ANALYSIS OF EFFECT OF PROBABILITY AND FIRM SIZE ON INTRINSIC VALUE WITH FINANCIAL DISTRESS AS AN INTERVENING VARIABLE IN OIL AND GAS COMPANIES ON THE INDONESIAN STOCK EXCHANGE

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Abstract: *The aim of this research is to determine and analyze effect of probability and firm size on intrinsic value with financial distress as an intervening variable in Oil and Gas Companies on the Indonesian Stock Exchange. This research uses a quantitative type of research that is causal. Population in this study are 33 companies operating in Oil and Gas Sector which are listed on the Indonesia Stock Exchange which regularly report their financial reports to the Indonesia Stock Exchange from 2019 to 2021. Samples used in the research were 27 Oil and Gas Sector Companies on the Indonesian Stock Exchange. This research uses path analysis in structural equation modeling. The research results show that profitability has a positive and insignificant effect on intrinsic value in Oil and Gas Companies on the Indonesian Stock Exchange. Firm size has a positive and significant effect on intrinsic value in Oil and Gas Companies on the Indonesian Stock Exchange. Profitability has a negative and significant effect on financial distress in Oil and Gas Companies on the Indonesian Stock Exchange. Firm size has a positive and significant effect on financial distress in Oil and Gas Companies on the Indonesian Stock Exchange. Financial distress has a positive and insignificant effect on intrinsic value in Oil and Gas Companies on the Indonesian Stock Exchange. Profitability does not has an indirect effect on intrinsic value through financial distress in Oil and Gas Companies on the Indonesian Stock Exchange. Firm Size has an indirect effect on intrinsic value through financial distress in Oil and Gas Companies on the Indonesian Stock Exchange.*

INTRODUCTION

Value is closely related to the company, the company will be appreciated if the company is able to create company value. Dominic (2005) believes that the purpose of establishing a company is to maximize the wealth or value of the company. Maximizing company value is the same as maximizing shareholder prosperity. The value of the company will be represented by the market price of the company's shares. In this case, the measure of success of company management can be seen through the company's ability to prosper its shareholders. A high share price reflects a high company value. A high company value will increase market confidence in the company's performance and the company's prospects in the future.

The company value is the actual value per share that will be received if the company's assets are sold according to the share price. Company value is the selling value of a company as an operating business. Having a sales value that is greater than the liquidation value shows that management is able to run the company organization. Firm value is the present value of future free cash flows at a discount rate in accordance with the weighted average cost of capital. Where free cash flow is cash flow that is available to investors, both creditors, and owners, after taking everything into account expenses for company operations and expenses for investment and net current assets. Company value is important because it will provide a positive signal to investors to invest capital in a company, while the company value in front of creditors reflects the company's ability to pay the company's debts so that creditors are not worried about providing loans to the company. Knowing the value signals from the stock exchange may not be enough, current company management needs to understand the company's intrinsic value to create more company value (McKinsey and Company, 2020).

Based on the calculation method used to determine company value, apart from nominal value, market value, book value and liquidation value, there is intrinsic value. Intrinsic value is the most abstract concept, because it refers to the estimate of a company's real value. Intrinsic value is not just the price of a group of assets, but the value of the company as a business entity that has the ability to generate profits in the future.

Possible factors that can influence the value of a company include profitability, financial distress and firm size. Profitability is the ability of a company to generate profits during a certain period. Shapiro (1991) defines profitability as a company's ability to generate profits using all the capital it has. Profitability is a comparison between income and costs generated through company assets, both in the form of current assets and fixed assets used in production activities. Profitability is an important factor that companies really pay attention to, because if the company's profitability is not good, it will be difficult to attract funds from outside.

Investors really pay attention to the level of profitability of a company before investing in that company. According to Sijabat (2018), high company profitability can affect company value and it depends on how investors perceive the increase in company profitability. The higher the company's profitability, the better the company's future prospects for generating profits. Increased profits will affect the increase in the value of company shares.

Companies that are financially healthy are certainly targets for investors. The healthy or unhealthy category of a company can be seen from the financial distress index. Financial distress can be something profitable if managed well, financial distress will be an early warning to detect problems that will arise so that the company avoids default and bankruptcy. Financial distress is a situation that describes a decline in a company's financial performance before experiencing bankruptcy or liquidation.

Firm size can be used as a way to determine the decision to invest in a company, most investors are interested in investing in companies with a large firm size. Brigham and Houston (2010) say that company size is a measure of the size of a company which can be assessed through total assets, total sales, total profits, tax burden and so on. According to Riyanto (2013) company size is the size of the company observed from the asset value, sales value and equity value.

Companies operating in the oil and natural gas energy industry will be one of investors' goals for investing, this is because companies operating in the oil and natural gas sector are ideally companies with a good level of profitability in the eyes of investors with a large firm size and financial distress index which is very small. Petroleum or petroleum and natural gas are fossil fuels which are raw materials for oil, diesel, gasoline and other derivative products, although currently many countries are concentrating on renewable energy. The world's dependence on oil and natural gas is still very large. Oil and natural gas are the most important energy sources in the world with oil contributing 38.7% and natural gas contributing 16.5%.

The aim of this research is to determine and analyze effect of probability and firm size on intrinsic value with financial distress as an intervening variable in Oil and Gas Companies on the Indonesian Stock Exchange.

RESEARCH METHODS

This research uses a quantitative type of research that is causal. The source of research in this thesis comes from the financial reports of the companies studied. This research consists of numbers or numbers that are explained in the form of a causal relationship (cause and effect relationship) between variables through hypothesis testing with statistical calculations so that proof results are obtained to accept or reject the hypothesis (Alimuddin et al., 2023; Pandiangan et al., 2023).

This research uses statistical methods, namely by obtaining data in the form of calculated numbers according to the indicators of each construct or latent variable which is then tested on the hypothesis (Kurdhi et al., 2023; Pandiangan, 2023). The data collection techniques used in this research are:

1. Secondary data sourced from the financial reports of each company used as a research sample, where the financial reports are documented on the Indonesian Stock Exchange and the official website of the company studied. The financial reports used in this research are annual reports from 2019 to 2021. The consideration for collecting secondary data is because secondary data is easier to obtain and more efficient according to the field being researched and adapts to the conditions of the COVID-19 pandemic.
2. Literature study, namely by studying literature related to this research, such as from books, international and domestic journals, statistical data processing software, and other tools related to the research title.

The research population is the entire research object to be studied (Pandiangan, 2024; Tambunan et al., 2024). Population in this study are 33 companies operating in Oil and Gas Sector which are listed on the Indonesia Stock Exchange which regularly report their financial reports to the Indonesia Stock Exchange from 2019 to 2021. Sample is part of the number and characteristics of the population. the (Pandiangan et al., 2023; Yoppy et al., 2023). This research uses a purpositive sampling technique, meaning that the data source sampling technique takes certain considerations. The reason for using a purposive sampling technique is because not all samples have criteria that match the phenomenon being studied (Pandiangan et al., 2023). Samples used in the research were 27 Oil and Gas Sector Companies on the Indonesian Stock Exchange.

This research uses path analysis in structural equation modeling. Path analysis in structural equation modeling is a multivariate analysis that can be used to simultaneously describe linear relationships between observed variables and variables that cannot be measured directly (Pandiangan et al., 2024; Ratnawita et al., 2023). Latent variables are unobservable variables or cannot be measured directly, but must be measured through several indicators. There are two types of latent variables in structural equation modeling, namely endogenous variables or dependent variables and exogenous variables or dependent variables.

RESULT AND DISCUSSION

General Description

Research on companies operating in the oil and gas sector, such as companies operating in the oil and gas production and refining sub-industry, oil and gas storage and distribution sub-industry, oil and gas services and drilling sub-industry and oil services and equipment sub-industry and gas will still grow rapidly for the next few decades. In recent decades, global demand for fossil fuels has been around 80% of total energy demand. The latest projection of world energy needs, it is estimated that in 2030 fossil fuels will contribute less than three-quarters of the total energy supply and in 2050 it will decrease and it is estimated that more than 60% of the energy need will come from oil and natural gas.

Companies with oil and natural gas commodities began to enter the stock exchange market in Indonesia since the early 90s. To date, there are 33 companies listed on the Indonesian stock exchange. And it is estimated that the number of companies that will list on the stock exchange market will increase. This is due to the need for quite large capital costs required by the company to carry out the company's activities and business operations and also because the level of success in drilling and exploration well drilling activities will increase. A high success ratio in the discovery of oil and natural gas reserves remains an attraction for companies operating in the oil and natural gas sector to continue to strengthen their position in expanding the company's business operations. The company will continue to develop diverse businesses and restructure the organization and portfolio to support success. Efforts continue to be made to take advantage of opportunities and look for investors or partners so as to provide added value for all stakeholders. The company will continue to grow along with the development of oil and natural gas projects from upstream to downstream in the coming years.

Table 1. Hypothesis Test Result

Number	Hypothesis	Original Sample	T Satistic	P Value	Result
H_1	Profitability has a positive and significant effect on intrinsic value.	0.199	1.428	0.153	Rejected
H_2	Firm size has a positive and significant effect on intrinsic value.	0.644	4.739	0.000	Accepted
H_3	Profitability has a negative and significant effect on financial distress.	-0.451	2.172	0.030	Accepted
H_4	Firm size has a negative and significant effect on financial distress.	0.327	2.400	0.016	Rejected
H_5	Financial distress has a negative and significant effect on intrinsic value.	0.307	1.836	0.066	Rejected
H_6	Profitability has an indirect effect on intrinsic value through financial distress.	-0.139	1.333	0.182	Rejected
H_7	Firm size has an indirect effect on intrinsic value through financial distress.	0.144	1.390	0.165	Accepted

The research results show that profitability has a positive and insignificant effect on intrinsic value in Oil and Gas Companies on the Indonesian Stock Exchange. Firm size has a positive and significant effect on intrinsic value in Oil and Gas Companies on the Indonesian Stock Exchange. Profitability has a negative and significant effect on financial distress in Oil and Gas Companies on the Indonesian Stock Exchange. Firm size has a positive and significant effect on financial distress in Oil and Gas Companies on the Indonesian Stock Exchange. Financial distress has a positive and insignificant effect on intrinsic value in Oil and Gas Companies on the Indonesian Stock Exchange. Profitability does not has an indirect effect on intrinsic value through financial distress in Oil and Gas Companies on the Indonesian Stock Exchange. Firm Size has an indirect effect on intrinsic value through financial distress in Oil and Gas Companies on the Indonesian Stock Exchange.

CONCLUSION

The research results show that profitability has a positive and insignificant effect on intrinsic value in Oil and Gas Companies on the Indonesian Stock Exchange. Firm size has a positive and significant effect on intrinsic value in Oil and Gas Companies on the Indonesian Stock Exchange. Profitability has a negative and significant effect on financial distress in Oil and Gas Companies on the Indonesian Stock Exchange. Firm size has a positive and significant effect on financial distress in Oil and Gas Companies on the Indonesian Stock Exchange. Financial distress has a positive and insignificant effect on intrinsic value in Oil and Gas Companies on the Indonesian Stock Exchange. Profitability does not has an indirect effect on intrinsic value through financial distress in Oil and Gas Companies on the Indonesian Stock Exchange. Firm Size has an indirect effect on intrinsic value through financial distress in Oil and Gas Companies on the Indonesian Stock Exchange.

The suggestions from this research are as follows:

1. For investors and prospective investors, when making decisions to invest in oil and gas sector companies that have been listed on the stock exchange, it is recommended to pay

more attention to firm size and the intrinsic value of the company, in addition to looking at the share price on the stock exchange. The current share price does not necessarily reflect the company's future performance, while the company's intrinsic value reflects the company's prospects for generating profits in the future.
2. For academics and researchers, in further research it is recommended to add other variables such as corporate governance, company managerial policies, capital market performance, company growth and other variables that are relevant to the company's future development. Future research is also expected to assess companies using methods other than the discounted cash flow method as an assessment comparison.
3. For companies, it is hoped that company management will pay more attention to factors that influence the risk of financial distress in managing the company's capital structure to minimize the risk of decreasing the company's ability to create profits. Companies operating in the oil and gas sector are also expected to increase firm size through assets and manage optimally to increase company profitability.
4. For appraisal practitioners, it is recommended that when assessing a company use the discounted cash flow method approach to better understand the company that will be assessed in order to obtain more data related to the company's projections, so that a projected value is obtained that is more accurate and reflects the company's intrinsic value.

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