

+++++

The Effect of Accounting Information (Net Cash Flow, Return on Equity, and Company Size) on Stock Returns in Manufacturing Companies Listed on the Indonesia Stock Exchange for the 2018 Period

Shofia Asry

Universitas Tama Jagakarsa
**e-mail: sofia.jihan3456@gmail.com*

Abstract

One of the investment activities that can be done is by investing in securities or stocks. The stock itself is evidence of equity participation in a company. Efficient Market Hypothesis explains that stock prices reflect all available information, which means that any information that can be used to predict stock performance will be reflected in stock prices. The sample objects of the companies studied were manufacturing companies on the Indonesia Stock Exchange for 2018, where their financial reports have been published and have been audited. The stock price which is the object of the dependent variable is the price per March 31, which is the last reported price when the shares are sold on the stock exchange, where three months after the end of the fiscal year, at this time the stock price reflects all information available in the market. This price occurs after the shares are listed on the stock exchange (secondary market price), and on March 31 all audit reports have been submitted. The partial test results show that the cash flow variable does not have a significant effect on stock returns, while the ROE and size variables have a significant effect on stock returns. Simultaneous test results show column sig. 0.000 < 0.05 level of significant (a). This means that simultaneously the independent variable has a significant effect on the dependent variable. This means that the null hypothesis (Ho) is rejected, while the alternative hypothesis (Ha) is accepted. The ability of the independent variable in explaining the dependent variable in this model is 37.8%, while the remaining 62.2% is caused by other variables outside this model. Based on these results, by looking at the small number of variables that have a significant effect on price movements and stock returns, it shows that the capital market in Indonesia is still not efficient. In other words, this study proves that the Grand Theory: Efficient Market Hypothesis has not been implemented in Indonesia.

Keywords: *Net Cash Flow, ROE, and Size.*

1. Introduction

The Efficient Market Hypothesis (EMH) explains that stock prices reflect all available information, which means that any information that can be used to predict stock performance will be reflected in stock prices. The stock itself is evidence of equity participation in a company. Financial Accounting Standards (SAK) 1994 and IFRS (International Financial Reporting Standard) 2009 standards in the basic framework for the preparation and presentation of financial statements, paragraph 12 states that the purpose of financial statements is to provide information regarding the

financial position, performance and changes in the financial position of a company. which is useful for a large number of users in making decisions.

Many researchers in the world, including in Indonesia, are trying to prove the theory of the Efficient Market Hypothesis (EMH), but the results of research still produce different conclusions. For example, a study by Ninna and Suhairi (2006) which examined industrial companies in the automotive and textile industries for the 1999-2004 financial reporting period. The variables in this study are the statements of operating cash flow, investment, funding, gross profit, and company size on stock expected return. The results prove that investment cash flow, gross profit, and company size consistently have a positive effect on expected stock returns.

Jimmy Sianipar (2006) examined the effect of book value of equity, residual income, net operating assets and operating income on stock returns, surveyed all 12 industrial companies listed on the Jakarta Stock Exchange for the years 2002-2004. This research proves that the book value of equity, residual income, net operating assets has an effect on stock returns, while operating profit has no effect on stock returns.

Sihar Tambun (2007) examined the effect of cash flow reports, gross profit, operating profit, size, book value, ROE, and ROA on stock returns. The results of his research prove that the gross profit variable has an effect on stock returns, while the cash flow variable has no effect on stock returns, and for the ROE variable has a negative effect on stock returns. the samples studied were public non-financial institutions listed on the Jakarta Stock Exchange for the years 2002-2005.

From this explanation, there are many differences in the results of research from previous periods so that the author wants to reexamine the "effect of accounting information on stock returns for manufacturing companies in 2018" with the research sample that the author took was the Indonesia Stock Exchange. The independent variables that I choose are as follows: net cash flow, return on equity, and size. While the dependent variable in this case is stock returns.

2. Literature Review

Previous Research

Livnat and Zarowin (1991) examined the information content of cash flow components as recommended by SFAS (Statement of Financial Accounting Standard) No. 95. The sample companies were selected from the Compusat Annual Industrial File and CRSP Monthly File using financial reports at the end of the fiscal year. The research sample was 281 companies using financial reports from 1974-1986. The analysis model used is multiple regression. The results of the analysis show that the individual components of cash flow have a different relationship with stock abnormal returns (Livnat and Zarowin: 1991). The individual components of operating cash flow, except for tax payments, have a strong relationship with stock abnormal returns. The individual coefficient of the funding cash flow component is generally consistent with the theory of asymmetry, debt issuance has a positive relationship with stock abnormal returns, common stock issuance has a positive relationship with stock abnormal returns but is weak, preferred stock issuance has a negative relationship with abnormal stock returns and dividends. has a positive relationship with stock abnormal returns. The individual components of investment cash flow do not have a significant relationship with stock abnormal returns.

Jimmy Sianipar (2006) examined the effect of book value of equity, residual income, net operating assets and operating income on stock returns, surveyed all 12 industrial companies listed on the Jakarta Stock Exchange for the years 2002-2004. This research proves that the book value of equity, residual income, net operating assets has an effect on stock returns, while operating profit has no effect on stock returns.

Return of Shares

William H Beaver (1968) was the first to introduce the formula for measuring stock returns, namely:

$$R_i = \frac{D_{it} + P_t - P_{t-1}}{P_{t-1}}$$

Information:

D_{it} = Cash received in period between time period t-1 and period t.

R_i = Stock return

P_t = share price in period t

P_{t-1} = Share price in period t-1

William H Beaver explained that the return of a stock can be measured by calculating the increase in share price plus dividends received. In the development of further research, many researchers assume that dividends are not calculated or ignored in assessing stock returns and only see changes in the stock price. In line with Jogiyanto (2003: 109), this researcher ignores dividends in calculating stock returns as quoted from Ross et al. (2003: 238), which can be written with the formula:

$$R_i = \frac{P_t - P_{t-1}}{P_{t-1}}$$

Information:

R_i = Stock return

P_t = share price in period t

P_{t-1} = Share price in period t-1

According to Jones (2010: 124): "Return is yield and capital gain (loss)". (1) Yield, namely cash flow paid periodically to shareholders (in the form of dividends), (2) Capital gain (loss), which is the difference between the share price at the time of purchase and the share price at the time of sale.

This is reinforced by Corrado and Jordan (2012: 5), who state that "return from investment security is cash flow and capital gain / loss".

Based on the opinion that has been stated, it can be concluded that stock returns are the benefits obtained from the investor's share ownership of the investment he has made, which consists of dividends and capital gain / loss.

Dividends are company profits that are distributed to shareholders in a certain period. Capital gain / loss in a period is the difference between the original stock price (at the beginning of the period) and the price at the end of the period. If the stock price at the end of the period is higher than the initial price, it is said that the investor has gained capital gains, whereas if the opposite happens, the investor receives capital loss.

This "normal" rate of return is the return that is in line with the risk of the shares. However, if a stock is immediately offered at a fair price with all available information, the increase or decrease is a response to new information. By definition, new information must be unpredictable, because if it can be predicted then the prediction is part of today's information. As a result, stock prices that change in response to new (unpredictable) information are also unpredictable. This is the core of the argument that stock prices will follow a random movement, namely that price changes are random and unpredictable.

Long before evidence of market irrationality, randomly moving stock prices were a necessary consequence of the intelligence of competing investors to find relevant information to buy or sell stocks before the entire market was aware of that information. Don't confuse the randomness of price

changes with the irrationality of the price level. If the price is determined rationally, only new information will cause the change. Therefore, a random movement is a natural result of the price which always reflects all the latest knowledge.

This means that if stock movements can be predicted, there will be evidence that the market is moving inefficiently, because the ability to predict prices is an indication that all available information has not been reflected in the stock price. Therefore, the statement that stock prices reflect all available information is called the efficient market hypothesis (EMH).

Dow Theory (Dow Theory), named after its founder Charles Dow (who founded The Wall Street Journal) forms the basis of most technical analysis. Dow Theory lists three forces that simultaneously influence stock prices:

1. A primary trend is a long-term price movement, spanning several months to several years.
2. Secondary or intermediate trends are caused by short-term price deviations from the trend line.

This deviation will be eliminated by correction, when the price returns to its trend value.

3. Tertiary or minor trend (tertiary or minor trend), namely daily fluctuations that are less important.

Financial reports as a source of information are prepared by management in general using a positive approach (Positive Accounting Theory) in the presentation of financial statements and in selecting the company's accounting policies.

The main goal of a positive approach is to develop a hypothesis about the factors that influence the world of accounting practice (Belkaoui: 2000).

Statement of Net Cash Flow / Variable X 1

A statement of cash flow reports the main cash inflows and outflows from a company during a period. This report provides useful information about a company's ability to generate cash from operations, maintain and expand its operating capacity, meet its financial obligations, and pay dividends.

A cash flow statement is considered more informative than a statement of changes in financial position because it can provide information about a company's historical cash flows so that it can be seen from past cash inflows and outflows (FASB 1987).

Meanwhile, the report on changes in financial position emphasizes the use of working capital, so this report is considered less reflective of the company's overall activities. Therefore, the cash flow statement is needed by investors and creditors before making investment decisions and the strength of the company's cash flow can be a reference in choosing stocks with good prospects.

In general, cash inflows in the company can be classified into two sources, namely:

- a. External sources, represent cash flows from owners, investors, sales of investments, and bank or other financial institution loans.
- b. Internal sources, are cash inflows caused by the utilization of fixed assets.

Cash outflows from the company can also be classified into:

- a. External expenditures, namely cash are used to meet obligations that are past due, such as tax costs, past due debts, and returns to owners.
- b. Internal expenditure, namely cash is used to obtain fixed assets of the company, and procurement of supplies, as well as investments for business expansion.

The cash flow statement reports cash flows through 3 (three) types of activities, namely:

1. Cash flow from operating activities
2. Cash flow from investing activities
3. Cash flow from financing activities (Cash Flow from Financing Activities)

1. Cash flow from operating activities

Operating activities reflect the implementation of business plans contained in financing activities and investment activities. Cash flows from operating activities are cash flows from transactions that affect net income, for example including the purchase and sale of merchandise by retailers.

Other cash receipts come from interest, dividends and other similar items. The largest cash expenditures are payments for purchases of supplies, salaries, taxes, interest, utilities, rent and similar expenses. The net cash received from or disbursed in operating activities is the main figure in the cash flow statement.

2. Cash flow from investing activities

Investment activities are activities that involve the acquisition or disposal of long-term assets (non-current assets) and other investments not included in cash equivalents, including lending money and collecting receivables and obtaining and selling long-term productive investments and assets. Investing activities reflect cash disbursements in relation to its purpose to generate future income and cash flows.

Cash flow from investing activity is cash flow from transactions that affect investment in non-current assets. Examples include the sale and purchase of fixed assets, such as equipment and buildings.

3. Cash flow from financing activities

Funding activities are activities that result in changes in the amount and composition of a company's capital and loans. Separate disclosure of cash flows arising from financing activities is necessary because it is useful for predicting claims on future cash flows by suppliers of the company's capital. In this category, cash inflows are activities to obtain funds for the benefit of the company. Cash outflows are repayments to owners and creditors for previously granted funds.

ROE (Return On Equity) / Variable X2

Return on Equity (ROE) is a ratio that measures the company's ability to obtain available profits for the company's shareholders. This ratio is also influenced by the size of the company's debt. If the proportion of debt gets bigger, this ratio will also get bigger.

It can be concluded that if ROE increases, it will result in an increase in stock prices, and if ROE decreases, it means that stock prices also fall. This ratio compares the net profit after tax to capital.

Company Size / Variable X3

Companies that have large total assets show that the company has reached the maturity stage where at this stage the company's cash flow is positive and is considered to have good prospects in a relatively long period of time, besides it also reflects that the company is relatively more stable and more able to generate profits. compared to companies with small total assets.

Hypothesis

From various studies that have been done before and based on a framework of thought, this research will test the following hypotheses:

There is an effect of accounting information (net cash flow, return on equity, and firm size), together on the company's stock return.

This hypothesis will be tested as a whole for one year, namely 2018, so that the analysis of the effect of accounting information on stock returns will be sharp and reliable.

3. Methodology

Place and Time of Research

The sample objects of the companies studied were manufacturing companies on the Indonesia Stock Exchange for 2018, where their financial reports have been published and have been audited. The stock price which is the object of the dependent variable is the price as of March 31, which is the last price reported when the shares are sold on the stock exchange, which is three months after the end of the fiscal year. At this time the share price has reflected all the information available in the market. This price occurs after the shares are listed on the stock exchange (secondary market price), and on March 31 all audit reports have been submitted.

Research Methods

This research is an empirical study conducted with multiple linear regression method. The reason for using this method is based on the previous research concept, which has been described in the previous chapter, namely to determine the effect of accounting information content on stock returns.

The first independent variable here is net cash flow from operating, investing and financing activities proxied from the cash flow statement. The second independent variable is the ratio of return on equity (ROE) which is proxied from profit after tax divided by total equity. The third independent variable is the size of the company which is proxied from the company's total assets.

The dependent variable here is the stock return proxied from the closing price per March 31, which is the last reported price when the shares are sold on the stock exchange, where three months after the end of the fiscal year, at this time the stock price has reflected all the information available in the market.

Research Population

The population studied is the financial statements of manufacturing companies listed on the Indonesia Stock Exchange in 2018. The data used in this study are secondary data, namely from audited financial reports.

The sample was selected by purposive sampling, that is, the population sampled is a population that meets certain criteria in order to obtain a representative sample according to predetermined criteria. The criteria used to select samples are as follows:

1. Companies listed on the IDX during 2018. This is to obtain sustainable data.
2. The company was not delisted during the 2018 period and the financial year ended 31 December.
3. The company has published and published audited financial statements which include direct method cash flow statements for the 2018 financial year. The company's shares were actively traded during 2018.

The sample used is a group of manufacturing companies listed on the IDX. This is based on several reasons regarding the availability of data and other differences where in financial institution companies, their financial ratios are affected by the intervention of Bank Indonesia. A company

registered on the IDX means that its financial statements have been published so that the availability and ease of obtaining data can be fulfilled.

The sample selection is only for companies whose shares are actively traded is intended to obtain a more concentrated distribution so that parameters are relatively efficient and have less variance.

Data Collection Procedures

This study uses secondary data including published audited financial reports, which consist of a balance sheet (financial position), income statement, and cash flow statement during the 2018 period. cash disbursements for investing activities are obtained and this method is recommended by the FASB and PSAK No.2. Meanwhile, data on net income and equity figures are obtained and calculated from the income statement and balance sheet (financial position).

Data Analysis Methods

To answer the problem in this study, a method of analyzing data is needed, namely by testing classical assumptions and testing the results of hypotheses that have been made. The assumptions are multicollinearity, autocorrelation and heteroscedasticity which were carried out using SPSS version 16. Furthermore, the analysis was carried out using multiple linear regression methods, with a degree of freedom (df) 95%, an error rate of 5% (100% -df). The following describes the classic assumption test and hypothesis testing.

1. Classic Assumption Test

The use of multiple regression statistical tools requires testing of classical assumptions. If the classical assumptions are not met, it will bias the results of the study. The classic assumptions that need to be tested are multicollinearity, autocorrelation, and heteroscedasticity. The results will be used to determine whether or not the use of linear regression is continued.

2. Multicollinearity Test

This shows that the independent variables have a direct (correlated) perfect relationship, usually multicollinearity occurs in periodic data (time series data) and between samples (cross sectional). The combination of the two is known as pooling the data.

The multicollinearity test is known from the VIF value for each predictor. The requirement to be said to be free from multicollinearity is if the VIF predictor value does not exceed the value of 10. At this test value, the VIF value does not exceed 10 so it can be concluded that the model is not affected by multicollinearity problems.

3. Autocorrelation Test

Shows that there is a correlation between the error of the previous period, which in the classical assumption this should not happen. The method of detection manually is the Cochrane-Orcutt method, the Hildreth-Lu method, the Durbin-Watson method, the Theil-Nagar method, and the method based on Durbin-Watson statistics. The problem is that autocorrelation is only relevant if the data used is time series data, while cross-section data is not necessary.

4. Heteroscedasticity Test

Shows the variance of each error is heterogeneous which means it violates the classical assumption which requires that the variance of the error must be homogeneous. This

heteroscedasticity problem tends to arise in studies that use cross-sectional data, because these data collect data that represent various measures. The state of heteroscedasticity causes the coefficient to be estimated and reduces the result of the interpretation beyond what it should be, or is misleading, so that eventually the conclusions drawn are wrong.

According to Imam Gozali (2000: 105) there is another way to detect the presence or absence of heteroscedasticity, namely by looking at the plot graph between the predicted value of the dependent variable and its residual. With the basic assumptions, namely:

1. If there is a certain pattern, such as dots that form a certain regular pattern, this identifies heteroscedasticity.
2. If there is no clear pattern, the dots spread above and below the 0 on the Y axis, this indicates that there is no heteroscedasticity.

The way to solve the heteroscedasticity problem is to transform the variables in the regression model that is being interpreted. These methods are:

- 1) Perform a transformation in the form of dividing the original regression model with one of the independent variables used in this model.
- 2) Perform log transformation.

5. Hypothesis Testing Design

This study uses a model where the dependent variable is stock returns and the first independent variable is net cash flow proxied from the difference in cash receipts and payments from each activity. The second independent variable is the return on equity proxied from the ratio between net income and total equity, while the third variable is the size of the company proxied from total assets.

Research Model

The mathematical research model can be written as follows:

$$Y = \beta_0 + \beta_1 \text{NCF} + \beta_2 \text{ROE} + \beta_3 \text{Size} + \varepsilon$$

Where:

Y: Stock Return

β_0 : Intercept

NCF: Net Cash Flow

ROE: Return on Equity (Ratio of Return on Equity)

Size: Company size (Company size)

β_1 - β_3 : Coefficient of independent variables

ε : Error term

Testing Stages with Multiple Regression Analysis

1. Prepare a multiple linear regression equation with the model: $Y = \beta_0 + \beta_1 \text{NCF} + \beta_2 \text{ROE} + \beta_3 \text{Size} + \varepsilon$, and test the model.
2. Prior to further analysis, it is necessary to conduct an econometric test on the analysis model whether or not there is a violation of the classical assumptions, which consist of multicollinearity, autocorrelation and heteroscedasticity with the help of SPSS 16. If there are no violations, then the analysis can be continued.
3. To test the relationship between changes in the dependent variable which can be explained by the independent variables, the adjusted coefficient of determination (adjusted R²) is jointly used, moving from 0 to 1.

The higher the adjusted R2 value means that the more variations in the dependent variable can be explained by the independent variable and the better the model, Wooldridge (2000: 530). For more details, the following describes in more detail each of these stages:

1. Econometric Testing in the Analysis Model
2. Multicollinear Existence Testing
3. Testing Against Autocorrelation
4. Testing of Heteroscedasticity
5. Statistical Testing

1. Econometric Testing in the Analysis Model

To find out that the regression estimation obtained using the Ordinary Least Square Estimators is the best estimate result (BLUE = Best Linear Unepang Estimator), it is necessary to test the assumptions of the classical model. The assumptions of the classical model are:

- a. The mean value of the error terms is zero
- b. There is no serial correlation between error terms (non-autocorrelation)
- c. Homoscedasticity of the error terms (non-heteroscedasticity)
- d. There is no collinearity between independent variables (non-multicollinear), where the independent variables do not contain a certain linear relationship
- e. Disturbances are distributed according to a normal distribution.

2. Multicollinear Existence Testing

Multicollinearity is the correlation between independent variables, where the effect that can occur even though R2 is high, there is very little regression coefficient estimate which is statistically significant and the parameter estimate will be very sensitive with the addition of data. The consequence if there is a correlation between independent variables is: the smallest estimator cannot be determined and the separate effect of the independent variable estimator cannot be estimated with accuracy.

Multicollinear testing is done by estimating the Variance-Inflation Factor (VIF) (Michael S Lewis), using the following formula:

$$VIF_k = \frac{1}{(1 - R_j^2)}$$

Where R2 is the coefficient of determination between the independent variables and the dependent variable. If the VIF value > 10 then the model used occurs multicollinearity. Ways to overcome multicollinearity are:

- Reducing independent variables that have a linear relationship with other independent variables
- Change the shape of the model
- Selecting new samples because multicollinearity is an inherently sample phenomenon
- Transformation of variables

3. Testing Against Autocorrelation

Autocorrelation is the correlation between members of a series of observations which in this model are sorted by time series data. Autocorrelation has the potential to cause serious problems leading to the assessment obtained, although it is unbiased but inefficient. The result is a serial correlation between residuals in the regression estimates:

- a) The residual variable (error terms) will be obtained lower than it should be, resulting in R2 being higher than it should be.
- b) Hypothesis testing using t-statistics and F-statistics will be misleading. The autocorrelation case was detected by the d test from Durbin-Watson using the formula:

$$D = \frac{\sum_{t=2}^{t=N} (e_t - e_{t-1})^2}{\sum_{t=1}^{t=N} e_t^2}$$

Using calculations from the E Views 3 for Windows program, we obtain the DW statistical figures, these numbers are compared with the critical values d_l and d_u .

As for seeing whether our model has autocorrelation or not, an interval from Durbin Watson is made with a significance level of 0.05, namely:

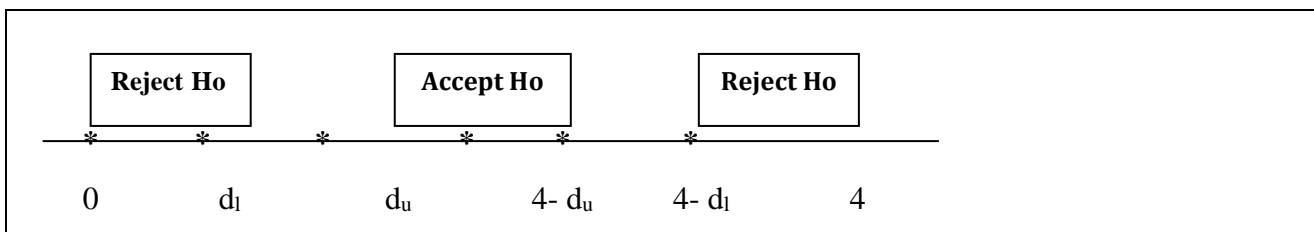


Figure 2. Calculations E Views

Table 1. Run-Test

Interval	Decisions
$D < d_l$ dan $d > 4 - d_l$	Rejecting Ho, meaning that there is autocorrelation in the model
$d_u < d < 4 - d_u$	Not rejecting Ho, there is no autocorrelation in the model
$d_l \leq d \leq d_u$ dan $4 - d_u \leq d \leq 4 - d_l$	It is not known whether or not autocorrelation is present in the model

The Run-Test test to prove the autocorrelation case is used when the Durbin-Watson statistical approach shows that the model is not known whether or not there is an autocorrelation case (located in an unidentified area) explaining the independent variable to the variation of the dependent variable of the function. The value of R2 ranges from $0 < R2 < 1$, the closer to 1, the closer the relationship between the independent variable and the dependent variable can be said that the model is good, and vice versa. In this study, the adjusted R2 was used because it was relatively unbiased compared to the R-square value because it had removed the effect of the addition of the independent variables in the regression equation.

To measure the effect of the independent variables together on the dependent variable, the F test is used, with a significant level of 5%, where the applicable criteria are:

Comparing t count with t table	The effect of independent variables on dependent variables
t count > t table or t count < -t table	Significant
-t table < t count < t table	Not significant

The partial correlation coefficient test is used to explain the magnitude of the relationship between each independent variable on profitability when the other independent variables do not change (*ceteris paribus*).

4. Testing of Heteroscedasticity

Symptoms of heteroscedasticity are often found in cross-sectional data, because observations are made on different individuals at the same time. As for how to detect the presence or absence of heteroscedasticity:

- Graph method
- Park test
- Goldfeld Test - Quandt

Meanwhile, to overcome heteroscedasticity is by:

- Generalized Least Squares (GLS) Method
- Logarithmic Transformation

The author will use a graphical method where the residual pattern (u_i^2) will be examined against the Y_1 (\hat{Y}_i) estimate. After obtaining the regression equation, an estimate is made to obtain the value \hat{Y}_i . The next step is to calculate u_i^2 with the formula:

$$U_i^2 = (Y - \hat{Y}_i)^2$$

Then create a plot between u_i^2 and \hat{Y}_i .

Heteroscedasticity will be detected if the plot shows a systematic pattern, whereas if the pattern is not systematic, there are no symptoms of heteroscedasticity. Thus it can be said that the variance is constant, and it can be concluded that the data is homoscedasticity.

5. Statistical Testing

Statistics is the study of ways of determining an estimate for a parameter and aims to draw conclusions about the parameter value (the value of the population size) based on the associated statistical value.

Simultaneous Test - F

The F-test is used to determine the significance of all regression coefficients, in the following steps: $H_0: \beta_1 = \beta_2 = \beta_3 = 0$, which means that there is no effect of independent variables on the dependent variable simultaneously. $H_a: \beta_1 \neq \beta_2 \neq \beta_3 \neq 0$ means that there is an effect of the independent variable on the dependent variable simultaneously. Ftable value with a significance level (α) of 5% and $df = (n-k) (k-1)$, where n = number of samples, k = number of variables. Then a comparison is made with Fcount to determine whether H_0 is accepted or rejected, provided that: H_0 is accepted if $F_{count} < F_{table}$ and H_0 is rejected if $F_{count} > F_{table}$.

Partial Test - t

The t-test is used to test the regression coefficient individually, with the following conditions:
 Ho: $\beta_1 = 0$, which means that there is no influence between the independent variable and the dependent variable.

Ha: $\beta_i \neq 0$, which means that there is influence between the independent variables on the dependent variable individually.

The next step is to determine the level of significance (α) which is 5% with $df = (n - k)$ to determine the ttable value. Comparison with tcount is made to determine whether Ho is rejected or accepted, provided that: Ho is accepted if $tcount < ttable$ and Ho is rejected if $tcount > ttable$.

To see the significance and estimated value of the equation above, various statistical tests are used: adjusted R2, F-test, t-test and partial correlation coefficient. The use of adjusted R2 shows the degree of ability to explain the independent variables to the variation of the dependent variable of the function. R2 value ranges from $0 < R2 < 1$, the closer to 1, the closer the relationship between the independent variable and the dependent variable is, or it can be said that the model is good and vice versa.

The author uses the F test as a tool to measure the effect of the independent variables together on the dependent variable and with a significant level of 5%. And if the calculated F value obtained is greater than F table ($F\ count > F\ table$), it means that the independent variables together significantly affect the dependent variable.

To find out how the size of each independent variable affects the dependent variable, it can be measured partially through a two-way t-statistic test with a significance level of 5%, where the applicable criteria, if:

Measurement of t-count	$t\ hit > t\ tab$	or	
with t-table	$t\ -hit < -t\ tab$		$-t\ tab < t\ hit < t\ tabel$
The resulting influence		Significance	Insignificance

The partial coefficient test is used to explain the magnitude of the relationship between each independent variable on performance when the other independent variables do not change (*ceteris paribus*). In this study, to process existing data, a computer with Microsoft Excel and SPSS 16.0 for Windows was used.

4. Results and Discussion

Data processing carried out in this study using the SPSS program, using multiple linear regression methods. The variables used in this method consist of stock return variables (Dependent) and Net Cash Flow, ROE, and Company Size (Independent).

Research Samples

Based on predetermined criteria, 59 samples were produced that met good criteria regarding the existence of the company, namely in 2018, the completeness of the data, and the consistency of the company to always be on the Indonesia Stock Exchange which was the variable of this study. The 59 companies that became the research sample were as follows:

Table 2. List of Research Samples

No.	Code	Name
1	IGAR	Kageo Igar Jaya
2	ALMI	Alumindo Light Metal Industry
3	AQUA	Aqua Golden Mississippi
4	ARNA	Arwana Citra Mulia
5	ASII	Astra Internasional
6	AUTO	Astra Otoparts
7	BATA	Sepatu Bata
8	RMBA/BINI	Bentoel Internasional
9	BRAM	Indo Kordsa
10	BRPT	Barito Pacific
11	BTON	Beton Jaya Manunggal
12	CTBN	Citra Tubindo
13	DLTA	Delta Djakarta
14	DVLA	Darya Varia Laboratoria
15	EKAD	Ekadharna Internasional
16	FASW	Fajar Surya Wisesa
17	GDYR	Goodyear Indonesia
18	GGRM	Gudan Garam
19	GJTL	Gajah Tunggal
20	HMSP	Hanjaya Mandala Sampurna
21	IKAI	Intikeramik Alamsri Industri
22	INAI	Indal Aluminium
23	INDF	Indofood Sukses Makmur
24	INAF	Indofarma
25	INRU	Toba Pulp Lestari
26	INTP	Indocement Tunggal Perkasa
27	JPRS	Jaya Pari Steel
28	KAEF	Sekawan Intipratama
29	KIAS	Kageo Igar Jaya
30	KLBF	Alumindo Light Metal Industry
31	LION	Aqua Golden Mississippi
32	LMSH	Arwana Citra Mulia
33	MERK	Astra Internasional
34	MLBI	Astra Otoparts
35	MRAT	Sepatu Bata
36	MYOR	Bentoel Internasional

No.	Code	Name
37	PBRx	Indo Kordsa
38	PICO	Barito Pacific
39	PROD	Beton Jaya Manunggal
40	PYFA	Citra Tubindo
41	RDTx	Delta Djakarta
42	SCPI	Darya Varia Laboratoria
43	SMAR	Ekadharna Internasional
44	SMCB	Fajar Surya Wisesa
45	SMGR	Goodyear Indonesia
46	SMSM	Gudang Garam
47	BUDI	Gajah Tunggal
48	SOBI	Hanjaya Mandala Sampurna
49	SRSN	Intikeramik Alamsri Industri
50	STTP	Indal Aluminium
51	TBLA	Indofood Sukses Makmur
52	TIRT	Indofarma
53	TOTO	Toba Pulp Lestari
54	TSPC	Tempo Scan Pacific
55	ULTJ	Ultra Jaya Milk Industry & Trading
56	UNIT	Nusantara Inti Corpora
57	UNVR	Unilever Indonesia
58	YPAS	Yana Prima Hastapersada
59	INCI	Intanwijaya Internasional

The models formed in this study are:

$$Y = \beta_0 + \beta_1NCF + \beta_2ROE + \beta_3Size + \varepsilon$$

Classical Assumption Test Results

Based on the results of the research conducted, data were obtained from 59 companies sampled in this study.

Table 3. Research Samples

No.	NAME OF ISSUERS	X1 NET CASH FLOWS	X2 ROE	X3 COMPANY SIZE	Y RETURN STOCK
1.	IGAR-Kageo Igar Jaya ALMI-Alumindo light metal industry	36.296,169	0,038	305.782,634	0,084
2.	AQUA-Aqua golden mississippi	27.002,346	0,011	1.636.668,166	0,017
3.		60.938,360	0,142	1.003.487,929	0,001

4.	ARNA-Arwana citramulia	10.086,655	0,192	736.091,719	0,067
5.	ASII-Astra International	8.687	0,278	80.740	0,229
6.	AUTO-Astra otoparts	525.658	0,213	3.981.316	0,096
7.	BATA-Sepatu bata	5.218,941	0,577	401.900,579	0,077
8.	RMBA/BINI-Bentoel international	76.694,243	0,138	4.455.531,964	0,036
9.	BRAM-Indo kordsa	276,769	0,095	1.672.766,471	0,097
10.	BRPT-Barito pacific	1.570.267	0,498	1.724.3721	-0,008
11.	Bton-Beton jaya manunggal	33817,9223	5 0,377	70.508,815	0,364
12.	CTBN-Citra tubindo	3.451.913,7	19 0,213	186.127.728	0,013
13.	DLTA-Delta Djakarta	289.951,36	5 0,161	698.296,738	0,024
14.	DVLA-Darya varia laboratoria	213.488,22	4 0,139	637.660,844	0,133
15.	EKAD-Ekadharma internasional	4.221,793	0,078	140.763,762	0,178
16.	FASW-Fajar surya wisesa	168.650,81	2 0,028	3.718.547,929	0,1
17.	GDYR-Goodyear indonesia	161.867,14	7 0,003	1.022.329,205	0,137
18.	GGRM-Gudang garam	1.134.826	0,121	24.072.959	0,069
19.	GJTL-Gajah tunggal	169.621	- 0,379	8.713.559	0,091
20.	HMSP-Hanjaya Mandala sampurna	-	478.411 0,484	16.133.819	-0,068
21.	IKAI-Intikeramik alamsri industry	278,001	0,019	784.499,132	0,136
22.	INAI-Indal aluminium	28.059,547	0,013	622.405,087	0,3
23.	INDF-Indofood sukses makmur	4.271.208	0,122	39.594.264	0,257
24.	INAF-Indofarma	263.287,77	2 0,017	965.811,676	0,072

25.	INRU-Toba pulp lestari	73.723,834	0,015	3.043.420,567	0,1	
26.	INTP-Indocement tunggal perkasa	790.140,94	8	0,205	11.286.706,860	0,272
27.	JPRS-Jaya pari steel	116.224,30	3	0,182	399.343,736	0,06
28.	KAEF-Kimia farma	221.955,78	2	0,058	1.445.669,8	0,013
29.	KIAS-Keramika indonesia assosiasi	3.343,131	0,177	83.0751,094	0,3	
30.	KLBF-Kalbe farma	1.321.797,6	25	0,195	5.703.832,412	0,255
31.	LION-Lion metal works	80.467,053	0,188	253.141,852	0,19	
32.	LMSH-Lion mesh prima	2.948,837	0,244	61.987,805	0,001	
33.	MERK-Merck	134.140,18	1	0,301	375.064,492	0,095
34.	MLBI-Multi bintang indonesia	276.849	0,646	941.389	0,182	
35.	MRAT-Mustika ratu	98.290,268	0,073	354.780,624	0,171	
36.	MYOR-Mayora indah	316.330,69	9	0,158	2.922.998,415	0,15 8
37.	PBRX-Pan brothers	20.788,055	0,419	952.742,296	0,006	
38.	PICO-Pelangi indah canindo	11.910,639	0,086	588.563,565	0,1	
39.	PROD-Sara lee bodycare Indonesia	26.472,904	0,095	272.313,352	0,003	
40.	PYFA-Pyridam farma	1.981,380	0,033	98.655,309	0,179	
41.	RDTX-Roda vivatex	35.248,378	0,132	580.931,077	0,077	
42.	SCPI-Schering plough Indonesia	6.033,541	0,793	199.526,342	0,625	
43.	SMAR-Sinar mas agro resources	480.277,28	4	0,227	10.025.915,92	0,05
44.	SMCB-Holcim indonesia	852.862	0,111	7.674.980	0,363	
45.	SMGR-Semen gresik	3.746.684,0	82	0,313	10.602.963,72	0,311
46.	SMSM-Selamat sempurna	13.616,225	0,167	929.753,184	0,15	

47.	BUDI-Budi acid jaya	143.395	0,053	1.698.750	0,224	Multicol	
48.	SOBI-Sorini agro asia corporindo	51.938,812	0,262	1.111.099,598	0,067		
49.	SRSN-Indo acidatama	43.148,017	0,035	392.937,045	0,0746		
50.	STTP-Siantar top	5.138,189	0,013	626.749,784	0,091		
51.	TBLA-Tunas baru lampung	357.901,88	5	0,071	2.802.497,072		0,016
52.	TIRT-Tirta mahakam resources	106.98,904	0,518	-	567.227,991		0,338
53.	TOTO-Surya toto indonesia	131.190,54	2	0,174	1.031.130,721		0,002
54.	TSPC-Tempo scan pacific	1.008.252,5	75	0,143	2.967.057,055		0,015
55.	ULTJ-Ultrajaya milk industry & trading	162.869,88	9	0,267	1.740.646,379		-0,032
56.	UNIT-Nusantara inti corpora	5.087,267	0,003		401.305,232		0,009
57.	UNVR-Unilever indonesia	722.347	0,776		6.504.736		0,356
58.	YPAS-Yana prima hastapersada	6.217,278	0,158		180.549,749		0,275
59.	INCI-Intanwijaya internasional	18.377,810	0,025		175.390,877		0,037

Multicollinearity Testing

Multicollinearity test aims to test whether the regression model found a correlation between the independent variables. A good regression model should not have a correlation between the independent variables. If the independent variables are mutually correlated, then these variables are not orthogonal. Orthogonal variables are independent variables whose correlation value between independent variables is equal to zero.

Table 4. Multicollinearity Test Results

		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Net Cash Flow (X1)	.495	2.022
	ROE (X2)	.993	1.007
	Company Size (X3)	.495	2.022

a. Dependent Variable: Return Stock (Y)

The results of multicollinearity testing can be done by looking at the Tolerance and VIF (Variance Inflation Factor) values. The total Tolerance value obtained is above 0.1. While the VIF value is not above ten. This shows that there is no multicollinearity effect because the Tolerance value is greater than 0.1 and the VIF value is smaller than 10, meaning that the model taken as the research sample is good.

Autocorrelation Testing

Autocorrelation test aims to test whether in the linear regression model, is there any correlation between observational data where the data is influenced by previous data, so that the correlation coefficient can be less accurate. Autocorrelation tests are performed using the Durbin Watson (DW test). The data in the model summary shows that Durbin Watson is 2,048 and is between the values of 1.66 or 2.34.

Table 5. Autocorrelation Test Results Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.640 ^a	.410	.378	.1289302	2.048

- a. Predictors: (Constant), Company Size (X3), ROE (X2), Net Cash Flow (X1)
- b. Dependent Variable: Return Stock (Y)

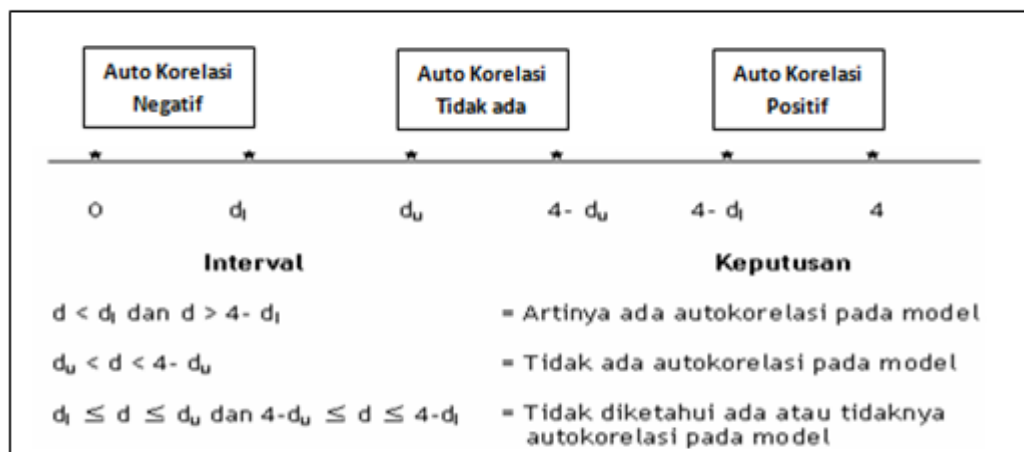


Figure 3. Autocorrelation Testing

1 1.33 1.66 2.34 2.67 0

Position result DW 2,048

From these results it can be seen that the resulting Watson durbin value is in the autocorrelation free area. Therefore it can be concluded that the data generated in this study are free from autocorrelation problems.

Heteroscedasticity Testing

Shows the variance of each error is heterogeneous which means it violates the classical assumption which requires that the variance of the error is homogeneous. This heteroscedasticity problem tends to arise in studies that use cross-sectional data, because these data collect data that represent various measures. The state of heteroscedasticity causes the coefficient to be estimated and

reduces the result of the interpretation beyond what it should be, or is misleading, so that eventually the conclusions drawn are wrong.

According to Imam Gozali (2000: 105) there is another way to detect the presence or absence of heteroscedasticity, namely by looking at the plot graph between the predicted value of the dependent variable and its residual. With the basic assumptions, namely:

1. If there is a certain pattern, such as dots that form a certain regular pattern, this identifies heteroscedasticity.
2. If there is no clear pattern, the dots spread above and below the 0 on the Y axis, this indicates that there is no heteroscedasticity.

The way to solve the heteroscedasticity problem is to transform the variables in the regression model that is being interpreted. This method is as follows:

1. Perform the transformation in the form of dividing the original regression model with one of the independent variables used in this model.
2. Perform log transformation.

The results of this test can be seen in Figure 4 below:

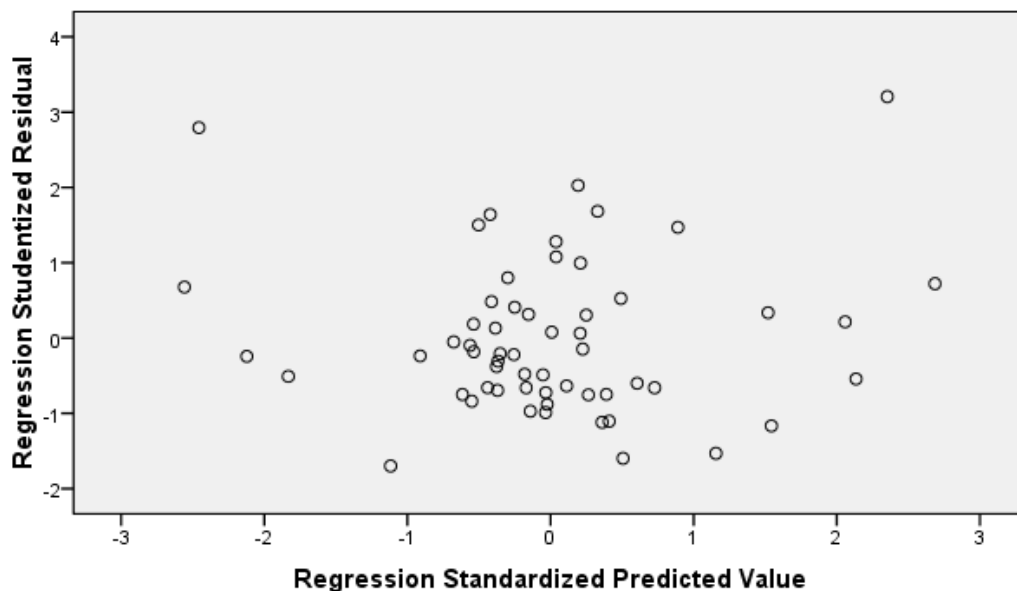


Figure 4. Heteroscedasticity Testing Results

Figure 4 above does not show a certain pattern and does not form a wavy pattern, does not spread then narrows and widened again, or other patterns, which indicate no heteroscedasticity, meaning that the model taken as a sample is good.

Hypothesis Testing and Discussion

Partial Test t Test

The t-test is used to test the regression coefficient individually, with the following conditions: $H_0: \beta_1 = 0$, which means that there is no influence between the independent variable and the dependent variable. $H_a: \beta_1 \neq 0$, which means that there is influence between the independent variables and the dependent variable individually. Comparison with t_{count} is made to determine whether H_0 is rejected

or accepted, with the following conditions: H_0 is rejected if $t_{count} > t_{table}$. and H_0 is accepted if $t_{count} < t_{table}$. This study shows the following results:

Table 6. T Test Results
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.102	.021		4.879	.000
	Net Cash Flow (X1)	2.939E-9	.000	.014	.093	.962
	ROE (X2)	.181	.072	.262	2.518	.015
	Company Size (X3)	3.756E-9	.000	.567	3.853	.000

a. Dependent Variable: Return Stock (Y)

The partial test results show that in fact:

1. The Net Cash Flow variable (X1) does not have a significant effect on stock returns, this is contrary to the FASB and PSAK statements which state that cash flow information is needed by investors in the decision-making process and is able to predict the possibility of the company generating profits and becoming a reference to select stocks with good prospects, and it is also against the theory of the Efficient Market Hypothesis.
2. The ROE variable (X2) has a significant effect on stock returns, this is in accordance with the Efficient Market Hypothesis.
3. The firm size variable (X3) also has a significant effect on stock returns, this is in accordance with the Efficient Market Hypothesis.

From the partial t test, it can be concluded that in reality investors still see the performance and size of a company in investing not on the cash flow information reported by the company.

F test

Multiple regression test or F-test, is used to determine the significance of all regression coefficients, with the following steps: $H_0: \beta_1 = \beta_2 = \beta_3 = 0$ which means there is no effect of the independent variable on the dependent variable together. $H_a: \beta_1 \neq \beta_2 \neq \beta_3 \neq 0$, which means that there is an effect of the independent variable on the dependent variable simultaneously. To determine whether the hypothesis is accepted or rejected, the provisions are H_0 is accepted if $F_{count} > F_{table}$ and H_0 is rejected if $F_{count} < F_{table}$. On the other hand, H_a is rejected if $F_{count} > F_{table}$ and H_a is accepted if $F_{count} < F_{table}$. The results of the F test in this study are as follows:

Table 7. F Test Results
ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	.636	3	.212	12.752	.000 ^b
	Residual	.914	55	.017		

Total	1.550	58			
-------	-------	----	--	--	--

- a. Dependent Variable: Company Size (X3), ROE (X2), Net Cash Flow (X1)
- b. Predictors: (Constant), Return Stock (Y)

The simultaneous test results show that the results of $F_{count} < F_{table}$. These results can be seen in the sig column. $0.000 < 0.05$ level of significant (a). This means that simultaneously the independent variable has a significant effect on the dependent variable. This means that the null hypothesis (H_0) is rejected, while the alternative hypothesis (H_a) is accepted.

The coefficient of determination is adjustable

To test the relationship between changes in the dependent variable which can be explained by the independent variables together, the adjusted coefficient of determination (adjusted R square) is used, which moves from 0 to 1.

The adjusted coefficient of determination can be seen from the output model summary. The higher the Adjusted R Square value, the more variation the dependent variable can explain by the independent variable and the better the model. The test results can be seen from the model summary table as follows:

Table 8. Result of R Square
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.640 ^a	.410	.378	.1289302	2.048

- a. Dependent Variable: Company Size (X3), ROE (X2), Net Cash Flow (X1)
- b. Predictors: (Constant), Return Stock (Y)

The amount of the Adjusted R square number generated in this study is 0.378. So it can be concluded that the ability of the independent variable in explaining the variation of the dependent variable in this model is 37.8%, while the remaining 62.2% is caused by other variables outside this model. The value of 62.2% in this study is called an error.

Interpretation and Economic Implications

Seeing the small number of variables that have a significant effect on stock movements and returns, the researchers interpreted that the capital market in Indonesia, in this case manufacturing companies, is still not efficient.

In this study, stock prices do not reflect all the information that describes the movement of the company's operational performance. The implication of the Efficient Market Hypothesis has not yet occurred in the stock market listed on the Indonesia Stock Exchange.

5. Conclusion

Based on the test results, it is found that several variables used, namely: Net Cash Flow, Return On Equity, and Size have not been able to fully explain stock price movements. This result is

seen from the small Adjusted R Square value in the range of 10% -40%, which means that there are several other variables besides the three variables used that can explain stock price movements.

The partial test results show that the cash flow variable does not have a significant effect on stock returns, while the ROE and size variables show a significant effect on stock returns.

Simultaneous test results show column sig. 0.000 <0.05 level of significant (a). This means that simultaneously the independent variable has a significant effect on the dependent variable. This means that the null hypothesis (Ho) is rejected, while the alternative hypothesis (Ha) is accepted.

The ability of the independent variable in explaining the dependent variable in this model is 37.8%, while the remaining 62.2% is caused by other variables outside this model. The value of 62.2% in this study is called an error.

The phenomenon of the price of a company share that does not match the value of the company that occurs in the Indonesian market has further supported previous studies regarding the efficiency of the Indonesian capital market. The results of this study prove that the Grand Theory: Efficient Market Hypothesis, has not been implemented in Indonesia, which means that the market in Indonesia is not efficient.

Because the ability of the independent variables that we studied (Net Cash Flow, Return on Equity, and Size) in explaining stock returns in this study was only 37.8%, while the remaining 62.2% was not known, academics had to dig again. various sources or other references that can explain the movement of stock returns, such as the time span between Pt and Pt-1 which was originally one month to be closer to one week or other sources, this is expected to contribute more to the development of economics, especially financial management and capital markets.

Future research needs to include several additional new variables which are considered sufficient to explain stock price changes, or need to extend the period of research conducted, so that the accuracy of the effect of stock price movements is more clearly visible.

For investors, the authors only suggest that the market in Indonesia has not been efficient where stock price movements have not reflected the movement of a company's operational performance, and the variables we have examined have not been able to fully explain stock price movements, hence accounting information (Net Cash Flow, Return On Equity and Size) received by investors must be studied further before making investment decisions.

References

- Adila, T. M., Bintang, W. S., Ikhsan, R. B., & Fahlevi, M. (2020). Instagram as information in developing purchase intentions: The role of social E-wom and brand attitude. *Proceedings of 2020 International Conference on Information Management and Technology, ICIMTech 2020*.
<https://doi.org/10.1109/ICIMTech50083.2020.9211151>
- Fahlevi, M., & Juhandi, N. (2019). The Impact of CGPI Award towards Financial Performance of LQ45 Firms. In *The 2nd International Conference on Inclusive Business in The Changing World*.
- Fahlevi, M. (2020). Mobile applications for health management in Indonesia. *Proceedings of 2020 International Conference on Information Management and Technology, ICIMTech 2020*.
<https://doi.org/10.1109/ICIMTech50083.2020.9211243>

- Fahlevi, M. (2020). Economic Analysis of Child Labor Based Households. *Open Journal for Research in Economics*, 3(1), 21–32. <https://doi.org/10.32591/coas.ojre.0301.03021f>
- Indosian Capital Market Directory, *Institute for Economic and Financial Research*, eighteenth edition, Jakarta, 2018.
- Ikatan Akuntansi Indonesia, *Standar Akuntansi Keuangan*, Salemba Empat, Jakarta, 2004.
- Istan, M., & Fahlevi, M. (2020). The Effect of External and Internal Factors on Financial Performance of Islamic Banking. *Jurnal Ekonomi & Studi Pembangunan*, 21(72), 137–145. <https://doi.org/10.18196/jesp.21.1.5036>
- Jurnal Akuntabilitas, Volume 4 No.2, Universitas Pancasila, Jakarta, Maret 2005.
- Jurnal Ekonomi, Manajemen dan Akuntansi, volume 1 No. 3, Fakultas Ekonomi Universitas Cokroaminoto, Yogyakarta, 2003.
- Jurnal Ekonomi Keuangan dan Manajemen, *Analisis Ekonormi Utama*, volume XII Nomor 2, ISSN 1978-1474, Fakultas Ekonomi Universitas Tama Jagakarsa, Jakarta, Mei 2018.
- Kasbuntoro, D. I., Maemunah, S., Mahfud, I., Fahlevi, M., & Parashakti, R. D. (2020). Work-Life Balance and Job Satisfaction: A Case Study of Employees on Banking Companies in Jakarta. *International Journal of Control and Automation*, 13(4), 439-451.
- Noviantoro, R., Maskuroh, N., Santoso, B., Abdi, M. N., Fahlevi, M., Pramono, R., Purwanto, A., Purba, J. T., Munthe, A. P., & Juliana. (2020). Did quality management system ISO 9001 version 2015 influence business performance? Evidence from Indonesian hospitals. *Systematic Reviews in Pharmacy*, 11(8). <https://doi.org/10.31838/srp.2020.8.71>
- Panduan IFRS, Cetakan pertama, Edisi Indonesia, PT. Indeks, Jakarta Barat, 2011.
- Perangkat dan Teknik Analisis Investasi di Pasar Modal Indonesia, PT. Bursa Efek Indonesia, Jakarta, 2008.
- Purwanto, A., Fahlevi, M., Maharani, S., Muharom, F., Suryanto, Setyaningsih, W., Faidi, A., Azhar, A., Pramono, R., & Bernarto, I. (2020). Indonesian doctoral students article publication barriers in international high impact journals: A mixed methods research. *Systematic Reviews in Pharmacy*, 11(7). <https://doi.org/10.31838/srp.2020.7.79>
- Santoso, S., *SPSS: Statistik Parametrik*, Alex Media Komputindo, Jakarta, 2006.
- Sembiring, H.M.Noor., *Modul Pelatihan Penelitian*, Universitas Tama Jagakarsa, Jakarta, 2006.
- Sutia, S., Riadi, R., Fahlevi, M., Istan, M., Juhara, S., Pramono, R., Purwanto, A., Purba, J. T., Munthe, A. P., & Juliana. (2020). Benefit of benchmarking methods in several industries: A

systematic literature review. *Systematic Reviews in Pharmacy*, 11(8).

<https://doi.org/10.31838/srp.2020.8.72>