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The Role of Corporate Social Responsibility and Firm Characteristics in Building a Sustainable Capital Structure in Indonesia's Agricultural Sector

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ABSTRACT

This study aims to explore the relationship between Corporate Social Responsibility (CSR), sales growth, and firm size on sustainable capital structure, with profitability as an intervening variable, in agricultural companies in Indonesia. The research employs a quantitative approach using secondary data collected from 88 agricultural companies listed on the Indonesia Stock Exchange (IDX) over the 2021–2024 period. To examine the direct and indirect relationships among the variables, path analysis is applied as the main statistical technique, supported by multiple linear regression. CSR is measured using the Corporate Social Responsibility Disclosure Index (CSRDI). Sales growth is calculated as the year-over-year percentage change in sales. Firm size is represented by the natural logarithm of total assets, and profitability is proxied by Return on Assets (ROA). The sustainable capital structure is measured using the Debt to Equity Ratio (DER). The results show that sales growth and firm size have a significant positive effect on sustainable capital structure, both directly and indirectly through profitability. In contrast, CSR does not exhibit a significant direct impact, suggesting it is not yet integrated into strategic financing decisions. Profitability is confirmed as an important mediating variable, supporting the signaling theory, which posits that profitable firms send positive signals to investors and creditors, thereby improving their access to external funding. These findings highlight the critical role of internal firm characteristics and operational performance in shaping sustainable capital structure decisions within Indonesia's agricultural sector.

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While CSR remains important for compliance and reputation, its financial impact requires further strategic integration. This study underscores the value of utilizing advanced quantitative methods such as path analysis to uncover complex causal relationships and encourages future research to develop more detailed CSR metrics to better assess its role in financial decision-making.

Keywords: Corporate Social Responsibility; Sales Growth; Firm Size; Capital Structure; Profitability

1. Introduction

In the era of globalization and rapid technological advancement, the intensity of business competition has increased significantly, compelling companies across sectors to continuously enhance their performance to maintain competitiveness [1]. Agricultural companies in Indonesia, as a vital part of the nation's food security and rural economic development, are not only expected to increase productivity but also to adopt sustainable and strategic financial practices that ensure long-term corporate resilience [2]. One of the most critical financial decisions within this context pertains to a company's capital structure [3]. Capital structure, which refers to the mix of debt and equity used to finance a firm's assets [4], plays a pivotal role in determining financial flexibility and operational sustainability. According to Marhendra [5], the composition of capital reflects a firm's ability to meet its financial obligations and optimize its cost of capital. An optimal capital structure can strengthen a firm's value and reduce financial risks, whereas a suboptimal structure may result in liquidity issues and reduced investor trust [6].

Given the unique characteristics of the agricultural sector, such as seasonality, weather dependency, and price volatility, financial managers must carefully evaluate both internal and external determinants when making capital structure decisions. Internal factors such as firm size, sales growth, and profitability, alongside broader market conditions, are central to this decision-making process. One increasingly influential internal factor is Corporate Social Responsibility (CSR). CSR represents a company's commitment to integrate environmental and social considerations into its business operations [7]. In the agricultural sector, CSR initiatives may include sustainable farming practices, rural community development, biodiversity conservation, and climate resilience programs. Beyond ethical and regulatory compliance, CSR is now widely regarded as a strategic lever that enhances corporate image, stakeholder trust, and market access [8,9]. Empirical studies suggest that well-executed CSR programs can strengthen stakeholder relationships, improve operational continuity, and positively affect financial outcomes [10].

Notable examples can be found among leading Indonesian agricultural firms, such as those engaged in palm oil, rubber, and plantation commodities, which have implemented CSR programs that involve sustainable land management, the empowerment of smallholder farmers, and support for rural infrastructure. These programs not only address social and environmental issues but also foster long-term consumer loyalty and regulatory goodwill. Tangible benefits experienced by local communities often lead to increased public trust, which can indirectly support sales growth, a proxy for business expansion. As highlighted by Nurhayati [11], sales growth reflects a firm's ability to capture market share and drive revenue, making it a relevant indicator in capital structure studies.

Firm size is another important factor influencing access to external financing. Larger agricultural companies generally benefit from greater economies of scale, better credit ratings, and increased investor confidence due to their perceived financial robustness and operational efficiency [12]. Consequently, they are more likely to secure financing under favorable conditions and exhibit higher leverage ratios [13]. This suggests that firm size may have a positive correlation with capital structure, especially in sectors characterized by high asset intensity and long production cycles, such as agriculture.

This study investigates the effect of Corporate Social Responsibility (CSR), sales growth, and firm size on capital structure, with profitability serving as an inter-

vening variable, focusing on agricultural companies in Indonesia. Although the sample consists of firms from the agricultural sector, this study also considers the unique characteristics and challenges faced by agricultural companies, such as fluctuating commodity prices, seasonality, and environmental sustainability pressures, which may influence financial decisions and capital structure. The agricultural sector in Indonesia has unique and complex characteristics, including dependence on natural factors, seasonal production cycles, and challenges related to climate risks and volatile commodity prices. These conditions influence financial decisions in agricultural companies, particularly regarding capital structure and the use of financing sources. Moreover, this sector is closely linked to environmental and social sustainability issues, making the implementation of CSR increasingly important as a strategy to enhance a company's reputation while supporting sustainable development. CSR in agriculture typically involves programs related to natural resource conservation, empowering farming communities, and environmentally friendly agribusiness practices. This contextualization aims to bridge the gap between financial aspects and the specific conditions of the agricultural sector, which are often overlooked in prior studies. The research is motivated by inconclusive findings in previous literature. For example, Umam et al. [14] reported a significant positive relationship between firm size and capital structure, while Sari et al. [15] found no such association. Similarly, conflicting results exist regarding the impact of sales growth on leverage [6,15]. By situating the study within the agricultural context, this research seeks to provide a more comprehensive understanding of how firm characteristics influence capital structure in this important sector.

These inconsistencies highlight the importance of context-specific analysis, particularly in the agricultural sector, which is highly influenced by socio-environmental factors and seasonal variations. Although this study focuses on the relationships between firm size, CSR, profitability, and capital structure, it also recognizes the need for a more comprehensive understanding of how capital structure is formed and managed in agricultural firms. In this regard, the study emphasizes the strategic role of CSR not merely as a compliance obligation but as an internal strategic element that can influence financial decision-making. However, this research has not fully developed an integrated strategy that connects these variables into a cohesive framework for financial planning and sustainability.

To address this gap, integrated strategies in agricultural firms must be formulated using a holistic approach that aligns with corporate social responsibility, financial performance, and capital structure decisions. CSR should be embedded in core business activities, not only as a matter of compliance but as a driver of long-term value. For example, sustainable farming practices, fair labor treatment, and community engagement can enhance a company's reputation, reduce operational risks, and open access to green financing and ESG-based investments.

This strategy also requires companies to evaluate the extent to which CSR initiatives impact profitability, as operational efficiency achieved through sustainable innovation can increase profit margins and internal financing capacity, aligning with the pecking order theory. Furthermore, strong CSR performance can serve as a positive signal to creditors and investors, thereby improving access to external financing.

Moreover, the formulation of an effective capital structure must take into account the firm's characteristics, such as size and sales growth. Large companies with stable revenue streams have greater bargaining power in structuring financing instruments that support sustainable investments. Thus, dynamic financial strategies must be developed, balancing retained earnings, debt, and equity based on CSR performance, operational scale, and corporate financial goals.

Accordingly, this study recommends that future research explore the formulation and implementation of integrated strategies that directly connect CSR, profitability, and capital structure in the context of the agricultural sector. Such a holistic approach would better support long-term resilience and sustainable value creation in agriculture, which remains a vital sector for Indonesia's economic and environmental development.

This study contributes to the literature by examining the mediating role of profitability in the relationship between corporate social responsibility (CSR), sales growth, and firm size with capital structure. Using path

analysis, the study reveals the indirect effects of these variables on capital structure through profitability. The findings provide strategic implications for corporate managers in designing efficient and sustainable financing policies, taking into account internal drivers such as profitability generated from CSR initiatives, sales performance, and firm scale management.

These insights are particularly relevant for Indonesian companies aiming to improve financial performance by enhancing CSR engagement, optimizing revenue growth, and managing organizational scale. A better understanding of the role of profitability in capital structure decisions enables firms to adopt healthier financing strategies and promote long-term business sustainability.

2. Literature Review

2.1. Signal Theory

Signal theory explains the actions that management must take to provide investors with clues regarding the company's future prospects [16]. These signals serve as tools to attract investors' attention and encourage them to invest in the company [17]. As a form of communication, these signals provide information that reflects the internal condition of the company and its long-term prospects. This definition aligns with Setiawanta et al. [18], who stated that signals are information transmitted by the information owner (the company) to the information recipient (the investor), which can be used to assess and project the company's future performance.

Corporate Social Responsibility (CSR) plays a crucial role as a form of signal that a company can send to its investors. Through the effective implementation of CSR, a company not only demonstrates its commitment to societal and environmental well-being but also enhances its reputation in the public eye [19]. From a managerial perspective, CSR serves as a means of building strong relationships with external stakeholders such as the community, customers, and regulators [20]. By fostering a positive image through CSR, the company can show that it conducts business in a responsible manner and in line with societal expectations [21]. The signal sent through CSR, in turn, influences public trust. Increased public trust in the company, resulting from effective CSR implementation, will positively impact product sales [22]. This rise in sales will have a direct impact on the company's profit, which will ultimately attract the attention of investors [23]. Investors are more likely to be attracted to companies with a positive image and those that can demonstrate positive performance through transparent social and environmental disclosures [24].

The positive signals sent through CSR lead to increased investor interest in investing in the company [25]. Companies that are proactive in disclosing relevant and consistent CSR activities can strengthen positive perceptions in the eyes of investors [19]. In this context, CSR not only benefits the company by enhancing its image in the public but also functions as a performance indicator that can guide investment decisions, potentially leading to more profitable outcomes for the company [18]. Through this disclosure, companies also seek to mitigate risks that may arise due to a mismatch between their operational activities and societal expectations [26]. Cavaco and Crifo [27] argue that companies can send positive signals to investors by implementing Corporate Social Responsibility (CSR). These signals not only build a positive image in the public eye but also attract potential investors, which could lead to increased investment inflows into the company [28]. Thus, CSR plays a strategic role in attracting investor interest and securing the company's long-term financial sustainability.

2.2. Pecking Order Theory

In capital structure research, several key theories are commonly used to explain how firms determine the composition between debt and equity. One relevant theory is the Pecking Order Theory, proposed by Myers and Majluf [29]. This theory suggests that firms prefer to use internal financing (such as retained earnings) first, followed by debt, and resort to issuing new equity only as a last option. This hierarchy is driven by information asymmetry between management and external investors, which makes equity financing more costly than debt or internal funds.

In the context of agricultural companies in Indonesia, this theory is particularly relevant, as income

fluctuations due to seasonality, commodity prices, and reliance on natural resources may affect firms' access to external financing. Therefore, internal firm characteristics such as profitability, size, and sales growth become critical factors in determining capital structure, as outlined by the Pecking Order Theory.

The inclusion of Corporate Social Responsibility (CSR) in this study can also be linked to the Pecking Order Theory. Firms with strong CSR performance tend to enjoy better reputations, which can reduce perceived credit risk and improve access to debt financing. Thus, CSR may serve as a strategic factor that influences capital structure decisions in line with the funding preferences suggested by the Pecking Order Theory.

2.3. Corporate Social Responsibility

Corporate Social Responsibility (CSR) in Indonesia is regulated by several laws, such as Law No. 25 of 2007 on Investment, Law No. 40 of 2007 on Limited Liability Companies, and regulations for State-Owned Enterprises (SOEs) [30]. Although its implementation is limited, these regulations emphasize the importance of CSR in building harmonious relationships between companies and the community [31]. CSR can be understood in two senses: broad and narrow [32]. In a broad sense, CSR relates to achieving economic sustainability, which involves accountability to the global community [33]. In a narrow sense, CSR focuses more on a company's commitment to sustainable development, aiming to improve the quality of life and create an environment that benefits all stakeholders [34].

Several definitions of CSR point toward a concept of cooperation between the company and its stakeholders to maintain the company's sustainability [35]. In the legislation, CSR is also described as a responsibility to create a balanced relationship that aligns with the social, cultural, and local norms [36]. CSR plays an essential role in the continuity of the company and the progress of the surrounding community. The main objective of CSR is to create value for society, raise environmental awareness, and improve employee welfare [2]. In its implementation, CSR emphasizes three core principles [37]:

1. Accountability: The company's responsibility for its decisions and policies, aimed at building public trust.
2. Transparency: The openness of company information to consumers and employees to strengthen communication and relationships.
3. Sustainability: Reducing the negative impact of the company's operations on the environment and society while also enhancing performance and profitability.

The benefits of implementing effective CSR include innovation in the development of environmentally friendly new products that satisfy consumers, reducing agricultural waste and packaging for cost efficiency, offering more environmentally friendly and competitive products, building closer and more positive relationships with consumers, improving employee morale and engagement within the company, as well as reducing the risk of losses through more thoughtful planning [38–40].

2.4. Company Characteristics

2.4.1. Sales Growth

Company growth is regarded as one of the key indicators for assessing a business entity's progress. A company is considered to be growing if there is a sustained increase in its core operational activities [37]. Among various performance indicators, sales play a very significant role. An increase in sales generally leads to a direct improvement in profits, which ultimately has a positive impact on the company's overall financial performance [41]. According to Engel [42], sales growth is the result of comparing the difference between the current year's sales and the previous year's sales. This definition emphasizes the importance of comparing different periods to assess growth trends. Marlina et al. [6] further added that the growth rate can be seen from increases in both volume and price, especially in sales activities. This is because sales is the primary activity conducted by companies to achieve their main objective, which is to obtain the expected level of profit. Meanwhile, Mishra and Suar [43] emphasizes that companies with relatively stable sales have a greater capacity to obtain loans and bear higher fixed costs compared to companies with unstable sales. Sales growth is an important indicator of a company's success and performance. An

increase in sales from one period to the next reflects the operational success of the company and shows its ability to meet market demand and sustain a competitive advantage over time [11].

2.4.2. Firm Size

Firm size is an important indicator in assessing the operational and financial capacity of a business entity. Larger companies tend to have broader access to resources, funding capabilities, and the potential for higher profits. In empirical studies, company size is often used as a control variable representing the scale of operations [3]. Laskar and Maji [44] define company size based on nominal indicators such as total assets, total sales, and market capitalization. Torang [45] states that company size reflects the demand for the services or products produced by the organization. Meanwhile, Oeyono et al. [46] uses average net sales as the main proxy for company size. Arfan and Wahyuni [3] add that size can be determined through income, assets, and equity, all of which reflect the financial strength of the company. Legally, company classification in Indonesia is regulated under Law No. 9 of 1995 and Law No. 20 of 2008, which divides businesses into micro, small, medium, and large categories. The criteria for this classification are based on net wealth and annual sales value. Micro and small businesses are generally independent and not affiliated with large companies. Incontrast, medium and large businesses include entities with broader economies of scale, including national and foreign companies operating in Indonesia [14].

2.4.3. Profitability

Profitability is a key indicator of a company's financial performance, indicating the extent to which the company can generate profit from its operational activities [47]. Profitability not only reflects the efficiency of asset and capital usage but also serves as a measure of management's success in managing the company's resources [48]. Various ratios are used to measure profitability, including Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM). ROA reflects the company's ability to convert assets into profit. ROE measures the rate of return on shareholders' invested capital. Meanwhile, NPM indicates operational efficiency through the percentage of net profit relative to revenue[49]. Empirically, profitability is often used in research as both an independent and mediating variable, as its ability to reflect competitiveness and business sustainability. High levels of profitability are also believed to encourage companies to engage in more extensive disclosures, including those related to social and environmental responsibility.

2.5. Sustainable Capital Structure

Capital structure refers to the strategic composition of debt and equity that a company uses to finance its operations and investments sustainably. According to the Pecking Order Theory, firms do not aim for an optimal capital structure; instead they follow a hierarchy of financing preferences due to information asymmetry. Companies prefer to use internal funds (retained earnings) first, then resort to debt, and consider issuing equity as a last option. This financing behavior reflects a desire to minimize external scrutiny and avoid signaling negative perceptions to the market.

Capital structure is the balance between debt and equity financing[50], while emphasizing the significance of aligning long-term financing decisions with internal financial capacity to achieve sustainable capital management [51].

Several key factors influence sustainable capital structure decisions in line with the pecking order rationale. First, the asset structure (tangibility) ratio, which is the ratio of fixed assets to total assets, affects a firm's ability to use internal resources or secure debt. Second, strong sales growth enhances internal funding by increasing revenues and retained earnings. Third, firm size, indicated by total assets [52], reflects access to internal and external resources; larger firms often have more retained earnings to fund operations. Lastly, profitability, as noted by Amini and Dal [37], strengthens a firm's internal capital base, reducing reliance on external financing.

By prioritizing internal resources and minimizing external costs, firms can plan a capital structure that supports financial sustainability, risk management, and

long-term resilience.

2.6. Previous Research

Several previous studies have examined the relationship between a company's profitability and its capital structure. Research by Pramana and Darmayanti [47] found that profitability has a significant negative effect on the capital structure of automotive companies. This study suggests that companies with higher profitability tend to rely more on internal funding rather than external funding, consistent with the pecking order theory and signal theory, which states that companies prefer debt only when they lack internal capital. Additioinally, Umam et al. [14] discovered that profitability functions as an intervening variable that mediates the relationship between company size, liquidity, and capital structure. They showed that companies with higher profitability tend to have a more optimal capital structure, thereby minimizing their dependence on external debt. However, other studies have yielded mixed results. Research by [53] revealed that profitability has a positive effect on capital structure, where companies with higher profits are more likely to increase their use of debt in their capital structure. On the contrary, a study by Sari et al. [15] showed that sales growth and business risk did not significantly influence the capital structure, even when profitability was high, suggesting the presence of other factors influencing capital structure decisions. Several studies also highlight the influence of other variables, such as company size and CSR, on profitability and capital structure. Pradnyani et al. [53] indicated that companies with higher profitability often have a more balanced capital structure driven by wise managerial decisions in managing the company's finances. Although several studies have examined the relationship between profitability and capital structure, the diverse results indicate that other variables, such as company size, sales growth, and environmental performance, need to be considered to understand the more complex relationship between profitability and capital structure [54]. Therefore, this study aims to fill this gap by examining the effect of company characteristics on capital structure, with profitability as an intervening variable.

2.7. Hypothesis

A hypothesis is a provisional answer to a problem based on theory. **Figure 1** illustrates the theoretical framework used in this study.

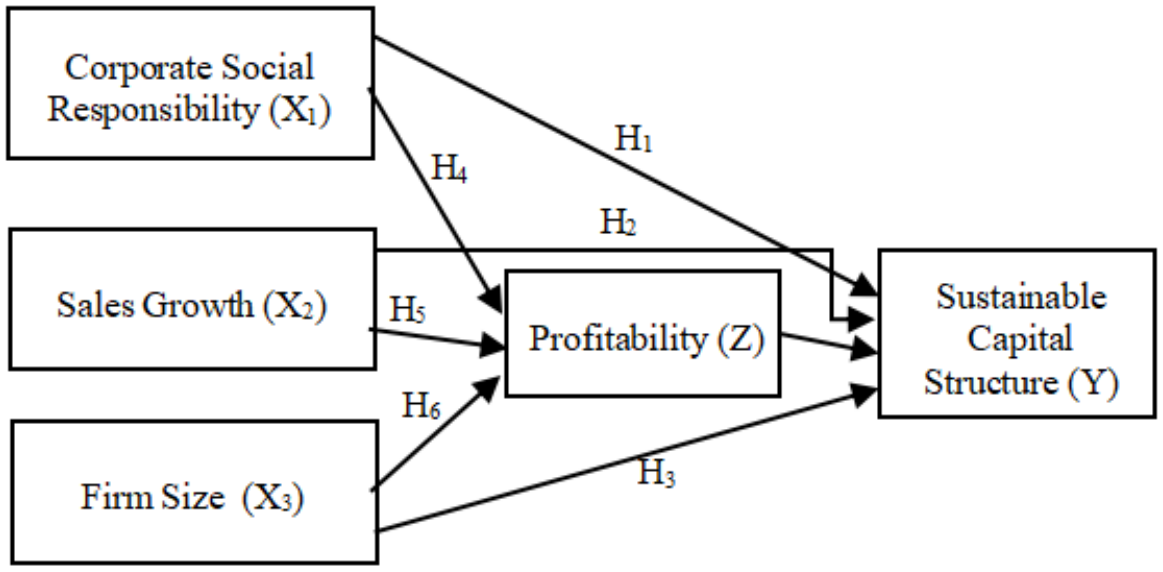


Figure 1. Theoretical framework.

2.7.1. Hypothesis Development

Corporate Social Responsibility (CSR) and Sustainable Capital Structure

Capital structure refers to the balance of funding through debt and equity. A company with a high level of leverage increases the attention of debtholders in overseeing its activities [55]. Leverage is inversely related to a company's CSR program because the company aims to avoid attracting undue scrutiny from debtholders, in line with the signaling theory [56]. Signaling theory posits that individuals act in their interest, while CSR is undertaken for the benefit of the collective. However, CSR initiatives within a company significantly influence the increase in public trust in the company [54]. When public trust is high, the profits the company receives are likely to increase, and many individuals may even entrust their funds to the company, which, in turn, can enhance the company's capital. Based on the above explanation, the following hypothesis can be formulated:

H1. *There is a significant relationship between corporate social responsibility and sustainable capital structure in the Indonesian agricultural sector*

Sales Growth and Sustainable Capital Structure

From the perspective of signaling theory and pecking order theory, larger firms tend to have a comparative advantage in accessing external financing, particularly long-term debt. In the context of the agricultural sector, this advantage becomes increasingly relevant due to the industry's capital-intensive nature, its reliance on seasonal cycles, and the inherent volatility in commodity prices. Large agribusiness firms are generally more capable of sending positive signals to investors and financial institutions through transparent financial reporting, stable cash flows, and well-structured capital arrangements, thereby enhancing market confidence in their long-term prospects. Moreover, in line with the pecking order theory, larger firms typically show a clear preference for utilizing internal funds before seeking external financing. They are better positioned to manage this financing hierarchy efficiently due to higher profitability and stronger internal reserves. The possession of fixed assets that can serve as collateral, strong credit reputations, and professional managerial structures further strengthen their bargaining position in obtaining debt at relatively lower costs. Therefore, firm size in the agricultural sector plays a crucial role in shaping financing strategies that align with both the signals conveyed to the market and the hierarchy of financing preferences, as outlined in signaling and pecking order theories [14].

Additionally, larger companies generally possess higher total assets, which can be used as collateral to secure debt. The greater the amount of assets a company holds, the more likely it is to obtain loans, as lenders feel more confident in the available collateral. If a company fails to meet its debt obligations, the assets can be used as compensation [57]. Therefore, larger companies are more likely to rely on debt as a source of funding, which is reflected in a higher Debt to Equity Ratio (DER). In the context of sales growth, several studies indicate that increased sales can create additional financing needs, particularly to support working capital and capacity expansion [58,59]. Companies experiencing high sales growth may face increased liquidity demands and thus tend to utilize external financing, including debt, to sustain operations and meet rising market demand. This tendency is more pronounced in larger firms, which have broader access to credit markets and sufficient assets to serve as collateral. Thus, significant sales growth in large companies can lead to increased debt usage, which in turn affects the company's capital structure. Based on this explanation, the hypothesis that can be proposed in this study is as follows:

H2. *There is a significant relationship between sales growth and sustainable capital structure in the Indonesian agricultural sector*

Firm Size and Sustainable Capital Structure

Firm size reflects the scale of a business entity, which can be measured using indicators such as total sales, total assets, average sales, and average total assets. Firms with higher sales and asset levels tend to be classified as larger entities, which, in turn, increases their opportunities to obtain external financing sources. Larger firms generally have a greater capacity to access loans compared to smaller firms [60]. This enables large firms to rely more heavily on leverage, given their greater ability to meet debt obligations. Therefore, it

can be concluded that firm size has a significant impact on capital structure, with larger firms tending to use a higher proportion of debt to finance their operations and expansion. Based on this reasoning, the proposed hypothesis is:

H3. *There is a significant relationship between firm size and sustainable capital structure in the Indonesian agricultural sector*

Corporate Social Responsibility and Sustainable Capital Structure Mediated by Profitability

Effective implementation of Corporate Social Responsibility (CSR) can enhance a company's reputation and public trust, which in turn can increase customer loyalty and attract investors [61]. These positive outcomes may drive higher revenues and profits. Improved profitability provides the company to have greater flexibility in choosing financing sources, particularly by minimizing reliance on external funding, such as debt [62]. According to signaling theory, companies with high profitability tend to use internal funds to meet their capital needs, thereby indirectly influencing their capital structure. Therefore, profitability may serve as a mediating variable in the relationship between CSR and capital structure. Based on this explanation, the hypothesis proposed is:

H4. *There is a significant relationship between corporate social responsibility and sustainable capital structure mediated by profitability in the Indonesian agricultural sector*

Sales Growth and Sustainable Capital Structure Mediated by Profitability

The inclusion of profitability as a mediating variable provides a more nuanced understanding of the relationship between sales growth and capital structure. According to Sya'dah and Huda [49], sales growth reflects projections of future sales volume based on historical trends in growth. A company is considered to have strong performance if its sales volume consistently increases year over year. When sales growth outpaces the increase in operating costs, it contributes to higher company profits. However, such growth may also increase the company's need for financing to support operational activities. According to signaling theory, companies may seek external sources of financing, such as debt, to meet these funding needs. In this context, profitability plays a crucial role in bridging the relationship between sales growth and capital structure [63]. Sales growth accompanied by profit increases can enhance lenders' confidence in a company's ability to fulfill its financial obligations, thereby influencing the capital structure. Based on this reasoning, the hypothesis proposed is:

H5. *There is a significant relationship between sales growth and sustainable capital structure mediated by profitability in the Indonesian agricultural sector*

Firm Size and Sustainable Capital Structure Mediated by Profitability

Firm size reflects a company's capacity to produce goods and deliver services to customers, and it serves as an important indicator of the company's profitability level [50]. According to the concept of economies of scale, increasing the scale of production allows firms to reduce the per-unit cost of production. When companies can produce goods more efficiently, profit margins tend to rise, thereby improving return on assets (ROA). This increase in profitability, resulting from a larger operational scale, influences the firm's decisions regarding capital structure [64]. More profitable companies are generally better positioned to finance their capital needs internally, thereby reducing their reliance on external financing such as debt. Based on this explanation, the following hypothesis is proposed:

H6. *There is a significant relationship between firm size and sustainable capital structure mediated by profitability in the Indonesian agricultural sector*

3. Research Methodology

The hypothesis is a provisional answer provided to a problem based on theory [65]. **Figure 1** illustrates the theoretical framework used in this research.

This study uses secondary data obtained from the financial statements of companies listed in Indonesia during the period from 2021 to 2024. The selected criteria focus on agricultural sector companies that publish financial or sustainability reports on the official

website of the Indonesia Stock Exchange [66].

The selection of the 2021–2024 period is based on several considerations. First, this period reflects the most recent financial reporting years, ensuring the relevance and timeliness of the data used in the study. Second, the post-pandemic years, particularly starting in 2021, represent a critical recovery phase for many industries, including agriculture, making it a relevant timeframe to examine financial strategies such as capital structure decisions. Third, there has been an increasing emphasis on sustainability reporting in Indonesia during this period, driven by regulatory developments and heightened stakeholder awareness, allowing this study to capture recent trends in both financial and non-financial corporate disclosures.

The sample used in this study consists of 88 companies. All data were analyzed using multiple linear regression testing, path analysis, and partial testing.

The operational variables consist of independent, dependent, and mediating variables. The independent variables used in this study are: first, corporate social responsibility (CSR), which has the potential to improve profitability through enhanced reputation and public trust, which in turn influences the company's capital structure; second, sales growth, which has the potential to drive an increase in company profits, thereby strengthening internal financing and impacting capital structure through profitability; third, company size, which reflects the efficiency of economies of scale that can improve profitability and indirectly influence capital structure.

CSR is measured using the Corporate Social Responsibility Disclosure Index (CSRDI), which is developed based on the Global Reporting Initiative (GRI) standards. The index covers three main aspects: economic, environmental, and social, consisting of a total of 120 disclosure items. These items are derived from the GRI Universal Standards (especially GRI 2: General Disclosures, which includes approximately 30 mandatory items) and GRI Topic Standards (covering 31 specific topics such as energy, emissions, human rights, and occupational health and safety). Each item is assessed using a binary scoring system, where a score of 1 is given if the item is disclosed and 0 if not, based on the company's annual reports and/or sustainability reports published through the Indonesia Stock Exchange. This measurement allows for a standardized and objective assessment of CSR performance in relation to financial decision-making variables.

The mediating variable in this study is profitability, which represents the company's efficiency in generating profits from total assets and is a key factor in capital structure decision-making. Companies with high profitability tend to use retained earnings as a source of financing, thereby relying less on debt. The operationalization of variables in this study is presented in **Table 1**.

Table 1. Variabel used in study.

Variable Type	Variabel	Measure	Scale
Dependen Variable	Sustainable Capital Structure	Debt of Equity Ratio (DER) = $\frac{Total\ Liabilities}{Total\ Equity}$ x 100%	Ratio
Independen Variable	Corporate Social Responsibility	$CSRDI_J = \frac{\Sigma X_j}{N_j}$	Ratio
	Sales Growth	Sales Growth = $\frac{Sales_{\ t} - Sales_{\ t-1}}{Sales_{\ t-1}}$	Ratio
	Firm Size	Firm Size = Ln Total Asset	Natural Logarithm
Mediation Variable	Profitability	ROA = $\frac{Net\ Profit\ after\ Tax}{Total\ asset}$ x 100%	Ratio

Source: Authors (2025).

In data analysis, path analysis is used to test the relationship between independent variables (corporate social responsibility, sales growth, and company size) and the dependent variable (capital structure) while

controlling for other factors that may influence the results, specifically the mediating variable (profitability).

The results of this study are expected to provide a more comprehensive understanding of how corporate social responsibility (CSR), sales growth, and company size can affect the capital structure of companies in Indonesia, particularly through the profitability path as the mediating variable. By considering the role of profitability, this study aims to explain the internal mechanisms linking social responsibility, operational performance, and company size to the financing decisions made by management.

In this context, it is important to emphasize that capital structure is a strategic component in corporate financial management, which is highly influenced by operational efficiency and the company's reputation in the eyes of stakeholders. CSR, as a form of company responsibility towards social and environmental aspects, not only impacts external legitimacy but also contributes to profitability through a better reputation and increased investor trust. Likewise, sales growth becomes an important indicator of the company's marketing and operational performance, which, when managed efficiently, leads to increased profits that ultimately affect the capital structure. Company size also plays a key role, as a larger economy of scale allows for cost efficiency and higher profit margins, thereby strengthening the company's financial position.

4. Results

4.1. Equations and Descriptive Statistics

This study utilized financial data from the financial statements of 88 agricultural companies listed on the Indonesia Stock Exchange (IDX) from 2021 to 2024. The financial data used include variables that form the basis for calculating capital structure, including sales growth, which is measured as a delta (the difference between sales in year t and sales in year t–1). Since this method requires year-to-year comparative data, the total number of observations used in this study is 264, obtained by multiplying 88 companies by three calculation periods (2021–2022, 2022–2023, and 2023–2024). In addition to financial data, this study also utilized data on the implementation of corporate sustainability reports. All 88 agricultural companies included in the model consistently published annual sustainability reports. Path analysis was employed as the analytical method, using the following regression **Equations (1)** and **(2)**:

$$Y = \rho 1X1 + \rho 2X2 + \rho 3X3 + Ɛ1 \quad (1)$$

$$Z = \rho 4X1 + \rho 5X2 + \rho 6X3 + \rho 7Y + Ɛ2 \quad (2)$$

Description:

X1: corporate social responsibility

X2: Sales growth

X3: Firm size

Y: Sustainable Capital structure

Z: Profitability

ρ_1X_1: Path coefficient of CSR toward capital structure

ρ_2X_2: Path coefficient of sales growth toward capital structure

ρ_3X_3: Path coefficient of firm size toward capital structure

ρ_4X_1: Path coefficient of CSR toward profitability

ρ_5X_2: Path coefficient of sales growth toward profitability

ρ_6X_3: Path coefficient of firm size toward profitability

ρ_7Y: Path coefficient of profitability toward capital structure

ε_1, ε_2 : Error terms

The inclusion of profitability as a mediating variable in this study is crucial for understanding the underlying mechanisms linking Corporate Social Responsibility (CSR), sales growth, and firm size to capital structure. Profitability reflects a firm's operational efficiency and serves as a key channel influencing financing preferences between internal and external sources. This research adopts a multidimensional approach by combining financial data with CSR indicators, sales growth, and firm size to move beyond conventional financial analysis.

CSR is assessed as a social responsibility initiative that can improve stakeholder trust and financial outcomes. Sales growth represents marketing effectiveness and value creation, while firm size indicates operational scale and cost efficiencies. Together, these variables provide a comprehensive framework for analyzing how strategic and operational factors influence capital structure through the mediating role of profitability. It

is important to note that **Table 2** presents descriptive statistics (mean, maximum, minimum, and standard deviation) of these variables, offering an initial overview of their distribution and characteristics within the sample. Although **Table 2** alone does not explain the causal effects, it provides essential background information that supports further inferential analysis on how CSR and firm characteristics relate to capital structure. Subsequent analysis will utilize these data to empirically test the relationships and mediating effects proposed in this study.

Table 2. Descriptive statistics.

N = 264	Mean	Max	Min	Std. Dev.
SCapitalStructure	0.695	3.410	0.090	0.627
CSR	0.308	0.500	0.100	0.121
SalesGrowth	0.129	1.110	0,010	0.166
FirmSize	28.920	32.820	25.95	1.718
Profitability	0.124	0.610	0.010	0.116

Source: Data analysis results, 2025.

This study focuses on companies within the agricultural sector, as this sector primarily comprises firms engaged in the production, processing, and distribution of agricultural products activities that are vital to national food security and rural economic development. The demand for agricultural goods tends to remain relatively stable due to their fundamental role in meeting basic human needs.

To ensure the validity of the regression analysis, a multicollinearity test was conducted using the Variance Inflation Factor (VIF) during the preliminary estimation stage. The highest recorded VIF value was 1.125. According to the general guidelines provided by Hair et al. [67], a VIF value below 10 indicates that multicollinearity is not a serious concern. Therefore, it can be concluded that the regression model used in this study does not suffer from significant multicollinearity issues (**Table 3**).

The Adjusted R Square value for the regression model has been calculated to assess the explanatory power of the independent variables after adjusting for the number of predictors in the model. The result shows an Adjusted R Square of 0.633, indicating that approximately 63.3% of the variation in the dependent variable (capital structure) can be explained by the independent variables (CSR, sales growth, and firm size), after controlling for profitability as a mediating variable. This suggests that the model has good explanatory power and supports the relevance of the selected variables in explaining capital structure decisions, presented in **Table 4**.

Table 3. Multicollinearity test results.

Model	Collinearity Statistics	
	Tolerance	VIF
CSR	0.889	1.125
SalesGrowth	0.978	1.023
FirmSize	0.899	1.112
Profitability	0.944	1.059

Source: Data analysis results, 2025.

Table 4. Coefficient of determination test results.

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.426[a]	.182	.633	.633169

a. Predictors: (Constant), Profitability, CSR, SalesGrowth, FirmSize
b. Dependent Variable: Capital Structire

Source: Data analysis results, 2025

4.2. Regression Analysis Results

This study employs multiple regression analysis with a path analysis model. The testing involves three stages of pathways, as follows:

Path 1: Corporate Social Responsibility (CSR) to capital structure mediated by profitability

Path 2: Sales growth to capital structure mediated by profitability

Path 3: Firm size to capital structure mediated by profitability

The following are the results of the path analysis testing based on the three-step paths, as illustrated in **Figures 2**, **3**, and **4**.

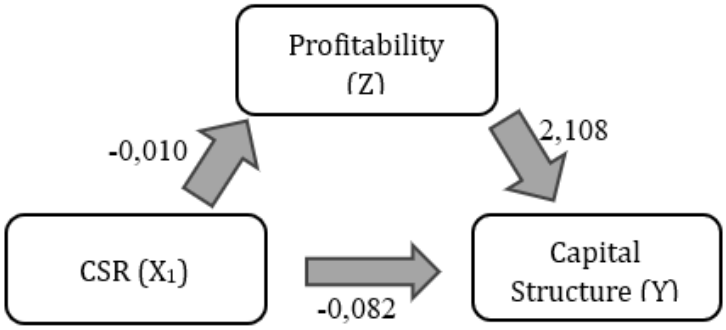


Figure 2. Path analysis test 1.

Source: Data analysis results, 2025.

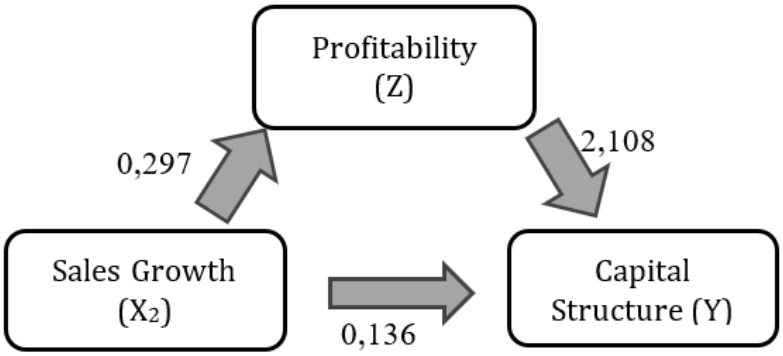


Figure 3. Path analysis test 2.

Source: Data analysis results, 2025.

Based on **Figure 2**, it shows the direct effect of CSR (X_1) on capital structure (Y) of -0.082, while the indirect effect of CSR (X_1) on capital structure (Y) through profitability (Z) is -0.010 x 2.108 = -0.021, and the total effect is -0.082 + (-0.021) = -0.103. The indirect effect is recorded as larger at -0.021 compared to the direct effect, which is -0.082. This suggests that profitability may serve as a mediating function between corporate social responsibility and capital structure.

The results in **Figure 3** show the direct effect of sales growth (X_2) on capital structure (Y) of 0.136, while the indirect effect of sales growth (X_2) on capital structure (Y) through profitability (Z) is 0.297 x 2.108 = 0.626, and the total effect is 0.136 + 0.626 = 0.762. The indirect effect is recorded as larger at 0.626 compared to the direct effect, which is 0.136. This suggests that profitability may serve as a mediating function between sales growth and capital structure.

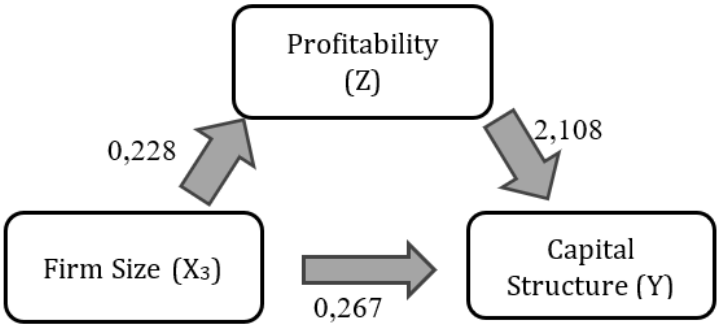


Figure 4. Path analysis test 3.

Source: Data analysis results, 2025.

Figure 4 shows the direct effect of firm size (X_3) on capital structure (Y) as 0.267, while the indirect effect of firm size (X_3) on capital structure (Y) through profitability (Z) is 0.228 x 2.108 = 0.481, and the total effect is 0.267 + 0.481 = 0.748. The indirect effect is larger at 0.481 compared to the direct effect, which is 0.267. This suggests that profitability serves as an intervening variable between firm size and capital structure. Based on the findings and the previous explanation, the intervening variable, profitability, was proven to mediate the relationship between Corporate Social Responsibility (CSR) and capital structure; thus, hypothesis H_4 is accepted. This finding indicates that effective CSR implementation contributes to increased profitability, which in turn influences the company's financing structure decisions.

Therefore, the presence of a strong CSR program contributes to enhancing the company's profitability, which in turn influences capital structure through internal financing mechanisms. In this context, profitability acts as a transmission mechanism that links corporate social responsibility with strategic financial decision-making. Furthermore, profitability also mediates the relationship between sales growth and capital structure. Thus, H_5 is accepted, indicating that when sales growth is accompanied by sound financial and operational management, it can generate higher profits. These increased profits, in turn, strengthen the company's capacity to rely on internal financing and reduce its dependence on external debt.

Thus, while sales growth may not directly change the capital structure, profitability plays a crucial role in connecting sales performance to the company's financing structure decisions. Furthermore, the profitability intervening variable can also mediate the firm size variable, meaning H_6 is accepted. This result shows that companies with larger operational scales tend to gain cost efficiency and higher revenues, which positively impacts their increased profitability. Profitability then becomes an important channel that influences financing preferences, with more profitable companies having a higher tendency to rely on internal funding in structuring their capital.

The following is the partial test result to determine the ability of each independent variable, presented in **Table 5.**

Table 5. Results of the T-Test Coefficients[a].

Model	Unstandardized Coefficients		Standardized Coefficients		
	Beta	Std. Error	Beta	t	Sig
(Constant)	-0.322	0.223		-1.439	0.155
CSR	-0.001	0.128	-0.001	-0.006	0.996
SalesGrowth	0.213	0.085	0.297	2.509	0.015
FirmSize	0.015	0.008	0.228	1.843	0.070

Note: [a]Dependent variable: capital structure.
Source: Data analysis results, 2025.

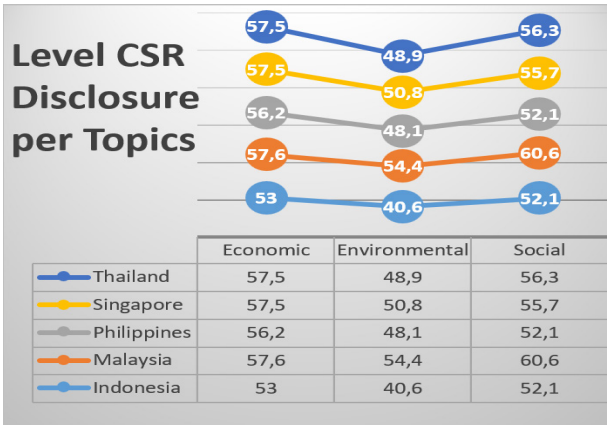
The results in **Table 4** show that the corporate social responsibility variable has a significance value of 0.996, indicating that it is greater than 0.1. Therefore, H_1 is not accepted, as corporate social responsibility does not have a significant effect on capital structure. The sales growth variable has a significance value of 0.015, indicating that it is less than 0.1. Therefore, H_2 is accepted, as sales growth affects capital structure. The firm size variable has a significance value of 0.070, indicating that it is less than 0.1. Therefore, H_3 is accepted, as firm size affects capital structure.

5. Discussion

Corporate Social Responsibility (CSR), sales growth, and firm size are internal factors believed to significantly influence a company's strategic financial decisions, including capital structure. CSR reflects a company's commitment to social and environmental responsibility, which not only affects its reputation but also shapes stakeholder perceptions, including those of creditors and investors [68]. Companies with strong CSR commitments tend to have better access to financing and lower capital costs, as they are perceived as more responsible and trustworthy in the financial market.

However, when comparing CSR disclosure levels across Southeast Asian countries such as Thailand, Singapore, the Philippines, Malaysia, and Indonesia, significant disparities emerge. As illustrated in **Figure 5,** Indonesia ranks the lowest in CSR disclosure per topic among its regional peers. This lag in transparency suggests that Indonesian companies, particularly in the agricultural sector, need to enhance their sustainability reporting practices to gain greater trust from financial institutions and attract more socially conscious investors.

In this study, the level of CSR disclosure is assessed using the Corporate Social Responsibility Disclosure Index (CSRDI), which is constructed based on the Global Reporting Initiative (GRI) framework. CSRDI incorporates 120 indicators derived from GRI Universal Standards and Topic-specific Standards, capturing the breadth and depth of disclosure across three core sustainability dimensions: economic, environmental, and social. These three pillars represent the foundation of sustainable business practices. The economic dimension covers aspects such as economic performance, market presence, and procurement practices, emphasizing the company's ability to create value not only for shareholders but also for broader stakeholders. The environmental dimension includes disclosures on energy usage, emissions, waste management, water conservation, and other ecological impacts, reflecting the company's responsibility toward minimizing environmental harm. The social dimension covers labor practices, human rights, occupational health and safety, community engagement, and product responsibility, highlighting the company's commitment to social welfare and equitable development. **Figure 5** presents cross-country comparisons of average disclosure levels across the same dimensions. The low CSRDI scores among Indonesian companies indicate insufficient transparency or underreporting in one or more of the three key areas.



	Economic	Environmental	Social
Thailand	57,5	48,9	56,3
Singapore	57,5	50,8	55,7
Philippines	56,2	48,1	52,1
Malaysia	57,6	54,4	60,6
Indonesia	53	40,6	52,1

Figure 5. Level CSR disclosure per topics.

Source: ASEAN CSR network (reprocessed).

This issue is particularly relevant for agricultural firms in Indonesia, which primarily focus on production and distribution activities essential to national food security and rural economic development. Despite their strategic role, many of these companies have not prioritized transparent CSR disclosures, potentially limiting their access to capital under favorable terms. Strengthening CSR initiatives and improving disclosure quality are therefore critical for building investor confidence and reducing perceived financial risk.

In addition to CSR, sales growth indicates a company's ability to generate stable and sustainable revenue. Firms with high sales growth are typically viewed as having promising business prospects and stronger profit-generating capacity, making them more attractive to funding providers. Meanwhile, firm size reflects operational scale and available resources; larger firms are generally seen as more credible and financially stable, leading to better financing opportunities and lower risk perceptions.

Thus, internal factors such as CSR, sales growth, and firm size interact in complex ways to influence capital structure decisions. For agricultural companies in Indonesia, strengthening transparency in CSR reporting, promoting sustainable revenue growth, and managing operational scale efficiently are vital strategies for achieving a healthier capital structure and supporting long-term business sustainability.

5.1. Corporate Social Responsibility and Sustainable Capital Structure

The results of this study indicate that corporate social responsibility (CSR) does not have a significant impact on capital structure, which means that H_1 in this research is not accepted. This condition suggests that, although CSR is theoretically expected to enhance a company's reputation and public trust, in practice, many agricultural sector companies have not consistently implemented social responsibility programs. The low implementation of CSR reflects that many companies still prioritize internal operational interests, such as cost efficiency in logistics and profitability in shipping, over contributing to social welfare and the preservation of marine environments. As a result, the potential of CSR to influence financing decisions has not been fully utilized. According to signaling theory, companies should aim to align their activities with social expectations to maintain public trust, particularly in industries that directly interact with coastal communities and marine ecosystems. However, the weak CSR practices in the agricultural sector indicate that CSR has not yet become a strategic part of financial decision-making, including determining capital structure. This suggests a disconnection between the goals of agricultural environmental sustainability and financing policies in many of the companies studied.

These findings are inconsistent with the research by Pradnyani et al. [53], who found a significant positive impact of CSR on capital structure, as well as with Giannarakis [69], who reported a significant negative impact of CSR on capital structure. The discrepancy in these results may be due to variations in the industry sector and the time periods studied, which affect the context of CSR implementation in each study. Overall, this research shows that CSR has not yet become a determining factor in the formation of capital structure in Indonesia's agricultural sector. Therefore, stronger encouragement is needed from regulators and stakeholders to ensure that CSR is more comprehensively integrated into business and financial strategies.

5.2. Sales Growth and Sustainable Capital Structure

The results of this study indicate that sales growth has a significant positive impact on capital structure, supporting H_2 in this research. This condition also suggests that the higher the sales growth rate, the more capital-intensive the company's capital structure. This finding indicates that, theoretically, sales growth can influence capital structure if it is supported by increased public trust in the company. High levels of trust from the public are likely to encourage higher sales volumes, which in turn can provide the company with more flexibility in managing its capital structure. This trust can be built through the company's strategic approach to consumers and the community, such as providing quality services, transparency of information, and active involvement in socially relevant activities within the

surrounding environment [70]. This finding is consistent with the study by Marlina et al. [6], which states that sales growth has a significant positive effect on capital structure. However, this finding is not aligned with the study by Sari et al. [15], which found that sales growth has no significant partial effect on capital structure. This finding supports signaling theory, as high sales growth can send a positive signal to investors and creditors regarding the company's future financial prospects, thereby influencing funding decisions and the company's capital structure.

5.3. Firm Size and Sustainable Capital Structure

The results of this study indicate that firm size has a significant positive impact on capital structure, supporting H_3 in this research. This finding suggests that the larger the company, the greater its ability to access external sources of funding, both from banking and capital markets, thereby increasing the proportion of debt in its capital structure. This result is consistent with the study by Pramana and Darmayanti [47], which states that firm size has a significant positive effect on capital structure. This proves that the larger the company's size, the greater the number of assetsit owns. With this, the amount of debt used as a source of funding for the company becomes capital that can be used to sustain business operations. However, this study is not in line with the study by Sari et al. [15], which states that firm size has no significant partial effect on capital structure. This finding supports signaling theory, as the large size of a company sends a positive signal to investors regarding the company's stability and credibility in managing financial resources, including its ability to meet long-term obligations. Larger companies tend to have broader access to external funding sources because they are considered to have lower risk compared to smaller companies. As a result, the capital structure of larger companies tends to be more leveraged due to investor confidence in the company's ability to manage and repay borrowed funds.

5.4. Corporate Social Responsibility and Sustainable Capital Structure with Profitability as an Intervening Variable

The results of this study indicate that profitability plays a significant role as an intervening variable in the relationship between corporate social responsibility (CSR) and capital structure. Therefore, hypothesis H_4 is accepted. This finding suggests that the level of profitability, measured using Return on Assets (ROA), influences the ability of corporate social responsibility to drive the company's capital structure. This result is consistent with the study by Pradnyani et al. [53], which states that profitability can mediate the relationship between corporate social responsibility (CSR) and a company's capital structure. The findings support the view that companies that consistently implement CSR tend to gain a positive image in the eyes of the public and stakeholders, which ultimately enhances profitability [51]. This increase in profitability then provides greater financial flexibility for companies in determining their capital structure composition, including making financing decisions through debt or equity. This finding also aligns with signaling theory, where companies weigh the benefits and costs of external financing, and profitability becomes a key factor in such decisions [71].

5.5. Sales Growth and Sustainable Capital Structure with Profitability as an Intervening Variable

The results of this study show that profitability plays a significant role as an intervening variable in the relationship between sales growth and capital structure. Therefore, hypothesis H_5 is accepted. This finding suggests that sales growth does not directly affect the company's capital structure, but through increased profitability, the company has a better financial capacity to determine its financing strategy. In this context, profitability strengthens the company's internal financial position, which in turn provides flexibility in choosing the capital structure, whether in the form of equity or debt financing. This finding supports signaling theory, which asserts that financial information such as profitability is used by management to convey the company's prospects and stability to external parties. Therefore, the higher the level of profitability obtained from sales growth, the greater the likelihood that the company will attract more optimal sources of financing

in determining its capital structure. This result is also consistent with the findings of Marlina et al. [6], which state that sales growth has a significant positive effect on capital structure through increased profitability.

5.6. Firm Size and Sustainable Capital Structure with Profitability as an Intervening Variable

The results of this study indicate that profitability successfully functions as a mediating variable in the relationship between firm size and capital structure, thereby supporting hypothesis H_6. This finding suggests that larger firms tend to have greater asset capacity and operational efficiency, which in turn enhances their profitability. In the context of capital structure theory, particularly the Pecking Order Theory, highly profitable companies tend to prioritize internal financing (retained earnings) over external funding such as debt or equity. As a result, greater profitability may lead to lower reliance on debt, highlighting an indirect effect of firm size on capital structure through profitability. However, it is also acknowledged that not all firms strictly avoid using debt. In some cases, companies may strategically employ debt to fund expansion or benefit from tax shields. From the perspective of the signaling theory, large firms with strong profitability send positive signals to the market about their financial stability and prospects. These signals reduce information asymmetry between the firm and creditors or investors, potentially improving access to external financing under more favorable conditions. Thus, firm size indirectly influences capital structure through its impact on profitability. This relationship is theoretically supported by both the Pecking Order and Signaling theories. It is consistent with the findings of Pramana and Darmayanti [47], who observed that larger firms tend to exhibit more stable financial structures due to their stronger profit-generating capacity.

6. Conclusion

The results of this study show that Corporate Social Responsibility (CSR) does not significantly affect the company's capital structure, indicating that social responsibility activities have not yet become a factor considered by companies in their financing decisions. This suggests that CSR implementation is seen more as a form of compliance or image-building rather than a strategy with a direct impact on company funding policies. In contrast, sales growth and firm size were found to have a significant positive effect on capital structure. These findings suggest that companies with consistently increasing sales and large operational scales tend to utilize external funding sources, including debt, to expand their businesses. Steady sales growth indicates potential future cash flows, while firm size reflects the asset capacity and bargaining power of companies in obtaining funding. Furthermore, profitability plays a significant role as an intervening variable in the relationship between CSR, sales growth, firm size, and capital structure. This means that the three independent variables not only directly affect capital structure but also indirectly through improvements in company profitability. This aligns with signaling theory, where high profitability provides a positive signal to the market and creditors regarding the company's financial stability, thereby increasing confidence in its ability to access external funding.

These findings contribute important insights into understanding the factors that influence company capital structure, particularly in the context of firms in developing countries. Although CSR does not directly affect capital structure, the increase in profitability resulting from sales growth and operational efficiency in larger companies can strengthen a company's financial position and its ability to optimally manage its capital structure. The study's findings have important implications for industry, especially in terms of capital structure management. Companies need to pay attention to the relationship between sales growth and firm size with capital structure, as well as understand the importance of profitability as an intervening variable that strengthens the relationship between these variables. In this way, companies can take strategic steps to improve their financial performance and strengthen their market position, ultimately enhancing the company's capital structure. Additionally, this finding provides valuable insights for managers in formulating better policies regarding resource allocation and external

funding.

This study has several limitations that should be addressed in future research. The sample size is limited to agricultural companies listed on the Indonesia Stock Exchange (IDX) during the 2021-2024 period, which means that the findings may not be fully generalizable to other industrial sectors. Additionally, the diversity in CSR disclosures and the financial performance of the companies analyzed also pose a challenge that could affect the consistency of these findings. Therefore, future research is recommended to expand the sample to include other sectors and extend the study period to gain a more comprehensive understanding of the relationship between CSR, sales growth, firm size, and capital structure.

7. Suggestions

In the context of Indonesia's agricultural sector, particularly in provinces such as Sumatra, which not only plays a significant role in shaping the regional economy but is also one of the largest contributors to production and employment in the national agricultural sector, companies face increasing pressure to align their financial and operational strategies with sustainable business practices. However, the results of this study show that Corporate Social Responsibility (CSR) does not have a significant direct effect on the capital structure of agricultural companies, indicating that CSR activities are currently viewed more as compliance efforts or image-building rather than strategic financial decisions.

Furthermore, this study does not detail the types of CSR activities undertaken by agricultural companies, nor does it include quantitative measurements of CSR implementation. Therefore, the ability to provide specific recommendations regarding CSR is limited because the empirical basis needed to understand the impact of CSR activities on capital structure decisions is not available in this research.

In contrast, firm characteristics such as sales growth and firm size were found to have a significant positive effect on capital structure decisions. Companies with consistent sales growth and larger operational scales tend to utilize external funding sources, including debt, to support their business expansion. Sales growth signals potential future cash flows, while firm size reflects its asset capacity and bargaining power in obtaining financing under favorable terms.

Moreover, profitability plays a crucial mediating role in this relationship. Profitability not only directly affects capital structure but also strengthens the influence of CSR, sales growth, and firm size on financing decisions. This aligns with signaling theory, where high profitability sends positive signals to creditors and investors regarding the company's financial stability, thus enhancing the company's ability to access external funding.

Based on these findings, agricultural companies should prioritize improving operational efficiency and profitability to strengthen financial resilience and optimize their capital structure. While CSR remains important for regulatory compliance and reputation enhancement, its direct impact on financing decisions is currently limited. However, to provide more accurate and actionable recommendations regarding CSR, future research needs to specify the types of CSR activities conducted and develop valid measurements of CSR implementation. Understanding these dynamics is vital for managers and policymakers aiming to support a sustainable and financially robust agricultural industry in Indonesia.

Author Contributions

Conceptualization, B.E.; methodology, B.E.; software, B.E.; validation, B.E., and H.W.; formal analysis, B.E.; investigation, B.E.; resources, B.E.; data curation, H.W.; writing—original draft preparation, B.E.; writing—review and editing, B.E.; visualization, H.W.; supervision, H.W.; project administration, H.W.; funding acquisition, B.E. All authors have read and agreed to the published version of the manuscript.

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Data Availability Statement

Data supporting reported results can be accessed by sending an email request to our first author, Bahtiar Effendi, at bahtiar.effendi90@gmail.com.

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Conflicts of Interest

The authors declare no conflict of interest.

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