

## Conference Paper

# Composition of Commissioners and Directors, Profitability, Capital Structure and Investor Investment Decisions: Role of Sustainable Investment

**Krystella, Tigor Sitorus, and Edi Purwanto**

Masters in Management Program, Bunda Mulia University, Jakarta, Indonesia

### Abstract

This study aims to determine the role of the sustainable investment on the composition of commissioners and directors, profitability, capital structure and investor investment decisions in financial sector companies listed on the Indonesia Stock Exchange. The research data were obtained from 2015-2018 by annual reports, financial reports, sustainability reports, summaries of tradable shares volume, and summaries of listed shares of financial sector companies listed on the Indonesia Stock Exchange (IDX). 48 units of observation data were collected. This study used quantitative analysis techniques with Structural Equation Modeling (SEM) and was processed by SmartPLS 3. The test results showed: 1) investor investment decisions are negatively and significantly affected by composition of commissioners and directors; 2) investor investment decisions are not affected by profitability; 3) investor investment decisions are positively and significantly affected by capital structure; 4) sustainable investment is positively and significantly affected by the composition of commissioners and directors; 5) sustainable investment is positively and significantly affected by profitability; 6) sustainable investment is not affected by capital structure; 7) investor investment decisions are positively and significantly affected by sustainable investment. Therefore, the sustainable investment mediation effect of the composition of commissioners and directors on investor investment decisions is quasi-mediating. It is also proven that there is fully mediating on the effect of profitability on investor investment decisions. While the effect of capital structure on investor investment decisions is not proven to mediate.

**Keywords:** composition of commissioners and directors, profitability, capital structure, sustainable investment, investor investment decision

Corresponding Author:

Tigor Sitorus  
 sitorus\_tigor@yahoo.com

Published: 11 November 2020

Publishing services provided by  
**Knowledge E**

© Krystella et al. This article is distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the IC-HEDS 2019 Conference Committee.

## 1. Introduction

### 1.1. Background Research

Investment is one indicator in assessing the level of economic development of a country. The more active its investment activities, the better the country's economic development. Therefore, the Government of Indonesia is currently trying to attract

 **OPEN ACCESS**

more interest from the public and foreign investors to invest in the national capital market. The trend of investing in the capital market has also increased from year to year. This is indicated by an increase in the number of investors shown through the Single Investor Identification (SID) registered at KSEI. The number of SID registered at KSEI until December 26, 2018, was 1,617,367; growing 44% compared to the end of December 2017.

However, investing in the capital market has a high level of risk. Sometimes when an investment can generate profits in the form of capital gains and dividends, it can also lead to losses caused by not achieving the expected return. So investors need to make wise investment decisions. To be able to make wise investment decisions requires knowledge of the financial and nonfinancial related companies.

Financial knowledge includes information on company financial statements, company performance, risks, economic conditions, inflation, interest rates, etc. [1, 4, 6, 8, 10]. Then non-financial knowledge can be in the form of political stability, diversity of commissioners and directors of a company, corporate image, and company contributions to the environment, social and governance (ESG) [4, 6, 40, 46].

Besides, the escalating issues of climate change and global warming which have become more intense lately have also changed the pattern of investor decision making in choosing investments [43]. More than 90% of climate scientists believe that climate change is real and that human activity is at least partially responsible. This increasingly requires companies to pay more attention to the environmental impacts that can be caused in the industrialization process [46].

This situation led to the birth of the concept of sustainable investment. Sustainable investment is an investment approach that takes into account environmental, social, and governance (ESG) factors in the selection and management of portfolios. [25] revealed that sustainable investment includes various asset classes that are chosen while caring for the causes of ESG. In 2017, global investment in renewable energy and energy efficiency fell by 3% and there is a risk of slowing down even further; obviously, fossil fuels still dominate energy investments [36]. However, the 2018 Global Sustainable Investment Review reports that at the beginning of 2018, global sustainable investment (in 5 major markets) reached US \$ 30.7 trillion, increasing 34% in two years [18].

Investors can find out information on the company's ESG implementation from the sustainability report published by the company. Sustainability report is a measurable report issued by a company or organization about economic, environmental, and social impacts caused by the company's daily operational activities. In Indonesia, the report is still voluntary. Whereas in various developed countries in the European region and

Asian countries such as Japan, each company, both state-owned and publicly-listed companies, is required to make a sustainability report. Besides getting high scores and ratings in the Environmental Performance Index (EPI), Japan was among the most environmentally friendly countries in 2018 according to a survey from the Value Champion. This is inversely proportional to Indonesia, which is ranked 133rd out of 180 countries in the EPI.

Indonesia still faces a very serious problem of river pollution. Citarum River is one of the dozens of rivers in Indonesia that are heavily polluted due to human activities that dump waste or industrial waste into rivers [37]. Besides, based on KLHK records, forest, and land areas that were burned (forest and land) until October 1, 2019, increased by 80.29 percent from the same period in 2018 [13]. One way to overcome this can be done by investors is to make sustainable investments. Therefore, investors need to know what factors can influence companies in implementing ESG policies so that they can screen and scan for sustainable investment. Besides, there have been several studies examining the relationship between the composition of commissioners and directors, profitability, capital structure, sustainable investment, and investor investment decisions.

[22] examined the effect of the composition of the company's top management team on investor decisions and found that the greater the diversity of the top management team, the more investors invested in the company. Research [32] found that investor decisions are influenced by the presence of women directors in a positive and significant way. Investors responded positively to the appointment of women directors especially from outside the company because of increasing diversity in ranks and independence [27]. Besides, [12] also examined the effect of the structure of top-level management on investor decisions during an IPO and found that companies with prestigious strategic leaders can assist investors in assessing the quality of their financial statements. Investors tend to be more receptive to financial statements that are certified by prestigious strategic leaders because these people will be more disadvantaged if their financial statements are proven to contain errors. Even though investors rate positively, the high diversity has weaknesses that make companies reluctant to have a board of commissioners and directors with diverse backgrounds and gender. Weaknesses are like spending more time and effort to reach consensus or the risk of higher conflict between members [27].

Besides the composition of commissioners and directors, the development of the company's revenue from year to year mustn't escape the consideration of investors, whether it has decreased or increased. In line with seeing the development of revenue, the development of the company's net profit is also a matter that must be considered

by investors. Companies that have a consistent income and net profit to grow are good companies to invest. Quality companies with good financial performance will certainly have value that continues to grow in the eyes of investors, thereby increasing the company's stock price [4, 10]. This result is in line with research by [20, 38] which found that investor decisions are influenced positively and significantly by profitability.

However, [35] revealed that profitability had a negative effect. Besides, the research of [6] found that corporate income did not significantly influence investor decisions but rather dividend distribution. This might be caused by investors valuing useless if the company's revenue increases if it is not accompanied by dividend distribution.

Then there is research that found that investor decisions on investment are also influenced by capital structure [2, 3, 42]. However, in the research of [16] as well as [20] no effect of capital structure was found on investor investment decision.

The composition of commissioners and directors influences the company's willingness to implement ESG. [46] states that the board of directors is the most important part of corporate governance. However, [46] also found that if the CEO also concurrently served as a member of the board of commissioners, it would lead to the opportunistic situation of the controlling shareholders and the level of willingness of the company to invest in low environmental protection. So, that the proportion of independent directors needed to increase investment in environmental protection.

[26] states that the presence of female executives can increase investment in protection in companies and this is not influenced by industry attributes, which means that not only in industries that cause pollution but also in non-polluting industries. [44] also added that the number of female executives must be at least three to have a significant impact on corporate environmental investment decisions. Research [7] found that increasing diversity in the ranks of commissioners and directors did not contribute positively to corporate CSR, despite a positive relationship between the percentage of women's presence with CSR. Thus, the presence of female executives in the company influences investor considerations in making sustainable investments.

Besides, profitability also encourages companies to adopt the application of policies related to ESG. However, few studies have found this relationship. More research examines the effect of ESG on profitability. Said by Margolis, Joshua, and Hilary Elfenbein (2008) in the Harvard Business Review as quoted by [16] that this result might be an inverse causality which means companies that have good financial performance (profit) are better able to contribute to ESG. Research conducted by [16] also found evidence that when companies operate efficiently and get a greater return on assets, companies will be more likely to practice ESG. [46] also revealed the same thing: the higher the

company's efficiency, which means increased profitability, the higher the company's willingness to invest in environmental protection.

The capital structure also influences the company in carrying out environmental risk management [19]. Capital structure with a lower proportion of internal equity than external prioritizes the application of ESG. This is caused by the external investors who are more interested in making sustainable investments. Besides, [11] found that increasing ESG activity reduced the cost of equity. However, capital structure financed through long-term debt ESG activity tends to be low. This is because banks and some funding agencies consider that ESG aspects are not the main aspects of providing loans and financing. They tend to think of it as greenwash, so it is a risk [17]. However, [19] found that funding agencies favor companies that report ESG activities because they are believed to reduce information asymmetry and increase transparency.

[34] find that the market positively and significantly respects environmental practices by companies that are not related to industries that are sensitive to environmental pollution. Conversely, the market positively and significantly respects the social and governance practices carried out by companies related to industries that are sensitive to environmental pollution. [43] also revealed that ESG by companies is the best choice for investors and portfolio managers in allocating assets to sustainable investments and reducing market risk. Research [5] reveals that investors use ESG information in determining their investment decisions. The research of [40] found that CSR disclosure has a direct effect on investors' reactions in making investment decisions and there is a mediating relationship between company size, media exposure, and industry sensitivity to investor reaction. Research conducted [30] also found that investors make sustainable investments in making investment decisions based on ESG information of related companies. Besides, most millennial investors prefer to make sustainable investments over conventional investments [15]. The results of the study [14] who researched Indonesia found that there was an increase in sustainable investment because sustainable investment provided better returns. In contrast to the results of the study of [25] where it was found that there were no significant differences related to the rate of return on investment between companies that applied ESG and those who did not. In other words, investors do not pay much attention to ESG aspects in the decision-making process.

Based on the research gap from previous researchers, the researcher is interested in developing research on the influence of the composition of commissioners and directors, profitability, and capital structure on investor investment decision by proposing sustainable investment as a mediator.

## 1.2. Literature Review

### 1.2.1. Theoretical Review

#### Investor Investment Decision

Investor investment decision is investor cognitive processes that result in the selection of one investment from several investment alternatives [6]. Investor investment decision is also defined by how investors decide to choose which investments will be made, how much investment will be, and when the investment will be made [24].

Investor investment decision are proxied through Trading Volume Activities (TVA). TVA can reflect all investor activities in the capital market [40]. TVA compares the number of shares of a particular company traded with those circulating at a certain time. TVA was observed using a period of 11 (eleven) days, -5 (minus five) to +5 (plus five) days from the date of publication of the sustainability report.

#### Composition of Commissioners and Directors

Organizational theories such as resource dependence theory, agency theory, stewardship theory, and social role theory provide a broad theoretical foundation on how the composition and diversity of commissioners and directors influence organizational and investor behavior [7, 12, 44]. According to [33], resource dependence theory focuses on the role of the board in engaging with the external environment to access critical resources.

Then in [33] also mentioned agency theory related to aligning the interests of owners and managers and based on the premise that there is an inherent conflict between the interests of company owners and their management. Most commonly, the relationship contained in agency theory is the relationship between shareholders, company owners, and company executives, as agents.

Besides, there is also a stewardship theory that recognizes a relationship built on trust between shareholders and management, which in turn minimizes the costs of monitoring and controlling management behavior [33]. This theory believes that managers inherently try to do a good job, maximize corporate profits, and provide good returns to shareholders.

There is also a social role theory that underlies the influence of gender in social research. Social role theory discusses gender stereotypes which state that men are self-oriented and women are public-oriented [44]. Thus, [46] defines the composition

of commissioners and directors as the diversity in the composition of commissioners and directors such as the proportion of independent commissioners and independent directors, their background, and their gender.

## Profitability

According to [38], profitability is used to measure the extent of overall management effectiveness in creating profits for companies. In this research, profitability is posited through ROA, ROE, and NPM.

Return on assets (ROA) is a ratio that shows how much the contribution of assets in creating net profit [21]. The higher the ROA, the better the company can use assets to get profits. Return on equity (ROE) is a ratio that used to measure the ability of own capital (equity) to create profits for all shareholders (ordinary shares and preferred shares) [21, 39]. [38] state that the ROE is considered as a representation of shareholder wealth or company value. Net Profit Margin (NPM) is a ratio that used to measure net profit after tax compared to sales volume [39]. The greater the NPM, the more effective the company's performance. So that will increase investor confidence in investing in the company [38].

## Capital Structure

The combination of short-term and long-term debt mix with equity funds used by companies is called capital structure [28]. Franco Modigliani and Merton Miller (MM) developed the theory of modern capital structure in 1958 known as MM theory. It can be concluded that the MM theory is positively related to leverage. This result implies that the company must have a capital structure that consists almost entirely of debt. Because real-world companies choose more moderate levels of debt. Then Myers and Majluf introduced the pecking order theory which implied that managers preferred internal financing to external. If external financing is needed, managers tend to choose the safest securities, such as debt over external equity. Whereas the Trade-Off theory says that a company's capital structure involves an exchange between the tax benefits of debt and the cost of financial distress. The Trade-Off Theory explains that if the position of the capital structure is below the optimal point, then any additional debt will increase the firm value [35]. Thus, companies will owe to a certain level of debt, where the benefits of tax savings (tax shields) from additional debt equals the cost of financial distress.

## Sustainable Investment

The Global Sustainable Investment Alliance (GSIA) in 2018 defines sustainable investment is an investment approach that considers environmental, social (corporate) and corporate governance (ESG) factors in portfolio selection and management [18]. Sustainable investment directs investment capital to companies that work to combat climate change, environmental damage while promoting corporate responsibility.

Environmental criteria can include the use of company energy, waste, pollution, conservation of natural resources, and animal care. These criteria can also be used in evaluating environmental risks that the company may face and how the company manages those risks. Social criteria look at the company's business relationships with suppliers, local communities, employees, and other stakeholders. Concerning governance, investors may want to know that companies use accurate and transparent accounting methods. And also, that shareholders are allowed to vote on important issues, avoid conflicts of interest in the selection of board members, do not use political contributions to get special treatment and, of course, not involved in illegal practices. To protect companies from illegal practices (fraud) a strong internal control system and professional, independent and accountable whistleblowing can be built [31].

### 1.3. Conceptual Framework

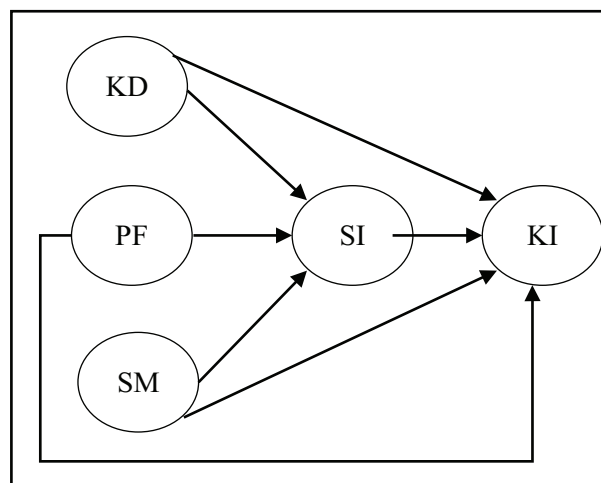


Figure 1: Conceptual Framework

Explanation KD: Composition of Commissioners and Directors

PF: Profitability

SM: Capital Structure



SI: Sustainable Investment

KI: Investor Investment Decision

## 1.4. Hypotheses

### 1.4.1. Effect of Composition of Commissioners and Directors and Investor Investment Decision

There are several studies about the composition of the company's top management team on investor decisions. [27, 32] found investors' positive responses by the appointment of female directors especially from outside the company because of increasing diversity in ranks and independence. [12] also revealed that investors were more receptive to financial statements that were certified by top management who had prestigious backgrounds. Thus, the greater the diversity of the top management team, the more investors will invest in the company [22]. Therefore, the hypothesis is proposed:

H1: Investor investment decision is positively influenced by the composition of commissioners and directors.

### 1.4.2. Effect of Profitability and Investor Investment Decision

Research by [20, 38] find that investor decisions are influenced positively and significantly by profitability. The higher the level of profitability of the company, the greater the level of prosperity provided by the company will attract investors to own the company. Thus, quality companies with good financial performance will certainly have value that continues to grow in the eyes of investors, thereby increasing the company's shares price [4]. Therefore, the hypothesis is proposed:

H2: Investor investment decision is positively influenced by profitability.

### 1.4.3. Effect of Capital Structure and Investor Investment Decision

Research by [3, 42] found that investor decisions on investment are also influenced by capital structure. [2, 3] also emphasized that investors must take into consideration the company's capital structure when making investment decisions. Therefore, the hypothesis is proposed:

H3: Investor investment decision is positively influenced by capital structure.

#### **1.4.4. Effect of Composition of Commissioners and Directors and Sustainable Investment**

Research by [46] revealed that the proportion of independent directors to increase investment in environmental protection. [26] also stated that the presence of female executives could increase investment in protection in the company. Besides, [44] also added that the number of female executives must be at least three to have a significant impact on corporate environmental investment decisions. With the increasing amount of environmental investment in the company, the company has implemented the ESG principle which is a consideration for investors in making sustainable investments. Therefore, the hypothesis is proposed:

H4: Sustainable Investment is influenced positively by the composition of commissioners and directors.

#### **1.4.5. Effect of Profitability and Sustainable Investment**

Margolis, Joshua, and Hilary Elfenbein (2008) in the Harvard Business Review as quoted by [16] stated that companies that have good financial performance (profit) are better able to contribute to ESG. Research by [16] also found evidence that when companies operate efficiently and get a greater return on assets, companies will be more likely to practice ESG. [46] also revealed the same thing, namely the higher the efficiency of the company which means increased profitability, the higher the company's willingness to invest in environmental protection. Therefore, the hypothesis is proposed:

H5: Sustainable investment is positively influenced by profitability.

#### **1.4.6. Effect of Capital Structure and Sustainable Investment**

Capital structure with a lower proportion of internal equity than external equity prioritizes the application of ESG. Besides, the higher level of separation between cash flow rights and control rights of controlling shareholders, the higher the willingness of companies to invest in environmental protection, and the degree of separation between cash flow rights and shareholder control rights is positively related to protecting the investment environment [46]. [11] also found that increasing ESG activity reduced the cost of equity. Therefore, the hypothesis is proposed:

H6: Sustainable investment is positively influenced by capital structure.

### 1.4.7. Effect of Sustainable Investment and Investor Investment Decision

The research of [34] found that the market positively and significantly valued environmental practices by companies that were not related to industries that were sensitive to environmental pollution. Conversely, the market positively and significantly respects the social and governance practices carried out by companies related to industries that are sensitive to environmental pollution. [43] also revealed that ESG by companies is the best choice for investors and portfolio managers in allocating assets to sustainable investments and reducing market risk. Research [30] also found that investors make sustainable investments in making investment decisions based on ESG information of related companies. Therefore, the hypothesis is proposed:

H7: Investor investment decision is positively influenced by sustainable investment.

## 2. Research Methods

The population of this research is companies in the financial sector, which are listed on the Indonesia Stock Exchange (IDX). The sampling technique used is non-probability sampling with a purposive sampling approach. The considerations applied are companies in the financial sector that are listed on the Indonesia Stock Exchange (BEI), which have continuously published sustainability reports for the past 4 (four) years.

In this study, secondary data used are from annual reports, financial reports, sustainability reports, summary trading volume, and summaries of the number of outstanding shares in 2015-2018 listed financial sector companies on the IDX. The study uses quantitative analysis techniques using Structural Equation Modeling (SEM), which is processed with SmartPLS 3.

## 3. Result

From Table 3, it can be concluded that all variables have the highest correlation on themselves compared with correlations on other variables. Thus, the discriminant validity requirements in the case of this study have been fulfilled.

From Table 4, it can be seen that all constructs produce AVE values  $> 0.50$ , so that they meet the reliability requirements.

Meanwhile, for the Cronbach's Alpha and Composite Reliability (Table 5 and 6) which also measures the reliability of the measurement model, good results are obtained,

TABLE 1: Proxies of Research

Variable	Proxy
Composition of Commissioners and Directors	Female Commissioners and Directors : At least three or more = one Less than three = zero (0)
	Ratio Female Commissioners and Directors = $\frac{\text{total female commissioners and directors}}{\text{total commissioners and directors}}$
	Ratio Independent Commissioners and Directors = $\frac{\text{total independent commissioners and directors}}{\text{total commissioners and directors}}$
Profitability	Background of Commissioners and Directors : From three or more different industries = one Less than three = zero
	ROA = $\frac{\text{EAT}}{\text{total assets}}$
	ROE = $\frac{\text{EAT}}{\text{total equities}}$
Capital Structure	NPM = $\frac{\text{EAT}}{\text{net sales}}$
	Debt to equity ratio (DER) = $\frac{\text{total debts}}{\text{total equities}}$
	Debt ratio = $\frac{\text{total debts}}{\text{total assets}}$
Sustainable Investment	Separation of control rights and cash flow rights = $\frac{\text{control rights}}{\text{cash flow rights}}$
	Environmental protection investment to total asset = $\frac{\text{Environmental investment}}{\text{total asset}}$
	Environmental protection investment to operating income = $\frac{\text{Environmental investment}}{\text{operating income}}$
Investor Investment Decision	Environmental investment growth rate = $\frac{\text{Environmental investment current year} - \text{Environmental investment previous year}}{\text{Environmental investment previous year}}$
	TV A i, t = $\frac{\text{number of shares traded i at time t}}{\text{number of shares outstanding i at time t}}$

TABLE 2: Analyzed Samples

Listed	90 companies
Discontinued	4 companies
Continue	12 companies
Observation Years	4 years
Observation Data	48 units

which is more than a rule of thumb of 0.70. Thus it can be concluded that the measurement model of all variables has good reliability.

Based on Table 7, we can explain the effect of each variable as follows:

TABLE 3: Discriminant Validity

	<b>KD</b>	<b>KI</b>	<b>PF</b>	<b>SI</b>	<b>SM</b>
<b>KD</b>	0.945				
<b>KI</b>	-0.422	0.799			
<b>PF</b>	-0.230	-0.024	0.967		
<b>SI</b>	0.347	0.137	0.264	0.976	
<b>SM</b>	0.430	0.151	-0.417	0.100	0.970

TABLE 4: Average Variance Extraced (AVE)

	<b>Average Variance Extraced (AVE)</b>
<b>KD</b>	<b>0.893</b>
<b>KI</b>	<b>0.638</b>
<b>PF</b>	<b>0.936</b>
<b>SI</b>	<b>0.952</b>
<b>SM</b>	<b>0.940</b>

TABLE 5: Composite Reliability

	<b>Composite Reliability</b>
<b>KD</b>	<b>0.943</b>
<b>KI</b>	<b>0.946</b>
<b>PF</b>	<b>0.967</b>
<b>SI</b>	<b>0.976</b>
<b>SM</b>	<b>0.969</b>

TABLE 6: Cronbach's Alpha

	<b>Cronbach's Alpha</b>
<b>KD</b>	<b>0.880</b>
<b>KI</b>	<b>0.936</b>
<b>PF</b>	<b>0.935</b>
<b>SI</b>	<b>0.950</b>
<b>SM</b>	<b>0.944</b>

TABLE 7: Path Coefficients

	<b>Original sample (O)</b>	<b>T Statistics ( O/STDEV )</b>	<b>P values</b>
<b>KD -&gt; KI</b>	-0.756	6.263	<b>0.000</b>
<b>KD -&gt; SI</b>	0.398	2.508	<b>0.007</b>
<b>PF -&gt; KI</b>	-0.149	1.104	<b>0.136</b>
<b>PF -&gt; SI</b>	0.394	1.726	<b>0.044</b>
<b>SI -&gt; KI</b>	0.402	3.143	<b>0.001</b>
<b>SM -&gt; KI</b>	0.374	2.444	<b>0.008</b>
<b>SM -&gt; SI</b>	0.093	0.687	<b>0.247</b>

1. H1: Investor investment decision is positively influenced by the composition of commissioners and directors.

Hypothesis testing results indicate that the Investor Investment Decision (KI) variable is negatively and significantly affected by the Composition of Commissioners and Directors (KD) with an original sample value (O) of 0.756 (75.6%) and the value of T Statistics (IO/STDEVI) equal to 6.263 ( $> 1.96$ ) with P value of 0.000 ( $< 0.05$ ). This means H1 is partially rejected. That is, if the number of Commissioners and Directors (KD) Compositions increases and the other conditions remain constant, there will be a decrease in Investor Investment Decision (KI) to related companies by 75.6%.

2. H2: Investor investment decision is positively influenced by profitability.

Hypothesis testing results show that the Investor Investment Decision (KI) variable is not influenced by Profitability (PF) because the T Statistics (IO/STDEVI) value is 1.104 ( $< 1.96$ ) with a P value of 0.136 ( $> 0.05$ ) which means insignificant. This means H2 is rejected. Therefore, investors in making investment decisions do not consider the Profitability (PF) variable of the related company.

3. H3: Investor investment decision is positively influenced by capital structure.

Hypothesis testing results indicate that the Investor Investment Decision (KI) variable is positively and significantly affected by the Capital Structure (SM) with an original sample (O) value of 0.374 (37.4%) and a T Statistics (IO/STDEVI) value of 2.444 ( $> 1.96$ ) with P value of 0.008 ( $< 0.05$ ). This means that H3 is accepted. That is, if there is an increase in Capital Structure (SM) and other variable conditions remain constant, there will be an increase in Investor Investment Decision (KI) of 37.4%.

4. H4: Sustainable Investment is influenced positively by the composition of commissioners and directors.

Hypothesis testing results indicate that the variable Sustainable Investment (SI) is positively and significantly affected by the Composition of Commissioners and Directors (KD) with an original sample value (O) of 0.398 (39.8%) and the value of T Statistics (IO/STDEVI) of 2.508 ( $> 1.96$ ) with a P value of 0.007 ( $< 0.05$ ). This means H4 is accepted. That is, if the number of Commissioners and Directors Compositions (KD) in the company increases and other conditions remain constant, an increase in Sustainable Investment (SI) by investors is 39.8%.

5. H5: Sustainable investment is positively influenced by profitability.

The results of hypothesis testing show that the Sustainable Investment (SI) variable is positively and significantly affected by Profitability (PF) with an original sample (O) value of 0.394 (39.4%) and a P value of 0.044 (<0.05) even though the T Statistics value (IO/STDEV I) of 1,726 (<1.96). This is still acceptable because the critical value of one-tailed testing with a P value of 0.05 is 1.645 [44]. This means that H5 is accepted. That is, if there is an increase in the company's Profitability (PF) and other variable conditions, there will be an increase in Sustainable Investment (SI) by investors by 39.4%.

6. H6: Sustainable investment is positively influenced by capital structure.

The results of hypothesis testing show that the Sustainable Investment (SI) variable is not influenced by the Capital Structure (SM) because the T Statistics (IO/STDEV I) value is 0.687 (<1.96) with a P value of 0.247 (> 0.05) which means insignificant. This means H6 is rejected, and the Sustainable Investment (SI) activity does not consider the related company's Capital Structure (SM) variable.

7. H7: Investor investment decision is positively influenced by sustainable investment

The results of hypothesis testing indicate that the Investor Investment Decision (KI) variable is influenced positively and significantly by Sustainable Investment (SI) with an original sample (O) value of 0.402 (40.2%) and a T Statistics (IO/STDEV I) value of 3,143 (> 1.96) with a P value of 0.001 (<0.05). This means that H7 is accepted. That is, the Investor Investment Decision (KI) will increase by 40.2% if there is an increase in Sustainable Investment (SI) and other variable conditions remain.

TABLE 8: Indirect Effect

	Original sample (O)	T Statistics (IO/STDEV I)	P values	
<b>KD -&gt; SI -&gt; KI</b>	0.160	1.719	<b>0.045</b>	<b>Mediated</b>
<b>PF -&gt; SI -&gt; KI</b>	0.158	1.753	<b>0.042</b>	<b>Mediated</b>
<b>SM -&gt; SI -&gt; KI</b>	0.037	0.814	<b>0.209</b>	<b>Tidak Memediasi</b>

The Composition of Commissioners and Directors (KD) had a positive effect on investment decisions through Sustainable Investment (SI) with a significance of 0.045 (<0.05). It means when the number of Commissioners and Directors Compositions (KD) in a company increases, it will increase the Investor Investment Decision (KI) mediated by Sustainable Investment (SI). Then, Profitability (PF) has a positive effect on investment decisions through Sustainable Investment (SI) with a significance of 0.042 (<0.05). It means, when the company's Profitability (PF) increases, it will increase the Investor Investment Decision (KI) mediated by Sustainable Investment (SI). However, the Capital

Structure (SM) does not affect investment decisions even though it has been mediated by Sustainable Investment (SI).

TABLE 9: Direct Effect

	Original sample (O)	T Statistics ( O/STDEVI)	P values	Type of Mediation
<b>KD -&gt; KI</b>	-0.597	4.726	<b>0.000</b>	<b>Quasi</b>
<b>KD -&gt; SI</b>	0.398	2.508	<b>0.007</b>	
<b>PF -&gt; KI</b>	0.010	0.054	<b>0.479</b>	<b>Full</b>
<b>PF -&gt; SI</b>	0.394	1.726	<b>0.044</b>	
<b>SI -&gt; KI</b>	0.402	3.143	<b>0.001</b>	-
<b>SM -&gt; KI</b>	0.411	2.399	<b>0.009</b>	<b>No Mediation</b>
<b>SM -&gt; SI</b>	0.093	0.687	<b>0.247</b>	

The influence of the Composition of Commissioners and Directors (KD) on Investor Investment Decision (KI) is still significant even without mediation, it means that this mediation is only quasi-meditating. However, the effect of Profitability (PF) on Investor Investment Decision (KI) is insignificant, resulting in full mediation. On the other hand, there is no mediating effect by the Sustainable Investment (SI) in the relationship of Capital Structure (SM) to the Investor Investment Decision (KI).

TABLE 10: R Square

	R Square
<b>KI</b>	0.434
<b>SI</b>	0.251

The R Square for Investor Investment Decision (KI) is 0.434 (43.4%) and Sustainable Investment (SI) is 0.251 (25.1%). The meaning is, the ability of the dependent variable to explain the dependent variable Investor Investment Decision (KI) is 43.4% and the rest is explained by other variables that are not in the research model formulated in this study. Meanwhile, the ability of the dependent variable to explain the dependent variable of Sustainable Investment (SI) is 25.1% and the rest is explained by other independent variables that are not in the research model in this study.

## 4. Conclusion and Discussion

1. Investor Investment Decision (KI) is affected negatively and significantly by the Composition of Commissioners and Directors (KD) of 75.6%. This finding is contrary to research [27, 31] which state that investors respond positively to the appointment of female directors. This can be due to the views of Indonesian people who



still doubt women's leadership [29]. However, there is a mediating effect from Sustainable Investment (SI) that can change the negative relationship between the Composition of Commissioners and Directors (KD) on Investor Investment Decision (KI) to be significantly positive.

2. Investor Investment Decision (KI) are not influenced by Profitability (PF). Indonesian investors don't consider the company's Profitability (PF) variable in making investment decisions. This result contradicts the research of [4, 20, 38] who found a positive and significant relationship between Profitability (PF) and Investor Investment Decision (KI). This finding could be caused by there are still many Indonesian investors who make investment decisions not based on information aspects of the company's financial statements, but rather on the irrational aspects [1]. However, Sustainable Investment (SI) can mediate fully which can change the Profitability (PF) relationship with Investor Investment Decision (KI) to be significantly positive.
3. Investor Investment Decision (KI) is positively and significantly influenced by Capital Structure (SM) of 37.4%. This result is in line with research by [2, 3, 42], who also found that investors decisions on investment are also influenced by Capital Structure (SM). Investors tend to prefer financial sector companies that have a strong and large capital structure supported by institutional ownership [41]. Thus, the financial sector companies sampled in this study were all indicated as healthy banks.
4. Sustainable Investment (SI) is affected positively and significantly by the Composition of Commissioners and Directors (KD) of 39.8%. This result is in line with the research of [26, 44], which proves that the existence of the Composition of Commissioners and Directors (KD) influences investor considerations in conducting Sustainable Investment (SI). The result of this study found that women commissioners and directors can improve corporate social image through CSR and environmental preservation [44].
5. Sustainable Investment (SI) is affected positively and significantly by Profitability (PF) of 39.4%. The result of this study is in line with the statements of Margolis, Joshua, and Hilary Elfenbein (2008) in the study of [16, 46]. The finding of this study confirms that the more Profitability (PF), the higher the willingness of these companies to invest in environmental protection, which ultimately leads investors to make Sustainable Investment (SI) in these companies.
6. Sustainable Investment (SI) is not influenced by the Capital Structure (SM). Thus, the activity of the Sustainable Investment (SI) does not consider Capital Structure

variable (SM) related companies. This result contradicts the study of [11, 19]. Instead, this result is in line with research by [17] which found that Sustainable Investment (SI) does not depend on the company's Capital Structure (SM). This finding is due to all financial sector companies sample as having strong internal funding so it does not depend on external funding. Capital Structure (SM) of companies whose proportion of internal equity is higher than external does not affect the application of ESG needed to make sustainable investment.

7. Investor Investment Decision (KI) is positively and significantly influenced by Sustainable Investment (SI) of 40.2%. This result is in line with research [30] which found that investors do sustainable investments in making investment decisions based on ESG information of the relevant company. In line with the results of the study [5], which revealed that investors also used ESG information in determining their investment decisions. This result is also supported by the results of research [14] which found that sustainable investment provides a better rate of return in Indonesia.

## 5. Future Research

1. Use the Sustainable Investment variable to mediate the relationship between the Composition of Commissioners and Directors and Profitability with investor investment decisions.
2. In future research, it can use other factors that can influence investors' investment decisions, such as return on investment, company value, company image, market risk, macroeconomic conditions, and so on, so that it will expand the repertoire of knowledge for researchers and readers.
3. Not only using secondary data but also using primary data such as questionnaires or interviews with investors so that the results obtained are more varied.
4. Expanding the research sample (company sector), not only companies from the financial sector, but can also from other industrial sectors such as agriculture, mining, consumer goods, construction, and others.

## Acknowledgement

The authors would like to thank to all the reviewers who gave their valuable inputs to the manuscript

and helped in completing the paper.

## Conflict of Interest

The authors have no conflict of interest to declare.

## References

- [1] Ahyaruddin, M., Widiarsih, D. and Winarso, D. (2017). Pengaruh Psikologi Investor Terhadap Volume Perdagangan Saham (Studi Empiris Pada Indeks Saham LQ45 Yang Terdaftar di BEI). *Jurnal Akuntansi Dan Ekonomika*, vol. 7, issue 2, pp. 121–131.
- [2] Akhtar, S. and Shah, S. M. A. (2018). A Stock Market Reaction to Firm Leverage: An Investors ' Insight from Developing Economy of Pakistan. *Journal of Managerial Sciences*, vol. 12, issue 2, pp. 37–55.
- [3] Al-Najjar, B. and Taylor, P. (2008). The Relationship Between Capital Structure and Ownership Structure. *Managerial Finance*, vol. 34, issue 12, pp. 919–933, <https://doi.org/10.1108/03074350810915851>.
- [4] Al-Tamimi, H. A. H. and Kalli, A. A. B. (2009). Financial Literacy and Investment Decisions of UAE Investors. *The Journal of Risk Finance*, vol. 10, issue 5, pp. 500–516, <https://doi.org/10.1108/15265940911001402>.
- [5] Amel Zadeh, A. and Serafeim, G. (2018). Why and How Investors use ESG Information: Evidence from a Global Survey. *Financial Analysts Journal*, vol. 74, issue 3, pp. 1–17, <https://doi.org/10.2469/faj.v74.n3.2>.
- [6] Bashir, D. T., et al. (2013). An Assessment Study on the “Factors Influencing the Individual Investor Decision Making Behavior”. *IOSR Journal of Business and Management*, vol. 9, issue 5, pp. 37–44, <https://doi.org/10.9790/487X-0953744>.
- [7] Bear, S., Rahman, N. and Post, C. (2010). The Impact of Board Diversity and Gender Composition on Corporate Social Responsibility and Firm Reputation. *Journal of Business Ethics*, vol. 97, issue 2, pp. 207–221, <https://doi.org/10.1007/s10551-010-0505-2>.
- [8] Boda, J. R. and Sunitha, G. (2018). Investor's Psychology in Investment Decision Making: a Behavioral Finance Approach. *International Journal of Pure and Applied Mathematics*, vol. 119, issue 7, pp. 1253–1261.
- [9] *News Unika*. (2019, June). Retrieved from <http://news.unika.ac.id/2019/06/dilema-sustainability-report-untuk-pembangunan-berkelanjutan/>.

- [10] C, G. (2014). Factors Influencing Stock Selection Decision: The Case of Retail Investors in Colombo Stock Exchange. Presented at *11th International Conference on Business Management*, pp. 107–115.
- [11] Cantino, V., Devalle, A. and Fiandrino, S. (2017). ESG Sustainability and Financial Capital Structure: Where they Stand Nowadays. *International Journal of Business and Social Science*, vol. 8, issue 5, pp. 116–126.
- [12] Certo, S. T. (2003). Influencing Initial Public Offering Investors with Prestige: Signaling with Board Structures. *The Academy of Management Review*, vol. 28, issue 3, pp. 432–446.
- [13] CNN. (2019, October). Retrieved from <https://www.cnnindonesia.com/teknologi/20191002194524-199-436203/titik-api-karhutla-2019-naik-80-persen-dari-2018>.
- [14] Firmialy, S. D., Wiryono, S. K. and Nainggolan, Y. A. (2019). Exploring the Bi-Directional Relationship of Stock Return and Sustainability Performance through the Sustainability Risk Lens (Case of Indonesia). *Jurnal Perspektif Pembiayaan Dan Pembangunan Daerah*, vol. 7, issue 2, pp. 127–142, <https://doi.org/10.22437/ppd.v7i2.7663>.
- [15] Formánková, S., et al. (2019). Millennials' Awareness and Approach to Social Responsibility and Investment—Case Study of the Czech Republic. *Sustainability*, vol. 11, issue 2, pp. 504, <https://doi.org/10.3390/su11020504>.
- [16] Gillian, S. L., et al. (2010). Firms' Environmental, Social and Governance (ESG) Choices, Performance and Managerial Motivation. Retrieved from [https://www.researchgate.net/publication/228847213\\_Firms\\_environmental\\_social\\_and\\_governance\\_ESG\\_choices\\_performance\\_and\\_managerial\\_motivation](https://www.researchgate.net/publication/228847213_Firms_environmental_social_and_governance_ESG_choices_performance_and_managerial_motivation).
- [17] Goss, A. and Roberts, G. S. (2011). The Impact of Corporate Social Responsibility on the Cost of Bank Loans. *Journal of Banking & Finance*, vol. 35, issue 7, pp. 1794–1810, <https://doi.org/10.1016/j.jbankfin.2010.12.002>.
- [18] GSIA. (2018). Global Sustainable Investment Review 2018.
- [19] Hamrouni, A., Boussaada, R. and Toumi, B. F. N. (2019). Corporate Social Responsibility Disclosure and Debt Financing. *Journal of Applied Accounting Research*, vol. 20, issue 4, pp. 394–415, <https://doi.org/10.1108/JAAR-01-2018-0020>.
- [20] Hapsoro, D. and Husain, Z. F. (2019). Does Sustainability Report Moderate the Effect of Financial Performance on Investor Reaction? Evidence of Indonesian Listed Firms. *International Journal of Business*, vol. 24, issue 3, pp. 308–328.
- [21] Hery, H. (2016). *Financial Ratio for Business* (1<sup>st</sup> ed.). Jakarta: PT Grasindo.

- [22] Higgins, M. C. and Gulati, R. (2006). Stacking the Deck: The Effects of Top Management Backgrounds on Investor Decisions. *Strategic Management Journal*, vol. 27, pp. 1–25, <https://doi.org/10.1002/smj.495>.
- [23] The official website of Indonesia Stock Exchange, <https://www.idx.co.id>.
- [24] Husnan, S. (2015). *Teori Portofolio & Analisis Sekuritas* (5<sup>th</sup> ed.). Yogyakarta: UPP STIM YKPN.
- [25] Jain, M., Sharma, G. D. and Srivastava, M. (2019). Can Sustainable Investment Yield Better Financial Returns: A Comparative Study of ESG Indices and MSCI Indices. *Risks*, vol. 7, issue 1, p. 15, <https://doi.org/10.3390/risks7010015>.
- [26] Jiang, X. and Akbar, A. (2018). Does Increased Representation of Female Executives Improve Corporate Environmental Investment? Evidence from China. *Sustainability*, vol. 10, issue 12, p. 4750, <https://doi.org/10.3390/su10124750>.
- [27] Kang, E., Ding, D. K. and Charoenwong, C. (2010). Investor reaction to women directors. *Journal of Business Research*, vol. 63, issue 8, pp. 888–894, <https://doi.org/10.1016/j.jbusres.2009.06.008>.
- [28] Keown, A. J., Martin, J. D. and Petty, J. W. (2017). *Foundations of Finance* (9<sup>th</sup> ed.). Harlow: Pearson Education Limited.
- [29] Khaerani, N. S. (2017). Peran Wanita Dalam Perubahan Sosial Melalui Kepemimpinan Posdaya. *Sosietas*, vol. 7, issue 1, pp. 371–375, <https://doi.org/10.17509/sosietas.v7i1.10352>.
- [30] Khemir, S., Baccouche, C. and Ayadi, S. D. (2019). The Influence of ESG Information on Investment Allocation Decisions: An Experimental Study in an Emerging Country. *Journal of Applied Accounting Research*, vol. 20, issue 4, pp. 458–480, <https://doi.org/10.1108/JAAR-12-2017-0141>.
- [31] Krystella, K. and Sitorus, T. (2017). Sistem Pengendalian Internal, Fraud Diamond, dan Larceny Sebagai Efek Mediasi Whistleblowingsystem (Studi Pada BPK RI). *Jurnal Akuntansi*, vol. 11, issue 1, pp. 99–130, <https://doi.org/10.25170/jara.v11i1.54>.
- [32] Loukil, N., Yousfi, O. and Yerbanga, R. (2019). Does Gender Diversity on boards influence stock market liquidity? Empirical Evidence from the French market. *Corporate Governance International Journal of Business in Society*, vol. 5, pp. 1–55, <https://doi.org/10.1108/CG-09-2018-0291>.
- [33] Madhani, P. M. (2017). Diverse Roles of Corporate Board: A Review of Various Corporate Governance Theories. *IUP Journal of Corporate Governance*, vol. 16, issue 2, pp. 7–28.

- [34] Miralles-Quirós, M. M., Miralles-Quirós, J. L. and Gonçalves, L. M. V. (2018). The Value Relevance of Environmental, Social, and Governance Performance: The Brazilian Case. *Sustainability*, vol. 10, issue 3, p. 574, <https://doi.org/10.3390/su10030574>.
- [35] Purwohandoko, P. (2017). The Influence of Firm's Size, Growth, and Profitability on Firm Value with Capital Structure as the Mediator: A Study on the Agricultural Firms Listed in the Indonesian Stock Exchange. *International Journal of Economics and Finance*, vol. 9, issue 8, p. 103, <https://doi.org/10.5539/ijef.v9n8p103>.
- [36] Sachs, J. D., et al. (2019). Why Is Green Finance Important? ADBI Working Paper, vol. 917, pp. 1–8, [https://doi.org/10.1007/978-1-349-67278-3\\_116](https://doi.org/10.1007/978-1-349-67278-3_116).
- [37] *Sindo*. (2018, May). Retrieved from <https://nasional.sindonews.com/read/1302781/15/10-problem-besar-lingkungan-di-indonesia-1525347778>.
- [38] Sitorus, T. and Yuganda, K. (2019). Investor's Stock Selection Decision: Influence of Profitability, Company Size, and RAROC. *Copernican Journal of Finance & Accounting*, vol. 8, issue 2, p. 69, <https://doi.org/10.12775/CJFA.2019.009>.
- [39] Sujarweni, V. W. (2019). *Analisis Laporan Keuangan*. Bantul: Pustaka Baru Press.
- [40] Tan, A., Benni, D. and Liani, W. (2016). Determinants of Corporate Social Responsibility Disclosure and Investor Reaction. *International Journal of Economics and Financial Issues*, vol. 6, issue 4, pp. 11–17.
- [41] Thakor, A. V. (2014). Leverage, Systemic Risk and Financial System Health: How Do We Develop a Healthy Financial System? *SSRN Electronic Journal*, August issue, [https://doi.org/https://doi.org/10.1057/9781137413543\\_2](https://doi.org/https://doi.org/10.1057/9781137413543_2).
- [42] Tong, S. and Ning, Y. (2004). Does Capital Structure Affect Institutional Investor Choices? *The Journal of Investing*, vol. 13, issue 4, pp. 53–66, <https://doi.org/10.3905/joi.2004.450757>.
- [43] Tseng, M., et al. (2019). Sustainable Investment: Interrelated among Corporate Governance, Economic Performance and Market Risks Using Investor Preference Approach. *Sustainability*, vol. 11, issue 7, p. 2108, <https://doi.org/10.3390/su11072108>.
- [44] Wei, F., Ding, B. and Kong, Y. (2017). Female Directors and Corporate Social Responsibility: Evidence from the Environmental Investment of Chinese Listed Companies. *Sustainability*, vol. 9, issue 12, p. 2292, <https://doi.org/10.3390/su9122292>.
- [45] Winship, C. and Zhuo, X. (2018). Interpreting t - Statistics Under Publication Bias: Rough Rules of Thumb. *Journal of Quantitative Criminology*, <https://doi.org/10.1007/s10940-018-9387-8>.

- [46] Yang, D., Wang, Z. and Lu, F. (2019). The Influence of Corporate Governance and Operating Characteristics on Corporate Environmental Investment: Evidence from China. *Sustainability*, vol. 11, issue 10, p. 2737, <https://doi.org/10.3390/su11102737>.