash flow indicates that cash flows from good operations do not guarantee that the company is avoided from financial distress conditions if the company has long-term loans from the poor investment side, so the cash flow from the operation can not cover this. The results of this study are in line with the research conducted by Dirman, et al., (2020). Free cash flow has a negative impact on financial distress.

5. Conclusion

The study aims to empirically test the impact of intellectual capital, institutional ownership, managerial ownership and free cash flow on financial distress in manufacturing companies listed on the Indonesian Stock Exchange in the period 2019-2021. Based on research results, it shows that Intellectual capital, Institutional Ownership, Independent Board of Commissioners, and Free Cash Flow did not affect financial distress, while managerial ownership influenced financial distresses by using X-Score measurements on manufacturing companies listed in the BEI period 2019-2021.

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