



## The effect of green investment, profitability, and company size on financial sustainability: A study on the IDX 30 Index for the period 2016-2023

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### ABSTRACT

This study aims to investigate the partial influence of Green Investment, Profitability, and Company Size on Financial Sustainability against the background of the importance of sustainability in all sectors, including industry. This study uses a quantitative method. The study examines 14 stable companies listed on the IDX 30 from 2016 to 2023, selected through purposive sampling. It utilizes secondary data collected via the study-desk method. Data analysis is conducted using multiple linear regression with SPSS 23. According to the study's findings, financial sustainability is somewhat positive but is slightly influenced by green investments, profitability, and company size. The causes of the three hypotheses only have a positive effect, but not significant, because there are variables that are more dominant in influencing Financial Sustainability, the time spectrum has a significant effect only in the long term, a significant influence only occurs after combining the mediator or moderator variables, the relatively small sample size, industry differences, and research site variations.

**Keywords:** Green Investment, Profitability, Company Size, Financial Sustainability.



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## INTRODUCTION

An organization's ability to sustain itself over a long period of time is known as sustainability. Because financial sustainability and sustainability are intertwined, the terms "financial sustainability" and "long-term financial performance," "financial longevity," and "financial health" are sometimes used interchangeably.

One of the financial variables related to sustainability is the concept of financial sustainability, which is often considered a concept that has the opposite of concepts such as financial distress, and financial risk. Meanwhile, concepts that often support the concept of financial sustainability include long-term growth rates (sustainable growth rate) to long-term returns (profitability) (Imhanzenobe, 2020).

This study aims to look at financial sustainability and the antithesis that affects companies indexed in the IDX 30. This is because IDX 30 is one of the stock price indices on the Indonesia Stock Exchange (IDX) which has the best liquidity level among the 45 companies indexed on LQ45. Previously, LQ45 was the 45 most liquid companies among the 921 issuers listed on the IDX as of March 2024. However, among the 45 companies, there are 30 companies with higher liquidity levels, so they are indexed in the IDX 30 Index (Pratomo, 2024).

IDX launched IDX 30 as a new benchmark as of April 23, 2012. B That the IDX 30 is superior to the LQ 45 index, because the IDX 30 is one of the stock indices that calculates the average index of 30 selected stocks from the stocks that were previously included in the LQ 45 Index in the same period by considering market capitalization, growth prospects, transactions (value, frequency, and days), and other factors related to the sustainability of the company (IDX, 2012).

The criteria for selecting issuers for IDX 30 are based on the IDX announcement letter No. Peng-0005/BEI. PSH/04-2012 issued on April 12, 2012. (1) Equities included in the LQ 45 Index during the same period are used to select the components of the IDX 30 Index. (2) Transaction activity which includes transaction value, transaction frequency and day, as well as market capitalization are taken into account when selecting the IDX 30 Index components. (3) IDX also considers the growth potential,

financial condition, and other aspects of the company's business continuity. (4) Every six months, the IDX reviews the IDX 30 Index which comes into effect between February and August (idx.co.id, 2012).

IDX30 is an index consisting of 30 companies that have high liquidity and large market capitalization and are supported by good corporate fundamentals. When compared to other indices, such as Kompas100 or LQ45, IDX30 is a stock index that has stricter specifications because it consists of 30 companies with the highest ratings. The IDX30 calculation uses a weighting method based on the market capitalization weighted average. The value of the IDX30 index is ranked and calculated based on three criteria. The three criteria are: (1) profitability ratio using Return on Equity (ROE), (ii) solvency ratio using Debt to Equity Ratio (DER), and (iii) earning variability using variability in Earning per Share (EPS) growth (IDX30, 2024) (IDX, 2024).

Regarding the issue of financial sustainability in companies indexed in the IDX 30, financial sustainability data for the 2016-2023 period shows that the average value of financial sustainability from the 14 IDX 30 issuers for the eight-year study period (2016-2023) is 0.80. There are three issuers whose financial sustainability strength is below the average value, namely BMRI, ANTM, and ADRO. Meanwhile, the financial sustainability value of 11 issuers is above average, namely CPIN (4.87), UNVR (2.91), PTBA (2,057), UNTR (1,834), ASII (1',496), TLKM (1,445), BBRI (1,356), SMGR (1,149), BBKA (1,092), BBNI (1,051), and PGAS (0.886).

It is interesting to see why among the companies indexed by the IDX 30 there are so many different values of financial sustainability. Therefore, it is important to know the factors that affect its financial sustainability. Previous studies have proven that Financial Sustainability is influenced by Green Investment (Taswin et al., 2023), Profitability (Hanafi & Hidayat, 2024), and Company Size (Hanafi & Hidayat, 2024). Based on previous research, this study aims to partially examine the influence of Green Investment, Profitability, and Company Size on Financial Sustainability.

## RESEARCH METHOD

This approach is quantitative research (Creswell, 2018). Judging from the purpose of the research, this research is an applied research (Sekaran & Bougie, 2016), Judging from the explanatory level, this research is descriptive and explanatory. Explanatory research chosen is a causal approach, and more specifically asymmetric relationships. This means a change in the independent variable (Green Investment, profitability, and company size) can change the dependent variable (Financial Sustainability), and not in the opposite direction (Cooper & Schindler, 2014).

Variable Green Investment using PROPER Rated proxies; the Proficiency variable using ROE proxies; the Company Size variable using total asset proxies; and variable Financial Sustainability Using a Proxy Financial Sustainability Ratio (FSR).

**Tabel 1. Operasionalisasi Variabel Penelitian**

Variable Gauge	Operational Definition	Measurement Techniques	Measurement Scale
Green Investment (proxy: PROPER Rating ( $X_1$ ))	The PROPER rating is used to measure the Green Investment variable. In this study, the PROPER rating is the compliance rating of IDX30 indexed companies on environmental sustainability based on PROPER measurements from the Ministry of Environment (MoEF) (ppid.menlhk/go.id, 2023; ppid.menlhk/go.id, 2023)	PROPER measurement based on the provisions of the Ministry of Environment of the Republic of Indonesia, namely: rank 1 (gold), rank 2 (green), rank 3 (blue), rank 4 (red), rank 5 (black): 0 (black). In this study, <i>Green Investment</i> data is given <i>dummy</i> system points for each IDX 30 issuer according to the PROPER rating. If an issuer in a year receives a gold rating, it is given 4 points. If an issuer obtains a green rating, it is given 3 points. If an issuer obtains a blue rating, it is given 2 points. If an issuer obtains a red rating, it is given 1 point. Meanwhile, if the issuer obtains a black rating, it will get 0 (zero) points.	Ordinal

Variable Gauge	Operational Definition	Measurement Techniques	Measurement Scale
Profitability [Proks; Return on Equity (ROE)] (X2)	Return on Equity (ROE) is used to measure the Probability variable. ROE is the ratio between income after taxes and total equity (Sudana, 2011). In this study, ROE is the ratio between net income and total equity in companies indexed on the IDX30.	$ROE = \frac{Earning\ After\ Taxes}{Total\ Equity}$	Ratio
Company Size (Proxy: Total Assets (X3))	Total assets are used to measure firm size. The total assets referred to in this study are the natural logarithms of the total assets in each of the issuers indexed in the IDX30 (Hidayat & Khotimah, 2022).	$Size = Log\ Natural\ (Total\ Aset)$	Ratio
Financial Sustainability Ratio (FSR) (Y)	The Financial Sustainability Ratio (FSR) is used to measure the financial sustainability variable. FSR is the ratio between total financial income and total financial expense multiplied by 100% (Oktoviyanti & Etty Murwaningsari, 2023)	$Financial\ Sustainability\ Ratio = \frac{Total\ Financial\ Income}{Total\ Financial\ Expense} \times 100\%$  FSR dapat dinilai baik apabila nilainya lebih besar daripada 100 %.	Ratio

The population of this study is all companies listed in the IDX30 which in the last eight years of the annual report (2016-2023) the company is still listed in the IDX30. Only 14 companies continue to be indexed on the IDX 30 during the 2016-2023 period.

The sampling technique in this study uses a non-probability sampling technique, in this case the purposive sampling technique, that is, the researcher determines the sample technique based on certain criteria (Sugiyono, 2017). In this study, the researcher determined the criteria that the IDX 30 companies to be studied are consistent companies that are listed on the IDX 30 during the research period. The researcher determined the research period, namely the last eight years (2016-2023).

The document study methodology is the method used in this study to obtain secondary data (Sugiyono, 2017). The researcher searched the official websites of each issuer listed in the IDX30 index. In addition, this study also utilizes relevant data officially published by the Indonesia Stock Exchange (IDX), namely a website with the link: <https://www.idx.co.id>.

In the use of regression models to test research hypotheses using the classical linear method or Ordinary Least Square (OLS), classical assumption tests are carried out to ensure that the model meets the criteria of the Best Linear Unbiased Estimator (BLUE) before the hypothesis is tested (Widarjono, 2015). The traditional assumption tests used in this study are normality, multicollinearity, autocorrelation, heteroscedasticity, and linearity tests (Ghozali, 2018). The data analysis method in this study uses descriptive and explanatory analysis techniques carried out with the help of the Statistical Package for the Social Science (SPSS) software version 23. The multiple linear regression equations of this study are as follows:

$$Y = Y = \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \varepsilon \quad (1)$$

Source: Widarjono (2015)

Information:

- Y = Financial Sustainability
- $\beta$  = Intercept
- $\beta_{1i}$  = Slope regression coefficient Green Investment
- $\beta_{2i}$  = Slope regression coefficient Profitability

$\beta_{3i}$  = Slope of the regression coefficient of Company Size  
 $X_1$  = Green Investment  
 $X_2$  = Profitability  
 $X_3$  = Company Size

### Theoretical Study Hypothesis Development

The study explores factors influencing financial sustainability, focusing on green investment, profitability, and company size.

#### Green Investment

Investing in environmentally friendly initiatives positively impacts financial sustainability by improving corporate value and reputation. Prior research (Taswin et al., 2023; Wang & Wang, 2021) confirms this relationship.

*H1: Green Investment positively affects Financial Sustainability.*

#### Profitability

Measured by Return on Equity (ROE), profitability enhances financial sustainability by ensuring stable financial performance. Higher profitability strengthens a company's ability to sustain operations. Research by Hanafi & Hidayat (2024) supports this relationship.

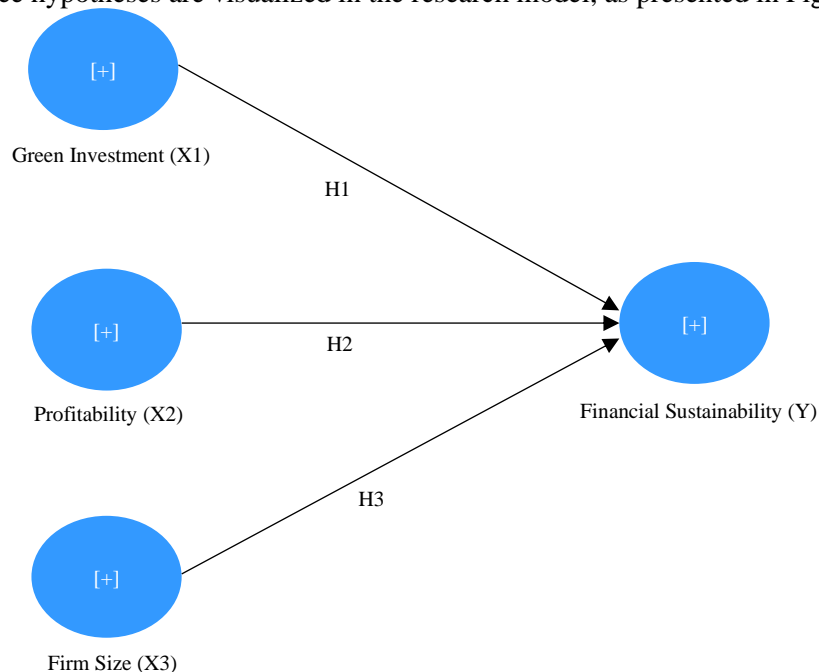
*H2: Profitability positively affects Financial Sustainability.*

#### Company Size

Larger companies have stronger financial positions and greater stability, supporting financial sustainability. Empirical studies by Hanafi & Hidayat (2024) confirm this effect.

*H3: Company Size positively affects Financial Sustainability.*

The three hypotheses are visualized in the research model, as presented in Figure 1.



**Figure 1. Research Model**

## RESULT AND DISCUSSION

### Descriptive Statistical Analysis

Here is the analysis descriptive of each of the four variables of the study (Green Investment, Profitability, Company Size, and Financial Sustainability). The table presents the minimum, maximum, and average values per variable during the research period (2016-2023) for the 14 companies indexed

on the IDX 30 IDX Index. The descriptive data of the four variables in question are presented in Tabal 2.

**Tabel 2. Analisis Deskriptif**

	Green Investment	Profitability	Firm Size	Financial Sustainability
N Valid	104	104	104	104
Missing	0	0	0	0
Mean	2,07	15,30	13,36	0,80
Std. Deviation	1,32	9,71	6,90	2,06
Minimum	1,00	-8,96	1,85	-16,38
Maximum	4,00	43,46	22,83	3,23

Source: Results by data with SPSS version 23 (2025)

#### 1. Green Investment Variable

The 14 companies indexed on the IDX 30 for the 2016-2023 period have a minimum value of 1.00 (Red rating in PROPER) obtained by ASII. There are two issuers (ADRO, PTBA) that obtained the maximum value, namely 4 (gold rating in PROPER). There are five issuers (ANTM, BBNI, BMRI, CPIN, and TLKM) that have the worst rating from PROPER, namely black, because their PROPER values are 0 (zero) each. Two issuers (BBRI, and BBKA) have passed the rank of 0 (black) but have not reached rank 1 A (red). Then two issuers (UNTR, and UNVR) received a 3rd rank (green). The average value of the PROPER rating for the 14 issuers is 2.07 which means rank 2 (blue).

#### 2. Profitability Variable

Table 2 shows that the average ROA value for the 14 issuers is 15.30%. If referring to Bank Indonesia Circular Letter No. 13/24 / DPNP which states that the value of ROE > 15%, then it means that on average the 14 issuers are considered healthy companies, if based on the BI SE, there are 7 issuers (PTBA, ADRO, TLKM, BBKA, UNVR, UNTR, and BMRI) that achieve ROE > 15%. Then 7 issuers (BBNI, BBRI, SMGR, ANTM, PGAS, ASII, CPIN) are considered unhealthy, because they have ROE values < 15%.

#### 3. Company Size Variable

Table 2 shows that the average firm size of the 14 IDX 30 issuers for the eight-year period (2016-2023) is 13.36. There are 6 issuers that have above-average company sizes, namely PGAS, BMRI, UNTR, SMGR, CPIN, and PTBA. This means that the six issuers are among the top six in terms of assets among the 14 companies indexed in the IDEX 30. Meanwhile, 8 other issuers have below-average company sizes, namely TLKM, BBNI, ANTM, BBKA, BBRI, ASII, UNVR, and ADRO.

#### 4. Financial Sustainability Variable

Table 2 shows that the average financial sustainability value of the 14 IDX 30 issuers for the eight-year research period (2016-2023) is 0.80. There are 3 issuers whose financial sustainability strength is below the average value, namely BMRI, ANTM, and ADRO. Meanwhile, the financial sustainability value of 11 issuers is above average, namely CPIN (4.87), UNVR (2.91), PTBA (2,057), UNTR (1,834), ASII (1,496), TLKM (1,445), BBRI (1,356), SMGR (1,149), BBKA (1,092), BBNI (1,051), and PGAS (0.886).

### Results of classical assumption tests

The results of the normality test using the Kolmogorov Smirnov test showed that the Asyms.Sig values for the four variables were 0.122 on Green Investment, 0.204 on Profitability, 0.067 on Company Size, and 0.074 on Financial Sustainability. Therefore, all four variables have Asymp values. Sig is greater than the alpha value of 0.05. This shows that the data is normally distributed (Ghozali, 2018), so that the four variables of this study have passed the normality test.

The multicollinearity test results, utilizing tolerance values and variance inflation factor (VIF) indicators, indicate that the tolerance values for the three partial influence models—Green Investment on Financial Sustainability, Profitability on Financial Sustainability, and Company Size on Financial Sustainability—are 0.423, 0.357, and 0.513, respectively. All tolerance values exceed the minimum threshold of 0.1, indicating that the three models do not encounter multicollinearity issues. Then the

variance inflation factor (VIF) values of the three preliminary models are 1.172; 1.813; 1.674, respectively; this means that the VIF values of each of the three partial models are smaller than the value of 10 (Ghozali, 2018). The results of the data show that there is no multicollinearity among the three independent variables (Green Investment, Profitability, and Company Size) in this study.

The autocorrelation test results utilizing the Durbin-Watson (DW) statistic indicate that the three partial influence models—Green Investment on Financial Sustainability, Profitability on Financial Sustainability, and Company Size on Financial Sustainability—yielded DW values of 1.892, 1.742, and 1.963, respectively. These values are inferior to the corresponding 4-dL value of 2.361 for the three models. According to the criterion that a model is deemed free from autocorrelation issues if the DW value is less than 4 minus dL (Ghozali, 2018), all three models are confirmed to be devoid of autocorrelation.

Additionally, the outcomes of the heteroscedasticity test via scatterplot indicate that the data distribution of the three partial effect models lacks a distinct or consistent pattern. The data distribution seems randomly dispersed over the four quadrants of the scatterplot. This signifies the absence of heteroscedasticity symptoms in the three partial effect models (Ghozali, 2018).

The linearity test results, derived from the Test of Linearity, indicate that the significance values for the three partial influence models—Green Investment on Financial Sustainability, Profitability on Financial Sustainability, and Company Size on Financial Sustainability—are 0.001, 0.004, and 0.002, respectively. All three results are below the significance threshold of 0.05, indicating a linear relationship in the three partial effect models (Ghozali, 2018).

### Panel Data Regression Test Analysis

Table 3 presents the values of the influence coefficients of the three independent variables (Green Investment, Profitability, Company Size) to Financial Sustainability.

**Table 3. Partial Effect Coefficient Value**

Model	Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Constant)	,510	,636		,802	,424		
Green Investment	,117	,156	,075	,748	,456	,980	1,021
Profitability	,003	,021	,013	,129	,897	,971	1,030
Firm Size	,036	,030	,122	1,223	,224	,991	1,009

a. Dependent Variable: FinancialSustainability

Source: Results bydata with SPSS version 23 (2025)

Referring to the Unstandardized *Coefficients* column part B in Table 3, the value of the coefficient of influence of the three independent variables on *Financial Sustainability* can be formulated through the regression equation as follows:

$$Y = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \varepsilon$$

$$Y = 0.510 + 0.117X_{1i} + 0.003X_{2i} + 0.036X_{3i} + \varepsilon$$

Based on this equation, it can be explained that:

- Constant value ( $\beta$ ) = 0.510. This means that, if the three independent variables (*Green Investment*, *Profitability*, *Company Size* variables) are considered unchanged, then the value of *Financial Sustainability* is 0.510.
- Coefficient  $X_1$  ( $\beta_1$ ) = 0.117. then the regression coefficient of the influence of *Green Investment* on *Financial Sustainability* is 0.117. therefore, every time there is an increase in *Green Investment* by 1 (one) unit, *Financial Sustainability* will increase by 0.117 or 11.7% of that unit.
- The regression coefficient for the relationship between investment profitability and financial sustainability is 0.003 if the coefficient  $X_2$  ( $\beta_2$ ) = 0.003. This indicates that, statistically, *Financial Sustainability* will increase by 0.003 or 0.3% for every one-unit increase in the *Profitability* variable.

- d.  $X_3$  ( $\beta_3$ ) is worth 0.036. This shows that there is a regression relationship of 0.036 between the variables Company Size and Financial Sustainability. According to statistics, Financial Sustainability will increase by 0.036, or 3.6%, for every one-unit increase in the Company Size variable.

Before conducting a partial hypothesis test, the t-value of the table is first determined. In determining the t-value of the table, the significance level is set at  $0.50/2 = 0.025$  and the Degree of Freedom (DK)/Degree of Freedom (DK) is  $DK = n - k - 1$  or  $104 - 1 - 1 = 102$ . Thus, from these provisions, the number "t table" is obtained of 1.98350.

#### 1. Hypothesis Test 1 ( $H_1$ )

The partial hypothesis test for the influence of Green Investment ( $X_3$ ) on Financial Sustainability is as follows:

$H_0 : \beta_1 = 0$ , means Green Investment ( $X_1$ ) has no effect on Financial Sustainability ( $Y$ )

$H_1 : \beta_1 \neq 0$ , meaning *Green Investment* ( $X_1$ ) affects *Financial Sustainability* ( $Y$ )

Based on Table 2, the value of  $t_{cal} (0.748) < t_{table} (1.98350)$ ,  $H_0$  was accepted and  $H_1$  was rejected. Another consideration, a *p-value* of 0.456 which means  $> 0.05$  This means that *Green Investment* ( $X_1$ ) has a positive effect, but not significantly on *Financial Sustainability* ( $Y$ ).

#### 2. Hypothesis Test 2 ( $H_2$ )

The partial hypothesis test for the effect of Profitability ( $X_2$ ) on Financial Sustainability is as follows:

$H_0 : \beta_1 = 0$ , This means that Profitability ( $X_2$ ) has no effect on Financial Sustainability ( $Y$ )

$H_1 : \beta_1 \neq 0$ , means that Profitability ( $X_1$ ) has an effect on Financial Sustainability ( $Y$ )

Based on Table 2, the value of  $t_{cal} (0.29) < t_{table} (1.98350)$ ,  $H_0$  is accepted and  $H_1$  is rejected. Another consideration, a *p-value* of 0.897 which means  $> 0.05$  This means that Profitability ( $X_2$ ) has a positive effect, but not significantly on Financial Sustainability ( $Y$ ).

#### 3. Hypothesis Test ( $H_3$ )

The partial hypothesis test for the influence of Company Size ( $X_3$ ) on Financial Sustainability is as follows:

$H_0 : \beta_1 = 0$ , this means that the Company Size ( $X_2$ ) has no effect on Financial Sustainability ( $Y$ )

$H_1 : \beta_1 \neq 0$ , this means that the Company Size ( $X_1$ ) has an effect on Financial Sustainability ( $Y$ )

Based on Table 2, the value of  $t_{count} (1,223) < t_{table} (1.98350)$ ,  $H_0$  is accepted and  $H_1$  is rejected. Another consideration, a *p-value* of 0.224 which means  $> 0.05$  This means that the Company Size ( $X_3$ ) has a positive effect, but not significantly on Financial Sustainability ( $Y$ ).

### Discussion

The discussion of the results of the hypothesis test of this research is divided into three partial models.

#### The Influence of *Green Investment* on *Financial Sustainability*

The regression results show that although the relationship between Green Investment and Financial Sustainability is positive, the relationship is not significant, which suggests that other factors may be more influential in explaining Financial Sustainability. Statistically, it means that the influence of Green Investment on Financial Sustainability is relatively weak. This means that there may be other factors such as small sample sizes, intervening variables (e.g. profitability or operational efficiency), and macroeconomic variables that can affect the results of the study. Therefore, it is recommended to researchers to consider the use of intervening or moderation variables such as innovation, environmental regulations, and investor perception of sustainable practices. In addition, it is recommended that subsequent researchers use a wider sample and with a longer period of time.

If we compare the results of this study with previous empirical research, the direction of influence of this study is in line with the results of research by Taswin et al. (2023), Clark et al. (2014), Wang & Wang (2021), and Hart & Milstein (2003) which prove that Green Investment has a positive effect on Corporate Financial Sustainability. That the influence of Green Investment on Financial Sustainability is not significant, this is in accordance with the findings of Clark et al. (2014) in a meta-analysis of 200 studies that show that the relationship between Green Investment and Financial

Sustainability is positive, but the effect varies depending on the industry sector and geographical location of the study.

Theoretically, Green Investment is indeed related to Financial Sustainability, in accordance with stakeholder theory (Freeman, 2010), signalling theory (Spence, 1978), and trade-off theory (Modigliani & Miller, 1958; Myers, 1977). Stakeholder theory (Freeman, 1984) states that sustainable investment or green investment can improve a company's relationship with stakeholders, strengthen the company's reputation, so that it can improve financial performance in the long term. Signal theory (Spence, 1978) suggests that companies that make green investments can send a positive signal to investors and consumers that the company has a commitment to sustainability, which can improve financial sustainability. Meanwhile, it is a trade-off theory (Modigliani & Miller, 1958; Myers, 1977) shows the possibility of green investments increasing short-term costs that can reduce profitability before providing financial benefits in the long term.

### **The Effect of Profitability on *Financial Sustainability***

The results of the study found that although the relationship between Profitability and Financial Sustainability is positive, it is not significant. This means that the Profitability influence is not strong enough to be considered significant in this sample of research. This suggests that other factors, such as company size, financial policy, and industry volatility may be more influential in explaining Financial Sustainability. That the effect is not significant, it is likely due to the effect of a period of time. This means that the influence of Profitability and Financial Sustainability will only be visible in the long term. Another cause is the relatively small sample size. The relatively small sample size can reduce the statistical strength.

The direction of influence of the results of this study when compared to previous empirical research is in accordance with the findings of Hanafi & Hidayat (2024) which show that profitability using Return of Assets (ROA) proxies has a positive influence on Financial Sustainability. The positive but insignificant relationship between profitability and financial sustainability can be explained by other research. For example, a 2019 study by Garcia et al. (2017) on the business of the European manufacturing subsector found a short-term, positive, but insignificant correlation between profitability and financial sustainability. This is due to additional factors including cost-effectiveness and operational strategies.

Bhatia & Tuli (2017) in their research in India found that Profitability has a significant effect on Financial Sustainability only when combined with a strong financial diversification and risk management strategy. According to the results of Soppe (2004) research on the energy sector, it is found that profitability as an independent variable is often not enough to explain Financial Sustainability without maximum resource management, and operational efficiency. A similar explanation was given by Herbohn et al. (2019) through their research on the banking sector which shows that high profitability does not always have a direct impact on Sustainability. This is because there are other factors such as liquidity management, and regulation, which have a more dominant influence compared to Profitability.

Theoretically, Profitability is indeed related to Financial Sustainability, in accordance with the resource-based view-RBV theory (Barney, 1991; Penrose, 2009), trade-off theory (Modigliani & Miller, 1958; Myers, 1977), and pecking-order theory (Donaldson, 1961; Myers & Majluf, 1984). Regarding the context of this research, the resource-based theory (RBV) (Barney, 1991; Penrose, 2009) stated that companies with high profitability have greater resources to invest in Financial Sustainability strategies, such as diversification, expansion, and innovation. Trade-off theory (Modigliani & Miller, 1958; Myers, 1977) explains that high profitability can help companies finance their long-term operations without relying on excess debt, which contributes to financial sustainability. Meanwhile, the pecking-order theory (Donaldson, 1961; Myers & Majluf, 1984) stated that companies with high profitability tend to rely more on internal income than external debt which ultimately strengthens long-term financial conditions (Financial Sustainability).

### **The Effect of Company Size on *Financial Sustainability***

The results of the study found that although the relationship between Company Size is positive, but the relationship insignificant. It shows that the influence is weak. The relatively weak influence of Company Size on Financial Sustainability can be caused by a number of factors. Among them, the different financial structures between large companies and small companies; lack of management



efficiency in larger companies; and the existence of other variables that have a greater influence on Financial Sustainability.

If we compare the results of this study with previous empirical research, the direction of influence of the results of this study is in the direction of the results of the research Hanafi & Hidayat (2024) prove that Company Size has a positive effect on Financial Sustainability. Other studies can explain why the influence of Company Size on Financial Sustainability has a positive effect but is not significant. For example, Farouk & Hassan (2014) examined manufacturing sector companies in Africa. As a result, Company Size has a positive but not significant effect on financial sustainability (Financial Sustainability). Why is it not significant, because there are other factors such as capital structure, risk management, which have a greater role in determining Financial Sustainability.

Dang et al. (2018) conducted a study on companies in Europe. The study found that the relationship between Company Size and financial performance is often insignificant, especially in industries that have intense competition and high volatility. Mahdavi & Hosseini (2019) conducted a study on companies in the Middle East. This research found that Company Size has a significant effect on Financial Sustainability only in conditions when the company implements an effective diversification strategy.

The theoretical assertion that Company Size has a positive effect on Financial Sustainability can be seen from the theory of economies of scale (Smith, 1776). This theory views larger firms as likely to have advantages in terms of cost efficiency, access to financial resources, and the ability to cope with economic shocks better, which can contribute to financial sustainability. A similar explanation can be from resource-based theory (Barney, 1991; Penrose, 2009). This theory proposes that large companies have more financial, human, and technological resources that can be utilized to ensure long-term financial sustainability. Then it is reviewed from signal theory (Spence, 1978), larger companies tend to be considered more stable by investors and creditors, which can increase trust and access to external funds, thus supporting financial sustainability.

Meanwhile, the effect of Company Size on Financial Sustainability shows insignificant results. This can be explained through agency theory proposed by Jensen & Meckling (1976), which states that companies with larger sizes tend to face efficiency problems due to increased agency costs. The implication is that even though the company has greater resources, it does not always have a significant positive impact on financial sustainability.

## CONCLUSION

The concept of sustainability has become the cornerstone of various industries, including the financial sector. This study proposes four research variables, two of which are closely related to sustainability. The two variables in question are Green Investment and Financial Sustainability. This study examines how financial sustainability is affected by profitability, company size, and green investment. The study focused on 14 businesses that were routinely indexed on the IDX 30 during the eight-year study period (2016–2023). According to the study's findings, financial sustainability is somewhat positive but is slightly influenced by green investments, profitability, and company size. The causes of the three hypotheses only have a positive effect, but not significant, because there are variables that are more dominant in influencing Financial Sustainability, the time spectrum has a significant effect only in the long term, a significant influence only occurs after combining the mediator or moderator variables, the relatively small sample size, industry differences, and research site variations.

## REFERENCES

- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Bhatia, A., & Tuli, S. (2017). Corporate attributes affecting sustainability reporting: an Indian perspective. *International Journal of Law and Management*, 59(3), 322–340. <https://doi.org/10.1108/IJLMA-11-2015-0057>
- Clark, G. L., Feiner, A., & Viehs, M. (2014). From the Stockholder to the Stakeholder: How Sustainability Can Drive Financial Outperformance. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2508281>

- Cooper, D. R., & Schindler, P. (2014). *Business Research Methods* (12th ed.). McGraw-hill.
- Creswell, J. W. (2018). Research design : qualitative, quantitative, and mixed methods approaches FIFTH EDITION. In *SAGE Publications* (Issue 2).
- Dang, C., (Frank) Li, Z., & Yang, C. (2018). Measuring firm size in empirical corporate finance. *Journal of Banking & Finance*, 86, 159–176. <https://doi.org/10.1016/j.jbankfin.2017.09.006>
- Donaldson, G. (1961). *Corporate debt capacity: A study of corporate debt policy and the determination of corporate debt capacity*. Beard Books.
- Farouk, M. A., & Hassan, S. U. (2014). Impact of audit quality and financial performance of quoted cement firms in Nigeria. *International Journal of Accounting and Taxation*, 2(2), 1–22.
- Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. Cambridge University Press.
- Garcia, A. S., Mendes-Da-Silva, W., & Orsato, R. J. (2017). Sensitive industries produce better ESG performance: Evidence from emerging markets. *Journal of Cleaner Production*, 150, 135–147. <https://doi.org/10.1016/j.jclepro.2017.02.180>
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS*. Universitas Diponegoro.
- Hanafi, I., & Hidayat, P. (2024). Analisis Tri-Faktor Keberlanjutan Keuangan: ROA, Ukuran Perusahaan, dan NPL pada Bank Perkreditan Rakyat di Provinsi Riau. *Management Studies and Entrepreneurship Journal*, 5(2), 4132–4141.
- Hart, S. L., & Milstein, M. B. (2003). Creating sustainable value. *Academy of Management Perspectives*, 17(2), 56–67. <https://doi.org/10.5465/ame.2003.10025194>
- Herbohn, K., Gao, R., & Clarkson, P. (2019). Evidence on Whether Banks Consider Carbon Risk in Their Lending Decisions. *Journal of Business Ethics*, 158(1), 155–175. <https://doi.org/10.1007/s10551-017-3711-3>
- Hidayat, I., & Khotimah, K. (2022). Pengaruh Profitabilitas dan Ukuran Perusahaan terhadap Nilai Perusahaan sub sektor kimia. *Jurnal Ilmiah Akuntansi Kesatuan*, 10(1), 1–8. <https://doi.org/10.37641/jiakes.v10i1.1175>
- Imhanzenobe, J. O. (2020). Managers' financial practices and financial sustainability of Nigerian manufacturing companies: Which ratios matter most? *Cogent Economics & Finance*, 8(1), 1724241. <https://doi.org/10.1080/23322039.2020.1724241>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Mahdavi, T., & Hosseini, S. A. (2019). Aquifers Sustainability assessment by Integrated Groundwater Footprint Indicator Case Study: East Azerbaijan Province. *Iran-Water Resources Research*, 15(4), 438–452. [https://www.iwrr.ir/article\\_101907.html](https://www.iwrr.ir/article_101907.html)
- Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American Economic Review*, 48(3), 261–297.
- Myers, S. C. (1977). Determinants of corporate borrowing. *Journal of Financial Economics*, 5(2), 147–175. [https://doi.org/10.1016/0304-405X\(77\)90015-0](https://doi.org/10.1016/0304-405X(77)90015-0)
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187–221. [https://doi.org/10.1016/0304-405X\(84\)90023-0](https://doi.org/10.1016/0304-405X(84)90023-0)
- Oktoviyanti, O., & Etty Murwaningsari. (2023). Faktor - Faktor Yang Mempengaruhi Financial Sustainability Pada Sub-Sektor Perbankan. *Jurnal Ekonomi Trisakti*, 3(1), 927–942. <https://doi.org/10.25105/jet.v3i1.15533>
- Penrose, E. T. (2009). *The Theory of the Growth of the Firm*. Oxford university press.

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- Pratomo, G. Y. (2024). *Perusahaan Terdaftar di BEI Tembus 921 hingga 15 Maret 2024*. Liputan6. <https://www.liputan6.com/saham/read/5555399/perusahaan-terdaftar-di-bei-tembus-921-hingga-15-maret-2024?page=2>.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & sons.
- Smith, A. (1776). An inquiry into the nature and causes of the wealth of nations, London: W. Strahan and T. Cadell, 2.
- Soppe, A. (2004). Sustainable Corporate Finance. *Journal of Business Ethics*, 53(1/2), 213–224. <https://doi.org/10.1023/B:BUSI.0000039410.18373.12>
- Spence, M. (1978). Job Market Signaling. In P. Diamond & M. Rothschild (Eds.), *Uncertainty in Economics* (pp. 281–306). Elsevier. <https://doi.org/10.1016/B978-0-12-214850-7.50025-5>
- Sudana, I. M. (2011). *Manajemen Keuangan Perusahaan : Teori dan Praktik*. Erlangga.
- Sugiyono. (2017). *Metode penelitian kuantitatif kualitatif dan R&D*. Alfabeta.
- Taswin, M., Judijanto, L., Sudarmanto, E., & Astuti, A. K. (2023). Analysis of the Impact of Green Investment on Corporate Financial Sustainability in West Java. *West Science Interdisciplinary Studies*, 1(11), 1138–1145.
- Wang, X., & Wang, Q. (2021). Research on the impact of green finance on the upgrading of China's regional industrial structure from the perspective of sustainable development. *Resources Policy*, 74, 102436. <https://doi.org/10.1016/j.resourpol.2021.102436>
- Widarjono, A. (2015). *Analisis Multivariat Terapan*. UPP STIM YKPN.