

Investment Opportunity and Size: Do They Matter for Firm Performance?

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Abstract. This study aims to examine the influence of the Investment Opportunity Set (IOS) and firm size on firm performance. The data utilized in this research comprises manufacturing sector companies from 2017 to 2022. The results indicate that IOS and firm size have a positive and significant effect on firm performance. The findings of this study support signaling theory, indicating that companies with favorable investment opportunities and larger size provide positive signals, as reflected in their strong performance

Keywords: size, investment opportunity set, ROA, firm performance

1 Introduction

Firm performance serves as a metric to gauge a firm's success in generating profits through its operational productivity. It also reflects the extent to which a company achieves its predetermined objectives. A firm's performance is deemed successful when it attains its established goals. The primary objective of any firm is to maximize shareholder wealth. Consequently, firm performance is a critical factor for investors in assessing and forecasting a company's future prospects [1]. Companies must strive to optimize their performance efficiently to serve as a benchmark of their operational effectiveness and attract potential investors.

Optimizing a firm's performance can be influenced by several factors, including investment opportunities [2] [3] and company sizing [4]. Investment Opportunity Set (IOS) represents an external investment decision-making framework for investors or companies, encompassing a diverse range of investment options. Investors can assess multiple investment alternatives to allocate their funds effectively across various financial instruments, including stocks, bonds, mutual funds, real estate, and others. IOS serves as a valuable tool for predicting future company growth within the investment decision-making process, enabling investors to evaluate various investment alternatives aligned with the company's financial objectives. By utilizing IOS, investors or companies can diversify their investments to mitigate risk. The Investment Opportunity Set (IOS) provides a comprehensive overview of a company's investment potential; however, its realization hinges on the company's strategic decisions for future growth. A higher IOS is correlated with an increased company valuation, and vice versa [4].

Firm size reflects a company's capacity to influence the market, utilize resources, and contribute to the economy. Larger companies tend to generate higher profits as they are often in the maturity phase, enabling them to access capital more easily for business expansion, which subsequently enhances firm performance [5]. Larger firms typically benefit from a broader pool of professional management, wider market reach, easier access to loans, opportunities to attract investors across various business sectors, and generally superior performance [6][7].

The manufacturing sector serves as a cornerstone of economic growth in developing countries, including Indonesia. This is evidenced by its significant contributions to exports, high levels of investment, and substantial employment absorption. To sustain this, productivity and competitiveness within the manufacturing sector must be continuously improved. Recognizing the sector's notable contributions to Indonesia's economy, this study uses manufacturing firms as the research sample. Accordingly, this research focuses on examining the influence of investment opportunities and firm size on financial performance, as proxied by Return on Assets (ROA).

2 Literature Review

Signaling Theory

Signaling theory was first introduced by [8] in the context of labor markets to explain how asymmetric information between two parties can be mitigated through the transmission of signals indicating the quality or performance of an entity. The theory suggests that investment spending conveys a favorable signal about a company's potential for future growth, which in turn boosts stock prices as a reflection of the company's value [8].

Hypotheses development

Investment Opportunity Set (IOS) is a fundamental concept used by investors to assess a company's potential for future growth through investment decisions. Based on the signaling theory, companies that have a large investment opportunity will try to convey this to investors, so that investors will be interested in buying the company's shares.. IOS helps investors evaluate various investment options that align with a company's financial objectives. By using IOS, companies can explore different investment alternatives to minimize risk and ensure that if one investment performs poorly, there are other options available. IOS provides a broad overview of a company's investment opportunities, but the ultimate decision depends on the company's future goals. A company with a high IOS value is likely to experience a corresponding increase in its overall value [4]. Efforts to minimize investment risk will positively impact the company's future performance and growth.

H₁: Investment opportunities (IOS) have a positive effect on firm performance

A large company is measured by the amount of assets it owns. Such companies are often considered to have strong operational performance and stable finances. According to signaling theory, a large company is seen positively by shareholders, leading to increased investor trust and interest. This can result in a higher stock price, reflecting the company's growing value [6][7].

H₂: Size has a positive effect on firm performance

3 Research Method

The sample selection in this study employed a purposive sampling method. The criteria for selecting the sample were manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2017-2022 period that provided complete data. The study comprises 132 observations.

This research uses Return on Assets (ROA) to measure firm performance, calculated using the following formula:

$$\text{ROA} = \text{net profit} / \text{total asset} \dots\dots\dots(1)$$

The measurement of IOS utilizes the market-to-book value of equity, calculated using the following formula.

$$\text{IOS} = \frac{\text{share outstanding} \times \text{closing price}}{\text{total equity}} \dots\dots\dots(2)$$

Firm size is measured using the natural logarithm of total assets (lnTotal Assets). Hypothesis testing was conducted using multiple linear regression analysis.

4 Result

4.1 Descriptive Statistic

Table 1. Descriptive Statistic

	Mean	Min	Max	Dev. STd.
ROA	5,89	-20,16	30,99	8,42
IOS	1,98	0,22	7,48	1,69
SIZE	29,26	26,69	32,83	1,91

Table 1 shows the descriptive statistical results of this study. The results show that the average ROA is 5.89, which means that the company has good performance. The higher the ROA level of a company, the more investors will be attracted to invest their capital in the company because a high ROA level is a sign that the company is making a profit. The average IOS score of 1.98 shows that, on average, the companies in the sample have a market value that's almost twice their book value of equity. The average firm size is 29.26, which indicates that most of the companies in our sample are relatively large. This finding suggests that larger firms, on average, might perform better than smaller ones.

Table 2. Hypothesis Testing

	Constanta	Standard Error	t Stat	P-value
Intercept	-23,24	10,91	-2,13	0,04**
IOS	2,20	0,42	5,23	0,00***
SIZE	0,85	0,37	2,28	0,02**

** ,*** significant at level 5% and 1% consecutively

Hypothesis 1

Investment opportunities (IOS) have a positive effect on financial performance is supported. The result shows that firms with high Investment Opportunities have high performance [2][3]. Companies that are able to take advantage of investment opportunities and are able to make the right decisions can maximize profits from the results of these investments. Therefore, IOS can be a signal to investors that the company do invest in profitable investment and leading to well performance.

Hypothesis 2

Size has a positive effect on company performance is supported. Larger companies are often perceived as having better operational performance, stable finances, and a strong foundation. Signaling theory suggests that larger companies are viewed positively by shareholders, increasing their trust and interest in the company [5][7].

5 Conclusion

The study found a strong positive effect between a firm's investment opportunities and its overall performance. This means that firms with more promising investment opportunities tend to perform better. This finding supports the idea that effective investment strategies can enhance a firm performance [3]. Firm size has a significant positive impact on firm performance. The size of a firm indicates its experience, capacity, and risk management strategies, which can impact the investor's overall investment experience[5][7]. his research focuses solely on the manufacturing sector. Future studies could adopt a more comprehensive approach by examining all sectors listed on the Indonesia Stock Exchange.

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