The Analysis of Agency Costs and Profitability on Effecting Financial Distress

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Abstract. This research aims to determine the effect of agency costs and profitability on financial distress in manufacturing companies on the Indonesia Stock Exchange (IDX) in 2018-2020. This research involved a population of 169 manufacturing companies on the IDX in 2018-2020. This research determines the sample using purposive sampling technique, so the total samples are 144 companies. This research tested the hypothesis with multiple linear regression analysis. The results show that agency costs and profitability have a positive effect on financial distress. Further research is recommended to identify or examine other variables that can complement the explanation of factors that influence financial distress, such as leverage, liquidity, operating capacity, sales growth, good corporate governance, and other variables.

Keywords: Financial Distress, Agency Costs, Profitability

1 Introduction

This Word document can be used as a template for papers to be published in EAI Core Proceedings. Follow the text for further instructions on text formating, tables, figures, citations and references. Companies that dominate the market are not necessarily able to sustain the viability of their companies. This can happen because the company is incapable of paying its matured debts. In 2018, PT. Sariwangi was declared bankrupt (Ramadhan, et al, 2022). Throughout 2019, the manufacturing industry suffered a decline. In 2020, the Central Agency stated that in the fourth quarter of 2019 the manufacturing industry grew by 3.66%, lower than the fourth quarter of 2018 which only grew by 4.25%.

The Composite Stock Price Index (IHSG) throughout 2020 experienced a decline in each sector. The basic industry and chemicals are the sectoral index that experienced an intense decline of 43,53% year to date. This index is filled up by issuers operating in the cement, poultry farming, pulp and paper, ceramics, porcelain, and chemical industries. Based on data from the IDX, of the 77 public companies that make up the basic and chemical industry index, seven issuers have released their 2019 financial reports. Based on the financial reports of the seven listed

companies, most issuers posted revenue growth in the range of 2%-32% annually. On the other hand, the net profit of the majority of these issuers fell by around 20% -32% year on year. If this decline in shares occurs for a long time, it can result in a company experiencing financial distress and even bankruptcy.

Financial distress is affected by internal and external factors within a company. Indicators that can predict bankruptcy are current and future cash flow analysis, company strategy analysis, financial reports, corporate information, and foreign affairs. Researchers use agency costs and profitability to measure the financial distress conditions that occur in companies (Wu, et al, 2022). Profitability ratios measure a company's ability to generate maximum profits through assets and capital (Kasmir, 2016). According to Susilowati (2019), agency costs are costs incurred by shareholders (principal) for the cost of supervising managers (agent), binding expenses by managers (agent), and residual losses.

The dependent variable in this research is financial distress. The research object is a manufacturing company. In Finishtya's (2019) research, it was shown that profitability had a negative effect on financial distress, while Dirman (2020) found that profitability had a positive effect on financial distress. Rimawati (2017) and Li, et al (2008) show that agency costs have a positive effect on financial distress, while Khan, et al (2012) suggest that agency costs have a negative effect on financial distress. Based on this description, researchers conducted research with the title "Analysis of Agency Costs and Profitability on the Effect of Financial Distress".

2 Literature Review

Agency theory is a contract between the manager (agent) and the owner (principal) (Jensen and Meckling, 1967). Agency theory can be seen from an economic perspective, namely theories used in various fields of knowledge, such as accounting, economics, finance, marketing, politics, organizational behavior, and sociology (Soemarso, 2018). Agency theory broadens the perspective of risk sharing into agency problems, that is, if the parties working together have different goals and there is a division of labor between management and principals. The business perspective in agency theory includes businesses engaged in business, procurement of goods and services, processing of raw materials for finished goods, marketing, and product sales, all of which are related to agency relationships (Soemarso, 2018). One of the causes of agency problems is the existence of asymmetric information between shareholders and management, allowing management to take policies that are less effective for the company (Moch et al, 2019). The relationship between agency theory and this research is that when financial distress is not managed well, a conflict of interest will occur which begins with information asymmetry (Seftiana, 2018).

Financial distress condition experienced by a company before bankruptcy. Bankruptcy in question is a failure experienced by a company because it cannot fulfill debtor obligations due to experiencing a crisis or lack of finances to run its business. According to Altman (1968), financial difficulty or financial distress is a condition that originates from disorderly or chaotic company financial management. In a company, as might be expected, there are costs incurred for company administration, such as managerial salaries, travel costs, welfare costs, and other costs (Jensen & Meckling, 1976). Agency costs are expenses incurred when an owner chooses or employs an agent to act on his behalf. According to Susilowati (2019), agency costs are expenses incurred by shareholders (principals) for supervision costs of managers (agents), binding expenses by managers (agents), and residual losses. To measure the size of the profits

generated by a company, the profitability ratio is used. According to Sujarweni (2017:154), profitability ratios measure company capabilities in generate profits at the sales level, assets, and certain share capital.

Agency Costs on Financial Distress

Rimawati (2017) found that if a company experiences high agency costs, that matter will improve risk of financial difficulties. In other words, agency costs are positively proportional to financial difficulties. These results are supported by Prastiwi (2019) who found that agency costs have a positive effect against financial distress.

H1: Agency costs have a positive effect on financial distress.

Profitability on Financial Distress

Masitoh (2020) stated profitability has a positive effect against financial distress. Increased profitability shows that it is unlikely that the company will experience financial difficulties (Khan, 2012).

H2: Profitability has a positive effect on financial distress..

3 Methodology

The research population is all manufacturing companies which is listed on the Indonesian Stock Exchange. The data used is from 2018-2020, totaling 169 companies. The sampling technique in this research uses a type of non-probability sampling, namely a purposive sampling approach, with several criteria as follows:Manufacturing companies listed on the IDX consecutively in 2018-2020.

- 1) Manufacturing company who publishes financial reports from 2018-2020.
- 2) Manufacturing companies that provided data according to research needs.

Manufacturing companies, use a formula consisting of 5 coefficients (Altman, 1968), namely:

$$Z = 1.2 T^{1} + 1.4 T^{2} + 3.3 T^{3} + 0.6 T^{4} + 0.99 T^{5}$$

Agency fees is cost incurred by shareholders (principal) for the cost of supervising managers (agents), binding expenses by managers (agents), and the presence of residual loss (Jensen and Meckling,1967). Costs incurred by the manager (agent) include salaries, travel costs, welfare costs, and other expenses, including administrative costs within the company. The agency cost indicators:

Agency Costs = Selling, administrative and general costs/ Revenue or sales x 100%.

The indicator used to measure profitability in this research is return on assets (ROA) with the

 $formula \ \ ROA = \frac{NetProfit}{TotalAssets} \ . \ The \ equation \ is \ multiple \ linear \ regression \ analysis \ formulated \ as$

follows:

$$Z_{score} = \alpha + \beta_1 AC + \beta_2 ROA + e$$

4 Results and Discussion

The first stage of carrying out the analysis in this research was through assumption testing classic. Before carrying out multiple regression analysis, several classic assumption tests have

to be conducted to see whether the regression model used is free from deviations in assumptions and meets the conditions for obtaining good linearity. The regression model obtained is the best, accurate in terms of estimation, unbiased and consistent, so it is necessary to test classical assumptions (Juliandi, et al, 2014).

Table 1. Tests of Normality

Kolmogorov-Smirnov^a

	Statistic	df	Sig.
Unstandardized	,159	432	,799
Residual			

a. Lilliefors Significance Correction

Based on Table 1. normality test, the significance value obtained in the Kolmogorov Smirnov test is 0.799, which is greater than 0.05. Can be concluded residuals are normally distributed.

Table 2. Multicollinearity test

		Tolerance	VIF
1	(Constant)		
	AC	,880	1,136
	ROA	,880	1,136

a. Dependent Variable: Z

Based on Table 2 multicollinearity test, seen from the VIF value, using a confidence level of 95%, then the results of data processing obtained a VIF value of 1.136. The VIF value is smaller than 10.00 which means multicollinearity does not occur.

Table 3. Heteroscedasticity test

Model		Sig.
1	(Constant)	,999
	AC	,956
	ROA	,918

a. Dependent Variable: Z

Method used is the Glejser method. The significance value of agency costs is 0.956 and profitability is 0.918. A significance value greater than 0.05 means that heteroscedasticity does not occur in the regression model.

 Table 4. Autocorrelation test

Unstandardized

	Residual	
Test Value ^a	,04562	
Asymp. Sig. (2-tailed)	,205	

a. Median

Based on Table 4 the significant value is 0.205 > 0.05. It can be concluded that in the regression model there are no symptoms or problems of autocorrelation. After the classical assumption test is completed, it is then analyzed using multiple linear regression analysis.

Tabel 5. Goodness of fit

	Model	Coefficients	t	Sig.
1	(Constant)	1,280	44,911	,000
	AC	,002	27,027	,000
	ROA	,034	25,640	,000

a. Dependent Variable: Z

Based on Table 5, the following results are obtained:

T-statistic of agency costs (AC) on financial distress (Z-Score) has a positive value of 27.027 with sig. equal to 0.000 < 0.05. These results indicate that agency costs have a positive impact to financial distress, so H_1 is accepted. It means that if a manufacturing company incurs high agency costs, it will trigger the company's financial difficulties, so the level of financial distress will also be higher.

The results of the analysis indicate that the t-statistic of profitability (ROA) on financial distress (Z-Score) has a positive value of 25.640 with sig. equal to 0.000 < 0.05. These results indicate that profitability has a positive effect on financial distress, so H2 is accepted. It shows that an increase in profitability indicates that the company is improbable to experience financial distress. There is a relationship in a positive direction between profitability and financial distress. It shows that if the profitability ratio increases, financial difficulties will increase, and the possibility of financial distress will be higher

3 Conclusion

Based on the research results, it can be concluded that:

- 1. Agency costs positive influence to financial distress. This means that if a manufacturing company incurs high agency costs, the company experiences financial difficulties so that the level of financial difficulties becomes higher.
- 2. Profitability has a positive effect on financial distress. An increase in profitability indicates that it is less likely that the company will experience financial difficulties. This research is inseparable from limitations that can later be improved by further research. Limitations and suggestions are as follows:

This research only used data from the Indonesia Stock Exchange (IDX). While financial report data was not available on the IDX, after further investigation, it turned out that some of it was available on the official website of the company concerned as well as other financial and investment sites. It caused several manufacturing companies to be excluded from the sample. It is recommended that further research not only look for company financial report data on the IDX. Look for data from related company websites, financial and other investment sites if the required data is not on the IDX. This research shows that the model suitability value is 0,831 or the research model can explain financial distress by 83,1%. It means that there are still 16,9% of other variables outside the research model that can describe financial distress. Further research is recommended to identify or examine other variables that can complement the explanation of factors that influence financial distress, such as leverage, liquidity, operating capacity, sales growth, good corporate governance, and other variables.

References

- Altman, E. I.: Financial Ratios, Discriminant, Analysis and The Prediction of Corporate Bankruptcy. The Journal of Finance, 23(1), pp. 589–609 (1968).
- [2] Dirman, A.: Financial Distress: The Impacts of Profitability, Liquidity, Leverage, Firm Size, and Free Cash Flow. International Journal of Business, Economics and Law, 22(1), pp.17–25 (2020). https://doi.org/ISSN 2289-1552.
- [3] Finishtya, F., C.: The Role of Cash Flow of Operational, Profitability, and Financial Leverage n Predicting Financial Distress on Manufacturing Company in Indonesia. Journal of Applied Management, 17(1) (2019). http://dx.doi.org/10.21776/ub.jam.2019.017.01.12.
- [4] Jensen, M. C. dan Meckling, W.: Theory of The Firm: Managerial Behavior, Agency Cost and Ownership Structure. Journal of Finance Economic, 3(1), pp. 305–360 (1967).
- [5] Kasmir. Analisis Laporan Keuangan. PT.Raja Grafindo Persada. (2016).
- [6] Khan, A., Kaleem, A. & Nazir, M., S.: Impact of Financial Leverage on Agency cost of Free Cash Flow: Evidence from the Manufacturing sector of Pakistan, Journal of Basic and Applied Scientific Research, 2(7), pp. 6694-6700 (2012).
- [7] Li, H., Wang, Z. & Deng., X.: Ownership, Independent Directors, Agency Costs and Financial Distress: Evidence from Chinese Listed Companies, Corporate Governance. 8(5), pp. 622-636 (2007). https://doi.org/10.1108/14720700810913287.
- [8] Masitoh, S, & Setiadi, I.: Pengaruh Likuiditas, Profitabilitas, Dan Leverage terhadap Financial Distress (Pada Perusahaan Jasa Sub Sektor Transportasi Yang Terdaftar Di Bursa Efek Indonesia Periode 2014-2017), Competitive Jurnal Akuntansi dan Keuangan, 4 (1), pp. 25-36 (2020). http://dx.doi.org/10.31000/c.v4i1.2028.
- [9] Moch, R., Prihatni, R. dan Buchdadi, A. D.: The Effect of Liquidity, Profitability and Solvability to The Financial Distress of Manucatured Companies Listed on The Indonesia Stock Exchange (IDX) Period of Year 2015-2017. Academy of Accounting and Financial Studies Journal. 23(6), pp. 1–16 (2019). https://www.researchgate.net/publication/ 338656223.
- [10] Prastiwi, B. I. dan Dewi, R.: Pengaruh Managerial Agency Cost terhadap Financial Distress dengan Struktur Kepemilikan sebagai Variabel Pemoderasi. Jurnal Informasi, Perpajakan, Akuntansi, Dan Keuangan Publik. 14(1), pp. 81–103 (2019). https://doi.org/10.25105/jipak.v14i1.5016.
- [11] Ramadhan, R., Raharja, S.J. & Muhyi, H.A.: Penyebab Kebangkrutan PT Sariwangi dan Analisisnya dengan menggunakan Teori Goal Setting. Jurnal Ilmu Manajemen dan Bisnis. 13(2), pp. 183-190 (2022).
- [12] Rimawati, I., & Darsono.: Pengaruh Tata Kelola Perusahaan, Biaya Agensi Manajerial dan Leverage terhadap Financial Distress. Diponegoro Journal of Accounting. 6(3), pp. 1–12 (2017).
- [13] Soemarso, S. R.: Etika Dalam Bisnis dan Profesi Akuntan dan Tata Kelola Perusahaan. Jakarta: Salemba Empat (2018).
- [14] Statistik, B. P.: Berita Resmi Statistik. Jakarta (2020). https://www.bps.go.id/website/materi_ind/materiBrsInd-20190801113259.pdf
- [15] Sujarweni, V. W.: Analisis Laporan Keuangan Teori, Aplikasi, dan Hasil Penelitian. Yogyakarta: Pustaka Baru Press (2017).
- [16] Susilowati, Y., Suwarti, T., Puspitasari, E., & Nurmaliani, F. A.: The Effect of Liquidity, Leverage, Profitability, Operating Capacity, and Managerial Agency Cost on Financial Distress of Manufacturing Companies Listed in Indonesian Stock Exchange. Advances in Economics, Business and Management Research. 100(1), (2019). https://doi.org/10.2991/icoi-19.2019.114.

[17] Wu, D., Ma, X. & Olson, D.: Financial distress prediction using integrated Z-score and multilayer. Decision Support Systems, 159 (2022). https://doi.org/10.1016/j.dss.2022.113814.