



Financial Resilience, Risk and Firm Size Towards Sustainable Business in Companies Listed on The Indonesia Stock Exchange

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Abstract. This study aims to examine the impact of financial resilience, risk and company size on sustainable business in companies listed on the Indonesia Stock Exchange. The study focuses on companies that consistently submitted environment, social and government reports from 2018 to 2022. The analysis employs a random effects model for panel data regression. The market share growth model as an indicator of sustainable business can be applied if the model analysis uses determinants of financial resilience, risk and company size. The model successfully explains variations in market share growth. The variables of financial resilience, risk and company size collectively contribute to the model. The net debt to EBIT ratio positively influences market share growth, while equity capital adequacy has a negative impact. Additionally, the debt to equity ratio also contributes positively. In contrast, neither the level of operational leverage nor company size appears to significantly affect market share growth.

Keywords: Financial Resilience, Risk, Firm Size, Sustainable Business.

1 Introduction

Indonesia has shown rapid economic development, including being the fastest growing capital market in Asia [1]. Between 2018 and 2022, the number of companies listed on the Indonesia Stock Exchange experienced a growth of 6.7%. The performance of the Indonesia Stock Exchange index is quite impressive with an average return of 24.74% in US\$ in the period from 1990 to 2022 [2]. In addition, the Indonesia Stock Exchange ranked second in environment, social and government risk rating with a score of 16.9, which is a low risk category in 2023, which shows the commitment of the capital market in Indonesia to sustainability issues [3]. The score is determined by the practices and policies of the Indonesia Stock Exchange that promote transparency and sustainable practices among listed companies. By the end of 2022, Indonesia had a total of 825 listed companies. However, the number of companies that submitted sustainability reports that can be seen from ESG reports continuously during the period from 2018 to 2022 was 43 companies or 6.06% of the average number of companies registered during

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2018-2022. The Indonesia Stock Exchange provides an alternative for investors to assess the company's sustainable business practices through the ESG Leaders index. The launch of the ESG Leaders index December 14, 2022 contains 30 selected companies that apply sustainability principles

The importance of the company implementing sustainability principles is driven by the awareness of the importance of earning profits but while preserving the environment and caring for the welfare of the community [4]. The trend of business sustainability has increased globally leading to the application of sustainability principles that ensure the company's performance accountability is measured and expressed in economic, social and environmental dimensions [5]. For more than three decades, The United Nations World Commission on Environment and Development (WCED) highlighted the significance of sustainability as the practice of fulfilling the needs of the present generation while ensuring that future generations can also meet their needs. To embrace this principle, many companies are now incorporating sustainability into their operations [6].

In relation to the principles of sustainability and the company as a business entity, the company strives to achieve a sustainable business that focuses on the company to generate profits, the company is committed to ensuring that its operations do not negatively impact society or the environment [7]. By embracing the principles of sustainable business, it strives to achieve economic, environmental, and social objectives simultaneously. Sustainable business is a concept that aims to produce short-term and long-term benefits, if a company can achieve its business goals, increase the company's value, and maintain everything consistently in the long term [8].

Sustainable business does not only come from short-term profits but with the consideration that through the acquisition of profits, the business will survive in the long term. Sustainable business is carried out by preserving the environment through achieving ecosystem balance so that future generations can still utilize natural resources through saving the use of natural resources, the adoption of renewable energy sources, the reduction of waste, and the decrease of carbon emissions [9]. Sustainable business has social concern for the community so that with the existence of the company will create an improvement in the standard of living in the community [10]. Companies that implement sustainable business will experience stable growth and be able to face risks, and the company's reputation will also increase because it implements sustainability principles. Corporate sustainability management enables business continuity through environmental protection, social contribution, and ethical management, as well as financial performance [11].

In recent years, there has been an increasing focus in both research and practice on the importance of developing sustainable business models that positively impact the environment and society [12]. However, there is a paradox in sustainability, on the one hand sustainability is applied in accordance with the concept of sustainability itself, on the other hand it is oriented towards monitoring and appreciating financial performance, this consequently sidelines the other two dimensions of sustainability: social and environmental [13].

Companies can face difficult times whether it is a weakening price, a change in market direction or even an economic crisis. This has increased the importance of improving financial resilience. The ability of a company to face and bounce back from difficult times is said to be a company that has financial resilience. Financial resilience depends not only on financial resources such as wealth and income but also on its debt obligations and money management practices [14]. When companies face internal and external pressures, companies with financial resilience are still able to operate with cost efficiency and obtain support from investors and creditors related to investment and working capital. Financial resilience is related to information on financial conditions so that companies can make the right decisions when they are going to take corporate actions, such as the decision to issue shares or develop product lines. Debt management produces a level of liquidity for the company, but poor liquidity levels can be a picture of bankruptcy risk that can be detected through the company's financial resilience.

Various problems and issues related to the environment and society pose risks that threaten the sustainability of the company. Companies function within a landscape where the public is increasingly concerned not only with their ability to generate profits but also with their responsibility to strike a balance between business growth and social progress. In this context, it is essential for companies to prioritize not just maximizing shareholder wealth, but also safeguarding the environment. Companies that do not implement sustainability principles can experience sustainability risks. Sustainability risk refers to the potential threats and vulnerabilities that stem from unsustainable practices and activities, which present considerable challenges to the well-being of both current and future generations [15]. Companies will be equipped to confront challenges and seize opportunities if they integrate risk management in achieving sustainable business. By integrating sustainability considerations in a company's strategy and operations, policymakers and businesses can reduce risks in the business.

Sustainability-related risk management practices focus on minimizing or eliminating the likelihood of events that could adversely affect environmental, social, or economic performance [16]. Sustainability risks from the economic aspect include financial risk with operational risk as part of financial risk [17]. Operational risk arises from problems in business operations [18]. Companies that manage financial risk well will be able to face economic changes and quickly adapt to regulatory changes and public domination.

The size of a firm can significantly influence its approach to corporate environmental practices. Larger companies typically have more resources at their disposal and face heightened environmental pressures compared to their smaller counterpart [19]. As companies grow, companies consciously fulfill their social and corporate responsibilities, they possess a deeper understanding of the corporate landscape and social responsibility, enabling them to effectively utilize resources to meet their corporate social obligations [20]. Firm size can support companies to grow sustainably [21]. The size of a firm plays a crucial role in shaping its future and influencing its sustainable practices [22]. Firm size is an important measure that drives feasible actions for sustainable practices [23].

This research stands out for its comprehensive approach, which integrates three key indicators: financial resilience, risk, and firm size. These factors are considered as crit-

ical determinants of sustainable business performance for companies listed on the Indonesia Stock Exchange. There are quite a lot of studies that discuss sustainable business, but there is no research that juxtaposes these four sustainability indicators. This research also helps companies to strengthen sustainable business in an increasingly competitive market through mastering market share growth by maintaining operational stability in the face of obstacles or financial crises, being able to identify and minimize risks that can threaten the company and making firm size a strategy to support corporate sustainability practices. This study aims to examine the influence of financial resilience, risk and firm size on sustainable business with the population of companies listed on the Indonesia Stock Exchange.

2 Literature Review

The sustainable business model embraces a triple bottom line approach, taking into account a diverse range of stakeholders, including the environment and society [24]. This concept, known as the triple bottom line, was introduced by John Elkington in 1994. It emphasizes that business activities can generate financial, social, and environmental benefits simultaneously. The theory posits that a company's sustainability is influenced by the three key components of the triple bottom line, namely people, profits and planets which are interrelated and inseparable from their management [25]. Elkington explained that the triple bottom line as the three main bases are interconnected and dependent on one another, yet they can sometimes contradict each other due to the trade-offs between social, environmental, and economic dimensions [26].

ESG principles are an important criterion to measure Sustainable Business. ESG, as a crucial factor in promoting sustainable business practices, has been explored from multiple viewpoints [27]. Within the framework of ESG principles, the concept of the triple bottom line offers a holistic approach for companies striving to harmonize profitability with social equity and environmental responsibility. ESG emphasizes the need to optimize economic, social, and environmental benefits simultaneously, ensuring a balanced impact on both business and society [28]. ESG is a philosophy for investment and a company's benchmark that prioritizes assessing organizational performance across all ESG dimensions, not just financial performance [29]. On the other hand, rapid economic expansion has led to significant financial benefits, though it has come at the cost of severe environmental degradation and resource depletion [30].

Companies often find themselves in a financially precarious position, which can hinder their ability to uphold commitments to stakeholders, society, and the environment. This situation can ultimately jeopardize the company's sustainability efforts [31]. In this condition, the company must have financial resilience. Financial resilience is the capacity of the financial system to overcome crises in preventing crises and handling crises that occur [32].

In implementing sustainable business, companies also face risks. Risks associated with sustainability encompass environmental, social, and economic dimensions [33]. The economic aspect involves financial risk including operational risk. Financial risk encompasses all factors related to the movement of money within a business, as well as

the potential for financial loss that a company might face [17]. In contrast, operational risk refers to the possibility of loss resulting from the failure of individuals or processes within the organization [34].

Firm size can affect company sustainability [35]. Firm size can be used as a tool to improve a firm's performance, especially during periods of financial crisis.

3 Methodology

The research utilized data collected between 2018 and 2022 with secondary data from Refinitiv Workspace. The research population comprises all companies listed on the Indonesia Stock Exchange. The sample criteria include companies that submit ESG reports during a continuous observation period. Table 1 presents the number of research samples by sector. According to Table 1, the research sample comprises 43 companies from diverse sectors listed on the Indonesia Stock Exchange. The largest sample came from the non-cyclical consumer sector and the least from the healthcare and utilities sectors.

Table 1. Number of samples by sector.

Sector	Sum
Consumer non cyclical	9
Basic materials	6
Industrial	2
Real estate	4
Consumer cyclicals	4
Financials,	6
Healthcare	1
Technology,	4
Energy	6
Utilities	1
Sum	43

Source: data processed, 2024.

The variables in this study include sustainable business, financial resilience, risk, firm size and sustainable business. Sustainable business is proxied with market share growth. Financial resilience is proxied by the net debt to ebit ratio and the equity index is measured by the sufficiency of equity capital [36]. Risk is proxied with a degree of operating leverage [37] and debt to equity ratio [38]. Table 2 provides an overview of the variables included in the study, accompanied by their respective descriptions.

Table 2. Variable operational definition.

Variable	Description	Formula
Net debt to ebit ratio	A company's ability to cover its debts using its operating income is often referred to as a measure of its financial health	$\frac{\text{Net debt}}{\text{EBIT}}$
Sufficiency of equity capital	A measure of the ability of equity to support operations or meet its debt obligations	$\frac{(\text{Long term asset} + \text{inventory} - \text{provision} - \text{long term liabilities})}{\text{Shareholder's Equity}}$
Degree of operating leverage	A measure of operational risk that measures changes in profit due to changes in sales	$\frac{\% \text{ change in EBIT}}{\% \text{ change in sales}}$
Debt to equity ratio	A financial risk metric that assesses the capacity of capital to support a company's debt obligations.	$\frac{\text{Total debt}}{\text{Total equity}}$
Firm size	Total assets	Ln total asset
Market share growth	A measure of a company's growth in market share relative to the industry.	$\frac{\text{CMS of the present period} - \text{CMS of the past period}}{\text{CMS Past Period}}$

Source: author's compilation, 2024

The panel data regression analysis technique used in this study employs panel data regression, utilizing three analytical approaches: the common effect method, the fixed effect method, and the random effect method. This study is to measure sustainable business regression in the components of financial resilience, financial risk and firm size. Regression model with panel data is stated as follows:

$$MSG_{it} = \beta_0 + \beta_1 NDE_{it} + \beta_2 SEC_{it} + \beta_3 DOL_{it} + \beta_4 DER_{it} + \beta_5 ASSET_{it} + \varepsilon_{it} \tag{1}$$

Remarks: β_0 is a constant, MSG_{it} is market share growth, NDE_{it} is net debt to ebit ratio, SEC_{it} is the sufficiency of equity capital, DOL_{it} is the degree of operating leverage, DER_{it} is the debt to equity ratio, $ASSET_{it}$ is total assets. i is cross section, t is time series, ε is error term.

4 Results and Discussion

4.1 Financial Resilience

The company's capacity to settle its debts using its operating income is shown by the lowest average net debt/ebit by Bank Negara Indonesia (Persero) Tbk PT from the financials sector because starting in 2022 the company strengthens its commitment as a global bank from Indonesia and expands again in the international arena. As a global bank, Bank Negara Indonesia (Persero) Tbk PT can cover wider market share accompanied by diversified products and can enhance the company's operating income to help meet its obligations.

The capacity of equity to support operations and meet its debt obligations is shown by the lowest average sufficiency of equity capital by Bumi Resources Tbk PT from the consumer non-cyclical sector because as the largest mining company in Indonesia by becoming the largest thermal coal producer in Indonesia, it has equity that can support operations and meet its debts. The highest average net debt/ebit and average sufficiency of equity capital were obtained by Waskita Karya (Persero) Tbk PT from the industrials sector engaged in toll road construction in Indonesia, which in the period from 2018 to 2022 is carrying out toll road construction in almost all regions of Indonesia, so the company needs more debt to cover its operating activities, while the debt payment has not been It can be covered with operational income obtained after the construction of the toll road is completed.

4.2 Risk

The sensitivity of profit changes due to changes in sales is shown by the average degree of operational leverage, the highest obtained by Bank Tabungan Negara (Persero) Tbk from the financials sector because bank income is mostly from loans, interest rate hikes and an increase in the amount of loans both in volume and loan value will result in an increase in income without any increase in fixed costs so that changes in profits in banking are more sensitive. PT XL Asiatika Tbk from the technology sector as a telecommunications company, the variable costs incurred are quite high in providing services, including bandwidth costs. In addition, it has limitations in increasing tariffs because it is related to high competition in the telecommunications industry so that changes in profits are less sensitive when the volume of services or the value of revenue changes compared to other industries. Companies with high degrees of operational leverage have greater risk than companies with low degrees of operational leverage because profits are more responsive to fluctuations in sales or revenues.

The company's capacity to finance its corporate debt is demonstrated by its lowest average debt-to-equity ratio obtained by Vale Indonesia Tbk from the basic materials sector because as a nickel mining and processing company, it requires a large initial investment, but after the operation is carried out, the cash flow is quite stable so that the use of debt is quite controlled. The highest average debt to equity ratio was obtained by Astra Agro Lestari Tbk PT from the non-cyclical consumer sector because as a plantation company, the working capital required is high accompanied by price fluctuations and the influence of weather on crop yields, so the company needs more debt to finance

its production. A high and low debt to equity ratio describes the risk taken by a company because it pertains to the company's policy of financing its operations through debt or its own capital in accordance with the risk profile faced.

4.3 Firm Size

In the financial sector, Bank Rakyat Indonesia Tbk (BBRI) recorded the highest firm size compared to other companies, reflecting its broad operational scale and significant asset capacity in the financial industry. On the other hand, PT Pabrik TPaper Tjiwi Kimia Tbk (TKIM), which is in the basic materials sector, recorded the lowest company size. This difference indicates that there is a gap in business scale and asset capitalization between the financial and basic materials sectors, which can be influenced by the characteristics of the industry, capital needs, and growth strategies implemented by each company.

4.4 Sustainable Business

Bumi Resources Tbk PT from the consumer non-cyclical sector obtained the highest average market share growth Bumi Resources Tbk stands as the largest coal mining company in Indonesia. Production expansion and increasing demand for coal from abroad have driven the high average market share growth of Bumi Resources Tbk. The lowest average market share growth was obtained by Tjiwi Kimia Tbk Paper Mill from the basic materials sector due to the pressure of paperless and digitalization to replace paper as well as environmental awareness in the form of the use of paper derived from recycled products. Market share growth demonstrates the company's capability to thrive despite competition because it has adaptability and is supported by financial stability. As the company has experienced an increase in market share, it has a strong foundation to support environmental, social and economic sustainability and become a company with a sustainable business.

4.5 Model Estimation Results

The research model is by regressing market share growth in the components of financial resilience, financial risk and firm size with the following equations:

$$MSG_{it} = \beta_0 + \beta_1 NDE_{it} + \beta_2 SEC_{it} + \beta_3 DOL_{it} + \beta_4 DER_{it} + \beta_5 ASSET_{it} + \varepsilon_{it}$$

Table 3. Model selection test.

	Prob	Best Methods
Chow Test	0.9517	Common Effect
Hausman Test	0.1265	Random Effect
LM Test	0.0000	Random Effect

Source: processed data, 2024

Table 3 presents the model selection test on the MSG model. The outcomes of Chow test indicate a p-value of 0.9517, which exceeds the 0.05 threshold. Therefore, we

cannot reject the null hypothesis, suggesting that the common effect is superior to the fixed effect model. Fixed effect model is more appropriate compared to the common effect (pooled OLS). Furthermore, the Hausman test showed a p-value of 0.1265, which is also greater than 0.05, so the null hypothesis could not be rejected, and the random effect model model was considered better compared to the fixed effect. Finally, the Lagrange Multiplier test produced a p-value of 0.000, indicating a highly significant result. This leads us to reject the null hypothesis, suggesting that the common effect model is superior. Consequently, this supports the preference for the random effects. From overall results of this test, the most suitable model for this data analysis is the random effect because Hausman and Lagrange Multiplier tests support selection of the model. Table 4 presents the results of the model estimation using a random effect model

Table 4. Model estimation results using random effect

Dependent Variable: MSG				
Method: Panel EGLS (Cross-section random effects)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	228.3446	212.2304	1.075928	0.2832
NDE	2.744652	0.710278	3.864197	0.0001
SEC	-35.32757	4.735104	-7.460779	0.0000
DER	11.91130	4.825633	2.468340	0.0144
DOL	-0.036485	0.047040	-0.775618	0.4389
LN_ASSET	-5.548855	6.624623	-0.837611	0.4032
R-squared	0.277776	Mean dependent var		10.32823
Adjusted R-squared	0.260498	S.D. dependent var		139.2039
S.E. of regression	119.7074	Sum squared resid		2994942.
F-statistic	16.07678	Durbin-Watson stat		1.915142
Prob(F-statistic)	0.000000			

Source: processed data, 2024

Constant (C) has a coefficient of 228.3446 contains a p-value of 0.2832, indicating that the result is not statistically significant. It means that the initial (intercept) value of market share growth (MSG) does not exert a significant influence on the model. When all independent variables are zero, the market share growth is positive but the effect is not significant.

The net debt to EBIT ratio (NDE) shows a positive coefficient of 2.744652 and a p-value of 0.0001, which is statistically significant. This suggests that the rise in the net debt to EBIT ratio is positively related to market share growth. The sufficiency of equity capital (SEC) exhibits a negative coefficient of -35.32757 and a p-value of 0.0000 indicates a significant result.

The debt to equity ratio (DER) exhibits a positive coefficient of 11.91130, accompanied by a statistically significant p-value of 0.0144. It shows the increase in the debt to equity ratio contributes positively to market share growth. However, the last two variables, degree of operating leverage (DOL) and size of firm (Ln Asset) do not show statistical significance. The coefficient for the degree of operating leverage is -0.036485

with a p-value of 0.4389, while the coefficient for firm size is -5.548855 with a p-value of 0.4032. Both show that there is no significant influence of the degree of operating leverage and firm size on market share growth in this model.

The results of regression analysis employing the Panel EGLS (cross-section random effects) approach show that this model has an R-squared value of 0.2778. This shows that about 27.78% of variation in dependent variables of market share growth can be clarified through the independent variables incorporated in the model. While this is not very high, this figure shows that the model has quite good predictive power, although there are additional variables beyond the model, there are other variables outside the model that also contribute to the variation in market share growth. An Adjusted R-squared value of 0.2605 provides a more accurate indication of the model's strength by taking into account the number of variables used. This value is slightly lower than R-squared, which suggests that some independent variables in the model do not contribute significantly to the explanation of variation in market share growth.

The F statistic, which measures 16.07678 with a probability of 0.0000, suggests that the overall regression model is significant. This indicates that at least one of the independent variables has a meaningful impact on the dependent variable. A Durbin-Watson value close to 2 of 1.915 indicates that there is no autocorrelation problem in the residual, which means that the model errors are random and do not correlate with each other.

4.6 Discussion

The results show that financial resilience that is proxied using the Net Debt to EBIT Ratio (NDE) has a positive coefficient and a significant influence on market share growth. It indicates that companies that have a higher level of net debt relative to operating profit tend to experience greater market share growth. The company uses debt funding to accelerate market expansion through increased production capacity, product innovation, and more aggressive marketing strategies [39]. The use of this leverage can show management's confidence in the future business prospects, where such strategic investments help the company strengthen its competitiveness and attract new consumers [40]. While high leverage can support market share growth, companies also need to ensure that EBIT is strong enough to cover debt burden and manage financial risk prudently [41]. These results demonstrate the importance of balancing debt use and the company's operational capabilities to achieve sustainable market share growth without sacrificing long-term financial stability. These findings are supported by a study by Alam et al., (2022) [42].

The negative and significant coefficient of the Sufficiency of Equity Capital (SEC) to market share growth shows that the greater the proportion of equity capital owned by a company, the lower the market share growth rate achieved. These results reflect that companies that rely on equity as their primary source of funding tend to be more conservative in their expansion strategies, compared to companies that use leverage to drive growth. In many cases, funding through debt allows companies to move more aggressively in expanding capacity, entering new markets, or investing in competitive marketing strategies [43]. Conversely, companies that rely heavily on equity capital

may be less active in aggressive expansion and more focused on financial stability and risk control, which could limit their ability to increase market share in the short term [44]. However, while this conservative approach may reduce the potential for market share growth, companies with sufficient equity capital can also enjoy long-term gains in the form of stronger financial stability and higher resilience to financial risk [45].

The positive and significant coefficient of the Debt to Equity Ratio (DER) to market share growth shows that companies with higher debt-to-equity ratios tend to achieve greater market share growth. By using leverage, companies can obtain additional resources to fund expansion, strengthen production capacity, or increase marketing activities, which can attract more consumers and strengthen market position [46]. Funding through debt allows companies to move more aggressively in competition and be more responsive to growth opportunities [47]. However, the increase in DER also implies an increase in liabilities, which requires effective debt management to maintain the company's financial health in the long term [48].

The results of the analysis show that the Degree of Operating Leverage (DOL) and the size of the company have no statistical significance in influencing market share growth, with a coefficient that shows a negative sign. This indicates that although DOL and company size have an expected theoretical impact on market performance, in the context of the analyzed sample, neither variable has a significant influence on market share growth. Negative signs on the DOL coefficient and firm size indicate a tendency that companies with high operational leverage or large sizes face challenges in adapting to rapid market changes, which can limit their ability to increase market share [49]. Several studies show that companies with high operating leverage can face great challenges in adapting to fluctuations in market demand [50-52]. The reliance on fixed costs can limit their flexibility in dealing with rapidly changing market dynamics, ultimately impacting their ability to increase market share.

5 Conclusion and Recommendation

This study aims to analyze the influence of financial resilience, financial risk, and firm size on sustainable business in companies listed on the Indonesia Stock Exchange. The results of the analysis show that financial resilience, which is proxied through the Net Debt to EBIT ratio, has a positive and significant influence on sustainable business. Companies that are able to manage debt wisely and have higher leverage tend to be better able to utilize resources for market expansion, product innovation, and marketing strategies that support business sustainability. These findings suggest that a capital structure that relies on debt in the right proportion can support long-term growth and business sustainability, as long as the company has adequate operational capabilities to manage emerging financial risks. Meanwhile, the debt to equity (DER) ratio also shows a significant positive relationship with sustainable business, indicating that debt funding provides room for companies to be more aggressive in achieving sustainable business goals. However, the Sufficiency of Equity Capital (high equity capital) has a negative relationship with business sustainability, as companies that rely on equity funding tend to be more conservative and less risky in aggressive expansion strategies, although

this approach provides more long-term financial stability. On the other hand, the degree of operating leverage (DOL) and firm size do not show a significant influence on sustainable business. This reflects that companies with high operational leverage or large sizes may face challenges in maintaining flexibility and adapting to rapid market changes, which may hinder the achievement of sustainable business objectives.

To achieve sustainable business, companies in Indonesia need to manage their capital structure optimally, by utilizing debt leverage wisely to support expansion and strengthen market position. Companies must ensure that the use of debt is carried out with due regard to operational capacity and the ability to manage financial risks. A conservative approach that relies on equities should not be ignored, as it can provide long-term stability despite the risk of limiting growth. Furthermore, companies need to focus on innovation and strategic risk management, especially in the face of global market uncertainty. Future research can delve deeper into the relationship between financial risk management and business sustainability by taking into account industry dynamics and other external factors.

References

1. Hill, H.: Asia's Third Giant: A Survey of the Indonesian Economy. *Economic Record*. **94**(307), 469–499 (2018). <https://doi.org/10.1111/1475-4932.12439>.
2. Li, N., Wei, C., Zhang, L.: Risk factors in the Indonesian stock market. *Pacific-Basin Finance Journal*. **82**, 102175 (2023). <https://doi.org/10.1016/j.pacfin.2023.102175>.
3. Indonesia Stock Exchange: Indonesia Stock Exchange 20 23 Nurturing Harmony to Develop a Sustainable Future.
4. Epstein, M.J., Elkington, J., Leonard, H.B. "Dutch": Making Sustainability Work. Routledge (2018).
5. Rezaee, Z.: Business Sustainability: Performance, Compliance, Accountability and Integrated Reporting. Routledge (2017).
6. Nations, U.: Sustainability, <https://www.un.org/en/academic-impact/sustainability>.
7. Camilleri, M.A.: Corporate sustainability and responsibility: creating value for business, society and the environment. *Asian Journal of Sustainability and Social Responsibility*. **2**(1), 59–74 (2017). <https://doi.org/10.1186/s41180-017-0016-5>.
8. Wu, L., Subramanian, N., Abdulrahman, M.D., Liu, C., Pawar, K.S.: Short-term versus long-term benefits: Balanced sustainability framework and research propositions. *Sustainable Production and Consumption*. **11**, 18–30 (2017). <https://doi.org/10.1016/j.spc.2016.09.003>.
9. Kovačević, I.: Sustainable development and environmental law. *Socioloski godisnjak*. **10**(7), 127–138 (2012). <https://doi.org/10.5937/socgod1207127k>.
10. Nosratabadi, S., Mosavi, A., Shamshirband, S., Kazimieras Zavadskas, E., Rakotonirainy, A., Chau, K.W.: Sustainable Business Models: A Review. *Sustainability*. **11**(6), 1663 (2019). <https://doi.org/10.3390/su11061663>.
11. Corrales-Estrada, A.M., Gómez-Santos, L.L., Bernal-Torres, C.A., Rodríguez-López, J.E.: Sustainability and Resilience Organizational Capabilities to Enhance Business Continuity Management: A Literature Review. *Sustainability*. **13**(15), 8196 (2021). <https://doi.org/10.3390/su13158196>.

12. Schlüter, L., Kørnøv, L., Mortensen, L., Løkke, S., Storrs, K., Lyhne, I., Nors, B.: Sustainable business model innovation: Design guidelines for integrating systems thinking principles in tools for early-stage sustainability assessment. *Journal of Cleaner Production*. 387, 135776 (2023). <https://doi.org/10.1016/j.jclepro.2022.135776>.
13. Argento, D., Broccardo, L., Truant, E.: The facets of the sustainability paradox. *Meditari Accountancy Research*. **30**(7), 26–48 (2022). <https://doi.org/10.1108/medar-10-2020-1051>.
14. Pomeroy, R., Arango, C., Lomboy, C.G., Box, S.: Financial inclusion to build economic resilience in small-scale fisheries. *Marine Policy*. 118, 103982 (2020). <https://doi.org/10.1016/j.marpol.2020.103982>.
15. Qazi, A., Simsekler, M.C.E., Al-Mhdawi, M.K.S.: Exploring network-based dependencies between country-level sustainability and business risks. *Journal of Cleaner Production*. 418, 138161 (2023). <https://doi.org/10.1016/j.jclepro.2023.138161>.
16. Kähkönen, A.-K., Martinen, K., Kontio, A., Lintukangas, K.: Practices and strategies for sustainability-related risk management in multi-tier supply chains. *Journal of Purchasing and Supply Management*. **29**(3), 100848 (2023). <https://doi.org/10.1016/j.pur-sup.2023.100848>.
17. Syed, A.M., Bawazir, H.S.: Recent trends in business financial risk – A bibliometric analysis. *Cogent Economics & Finance*. **9**(1), (2021). <https://doi.org/10.1080/23322039.2021.1913877>.
18. Cornwell, N., Bilson, C., Gepp, A., Stern, S., Vanstone, B.J.: Modernising operational risk management in financial institutions via data-driven causal factors analysis: A pre-registered report. *Pacific-Basin Finance Journal*. **77**, 101906 (2023). <https://doi.org/10.1016/j.pacfin.2022.101906>.
19. Vanpoucke, E., Vereecke, A., Wetzels, M.: Developing supplier integration capabilities for sustainable competitive advantage: A dynamic capabilities approach. *Journal of Operations Management*. **32**(7-8), 446–461 (2014). <https://doi.org/10.1016/j.jom.2014.09.004>.
20. Wang, J., Zhang, Y., Goh, M.: Moderating the Role of Firm Size in Sustainable Performance Improvement through Sustainable Supply Chain Management. *Sustainability*. **10**(5), 1654 (2018). <https://doi.org/10.3390/su10051654>.
21. Ghardallou, W.: Corporate Sustainability and Firm Performance: The Moderating Role of CEO Education and Tenure. *Sustainability*. **14**(6), 3513 (2022). <https://doi.org/10.3390/su14063513>.
22. Fayed, M.E., Ezzat, A.M.: Central Bank Independence and Democracy: Does Transparency Matter? *Contemporary Economics*. **14**(2), 90–111 (2020). <https://doi.org/10.5709/ce.1897-9254.334>.
23. Fei, W., Wei, F., Chunxia, Z., Zhen, W.: The impact of environmental, social, and governance, board diversity and firm size on the sustainable development goals of registered firm in China. *Economic Research-Ekonomska Istraživanja*. **36**(1), 668–686 (2022). <https://doi.org/10.1080/1331677x.2022.2100438>.
24. Biloslavo, R., Bagnoli, C., Massaro, M., Cosentino, A.: Business model transformation toward sustainability: the impact of legitimation. *Management Decision*. **58**(8), 1643–1662 (2020). <https://doi.org/10.1108/md-09-2019-1296>.
25. Dewi, N.K., Suroso, A.I., Fahmi, I., Syarif, R.: The influence of women’s leadership on corporate sustainability in Indonesia. *Cogent Business & Management*. **10**(3), (2023). <https://doi.org/10.1080/23311975.2023.2262706>.
26. Heim, I., Vigneau, A.C., Kalyuzhnova, Y.: Environmental and socio-economic policies in oil and gas regions: triple bottom line approach. *Regional Studies*. **57**(1), 181–195 (2022). <https://doi.org/10.1080/00343404.2022.2056589>.

27. Zhou, S., Rashid, Md.H.U., Mohd. Zobair, S.A., Sobhani, F.A., Siddik, A.B.: Does ESG Impact Firms' Sustainability Performance? The Mediating Effect of Innovation Performance. *Sustainability*. **15**(6), 5586 (2023). <https://doi.org/10.3390/su15065586>.
28. Shu, H., Tan, W.: Does carbon control policy risk affect corporate ESG performance? *Economic Modelling*. **120**, 106148 (2023). <https://doi.org/10.1016/j.econmod.2022.106148>.
29. Zeng, H., Yu, C., Zhang, G.: How does green manufacturing enhance corporate ESG performance? — Empirical evidence from machine learning and text analysis. *Journal of Environmental Management*. **370**, 122933 (2024). <https://doi.org/10.1016/j.jenvman.2024.122933>.
30. Yang, W., Zhao, J.: Sources of China's Economic Growth: A Case for Green Accounting. *Advances in Management & Applied Economics*. **8**(2), 33–59 (2018).
31. Biondi, Y., Haslam, C.: Company Capital Management: Safeguarding Financial Resilience for Sustainability. *European Company Law*. **17**(5), 165–175 (2020). <https://doi.org/10.54648/eucl2020024>.
32. Allen, F., Krahn, J.P., Rey, H.: Financial resilience revisited: Why consistency in regulation is now paramount, <https://hdl.handle.net/10419/157311>.
33. Giannakis, M., Papadopoulos, T.: Supply chain sustainability: A risk management approach. *International Journal of Production Economics*. **171**, 455–470 (2016). <https://doi.org/10.1016/j.ijpe.2015.06.032>.
34. Clark, B., Ebrahim, A.: Risk shifting and regulatory arbitrage: Evidence from operational risk. *Journal of Financial Stability*. **58**, 100965 (2022). <https://doi.org/10.1016/j.jfs.2021.100965>.
35. Firmansyah, A., Kartiko, N.D.: Exploring the association of green banking disclosure and corporate sustainable growth: the moderating role of firm size and firm age. *Cogent Business & Management*. **11**(1), (2024). <https://doi.org/10.1080/23311975.2024.2312967>.
36. Bistrova, J., Lace, N., Kasperovica, L.: Enterprise Crisis-Resilience and Competitiveness. *Sustainability*. **13**, 2057 (2021). <https://doi.org/10.3390/su13042057>.
37. Harjoto, M.A.: Corporate social responsibility and degrees of operating and financial leverage. *Review of Quantitative Finance and Accounting*. **49**(2), 487–513 (2016). <https://doi.org/10.1007/s11156-016-0598-5>.
38. Nukala, V.B., Prasada Rao, S.S.: Role of debt-to-equity ratio in project investment valuation, assessing risk and return in capital markets. *Future Business Journal*. **7**(1), (2021). <https://doi.org/10.1186/s43093-021-00058-9>.
39. Meena, A., Dhir, S., Sushil: An analysis of growth-accelerating factors for the Indian automotive industry using modified TISM. *International Journal of Productivity and Performance Management*. **70**(6), 1361–1392 (2020). <https://doi.org/10.1108/ijppm-01-2019-0047>.
40. Malshe, A., Agarwal, M.K.: From Finance to Marketing: The Impact of Financial Leverage on Customer Satisfaction. *Journal of Marketing*. **79**(5), 21–38 (2015). <https://doi.org/10.1509/jm.13.0312>.
41. Coulon, Y.: *Rational Investing with Ratios*. Springer International Publishing, Cham (2020).
42. Alam, Md.M., Tahir, Y.M., Saif-Alyousfi, A.Y.H., Ali, W.B., Muda, R., Nordin, S.: Financial factors influencing environmental, social and governance ratings of public listed companies in Bursa Malaysia. *Cogent Business & Management*. **9**(10), (2022). <https://doi.org/10.1080/23311975.2022.2118207>.
43. O'Brien, J.P., David, P., Yoshikawa, T., Delios, A.: How capital structure influences diversification performance: A transaction cost perspective. *Strategic Management Journal*. **35**(7), 1013–1031 (2013). <https://doi.org/10.1002/smj.2144>.

44. Adrian, T., Covitz, D., Liang, N.: Financial Stability Monitoring. *Annual Review of Financial Economics*. 7(1), 357–395 (2015). <https://doi.org/10.1146/annurev-financial-111914-042008>.
45. Thakor, A.V.: Bank Capital and Financial Stability: An Economic Trade-Off or a Faustian Bargain? *Annual Review of Financial Economics*. 6(1), 185–223 (2014). <https://doi.org/10.1146/annurev-financial-110613-034531>.
46. Halling, M., Yu, J., Zechner, J.: Leverage dynamics over the business cycle. *Journal of Financial Economics*. 122(1), 21–41 (2016). <https://doi.org/10.1016/j.jfineco.2016.07.001>.
47. Boubaker, S., Saffar, W., Sassi, S.: Product market competition and debt choice. *Journal of Corporate Finance*. 49, 204–224 (2018). <https://doi.org/10.1016/j.jcorpfin.2018.01.007>.
48. Hasanuddin, R.: The Effect of Firm Size, Debt, Current Ratio, and Investment Opportunity Set on Earnings Quality: An Empirical Study in Indonesia -The Journal of Asian Finance, Economics and Business. *The Journal of Asian Finance, Economics and Business*. 8(6), 179–188 (2021). <https://doi.org/10.13106/jafeb.2021.vol8.no6.0179>.
49. Josefy, M., Kuban, S., Ireland, R.D., Hitt, M.A.: All Things Great and Small: Organizational Size, Boundaries of the Firm, and a Changing Environment. *Academy of Management Annals*. 9(1), 715–802 (2015). <https://doi.org/10.5465/19416520.2015.1027086>.
50. Kovach, J.J., Hora, M., Manikas, A., Patel, P.C.: Firm performance in dynamic environments: The role of operational slack and operational scope. *Journal of Operations Management*. 37, 1–12 (2015). <https://doi.org/10.1016/j.jom.2015.04.002>.
51. Day, G.S., Schoemaker, P.J.H.: Adapting to Fast-Changing Markets and Technologies. *California Management Review*. 58(4), 59–77 (2016). <https://doi.org/10.1525/cmr.2016.58.4.59>.
52. Chen, Z., Harford, J., Kamara, A.: Operating Leverage, Profitability, and Capital Structure. *Journal of Financial and Quantitative Analysis*. 54(1), 369–392 (2018). <https://doi.org/10.1017/s0022109018000595>.

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