

Unveiling the hidden power: How ESG enhanced Indonesian companies' financial flexibility

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Abstract

Purpose – The company's investors and lenders increasingly see that ESG is an important aspect to implement and disclose that can determine their investment or lending decision. This decision can impact the firm's capital inflow and financing capability, which can affect the company's financial flexibility. This study aims to show the effect of ESG on financial flexibility and the mediating role of financial constraints.

Design/methodology/approach – This study used companies listed on the Indonesia Stock Exchange from 2015 to 2021 as a sample. The final sample included 233 unbalanced panel data points from 48 listed firms. Path analysis and Sobel test are used to test the mediating role of financial constraint.

Findings – The results revealed a notable positive influence of ESG performance on financial flexibility. However, both the path analysis and Sobel test findings indicated that financing constraints were unsuccessful in mediating the relationship between a company's ESG performance and financial flexibility, as the direct effect remained stronger.

Research limitations/implications – This study only use enterprises from Indonesia as samples. Secondly, this study applied conventional methodologies commonly used in the existing literature to quantify variables. Third, this study relied on Refinitive ESG rating data and did not compare the ESG ratings from multiple institutions.

Practical implications – This research's findings prove to company management that adopting ESG practices in Indonesia can positively influence cash flow and financial flexibility. As a result, it incentivizes companies to be more open to voluntarily disclosing ESG-related information.

Originality/value – Little research has discussed whether ESG affects financial constraints and financial flexibility in Indonesia. This study also studies the differences in the effect of ESG performance on financial flexibility directly and indirectly through financial constraint as a mediator, which has not been covered in previous studies.

Keywords: ESG performance; financial flexibility; financial constraints.

Introduction

Many stakeholders encourage companies to consider environmental, social, and government (ESG) in their business practices. Institutional investors and regulators have encouraged companies to disclose ESG and comply with reporting standards to provide capital markets with access to

quantifiable and verifiable information (Sustainalytics, 2022). ESG is considered to provide additional information to stakeholders in the form of non-financial information that provides deeper access when analyzing investment benefits and risks that help determine the value of investment in the company more clearly (Li et al., 2021). Furthermore, consideration of ESG factors has become one of the things that banks pay attention to in lending. This shows that company investors and lenders increasingly see ESG as an important aspect to implement and disclose that can determine their investment or lending decision.

Taking ESG considerations into account when investing in a firm in emerging economies is critical. According to (Sun & Hou, 2021) and (Engelhardt et al., 2021), most rising countries have major issues such as resource scarcity, environmental degradation, and insufficient governance, resulting in higher ESG risks. As a result, adding ESG aspects to investing decisions in emerging economies can increase investment performance (Zhang & Liu, 2022).

Indonesia is the sixth-largest emerging country by gross domestic product and has grown faster in the last decade than China and India (The Economist, 2022). The implementation of ESG and its disclosure in Indonesia is very limited and only started to be pushed by regulators in 2017. The regulation requires public companies in Indonesia to disclose their ESG practices in sustainability reports starting in 2020. Applications and disclosures prior to 2020 are still voluntary; many Indonesian companies have not implemented and disclosed ESG.

Although there is a strong push for implementing ESG practices, not all companies are willing to adopt and disclose their ESG performance voluntarily. Investing in and practicing ESG incurs additional costs for the company. ESG practices are often considered to be in tension with traditional profit maximization theory, which can influence the firm's market value (Artiach et al., 2010). On the contrary, several academic studies have shown that implementing ESG can affect company value and financial performance. Several studies state that ESG improves the firm's cash holding, performance, and value (Arouri & Pijourlet, 2017; Cheng et al., 2014). Some researchers examined the effect of ESG on the cost of capital (El Ghouli et al., 2011), the effect of ESG on default risk (Atif & Ali, 2021), and the effect of ESG on financial risk (Lee & Faff, 2009; Oikonomou et al., 2012). Similarly, academic research that examines the influence of ESG in Indonesia mostly focused on the effect of ESG on financial performance (Nugroho & Hersugondo, 2022; Rizky Bunga Pertiwi, 2023; Sekar Sari et al., 2023) and stock performance (Octaviani & Utama, 2022; Trisnowati et al., 2022).

Numerous research findings have demonstrated that ESG practices can enhance company performance, leading stakeholders to emphasize the long-term sustainability of the company's performance. The long-term sustainability of the company's financial performance is currently being challenged because changes and uncertainties in the world are increasing, for example, the Covid-19 Pandemic, the Russian and Ukrainian wars, and the economic crises of several European countries. The uncertain business environment requires companies to maintain financial performance in various conditions. The company's ability to actively adapt to changes in the external environment, adjust to system changes, unify financial resources, and provide optimal financial decisions, is called financial flexibility (Zhao & Zhang, 2010) and (Golden & Powell, 2000). Companies that possess financial flexibility have a greater capacity to manage risks in an unpredictable business environment, enabling them to achieve long-term sustainability (Zhang & Liu, 2022).

One of the most crucial and effective parts of increasing the company's financial flexibility is the ease of obtaining access to funding or low financial constraints. Obtaining external funding is relatively higher than internal funding (Baños-Caballero et al., 2014). According to (Chae et al., 2009), the higher the company's external funding constraints, the more challenging it is for companies to obtain loans or capital inflow and the higher the cost of these funds.

The existence of asymmetric information and agency costs is one of the factors contributing to financial constraints. Agency problems arise when agents or management prioritize their interests over shareholders' interests (Jensen & Meckling, 1976), leading to an imbalance of information between company management and investors. This information asymmetry, as highlighted by (Myers & Majluf, 1984), can result in financial constraints and increased costs for external funding (S. B. Choi & Kawk, 2015).

To address these issues, various efforts can be undertaken by companies to reduce asymmetric information and agency costs. One effective approach is implementing and disclosing environmental, social, and governance issues in company management, as suggested in the research conducted by (Cheng et al., 2014). Research by Cheng et al. (2014) revealed that companies with higher ESG performance have lower financial constraints. Similar research on the relationship between ESG and financial constraints is still limited. Another research conducted by Choi & Kawk (2015) examined the performance of corporate CSR in South Korea against financial constraints, where the result is that companies that prioritize CSR strategies related to stakeholders will have low financial constraints. Other researchers are looking at the relationship between CSR and access to funding on the disclosure side. Research by García-Sánchez et al. (2019) proves that the broader the CSR disclosure, the easier it is to access funding. Research conducted by Zhang & Liu (2022) in China proves that good ESG performance can reduce financial constraints, improve a company's financial capabilities, and ultimately increase financial flexibility. This study adds value to the field by examining the impact of ESG performance on financial flexibility. First, the present literature mostly focuses on the impact of ESG on financial performance, the value of the firm, and stock price. In contrast, minor studies examine the effect of ESG performance on companies' financial flexibility. Second, this study enriches previous studies by also studying the differences in the effect of ESG performance on financial flexibility directly and indirectly through financial constraint as a mediator, which has not been covered in previous studies.

This study aims to demonstrate how ESG factors influence financial flexibility and further investigates how financial constraints function as a mediator in the link between ESG performance and financial flexibility. We used firms listed on the Indonesian Stock Exchange as a sample to test the mechanisms that affect ESG performance on financial flexibility. Path analysis and Sobel test are used to test the mediating role of financial constraint.

The structure of this article is organized in the following way: it begins with an introduction, followed by a literature review that encompasses both theoretical and empirical research, shedding light on the connection between theory and practice. The third section provides contextual information about the study and its approach. In the fourth section, the authors present the results and analysis of the study. Finally, the paper concludes by summarizing key points, offering recommendations, suggesting directions for future research, and acknowledging any limitations.

Literature Review and Hypotheses

The Stakeholder Theory

According to Gray et al. (1995), stakeholder theory considers the effects of policies when there are different stakeholder groups within a firm. For example, management in an enterprise may reveal information about the investment responsibility of the company in social and environmental spheres in order to obtain support and approval from stakeholders whose support and approval affect the age of the company.

According to this viewpoint, stakeholders' collaborative efforts are critical to producing corporate value (Haslam et al., 2015), and a loss of support from stakeholders might jeopardize the business's existence (Freeman, 2010). As a result, running a business model without solid connections with stakeholders, both inside and outside the company, is impossible (Freudenreich et al., 2020).

Signaling Theory

Signaling theory is fundamentally concerned with minimizing information imbalance between two parties (Brown et al., 2020). One way to reduce information asymmetry is by disclosing company information to external parties, both financial and non-financial information. From the investor side, the disclosure of reports is considered a signal for capital markets to lessen information asymmetry, reduce expenses, and boost firm value, which is influential in reducing uncertainty in the market (Gallego-Álvarez et al., 2011). The company's responsible and ethical behavior, as perceived by customers, can help enhance its reputation and public image. This can positively

influence customers' perceptions of the company, increase their satisfaction with its products, and lead to continued loyalty and profitability (Hur et al., 2018).

Financial Flexibility

Financial flexibility refers to an organization's ability to manage an uncertain business climate, letting it set aside enough finances to deal with potential financial issues and investment prospects. Investment prospects provide returns and describe the company's reaction to environmental uncertainty and opportunity utilization rates (Deangelo et al., 2006). According to (Fridson & Alvarez, 2022), financial flexibility means the ability of a company, in declining business conditions, to remain able to make expenses in the long run by minimizing capital costs and increasing competitiveness.

In a frictionless environment such as Modigliani & Miller (1958) present, companies have financial flexibility because they can manage their financial structure at no cost to meet unforeseen requirements. Therefore, the concept of financial flexibility becomes attractive only in the presence of friction or in imperfect capital markets. However, the significance of financial flexibility arises only in the presence of friction or imperfect capital markets. Therefore, companies need to choose financial policies that support financial flexibility in the presence of such friction to tackle unexpected periods of resource constraints (Denis, 2011).

In addition, financial flexibility can also help companies to mitigate the negative effects of economic downturns and market volatility. For example, a study by (Ferrando et al., 2017) found that companies with higher financial flexibility were better able to weather the 2008 financial crisis and subsequent recession. This is because these companies had greater access to liquidity and could maintain their operations and investment activities despite the economic turmoil. Companies can maintain financial flexibility by managing their financing decisions, adjusting their leverage levels to balance the risks and benefits of debt financing, and maintaining adequate cash reserves (Zeng & Wei, 2013). This notion is in line with previous studies (Chen et al., 2020; R. Islam et al., 2022; Lie, 2005) that the level of financial flexibility is influenced by the amount of cash held by the company, which, in turn, depends on revenue growth and expenditure levels.

Companies with sufficient financial flexibility show three benefits when faced with shocks: (1) Companies can raise money at low costs to quickly change their capital structure and avoid financial difficulties (Ferrando et al., 2017); (2) companies can lessen the negative effects of environmental uncertainty by improving its innovation to achieve efficiency do so that it can increase key competitive advantages (Hao et al., 2022); and (3) companies can reserve adequate reserves, capture strategic opportunities, and achieve innovative development (Xiao et al., 2020). Therefore, financially flexible companies can better address environmental risks and uncertainties and achieve sustainable growth (Zhang & Liu, 2022).

Hypothesis Development

ESG performance and financial flexibility

The focus on ESG (Environmental, Social, and Governance) has resulted in a shift from prioritizing individual interests to prioritizing societal interests, which has forced companies to include other aspects in their operations, such as Environmental preservation, social responsibility, and improved business governance (Zhang & Lucey, 2022). ESG factors have been integrated into investment strategies by many investment service providers, and research indicates that incorporating ESG considerations can enhance a company's value (Fatemi et al., 2018; Porter & Kramer, 2011; Wong et al., 2021).

ESG has become increasingly important in business strategy as stakeholders believe that companies that take on social and environmental responsibilities can identify and capitalize on opportunities, showing their competitiveness, including innovation capabilities. McWilliams & Siegel (2001) found that CSR (ESG) can potentially harm the company and decrease shareholder equity, while Sen & Bhattacharya (2001), Ali et al. (2021), and T. Islam et al. (2021) argue that CSR (ESG) can enhance revenue and sales and improve the company's reputation, which is a critical

success factor in the market. ESG has been shown to improve company performance by enhancing the company's reputation, consumer satisfaction, and competitiveness (Saeidi *et al.*, 2015).

Based on signaling theory, good ESG performance offers reliable signals to the financing market, helping firms to earn more trade credits and enhance their financial performance (Zhang & Lucey, 2022). According to Hur *et al.* (2018), when viewed from the customer's perspective, a company's responsible and ethical behavior sends a positive signal to the outside world, which can enhance the company's image. This, in turn, can result in customers perceiving the company more favorably, leading to increased satisfaction with its products, a greater likelihood of repeat purchases, and improved profitability. In addition, it strengthens profits and increases the company's free cash flow, which leads to increased cash flexibility (Zhang & Liu, 2022).

From a principal-agent standpoint, the idea of ESG demands that corporations defend shareholders' interests and prioritize long-term growth (Zhang & Liu, 2022). More broadly, when viewed from the perspective of stakeholders, companies with superior ESG performance can build trust and cooperation with key stakeholders, leading to strategic alignment of interests (Jones, 1995). This can lead to reductions in agency, transaction, and production-related costs. Effective involvement with a company's stakeholders, such as customers, business partners, and workers, may also increase revenue or profits by enhancing relationships (J. Choi & Wang, 2009). Furthermore, strong stakeholder engagement can discourage short-term opportunism and enable more efficient alignment with key stakeholders resulting in lower agency costs and greater access to funding (Jones, 1995; Bénabou *et al.*, 2010).

Based on the preceding analysis, a company's good ESG performance can foster strong relationships with stakeholders, enhance decision-making processes, and improve flexibility in generating profit, cash ownership, borrowed fund, and equity financing. In this way, companies can increase financial flexibility and address uncertain environmental impacts. So the study formulated a hypothesis:

H₁: ESG performance positively affects the company's financial flexibility.

The mediating effect of financial constraints

The company makes investments to maximize the value of the company through improved performance and a competitive edge. To achieve this, the company requires financing to fund its investments. The company's ability to finance investments depends on its constraints or financial limitations. Financial constraints can be described as market obstacles that hinder companies from financing all targeted investments (Cheng *et al.*, 2014). These constraints may include credit constraints, liquidity issues, and difficulties in borrowing or issuing equity (Lamont *et al.*, 2001).

Financial constraints arise due to a disparity between external and internal funding costs, which can be influenced by various factors, including agency costs and information asymmetry caused by flawed market conditions (Kaplan & Zingales, 1997). Various company efforts can be made to reduce asymmetric information and agency costs, one of which is the implementation of social or environmental, social, and governance responsibilities, as researched by Cheng *et al.* (2014). Research by Cheng *et al.* (2014) revealed that firms with higher ESG ratings have lower financial constraints. The study found that ESG performance is important in reducing financial constraints. Companies that show exceptional ESG performance often showcase their ESG initiatives through sustainability reports (Dhaliwal *et al.*, 2011). As a result, ESG disclosure increases the company's transparency and enhances the credibility of company information, thereby fostering a robust internal control system. Consequently, it mitigates information asymmetry and lowers financial constraints (Cheng *et al.*, 2014).

According to signaling theory, strong ESG performance communicates positive and reliable information to the financing market. This helps companies obtain more trade credit, improving financial performance (Zhang & Lucey, 2022). From the principal-agent perspective, the ESG concept compels companies to safeguard shareholder interests and prioritize long-term development (Zhang & Liu, 2022). Taking a broader stakeholder view, companies with excellent ESG performance can align their strategic interests with key stakeholders through mutual trust and cooperation (Jones, 1995). Consequently, this alignment reduces agency fees and transaction costs

while limiting short-term opportunistic behavior (Bénabou et al., 2010). Moreover, enhanced engagement with stakeholders fosters more efficient alignment, reducing agency costs and facilitating access to funding.

The presence of financing constraints may alter the connection between ESG performance and financial flexibility, as these constraints play a crucial role in shaping the impact of ESG performance in mitigating asymmetric information. Lower financial constraints can help with companies in raising adequate funds at reasonable costs, ultimately strengthening their financial flexibility (Gamba & Triantis, 2008).

The preceding analysis suggests that strong ESG performance can foster stakeholder engagement, optimize managerial processes, and improve several areas of a company's financial performance, including its ability to generate revenue, cash ownership, debt, and equity financing. This can enable companies to enhance their financial flexibility and effectively respond to uncertainty. By improving external financing capabilities and increasing cash ownership, companies can obtain enough financial resources to withstand negative environmental changes and meet future investment needs, ultimately boosting their ability to cope with uncertainty and increase financial flexibility. In other words, financial constraints might impact financial flexibility when it comes to cash management flexibility and flexibility in debt and equity financing. Therefore, the study formulated a hypothesis:

H₂: Financial constraints act as a mediating factor in the connection between ESG performance and financial flexibility.

Research Methods

Sample Selection

The study selected listed firms in Indonesia between 2015 and 2021 to investigate the impact of ESG performance on Indonesian companies' financial flexibility. Data on ESG rating, financial flexibility data, and other variables were collected from the Refinitive database. To ensure the validity of the sample, the study followed established research practices and applied the following criteria: (1) excluding 106 listed financial firms, (2) removing 608 listed firms with incomplete variable data (no ESG score), and (3) reducing the impact of outliers by scaling down continuous variables. The final sample included 233 unbalanced panel data points from 48 listed firms.

Variable Setting

The dependent variable in this study is financial flexibility. Measurements of financial flexibility are still quite diverse. Some previous studies have suggested that financial flexibility can be achieved through cash holding (Almeida et al., 2004; Chen et al., 2020). Zhang & Liu (2022) measure using two approaches, the first by measuring the standard deviation from the average monthly stock return and excess cash holding.

The cash ratio is used to measure financial flexibility in this study, similar to R. Islam et al. (2022) and Farinha et al. (2018). The cash ratio was chosen because cash is the most easily available and liquid asset, acting as a typical measure of a company's financial flexibility. The formula for calculating the cash ratio is the division of cash and equivalents by total assets.

The ESG scores used in this study used ESG Scores published by Refinitiv. With over 40,000 consumers in 190 countries, Refinitiv is a leading producer of financial market data globally. Refinitiv has one of the largest ESG databases in the industry, accounting for more than 80% of worldwide market capitalization. Refinitiv captures and calculates more than 630 ESG measurements at the enterprise level, which is a subset of the 186 most comparable measurements across industries that power the entire enterprise ESG assessment process. The 680 measurements are categorized into ten distinct groups, encompassing three pillars of value and one crucial ESG value. Using publicly accessible data, these categories represent a company's ESG performance, commitment, and effectiveness.

Refinitiv establishes ESG scores in the form of numerical values, ranging from 0 to 100, which can be converted into letter grades from A to D. An ESG score of A, or a value above 75,

indicates companies with excellent ESG performance and high levels of transparency and disclosure to the public regarding their ESG practices. A score of B, or a value between 50 and 75, signifies companies with good ESG performance and above-average levels of transparency and disclosure of their ESG activities to the public. Companies with a score of C, or a value between 25 and 50, demonstrate moderate ESG performance and a moderate level of transparency and disclosure of their ESG practices to the public. Finally, companies with a score of D, or a value below 25, represent poor ESG performance and inadequate transparency and disclosure regarding their ESG practices to the public.

The mediating variable in this study uses the KZ Index introduced by Kaplan & Zingales (1997) as previous research (Cheng et al., 2014; S. B. Choi & Kawk, 2015; García-Sánchez et al., 2019; Wibowo & Lolyta, 2005; Zhang & Liu, 2022). KZ index consists of five financial ratios: cash holding to assets, cash flow to assets, debt to total capital, dividends to assets, and market value of equity.

The control variables used in this study follow several studies on financial flexibility that previous researchers have conducted. Hoberg et al. (2014) use market-to-book, asset growth, profitability, and firm age as financial flexibility control variables, while Fahlenbrach et al. (2021) use market-to-book, firm size, and capital expenditure. We followed the approach of Zhang & Liu (2022), which included company growth, capital expenditure, and company size as control variables.

Methodological Remarks

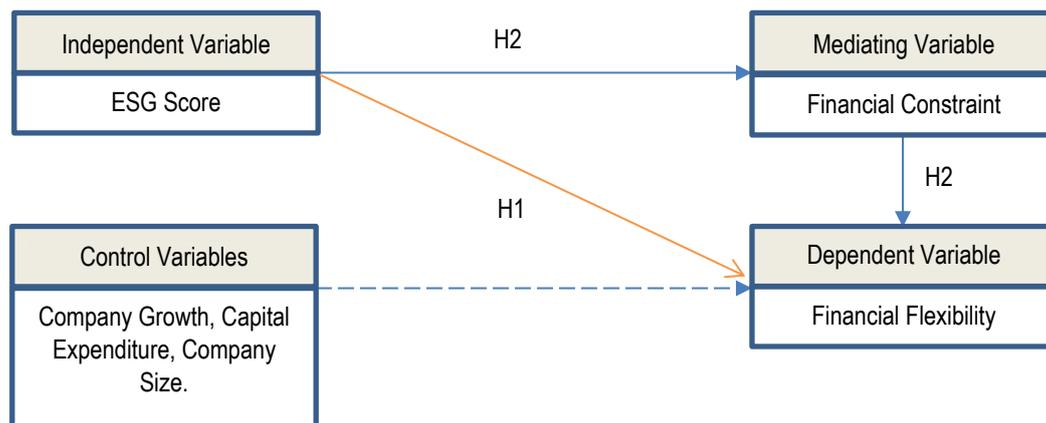


Figure 1. Conceptual Model. Source: Authors

To examine the correlation between ESG performance and financial flexibility, this study adopts the research model proposed by (Zhang & Liu, 2022), which includes an equation to validate the relationship.

$$FF = \beta_0 + \beta_1 ESG + \beta_2 SUS_GROWTH + \beta_3 CAPEX + \beta_4 SIZE + \varepsilon \tag{1}$$

The explained variable in the model is denoted as FF, representing financial flexibility. The explanatory variable is ESG, which signifies ESG performance. Additionally, there are several control variables, including SUS_GROWTH, CAPEX, and SIZE. The definitions of these variables can be found in Table 1.

The mediation test model of Baron & Kenny (1986) is used in the research model to assess the effect of mediating financial constraints, which analyzes the influence of ESG on financial constraints and whether financial constraints play a mediating role in the link between ESG and financial flexibility. Using two regression models, we will study the impact of financial constraints in mediating the relationship between ESG performance and financial flexibility.

$$FC = \beta_0 + \beta_1 ESG + \beta_2 SUS_GROWTH + \beta_3 CAPEX + \beta_4 SIZE + \varepsilon \tag{2}$$

$$FF = \beta_0 + \beta_1 ESG + \beta_2 FC + \beta_3 SUS_GROWTH + \beta_4 CAPEX + \beta_5 SIZE + \varepsilon \tag{3}$$

Financial constraints, represented by FC, act as a mediating variable reflecting the

limitations on financing in the equations. We employed Equation (3) to investigate the role of financing constraints as a mediating factor. Equation (2) specifically examines whether ESG performance has an impact on the financial constraint. The significance of the coefficients in Equations (1) through (3) will be assessed through path analysis and Sobel tests. By conducting these analyses, it will be possible to ascertain whether there is a relationship between ESG performance and financial flexibility and whether this relationship is mediated by financing constraints.

Table 1. Variable Description

Symbol	Variables Name	Definitions
Dependent Variables		
FF	Financial flexibility	Cash and equivalents divided by total assets
Independent Variables		
ESG	ESG Performance	Environmental, social, and corporate governance values based on the Refinitiv database
Mediating Variables		
FC	Financial Constraints	KZ Index
Control Variables		
SUS_GROWTH	Sustainable Growth	Retention rate multiplies return on equity. Retention rate = $1 - (\text{dividend} / \text{net income})$
CAPEX	Capital Expenditure	Capital expenditure ratio divided by total assets
SIZE	Company Size	Natural log of the company's total annual assets

Source: Authors

Results and Discussion

Descriptive Statistics

Based on the total observations in this study, when looking at the ESG scores, the majority of observations are distributed in the ESG score category B, which ranges from above 50 to 75, accounting for 45 percent of the observations. The ESG score category C, ranging from 25 to 50, accounts for 35 percent of the observations. When combined, most of the observations in this study fall into the ESG score categories B and C. The highest ESG score category, ESG A, which is above 75, only accounts for 7 percent of the total observations. This indicates that few public companies in Indonesia are still assessed to have excellent ESG performance by Refinitiv.

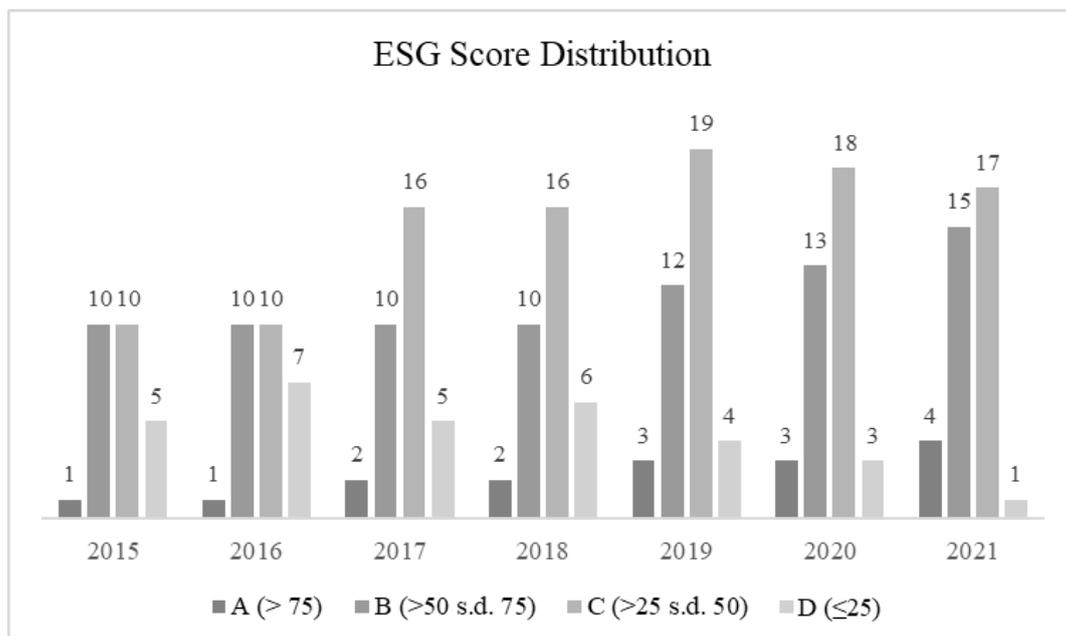


Figure 2. ESG Score Distribution

Figure 2 shows the trend of companies in Indonesia with ESG performance scores increasing from 2015 to 2021. Companies with poor ESG scores or D ratings have experienced a declining trend, with five companies in 2015 and one in 2021. But companies with good performance in the ESG score categories A and B have seen an increasing trend, with 20 companies in 2015 and 32 companies in 2021. This indicates that the ESG performance and disclosing companies in Indonesia are improving, driven by regulatory incentives.

The descriptive statistics are presented in Table 2. These statistics summarize the distribution and characteristics of each variable analyzed in the study. The average cash ratio of companies in Indonesia that have ESG data is 0.064, with a middle value that also shows 0.05. The standard deviation of 0.055, which is quite far from the average, shows that the cash ratio of companies in Indonesia that have ESG values from the study period is quite variable. As for the period 2015 to 2021, the minimum value is 0.002, which is in the company PT Astra Agro Lestari Tbk (AALI. JK) in 2018 as a result of the decline in the company's performance where in that year, the price of crude palm oil (CPO / Crude Palm Oil) which is AALI's main commodity decreased in price from the range of USD 677 / ton at the beginning of the year to USD 489 / ton at the end of 2018. The maximum value of 0.353 is in PT Matahari Department Store Tbk (LPPF. JK) in 2016 due to the launch of omni-channel operations with the opening of 9 new branches, MatahariMall.com, and MatahariStore.com which increased the company's net sales in 2016 by 8.3 percent. When viewed at skewness which shows a positive skewness, it can be interpreted that the cash ratio of companies in Indonesia is mostly above 0.064 to 0.353.

Table 2. Descriptive Statistic

Variable Name	Mean	Median	Maximum	Minimum	Std.Dev.	Skewness
FF_CR	0.064	0.050	0.353	0.002	0.055	2.028
FC	2.137	1.843	12.549	-7.303	3.636	0.355
ESG	45.563	43.600	84.680	8.160	19.354	0.205
SUS_GROWTH	0.081	0.078	1.469	-0.333	0.134	4.789
CAPEX	0.056	0.041	0.196	0.000	0.044	0.992
SIZE	17.466	17.380	19.720	14.080	0.953	-0.215

ESG value is an independent variable in this research. The ESG value ranges from 1-100, where the higher the range, the greater the involvement of ESG-related business activities in the company. The ESG score has an average score of 45.563. The ESG score with a minimum score of 8.160 at Charoen Pokphand Indonesia Tbk (CPIN. JK) in 2016 was due to an investigation conducted by the Business Competition Supervisory Commission (KPPU) against CPIN. JK. The KPPU decided that CPIN. JK and eleven other companies engaged in poultry farming business engaged in monopolistic practices to increase the price of day-old chicken (DOC) by reducing the supply of DOC through culling hens. ESG score has a maximum value of 84.68 in Vale Indonesia Tbk (INCO. JK) in 2017, which received a platinum award (the highest rating) in Asia Sustainability Reporting (ASR).

Financial Constraints (FC) is a mediator variable in this study measured using the KZ Index, where the higher the value, the greater the financial constraints the company faces. FC has an average score of 2.137 with a minimum score of -7.303 in PT Surya Citra Media Tbk (SCMA. JK) in 2016, where the company recorded a fairly good performance with an increase in revenue of 6.75 percent so that the company could distribute dividends of Rp1.21 trillion in 2016, this dividend was 88.72 percent of the total cash used for funding activities. The maximum value is 12.549 at PT Indosat Tbk (ISAT. JK) in 2020, which was influenced by the company's performance by posting a loss of IDR 716.7 billion.

Sustainable Growth Rate (SUS_GROWTH), capital expenditure (CAPEX), and company size (SIZE) are the control variables used. The sustainable growth rate has a mean of 0.081, a minimum of -0.333, and a high of 1.469. Capital expenditure has an average value of 0.056, with a low of zero and a high of 0.196. The average firm size is 17.466, with a minimum value of 14.080 and a maximum of 19.720.

Regression Result Analysis

The effect of ESG performance on financial flexibility

Table 3 shows the results of testing research hypotheses containing information as the level of significance of the model simultaneously (F-test), partially (T-test), and the strength of the model in explaining the dependent variable that can be seen in the value of R². Based on Table 3, the research model has a probability value of 0.00000. This number is smaller than the alpha value of 0.01. So all independent variables in the research model can significantly affect financial flexibility.

According to Hypothesis 1 of this study, ESG values positively affect financial flexibility. The coefficient of ESG is positive with a probability level of less than 0.01 in the regression findings, indicating that the coefficient of the regression results is significant. Therefore, hypothesis one failed to be rejected, and it can be known that in Indonesia, the better the company's ESG rating, the higher its financial flexibility. This verifies previous research conducted by Zhang & Liu (2022) in China, which proved that good ESG performance can reduce financial constraints.

Based on signaling theory, good ESG practice sends reliable signals to the finance market and customers, providing responsible and ethical signals to the outside world that are useful for building a good company image. This will have an influence on increasing funding capabilities and strengthening profits to increase the company's free cash flow, which leads to increased cash flexibility, which is a measure of financial flexibility.

Table 3. Fixed Effect Model I Result (ESG on Financial Flexibility)

Variabel	Coefficient	Std. Error	P-Value
ESG	0.000938	0.000274	0.0008
SUS_GROWTH	-0.009422	0.016335	0.5648
CAPEX	-0.200514	0.075300	0.0084
SIZE	0.020371	0.010627	0.0568
Adj. R-Squared		0.771213	
Prob (F-Statistic)		0.000000	
N		233	

The role of financial constraints as a mediator in the effect of ESG performance on financial flexibility

Based on Table 4, the research model has a probability value of 0.00000. This number is smaller than the alpha value of 0.01 so all independent variables in the research model can significantly affect financial constraints simultaneously.

Table 4. Fixed Effect Model II Result (ESG on Financial Constraint)

Variabel	Coefficient	Std. Error	P-Value
ESG	-0.031464	0.013762	0.0234
SUS_GROWTH	3.266348	0.820930	0.0001
CAPEX	-5.418777	3.784297	0.1539
SIZE	1.880976	0.534065	0.0005
Adj. R-Squared		0.866717	
Prob (F-Statistic)		0.000000	
N		233	

Hypothesis two states that ESG values significantly affect financial flexibility by mediating financial constraints to be tested through regression models II and III. In the regression results of Model II, the coefficient of ESG may be observed as negative with a probability level below 0.01, indicating statistical significance. This shows that the higher the ESG performance in Indonesian companies, the lower the financial constraints faced. This reinforces the results of earlier studies, namely Zhang & Liu (2022), Cheng et al. (2014), and S. B. Choi & Kawk (2015), which stated that companies with high ESG values have low financial constraints.

Additional testing was conducted to examine the influence of ESG performance on financial flexibility while considering the presence of financing constraints. Table 5 displays the findings of this investigation.

Table 5. Fixed Effect Model III Result (ESG and Financial Constraint on Financial Flexibility)

Variabel	Coefficient	Std. Error	P-Value
ESG	0.000836	0.000275	0.0027
FC	-0.003227	0.001463	0.0287
SUS_GROWTH	0.001118	0.016856	0.9472
CAPEX	-0.218000	0.074931	0.0041
SIZE	0.026440	0.010870	0.0160
Adj. R-Squared		0.771213	
Prob (F-Statistic)		0.000000	
N		233	

Based on Table 5. above, the research model has a probability value of 0.00000. This number is smaller than the alpha value of 0.01, so all independent variables in the research model can significantly affect financial flexibility simultaneously. In the regression results of model III, the coefficient of ESG is positive with a probability level of less than 0.01, indicating that the coefficient of the regression results is significant, consistent with the results of regression model I. The coefficient of financial constraints (FC) is negative with a probability level below 0.05, thus indicating that the coefficient of regression results is significant. This shows that the lower the financial constraints in an Indonesian company, the higher the financial flexibility. This reinforces Zhang & Liu (2022) research in China which states that financial constraints affect financial flexibility.

Lower financial constraints indicate reduced information asymmetry, facilitating companies in raising adequate funds at reasonable costs. Companies can get sufficient financial resources to withstand negative environmental changes and meet future investment needs by enhancing their external financing capabilities and expanding cash ownership. Finally, this improves their ability to deal with unpredictability and increases their financial flexibility.

A path analysis was performed to assess the function of financial constraint as a mediating factor in the link between ESG performance and financial flexibility. The results are shown in Figure 2.

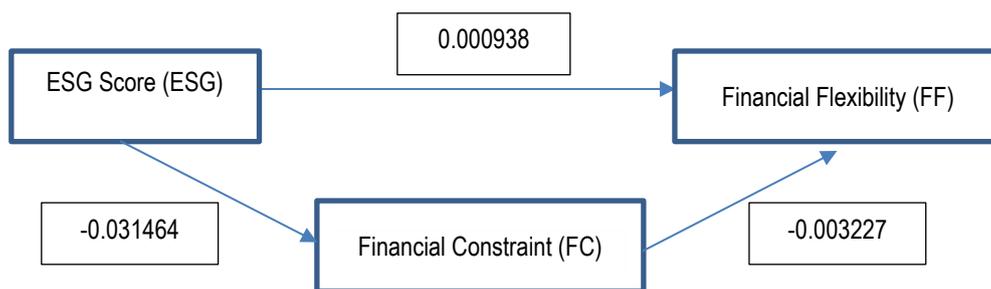


Figure 2. Path Analysis of ESG Performance, Financial Flexibility, and Financial Constraints

According to the path analysis findings, the ESG Score has a direct influence on financial flexibility and an indirect influence of ESG Score on Financial Flexibility through Financial Constraints (Intervening Variables/Mediators). The amount of direct influence is 0.000938, while the indirect influence must be calculated by multiplying the ESG coefficient to FC by FC to FF. The indirect influence is 0.0001 or smaller than the direct influence of 0.0009, so it can be concluded that the direct influence between ESG on FF is greater than the indirect influence through mediation.

To determine whether the indirect influence is significant, a Sobel test is carried out to conclude the significance of the value of the relationship coefficient. If the P-Value of the Sobel

Test is less than the significance value $\alpha = 0.05$, then the hypothesis is accepted so that the intervening variable has an influence. The following are the findings of the coefficient and Sobel test indirect influence calculation:

Table 6. Sobel Test Result

Indirect Effect	Coefficient	Std.Error	p-value Sobel test
ESG-FC-FF	0,000101534	0,00006396	0,11242003

The results of the Sobel test, as presented in Table 6, indicate that the p-value obtained is 0.11242003, higher than the predefined significance level $\alpha = 0.05$. This suggests that the indirect influence between ESG (Environmental, Social, and Governance) and FF (Financial Flexibility) through FC (Financial Constraints) is not statistically significant. Thus, Hypothesis 2 of this study, which posits a significant effect of ESG values on financial flexibility mediated by financial constraints, is not supported by the findings.

However, it is essential to highlight that while there may not be a significant indirect relationship between ESG Score and Financial Flexibility through Financial Constraints, both ESG Score and Financial Constraints individually demonstrate a significant impact. This implies that ESG Score has a direct and stronger influence on Financial Flexibility, while Financial Constraints independently affect Financial Flexibility as well.

Theoretical Implication and Managerial Implication

The findings of this study carry significant implications for various stakeholders, including corporate executives, government entities, investors, and creditors. Firstly, companies are encouraged to actively embrace ESG practices and transparently disclose information because, according to signaling theory supported by the findings of this study, ESG could enhance corporate cash inflow and ultimately improve financial flexibility. Moreover, based on the results and stakeholder theory, integrating ESG into business practices enables companies to foster strong relationships with stakeholders, enhance decision-making processes, and improve flexibility in generating profit, owning cash, borrowing funds, and obtaining equity financing. The results guide companies in integrating ESG considerations into financial decision-making, business strategy, and corporate policy setting, considering the influence of ESG on financial flexibility and financial constraints.

Secondly, policymakers can create necessary policies and review ESG disclosure to promote the implementation of ESG in Indonesia for both public and private companies. Consequently, ESG data can provide investors with valuable information, enabling them to make well-informed decisions and investments in ethical and sustainable sectors. Thirdly, investors and creditors are advised to integrate ESG considerations into their investment and lending strategies. This approach allows them to identify companies with lower risks, thereby reducing overall investment risk while enhancing potential investment returns. By incorporating ESG factors into their decision-making processes, investors and creditors can align their portfolios with sustainable and responsible investment practices.

Conclusion and Future Direction

Companies need to strengthen their financial flexibility in a highly uncertain business environment to proactively manage future capital requirements, mitigate potential financial difficulties, and grab strategic opportunities. This research objectives are two-fold: first, to investigate the impact of ESG on financial flexibility, and second, to analyze the mediating role of financial constraints in the link between ESG and financial flexibility. We aim to investigate the direct effect of ESG performance on financial flexibility while also exploring how financial constraints may mediate this relationship.

The findings reveal a significant positive correlation between ESG performance and financial flexibility. However, while there may not be a strong indirect relationship between ESG

Score and Financial Flexibility via Financial Constraints, both ESG Score and Financial Constraints independently have considerable influence. Companies that demonstrate strong ESG performance have the advantage of attracting investor confidence and improving their access to funding. Furthermore, companies with good ESG scores can enhance customer relationships, leading to increased profitability and, ultimately, improved cash flow. This, in turn, strengthens their financial flexibility.

This study has several drawbacks. Because this study solely uses Indonesian firms as samples, the number of public companies with ESG performance scores in Indonesia is still limited. Therefore, the research sample utilizes unbalanced panel sample data. Conducting an international data analysis in future research is necessary. Secondly, this study applied conventional methodologies commonly used in the existing literature to quantify the dependent variable, which is the cash ratio. Thus, it did not use novel techniques to measure financial flexibility directly. Third, as this study only focused on Indonesian companies, we relied on Refinitive ESG rating data and did not compare the effects of ESG ratings from multiple institutions on our findings. Further research could expand the scope of the study by using international data, enlarging the sample size, and categorizing the sample industries to better understand the effect of ESG performance on financial flexibility. Future research may also explore innovative techniques to directly measure financial flexibility, resulting in a more comprehensive and transparent analysis. Additional research and analysis may have to explore the complex dynamics and potential factors influencing the relationship between ESG performance, financial constraints, and financial flexibility.

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