



The influence of Investment Efficiency on Financial Performance

Azzahra Kurnia Fitri ¹, Fenny Marietza ²

¹Accounting Study Program, Faculty of Economic and Business, Bengkulu University

Email: ¹azzahrakurniafitry@gmail.com, ²mari3tza@gmail.com

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ABSTRACT

The purpose of this research is to see how investment efficiency can increase profitability. This research was conducted as a from of population gap seen in previos studies, so this study aims to re-examine the effect of investment efficiency on finansial performance. The novelty inthis research is to analyze the direct influence between investment efficiency on financial performance. This research uses a quantitative approach with secondary data. The population of this study is companies indexed LQ45 in the 2018-2022 period, the sample of this study is 27 companies with 135 observation that meet the criteria. This research was tested using multiple linear regression analyze using the Eviews application with the result that investment efficiency cannot affect financial performance.

INTRODUCTION

Financial performance is an evaluation of how a company manages assets and liabilities owned by the company, which can generate income from its capital (Ali & Oudat, 2020). Financial performance is referred to as a description of the financial condition of a company in a certain period which involves aspects of raising funds and channeling funds. According to (Saiful et al., 2023) the company's financial performance can be seen from how well the company uses its business assets to generate income. Financial performance is related to the profitability ratio. Profitability is the company's ability to seek profit or profit of a company (Rezeki, 2019). Financial performance can be measured using ROA (Return on Assets) and ROI (Return on Investment). According to Subramanyam, 2010) p 65) the higher the ROA value, the greater the return on investment. So that the company's financial performance will be better (Indriani et all 2016) while a high ROI can show an efficient company, so that it can achieve profitable investment results.

Financial performance can be influenced by one factor, namely investment efficiency. Investment efficiency is a factor that can contribute to the sustainability of the financial system through efficient resource allocation and increased profitability of a company (Qi & Deng, 2019) Investment efficiency is the ability of a company to manage its funds optimally, where the

company must choose a positive NPV and avoid negative NPV. If the NPV is positive, it shows that the investment is profitable and able to create high value for a company (Doukas, 2022). Investment efficiency is measured using IRR (Internal of Return), IRR is the interest rate of net present value (NVP) and cash flow generated by an investment project or financial decision equal to zero. This research looks at the ratio of net cash flow and interest rate ratio, if the IRR is high, then the indication of the investment can be profitable (Starkey & Tsafack, 2023). NPV is positive, indicating that the present value of the expected cash flows from the investment exceeds the investment costs incurred. The company can consider continuing the investment because it can generate profits in the future (Suranta, Satrio, & Midiastuty, 2023).

The theory that explains the relationship between investment efficiency and financial performance is signal theory. According to (Spence, 1972), signal theory is able to emphasize the importance of accurate and relevant information to investment decision making, and signal theory explains how companies are able to provide good signals or appropriate information to interested parties. Efficient companies are able to provide positive signals to investors, can reduce uncertainty, and increase access to financing needed to support investment and growth, which can increase investor confidence in the company. According to (Marietza & Wijayanti, 2021) suggests that signal theory can provide signals to users of financial statements. Therefore, good signals can increase investment efficiency and good corporate financial performance. In this study, the type of investment seen is asset investment, Investment Assets are all assets and resources, whether tangible or not, owned by a person or company. According to (Fridana & Asandimitra, 2020) investment assets can provide benefits within a certain period of time, because the value of assets owned is expected to increase over time.

Previous research conducted by (Marsya et al., 2022) argues that Investment Efficiency affects financial performance because it is able to generate higher profits and can reduce operating costs. Research conducted by (Safi et al., 2023) argues that investment efficiency can affect financial performance because companies that have higher investment efficiency have lower agency costs, lower agency costs refer to reducing conflicts of interest between shareholders, controllers, and non-investment stakeholders which can lead to better or efficient investment decisions, therefore it can improve the quality of the company's better financial performance. Research conducted by (Ramadhani & Adhariani, 2017) argues that investment efficiency can also affect financial performance because efficient investment can increase company value and generate greater profits. This study also says that investments that can improve financial performance are efficient and targeted investments, meaning that efficient investments are investments that provide optimal results at minimal cost to the company, while targeted investments are investments that are in accordance with the company's business strategy and can strengthen the competitive advantage of a company, targeted investments can also reduce financial risk and increase the chances of achieving the expected investment results.

Research conducted by (Doukas, 2022) states that Investment Efficiency can be measured using Tobins'Q, INVEFF and CDR in companies that make cross-border acquisitions of CBM & A (multinational) which find the results that investment can be repeated with high consistency. In contrast to the results of research conducted (Safi et al., 2023) which states that Investment Efficiency can be measured by ROA asset returns using the Richardson method (2006). Richardson's method explains that, by separating overall investment into expected and unexpected investment in financial institutions in China that are privately or state owned, resulting in companies with high levels of CSR, and tend to have higher Investment Efficiency. However, in contrast to research conducted by (Bae, Biddle, & Park, 2022) Investment Efficiency is measured using the residuals from the regression equation of predicted investment of companies that publish voluntary Capex guidance, and have IBES Guidance Capex and Earnings Guidance data from 2008 to 2014, which results in the classification of companies into over-investment or under-investment groups.

Research on the effect of investment efficiency on financial performance has inconsistent results, so there is a population gap. In previous studies, Investment Efficiency was widely studied from various aspects of the industry, so this study tries again to link Investment Efficiency to Profitability using IRR measurement in companies indexed in LQ45. This study aims to see how investment efficiency can increase profitability, so the sample taken in this study is all companies included in the LQ45 index from the period 2018-2022.

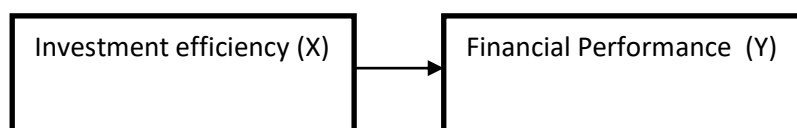
The novelty in this study is to analyse the direct influence between Investment Efficiency on financial performance, with the aim of providing input to companies in determining efficient investment policies that can improve the company's financial performance, and being able to optimise investment strategies to increase a company's profitability and competitiveness in the capital market. From the explanation of the previous sentence, the problem formulation of this research is Does the company's Investment Efficiency affect the company's financial performance?

Companies need efficient investment activities in order to provide benefits in the future. Research (Ramadhani & Adhariani, 2017) argues that the type of investment that can be said to be able to improve the financial performance of a company is targeted investment and efficient investment. Efficient investment if the company is able to allocate capital and resources wisely to assets that have high profit potential, efficient investment also involves analysing project profits, operating costs, and other investment risks. In making efficient investments, investors can maximise potential profits while managing investment risks and costs. Targeted investment is an investment that is in accordance with the company's business strategy and can strengthen competitive advantage and business strategy in making investment decisions to ensure whether the investment is right on target and able to improve financial performance or not.

The results of previous research argue that investment efficiency has an influence on financial performance because efficient investment can increase high profits and companies can minimise costs and maximise the best use of assets so as to increase the productivity and efficiency of company assets (Marsya et al., 2022) In addition, efficient investment can also help companies to expand their business and be able to increase market share so as to increase company profits, with high profits can increase investor and creditor confidence, increase the company's ability to obtain additional funding, increase the company's market value, and provide the company's ability to pay higher dividends to shareholders. In research (Doukas, 2022) argues that investment efficiency can affect financial performance because companies that are more efficient in making investments tend to be able to produce greater added value, therefore efficient investment can increase the value of shareholders and overall good corporate financial performance. Then the hypothesis proposed in this study is as follows:

H1 : Investment Efficiency Affects Financial

Performance Research Framework



LITERATURE REVIEW

Signal Theory

Signal theory is based on the information received by each party related to the company is not the same. So it can be concluded that signal theory is related to information

asymmetry. According to (Spence, 1972) signal theory is able to emphasise information that is relevant to each company's investment decision making. And signal theory can reveal companies in providing positive signals to investors, because with positive signals it can reduce the uncertainty that

Investment Efficiency

Investment is the step by which an entity can direct its funds or assets at this time with the intention of achieving maximum profit and profit in the future. According to (Qi & Deng, 2019) investment efficiency is an investment that is carried out efficiently and optimally in managing the funds owned by a company. Where companies must choose negative NPV and avoid positive NPV.

Financial Performance

Investment efficiency is one of the factors that can affect financial performance, financial performance has 3 ratios, namely profitability, solvency and liquidity. The ratio used is the profitability ratio, because the profitability ratio is able to measure the size of the company's performance in creating profits in the future. Financial performance is an evaluation of how a company manages the assets and liabilities owned by the company, can generate income from the capital owned by a company. (Ali & Oudat, 2020)

METHODS

This study uses a quantitative approach to examine data in the form of numbers and then analyse it using statistical processing. Quantitative method is a research method based on the philosophy of positivism and is used to analyse quantitative statistical data (prof. dr. sugiyono, 2011) Quantitative methods are used to test the relationship and influence of independent and dependent variables, variables are measured and operationalised using data obtained from the Indonesia Stock Exchange or certain media. The population taken is companies listed on LQ45 by looking at annual reports from 2018-2022 with 27 companies listed on LQ45 at this time.

This study uses multiple linear regression analysis using the help of the Eviews application, the data analysis methods used include the classical assumption test model test and hypothesis testing which includes the F R2 test and the t test:

$$ROA = \alpha + \beta_2 IRR + \varepsilon$$

$$ROI = \alpha + \beta_2 IRR + \varepsilon$$

Information

α = Konstanta

β_1 = Coefisien

IRR = Interest Rate

ε = Error

Financial Performance

The dependent variable in this study is financial performance, where financial performance is seen from the profitability ratio (Nikmah & Apriyanti, 2019) as measured using ROA and ROI with the following equation:

$$ROA = \alpha + \beta_1 EI + \varepsilon$$

$$ROI = \alpha + \beta_1 EI + \varepsilon$$

Information

α = konstanta

β = Coefisien

El = Investment Efficiency

Investment Efficiency

Independent variables in this study are investment efficiency measured using ROI and ROA analysed using the IRR method.

$$IRR = i_1 + \frac{NPV_1}{(NPV_1 - NPV_2)} + (i_2 - i_1)$$

i_2 = the resulting interest rate

i_1 = the resulting interest rate

NPV_2 = Net Present Value which has a negative value
the conditions are :

If $IRR >$ the interest rate rejected, investment is accepted

If $IRR <$ the investment interest rate is rejected

Hypothesis testing will be carried out several stages

Model test

Chow test

The Chow test is used in determining whether the Common Effect Model (CEM) or Fixed Effect Model (FEM) is most appropriate for estimating the data.

1. If the Profitability F value is more than 0.005 then the Fixed Effect Model is accepted
2. If the Profitability F value is less than 0.05 then the Fixed Effect Model is rejected. This test is followed by the Hausman test.

Hausman test

The Hausman test is used to determine between the Fixed Effect Model (FEM) and the Random Effect Model (REM).

1. If the Chi-Square Profitability value is more than 0.05 H_0 is accepted, which indicates Random Effect Model (REM)
2. If the Chi-Square profitability value is less than 0.05 H_0 is rejected, which indicates the Fixed Effect Model.

Lagrange Multiplier test

The Lagrange Multiplier (LM) test is used to determine whether the Random effect Model or the Common Effect Method is better.

1. If the LM statistical value is smaller than the Chi-Square, then H_0 is rejected, which indicates that the Random Effect Model.
2. If the LM statistical value is greater than Chi-Square, then H_0 is accepted, which indicates that the Common Effect Model.

Asumsi Klasik test

Normality test

The normality test evaluates the data distribution of a normal group of data or variables. The Jarque Bera (JB) likelihood value and significant level can be used to determine the distribution of residuals. If the JB likelihood value is less than the significant level (0.05), the residual distribution is considered normal.

Autocorrelation test

Said that the autocorrelation test is used to determine whether there is a correlation between confounding errors in period t and confounding errors in $t-1$, or the previous period, in the regression model. The Durbin-Watson autocorrelation test, or DW-test, is the most commonly used technique.

Heteroskedasticity test

The heteroscedasticity test is used to determine whether there is an inequality of variance in the regression model between the residuals of one observation and another. According to the heteroscedasticity test, it is used to determine whether the residuals of the regression model have constant variation.

Multiple linear regression

F test

(Ghozali, 2011) The F test is conducted to determine whether the independent variables in the regression model have an effect on the dependent variable.

1. If the significant value is greater than α (significance level), the regression coefficient is not significant.
2. If the significant value is lower than α (significance level), the independent variable has a significant effect on the dependent variable.

R² test

(Ghozali, 2011) that the test of the coefficient of determination is done to evaluate the ability of the model to explain the dependent variable. The value of the coefficient of determination ranges between 0 and 1.

1. If the determination value of the regression model is closer to the value 1, then the influence of all independent variables on the dependent variable is getting bigger.
2. If the determination value of the regression model is getting closer to the value 0 (zero), then the influence of all independent variables on the dependent variable is getting smaller.

t test

According to (Ghozali, 2011) The t-statistic test is used to measure how far the influence of one independent variable is on the explanation of the dependent variable. The significance value is compared with the specified significance level (α).

1. If the significance value of α (significance level) indicates that the regression coefficient is not significant, then the independent variable does not significantly affect the dependent variable.
2. If the significance value of α (significance level) indicates that the regression coefficient is significant, then the independent variable partially affects the dependent.

RESULTS

Statistik Deskriptif

	ROA	IRR	ROI
Mean	0.080805	15.31144	18.37801
Maximum	0.606287	18.50000	98.18934
Minimum	-0.030802	6.602405	0.164311
Std. Dev.	0.103979	2.389954	21.89009

Descriptive statistics in this study are using the minimum, maximum, mean and standard deviation values for all variables in this study. The data analysis method used to describe the object to be studied with the population and sample in this study.

Chow test

Table 2. Result chow test

Model 1

Effects Test	Statistic	d.f.	Prob.
Cross-section F	18.809176	(26,107)	0.0000
Cross-section Chi-square	231.859333	26	0.0000

Effects Test	Statistic	d.f.	Prob.
Cross-section F	22.659732	(26,107)	0.000
Cross-section Chi-square	252.819991	26	0.000

Model 2

The table above shows the results of the chow test on equation 1 and equation 2 obtained from the profitability value of 0.0000, which means $F < 0.05$. Therefore, the FEM test is selected, so it is continued with the Hausman test.

Hausman test

Table 3. Result hausman test

Model 1

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.015587	1	0.900

Lagrange Multiplier test

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	162.2061 (0.0000)	0.676793 (0.4107)	162.8829 (0.0000)

The table above show that the result of the lagrange multiplier test < chi- square, so test REM test was chosen, so in this study the best test chosen was the REM test.

Model 2

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.000000	1	1.0000

The table above shows that the Hausman test results from equation 1 and equation 2 $\chi^2 > 0.05$, so the REM test was chosen.

F test

F-statistic 2.927085
 Prob(F-statistic) 0.015469

The F test results from the table above show an F value of 2.927085 with a profitability value of 0.015469, so all variables simultaneously affect the bond variable.

R² test

Adjusted R-squared 0.067083

The results of the table above show an adjusted R-square value of 0.067083 (6.70%), which shows that the independent variable is able to explain 6.70% of the dependent variable, the remaining 93.3% is influenced by other factors outside this study.

t test

Variable	Coefficient	Std. Error	tStatistic	Prob.
IRR	-1.827886	1.115836	-1.638131	0.1038
C	46.36556	17.08505	2.713809	0.0076

Hasil dari tabel diatas pada variabel IRR nilai koefisien sebesar -1.827886 dengan value sebesar 0.103 P-value > 0,05, maka menunjukkan bahwa Efisiensi Investasi tidak dapat mempengaruhi kinerja keuangan.

DISCUSSION

The Effect Of Investment Efficiency On Financial Performance

Investment efficiency is a factor that can contribute to the sustainability of the financial system through the allocation of funds and resources owned by each company. Based on this research, investment efficiency can be measured using IRR (Internal Rate of Return), while financial performance can be measured using ROI and ROA with a population of all companies indexed LQ45 by examining the company's annual report. So that it produces that investment efficiency cannot affect financial performance, then H1: rejected. Investment cannot have an influence on financial performance due to market changes or other factors, it is also caused by a lack of focus on increasing revenue, meaning that if investment efficiency is only focused on reducing costs without considering efforts to increase revenue or added value, it has an impact on limited financial performance. There is no research that specifically examines the effect between investment efficiency on financial performance but only There are several previous studies that only argue that investment efficiency can affect financial performance such as in research (Marsya et al., 2022) & (Ramadhani & Adhariani,2017)

CONCLUSION

This study aims to see the effect of Investment Efficiency on financial performance, but the results show that investment efficiency has no effect on financial performance. This research focuses on companies indexed LQ45 for the period 2018-2022 the samples used after fulfilling the criteria are 27 companies with a total of 135 observations.

SUGGESTION

And the result of this study is that investment efficiency cannot affect financial performance, so it is hoped that further research can add other variables to see the effect of investment efficiency on financial performance, besides that it is also expected to add or replace other samples to be tested.

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