

The Influence of Financial Reporting Quality, Debt Maturity, and CEO Career Concerns on Investment Efficiency

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ABSTRACT

This research aimed to determine the effect of financial reporting quality, debt maturity, and CEO career concerns on investment efficiency among the companies in manufacturing industry listed on Indonesia Stock Exchange (IDX) from the year 2016 to 2019. The sample was selected by using the purposive sampling method and the valid data consist of 104 companies with 397 data. The data processing method used in this research was the multiple regression analysis by using EViews (Econometric Views) version 11. The results of this study indicated that only financial reporting quality has a positive and significant effect on investment efficiency, while debt maturity and CEO career concerns do not. The implication of this research is the need to increase financial reporting quality to improve investment efficiency by mitigating information asymmetry, such as moral hazard and adverse selection.

Keywords: *Financial Reporting Quality, Debt Maturity, CEO Career Concerns, Investment Efficiency, Manufacturing Industry*

1. INTRODUCTION

Investment is one among the important things that must be considered by a country, because it can increase the growth and development of the economic. Investment is a decision to allocate the funds to support the company's operational activities with the aim to earn income or profit. Shareholders do not necessarily take part in the company's daily operational activities, but instead give confidence to those who have the ability to carry out such activities. Therefore, there is a way to find out whether the invested capital has been allocated properly, namely by looking at the level of investment efficiency. Investment efficiency shows the maximum level of investment done by the management in order to achieve the targets set by the company.

Investments can be allocated inappropriately (investment inefficiency), because there is information asymmetry that creates differences in views between shareholders (investors) and company's management. To achieve the level of investment efficiency optimally, it is necessary to reduce information asymmetry. Investment efficiency can be influenced by several factors, namely financial reporting quality which reflects the company performance. The company's financial reporting quality will hold managers accountable, reduce the occurrence of information asymmetry, and achieve investment efficiency. Debt maturity also affects the level of

investment efficiency. Debt maturity is a financial policy used by companies to determine the maturity of debt. Gomariz and Ballesta [1] explained that companies using short-term debt maturity are predicted to reduce the level of information asymmetry so that investment efficiency can be achieved. In addition to financial reporting quality and debt maturity, CEO career concerns can also affect the company's level of investment efficiency. A CEO is the person who is responsible for the company's investment decisions and for all of the company's operational activities. The age and term of office of the president director are considered to be able to influence investment decisions.

In 2019, the government explained that the level of investment efficiency in Indonesia was still very low, because the level of Incremental Capital to Output Ratio was still above six percent. Therefore, companies can pay attention to financial reporting quality, debt maturity, and CEO career concerns so that they can determine the right investment decisions. This research results may be used by companies to continue improving the level of investment efficiency so that it can facilitate them in avoiding or overcoming the problem of under / over-investment activities (investment inefficiency). For external parties, especially shareholders, this research results may be used as a reference for considering matters related to investment decisions that will be taken by the company.

This research problem is: Do financial reporting quality, debt maturity, and CEO career concerns influence the investment efficiency?

2. BACKGROUND

2.1. Neo-Classical Theory of Investment

Neo-classical theory of investment explicitly assumes to maximize the company, in which economic agents, such as companies, will invest and divest or sell their investments to achieve the maximum capital stock. Jorgenson [2] explained that the neo-classical investment theory discusses about investment decisions, in which the company has a relationship with the cost of capital, and the company's behavior in maximizing profit becomes the basis for investment decisions. Hayashi [3] and Abel [4] stated that the neo-classical investment theory explains that companies will invest until the marginal benefit is equal to the marginal cost with the aim of maximizing company value.

2.2. Agency Theory

According to Jensen and Meckling [5], agency theory is a contractual relationship between managers and shareholders, in which the manager being the party managing the company, has an obligation to run the company based on decision making. Managers have responsibilities to shareholders as a result of both parties having fulfilled the contract agreement. The relationship between these two parties can sometimes cause problems, because human beings are economic creatures with a basic nature of wanting to fulfill their own interests. For example, the management of the company will be more concerned with providing large compensation for its performance in running the company, while shareholders will be concerned with the rate of return on shares or capital invested in the company in a larger nominal and within a short period of time. Therefore, this causes the emergence of agency problems (agency conflict).

2.3. Financial Reporting Quality

The quality of financial reporting is the presentation of financial statements with a good quality and can be used as a reference for making maximum investment decisions so that investment efficiency can be achieved. Financial reports are considered to have a quality, if the information contained can be used to make a decision. This is in accordance with the research conducted by Biddle, Hilary, and Verdi [6] and Chen et al. [7]. Financial reporting quality can affect the cash-flow sensitivity of investments to a lesser extent. The higher financial reporting quality will have an impact on the lower level of information asymmetry so that it can have an impact on the investments that will be made by the company in

accordance with the investments that have been determined and previously planned, as found by Biddle and Hilary [8]. Therefore, it can be said that the investment is run efficiently. The results of this study are also the same and in line with the research conducted by Chen et al. [7] which showed that financial reporting with higher quality will facilitate and assist companies in making investments during a condition of investment inefficiency.

2.4. Debt Maturity

Debt maturity is used by the company to determine the maturity of debt that will be used in paying-off its debts to external parties, especially creditors. There are two types of debt maturity, namely short-term and long-term debt maturity. The research conducted by Gomariz and Ballesta [1] concluded that the maturity of short-term debt has an influence on investment efficiency. However, this is not in line with the research conducted by Septiana and Ikhsan [9] who found that debt maturity does not affect investment efficiency. Myers [10] and Jensen [11] stated that debt has an interest in disciplining managers in making investment decisions. Gomariz and Ballesta [1] also stated that the use of a short-term debt maturity policy will avoid the problem of information asymmetry. This is because the maturity of short-term debt will create tighter supervision and control of managers. Therefore, it can prevent them from making deviations in making investment decisions, hence investment efficiency can be achieved. Childs et al. [12] also shared the same opinion, namely the short-term debt maturity with higher level of flexibility, will reduce the agency conflict between management and creditors, thus investment inefficiency problems can be avoided. This is not in line with the research conducted by Septiana and Ikhsan [9] which stated that short-term debt does not have a significant effect on investment efficiency.

2.5. CEO Career Concerns

Chief Executive Officer (CEO) career concerns are related to the career concern of a President Director based on his or her age and time of appointment. Gibbons and Murphy [13] stated that managers experience career concerns when their performance is used to assess their ability and to determine their compensation. Career concerns in the new President's term can have a negative impact. This is due to the market environment and creditors who still do not believe in the ability and performance of the President Director. Recognition of the ability and skills of the President Director is important, because it will have an impact on job security, market competitiveness, future compensation, and managerial autonomy. Xie [14] stated that CEO career concerns have an effect on investment decisions, assuming that younger President Directors (under 50 years old) have a higher motivation to build a good reputation and to expand into new market segments. Therefore, younger President Directors tend to focus more on profits and they will invest efficiently. On the other

hand, older and more experienced President Directors tend to invest less efficiently. However, this is not in line with the research conducted by Aulia and Siregar [15], which stated that the CEO career concerns has a significant effect on over-investment conditions. Companies need to consider age as a factor in selecting a new President Director and setting a limit on the number of times a President Director can serve in his or her position again.

2.6. Hypothesis Development

The research conducted by Biddle, Hilary, and Verdi [6] and Chen et al. [7] stated that financial reporting quality has a significant influence on investment efficiency. This is related to reducing the level of information asymmetry between company management and external parties, namely the shareholders. A high level of financial reporting quality makes managers have greater responsibility so that the supervision carried out on investment activities becomes more stringent and can reduce information asymmetry, including capital hazard and adverse selection.

H₁: Financial Reporting Quality has a positive effect on investment efficiency.

The results of research conducted by Gomariz and Ballesta [1] stated that short-term debt maturity has a significant effect on investment efficiency. This is because short-term debt maturities have a faster repayment period or within a period of no more than one year, thus making managers think of various ways to place the investment funds to a higher level of investment efficiency. However, this research is not in line with the research conducted by Septiana and Ikhsan [9], which stated that short-term debt does not have a significant effect on investment efficiency.

H₂: The use of short-term debt has a positive effect on investment efficiency.

Xie [14] in his research stated that the CEO career concerns has a significant influence on investment efficiency. Xie [14] also stated that the age of President

Director has an influence on the company's investment decisions. However, this is not in accordance with the research conducted by Aulia and Siregar [15], which stated that the CEO career concerns has a significant influence in over-investment conditions.

H₃: CEO career concerns has a negative effect on investment efficiency.

The research framework can be see in the Figure 1 below:

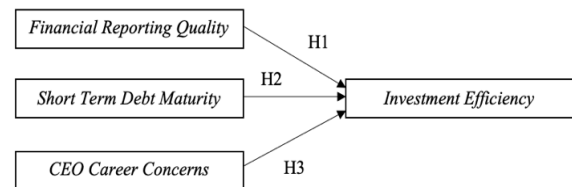


Figure 1 Research Framework

2.7. Methodology

This research used the quantitative data analysis method with secondary data obtained from the Indonesia Stock Exchange (IDX) in the 2016 - 2019 period. The data was processed using the multiple regression analysis by using EViews 11 software.

The independent variable in this research is investment efficiency, while the dependent variables are financial reporting quality, short-term debt, and CEO career concerns. This research also used 7 control variables to avoid biases in the calculation of the analysis. The control variables were added to this research to control the relationship between independent and dependent variables. Based on the previous research, the control variables in this research, namely LnAge, Loss, CFO, Leverage, Size, Tang, and Tobin's Q, are closely related to the dependent variable, which is investment efficiency. Therefore, the 7 control variables were also analyzed in this research.

The operational variables and measurements used are as follows:

Table 1 Operational Variables and Measurements

No	Variable	Var. Type	Source	Size	Scale
1	Investment Efficiency	Dependent (Y)	Aulia & Siregar (2018) [15]	$Invest_{i,t} = \beta_1 + \beta_1 NEG_{i,t-1} + \beta_2 \%RevGrowth_{i,t-1} + \beta_3 NEG * \%RevGrowth_{i,t-1} + \epsilon_{i,t}$	Ratio
2	Financial Reporting Quality	Independent (X1)	McNichols & Stubben's (2008) [16]	$\Delta AR_{i,t} = \beta_0 + \beta_1 \Delta Sales_{i,t} + \epsilon_{i,t}$	Ratio
3	Financial Reporting Quality	Independent (X1)	Kasznik (1999) [17]	$TA_{i,t} = \beta_0 + \beta_1 \Delta Sales_{i,t} + \beta_2 \Delta PPE_{i,t} + \beta_3 \Delta CFO_{i,t} + \epsilon_{i,t}$	Ratio
4	Short-Term Debt	Independent (X2)	Aulia & Siregar (2018) [15]	$STDebt = \frac{Short\ Term\ Total\ Liabilities}{Total\ Liabilities}$	Ratio

5	CEO Career Concerns	Independent (X3)	Aulia & Siregar (2018) [15]	Dummy Variable, if the age of the CEO is older than 50 = 1, if not older than 50 = 0. If the CEO is appointed in that year and 0 (vice versa). The two dummies are then added-up.	Nominal
6	LnAge	Control	Aulia & Siregar (2018) [15]	Logarithm Natural Company Age	Ratio
7	Loss	Control	Aulia & Siregar (2018) [15]	Dummy Variable, If Loss =1 if not = 0	Nominal
8	CFO	Control	Aulia & Siregar (2018) [15]	$STDebt = \frac{Cash\ Flow\ From\ Operation}{Total\ Asset}$	Ratio
9	LEV	Control	Aulia & Siregar (2018) [15]	$LEV = \frac{Total\ Debt}{Total\ Asset}$	Ratio
10	SIZE	Control	Aulia & Siregar (2018) [15]	Logarithm Natural Sales	Ratio
11	Tang	Control	Aulia & Siregar (2018) [15]	Property, Plant, and Equipment Ratio to Total Assets	Ratio
12	Tobin's Q	Control	Aulia & Siregar (2018) [15]	$Tobin' = \frac{Total\ Market\ Value\ of\ Equity + Total\ Liabilities}{Total\ Asset}$	Ratio

The sampling selection method used was purposive sampling among the companies in manufacturing industry as the samples if they met the following criteria: 1) Manufacturing companies listed on IDX in the 2016 - 2019 period; 2) Companies that include Annual Reports along with financial statements expressed in Rupiah (Rp);

and 3) Consistent in presenting the financial statements as of December 31st. The total number of valid samples is 104 companies. The secondary data was obtained from IDX based on the companies that met the purposive sampling requirements.

3. DATA ANALYSIS

3.1. Descriptive Statistics

Table 2 Descriptive-Statistics Test Result

	Mean	Median	Maximum	Minimum	Std. Dev.
INVEFF	-0.17977	-0.16041	-0.00059	-1.00819	0.129563
FRQ_AGGREG	-0.0609	-0.041	-0.00221	-0.41974	0.062723
STDEBT	0.70624	0.724081	1.765755	0.060512	0.228467
CC	0.989924	1	2	0	0.58162
TANG	0.396337	0.373887	0.923987	0.001194	0.196982
TOBINSQ	1.857115	1.033059	35.06396	0.138228	3.037862
CFO	0.077174	0.051021	1.346145	-0.234	0.142112
LEV	0.483509	0.437755	2.899874	0.007689	0.343326
SIZE	28.31474	28.24444	33.50614	22.84788	1.715383
LNAGE	3.675818	3.713572	4.644391	2.302585	0.389515
LOSS	0.785894	1	1	0	0.410718

Based on the descriptive-statistics results in Table 2, the investment-efficiency variable had an average of -0.17977. This means that the companies in Indonesia averagely had an efficient level of investment, because such value is close

to the maximum value of investment-efficiency level, which is -0.00059. Financial reporting quality had an average of -0.0609. This means that the companies averagely had quality financial reporting, because the value is close to the

maximum value of the level of investment efficiency, which is -0.00221. Short-term debt maturity had an average of 0.70624, which means that on average, the companies had a short-term debt maturity level of only 70.62% of the total loans owned. Therefore, it can be said that the level of short-term debt maturity usage among companies in Indonesia was very high when being compared to their total liabilities. Then, there were 75% of CEOs who were over 50 years old and 23.56% CEOs who had just been inaugurated during the research period. Tangibility had an average value of 0.396337. So, it can be concluded that those companies had an average of fixed assets as much as 39.63% of the total assets owned. So, it can be said that the ownership of fixed assets among companies in Indonesia was quite low when being compared to their total assets. Tobin's Q has an average value of 1.857115, so the companies in Indonesia had an average market value 1.49 times greater than their book values. CFO had an average of 0.077174. So, it can be said that the operating cash-flow of companies in Indonesia was quite low compared to their total assets. The average value of the company's leverage was 0.483509. This value explains that the companies in Indonesia averagely had the ability to rely on debts to finance their assets by 48.35%. The average value of company size was 28,31474 (IDR

1,981,232,021,086). This explains that the average company size in Indonesia was large. The average company age was 3.675818 (39 years). This explains that the average age of companies in Indonesia was 38 years. Then, there were 78.84% of companies in Indonesia that suffered losses during the research period.

3.2. Classical-Assumption Test

This research has tested the classical assumptions and obtained the result that there is no classical assumption problem in this study. After ensuring that the research is free from the problem of classical assumptions, then a model test was carried out to determine the appropriate model for testing. Based on the results of Model Test (Chow-Test and Hausman-Test), it was found that the Random-Effect Model was the most appropriate for regression model.

3.3. Panel Data Regression Analysis

Then, a partial test (t-test) was carried out and the results can be seen in Table 3 below:

Table 3 Panel Data Regression Analysis Test Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.418909	0.157463	-2.660369	0.0081
FRQ_AGGREG	0.422783	0.091603	4.615373	0.0000
STDEBT	0.047486	0.033195	1.430491	0.1534
CC	0.000328	0.010874	0.030137	0.9760
TANG	0.020408	0.044550	0.458097	0.6471
TOBINSQ	0.001581	0.002304	0.686154	0.4930
CFO	0.044084	0.046275	0.952657	0.3414
LEV	0.024338	0.023235	1.047438	0.2956
SIZE	0.010703	0.005577	1.919110	0.0557
LNAGE	-0.029472	0.025066	-1.175762	0.2404
LOSS	0.010676	0.016359	0.652626	0.5144
R-squared				0.067499
Adjusted R-squared				0.043341
F-statistic				2.794076
Prob(F-statistic)				0.002375

Dependent Variable: Investment Efficiency(InvEff)

Based on the results in Table 3, the regression equation developed in this research can be seen in the formula below:

$$\begin{aligned}
 InvEff = & -0.418909 + 0.422783FRQ + 0.047486STDEBT + 0.000328CC \\
 & + 0.020408TANG - 0.01581TOBINSQ + 0.044084CFO \\
 & + 0.024338LEV + 0.010703SIZE - 0.29472LNAGE \\
 & + 0.010676LOSS + \epsilon
 \end{aligned}$$

Based on the regression results, the determinant test shows that financial reporting quality has a positive effect with the coefficient of 0.422783 (positive) and a significance value of 0.000 (significant). Thus, it can be concluded that financial reporting quality has a positive and significant effect on investment efficiency. It also shows that the higher the financial reporting quality is, the higher the investment efficiency will occur.

The second independent variable, namely debt maturity, has a positive effect with the coefficient of (0.047486), but its effect is not significant on investment efficiency with a significance value of 0.1534 (not significant). The third variable, CEO career concerns also has a positive but insignificant effect on investment efficiency, with the coefficient of 0.000328 and a significance value of 0.9760.

To find out the correlation between the independent variables and the dependent variable, a multiple determinant coefficient test (R^2) was conducted. In Table 3, it is stated that the adjusted R-square has a value of 0.043341. To find out whether there is a significant effect between the independent variables simultaneously on the dependent variable, a simultaneous test (F-test) was carried out. In Table 3, it is stated that the probability value (F-statistics) is 0.002375. This means that the independent variables have a simultaneous effect on the dependent variable.

4. DISCUSSIONS

H₁: Financial Reporting Quality has a positive effect on investment efficiency.

The result of this study is in accordance with the research conducted by Biddle, Hilary, and Verdi [6] and Gomariz & Ballesta [1], which stated that financial reporting quality will reduce the sensitivity of investment cash-flows. The higher the quality of financial reporting is, the less likely the asymmetry of information will happen. This is because the quality financial reporting can make managers more accountable and shareholders to be more stringent in supervising managers in carrying out operational activities. Therefore, this phenomenon can limit the company management who have other motives in making investment decisions. This research found that financial reporting with higher quality can have an impact on the investment conducted by the company as expected. Thus, this shows that the higher the financial reporting quality will increase the higher level of investment efficiency.

H₂: The use of short-term debt has no significant effect on investment efficiency.

This research is aligned with the research conducted by Septiana and Ikhsan [9]. Based on the data listed in the descriptive-statistics table, it is stated that the average company in Indonesia used short-term debt as much as 70.62%. This value describes a very large nominal, so it can be concluded that it will have an effect on the company's cash-flow. There should be cash that can be used for investment activities, but it must also be used to pay debts and interest. This has an impact on the company not being

able to carry out the investment optimally and making the investment efficiency unattainable.

H₃: CEO Career Concerns has no significant effect on investment efficiency.

This result is in accordance with the research conducted by Aulia & Siregar [15]. Among the manufacturing companies in Indonesia, neither the age nor the term of office of the President Director is a benchmark in making investment decisions. This is because both the President Directors under and above 50 years old have advantages and disadvantages. In this study, both the strengths and weaknesses of the President Director have no effect on investment efficiency. However, it is possible that CEO career concerns have a significant effect on investment efficiency in other company sectors.

5. CONCLUSIONS, LIMITATIONS, AND SUGGESTIONS

This research revealed that there is only one independent variable that has an influence on the dependent variable, namely financial reporting quality on investment efficiency. Financial reporting quality at a higher level, will have an impact on better investment efficiency by reducing information asymmetry. Then, it can make managers more accountable and increase stricter supervision of managers who have other motivations in making investments. The results of this research can be used as a reference for the company internal management. This study suggests managers to improve financial reporting quality so that investment efficiency can be achieved and company management can use financial statements as a reference in making investment decisions. The results of this research are expected to provide new information so that investors can view financial statements to find out how efficient the investments conducted by companies, because the financial reports in Indonesia have high quality. The limitations of this study are: (1) This study only took four years of data, namely from 2016-2019; (2) This study only used three independent variables, namely financial reporting quality, debt maturity, and CEO career concerns, with seven control variables, namely tangibility, Tobin's Q, cash flow from operating activities, leverage, size, income, and loss; and (3) This study only used companies in manufacturing companies. Suggestions that can be provided for further research are: (1) Increasing the number of research periods and changing the researched sector, such as research on non-financial companies; and (2) Replacing and adding independent variables in order to further develop research on investment efficiency in Indonesia.

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