Performance Metrics in Food and Beverage Investments: A Systematic Reviews of Existing Research

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Abstract. This literature review explores the dynamics of investment decisions, resilience to economic shocks, and the role of sustainability in the food and beverage sector. Focusing on the impact of capital investment, stock performance, and the application of environmental, social, and governance (ESG) principles, the review shows how the right strategies can enhance corporate value, attract investors, and maintain financial stability in the face of global economic uncertainty. Key findings suggest that investments in fixed assets and human resources have a positive impact on corporate operational performance and competitiveness in international markets. The COVID-19 pandemic is a prime example of the sector's resilience, prompting companies to rethink their business models and capital expenditures. In addition, foreign direct investment (FDI) in developing countries, especially sustainability-oriented investments, has been shown to positively contribute to local economies. This study contributes by providing strategic guidance for stakeholders to optimize investment decisions in an effort to achieve sustainable growth.

Keywords: Investment, Food and Beverage Sector, Capital Expenditure, Stock Performance, Economic Shocks

1. INTRODUCTION

OPEN

The food and beverage industry plays a strategic role in the global economy. This sector not only meets the basic needs of society but also serves as one of the main drivers of investment and job creation. Given the great potential in attracting international capital and generating economic benefits, this sector continues to grow, especially in developing countries. One of the main indicators of the success of this industry is the ability of companies to maintain and increase their share value, as well as attract domestic and international investors. Against this backdrop, various studies have been conducted to understand the dynamics of investment, financial strategies, and how this sector can increase company value and reduce risks faced amidst global economic challenges.

In recent years, various economic changes have significantly affected the food and beverage industry. The COVID-19 pandemic, for example, has had a major impact on the cash flow and performance of companies in this sector (Dau et al., 2024). The pandemic has disrupted the global supply chain, forcing companies to adjust their financial strategies to survive amid high uncertainty (Maulana et al., 2024). In addition, pressure to implement sustainability and social responsibility standards is increasing, along with increasing public attention to environmental and social issues. Therefore, the integration of environmental, social, and governance (ESG) factors in investment decisions is becoming increasingly

relevant, especially in the food industry which has a significant impact on the environment (Robinson et al., 2024; Sunaryo et al., 2024).

In addition to external challenges such as climate change and the pandemic, capital investment in this sector is also affected by internal factors, including the company's capital structure, agency costs, and intellectual capital. Research shows that wise investment strategies, such as allocating funds to long-term equipment and human resource development, can improve company performance (Komolafe; Joseph, 2023; Sunaryo, 2022; Sunaryo et al., 2022; Sunaryo & Lestari, 2023). However, investment decisions do not always have a positive impact on company value. Research also reveals that some types of capital expenditures can increase risks for companies, especially if they are not carried out with in-depth risk analysis (Amadi Ngozi Eleba; & Jack Obiazi Tubotamuno Ojas, 2024; Deni Sunaryo, Etty Puji Lestari, Siti Puryandani, 2023; Deni Sunaryo, Nafiuddin, Ratu Erlina Gentari, 2021).

This study aims to examine the various factors that influence investment decisions in the food and beverage industry, and their impact on company performance and value. By conducting a semantic literature review, this article will highlight key trends in financial and investment strategies, as well as the challenges and opportunities faced by the sector in maintaining its sustainability and competitiveness. In addition, this study will also provide guidance for stakeholders on how to optimize investment decisions to achieve long-term growth.

2. METHODOLOGY

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This study uses the semantic literature review method to identify, group, and analyze relevant research findings in the food and beverage industry. Semantic literature review is an approach that groups research findings into specific themes that emerge from the results of text analysis in relevant articles. This approach allows researchers to gain a comprehensive understanding of the dynamics of investment and company performance in the food and beverage sector by considering various factors that influence it.

The first step in this methodology is the selection of relevant articles. Articles are selected based on inclusion criteria that include publication period (published between 2019 and 2024), credible sources (indexed journals and articles using empirical data), and topic suitability (investment decisions, company performance, and external factors such as pandemics and economic changes). Some of the articles selected in this review include research on the impact of investment decisions on stock value, the influence of capital structure, and the impact of the pandemic on company cash flow.

Once the articles were selected, the next stage was to group the findings by theme. Semantic analysis was conducted to identify key terms and concepts that recurred in each article. The main themes that emerged from this analysis were the impact of equity investment on firm value, the influence of external factors on stock performance, the importance of responsible investment in sustainable growth, and the role of multinational investment in local economic development. Each theme was analyzed in depth to illustrate general patterns as well as differences in views in the literature.

The final stage is the synthesis and integration of the analysis results into a thematic structure. Each theme is reviewed in detail, using citations from the articles to strengthen the arguments and findings. This approach ensures that the literature review is well-grounded and makes new contributions to a comprehensive understanding of investment dynamics in the food and beverage sector.

3. LITERATURE REVIEW

Title	Writer	Method	Initial Results of	Results After Semantic
The role of agriculture sector performance in attracting foreign direct investment	(Cubic, 2023)	Quantitative analysis	the Article Explore the agriculture sector's impact on foreign direct investment.	Literature Reviews Demonstrations that the agriculture sector significantly attract foreign direct investment, with performance enhancements support sustainability.
Greenfield investment and job creation in Ghana: A sectorial analysis and geopolitical implications of Chinese investments	(Assamah & Yuan, 2024)	Ordinary least square analysis (OLS)	Identifies the job creation potential of Greenfield investments in Ghana.	Reveals that Greenfield investments, while beneficial, need targeted sectoral strategies to maximize local economic benefits.
Determinants Factors in Stock Returns of Food and Beverage Industry Companies in Indonesia	(Rohman & Saefudin, 2024)	Panel data analysis	Examines internal and external factors affecting stock returns in Indonesia's food and beverage sector.	Shows that external economic conditions have more substantial impact on stock returns than initially thought.
Accelerate investment action for healthy and sustainable food systems in Australia	(Robinson et al., 2024)	Thematic analysis with focus groups and interviews	Identifies potential for food system changes in Australia through ESG- focused investment.	Emphasizes that integrating ESG in investments is key for sustained food system transformation.

Table 1. Literature review

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	Capital Expenditure Decisions and Market Value of Quoted Food and Beverages Firms in Nigeria	(Amadi Ngozi Eleba; & Jack Obiazi Tubotamuno Ojas, 2024)	Fixed effects model	Shows that capital expenditure decisions significantly affect firm value in Nigeria.	Highlights the need for strategic capital allocation in sustaining firm value amidst market volatility.
	Boosting Firm			Identifies key drivers	Underscores the critical
	Performance: Insights		D 1. 1. (.	in the food and	role of operational
	from the Food &	(Widiaia	Panel data	beverage sector influence firm	efficiency and agency
	Beverage Sector's	(Widjaja, 2024)	regression in EViews		cost management in firm
	Key Drivers The Influence of	2024)	EVIEWS	performance.	growth.
	Investment Returns,				
	Growth			Studies how	
	Opportunities, Asset			investment returns	Finds that investment
	Structure on Stock			and assets structure	structure and growth
	Returns in Food &			affect stock returns	opportunities play a
	Beverage Sector	(Sipahutar et		in food & beverage	crucial role in finance
	Companies	al., 2024)	Path analysis	companies.	stability.
	Capital Investment	,	*	Examinations	Validate that capital
	Decisions and Stock			relationship between	investments on assets
	Valuation of Quoted		Fixed effects	capital investment	directly influence stock
	Food and Beverages	(Komolafe;	with	and stock valuation	value with varied long-
	Firms in Nigeria	Joseph, 2023)	Houseman test	in nigeria firms.	term effects.
	Stock Prices in Food			Analyze stock price	Indications the
	and Beverage			variations in food	pandemic's role in
	Companies Before	(Hendri	Panel	and beverage firms	accelerating digital
	and After the	Maulana et al.,	regression	pre - and post	adoption and market
	Pandemic	2023)	with EViews	pandemic.	resilience.
				Assesses the impact	
			6 11	of COVID-19 on	Confirmation the
	The Impact of Covid-		feasible	cash flow of food	importance of cash flow
	19 on the Cash Flow	(D 1	Generalized	and beverage	management in crisis
	of Food and	(Dau et al., 2024)	Least Squares	companies in	preparation for food and
-	Beverage Industry	2024)	(FGLS)	Vietnam.	beverage companies.
	Source article 202	1			

Source: article, 2024

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Table 1 distribution of methods in articles shows the variety of approaches used in research in the food and beverage sector. From Table 1, we can observe several important points related to the results of the article review:

- a. Regression Methods and Fixed Effects Models: Several articles use regression methods, including Ordinary Least Square (OLS) and Fixed models Effects. The use of this method shows that researchers focus on statistical modeling to assess the impact of independent variables, such as capital expenditures or raw material prices, on dependent variables such as firm value or stock performance. The findings of this article generally indicate that strategic capital investment has a significant effect on the stability of firm value, especially in volatile economic conditions.
- b. Qualitative Approaches and Thematic Analysis: Articles using qualitative approaches, such as interview-based thematic analysis, tend to focus on sustainability factors and ESG (environmental, social, and governance) principles. These articles conclude that

responsible and environmentally friendly investment practices have great potential to strengthen companies' long-term competitiveness. This focus is relevant in the food and beverage industry, which is increasingly affected by sustainability issues.

- c. Panel Data Analysis: The use of panel data analysis in several articles indicates the collection of time-series data that combines cross-sectoral observations. Findings from articles using this method tend to highlight internal and external factors that influence company performance, such as macroeconomic conditions and company capital structure. These articles show that external factors, such as the pandemic and commodity price volatility, have a greater impact than internal factors.
- d. Case Studies and Local Context: Several articles use a case study approach, particularly in the context of developing countries such as Nigeria and Ghana. These studies highlight the role of foreign direct investment (FDI) in creating jobs and enhancing local skills. The results suggest that in the context of developing countries, FDI is an important tool for boosting local economies, but supportive policies are needed to optimize its impact.

Based on the distribution of methods in Table 1 and the results of the article review, we can conclude that the choice of research method is closely related to the focus of the research results. Quantitative research provides more insight into the direct influence of financial variables, while qualitative and thematic approaches contribute to the understanding of sustainability and social impact. Both approaches provide a comprehensive picture of how investments in the food and beverage sector can be managed to achieve a balance between financial returns and long-term sustainability.

Theme 1: Impact of Capital Investment on Firm Value

Capital investment in the food and beverage sector has been shown to contribute significantly to increasing company value. According to (Amadi Ngozi Eleba; & Jack Obiazi Tubotamuno Ojas, 2024), capital expenditures focused on developing physical assets, such as equipment and infrastructure, can increase the company's market value and attract investor interest. This is supported by (Widjaja, 2024), who found that higher operational capacity not only increases production efficiency but also increases customer satisfaction, thereby creating long-term added value for the company.

In addition to investment in physical assets, the literature shows the importance of spending on human capital as a critical component in improving performance. Investment in human capital development, such as training and skills development, has been shown to increase innovation and operational efficiency (Komolafe; Joseph, 2023). However, the risks

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inherent in expansion projects have also been noted in the literature. For example, studies (Amadi Ngozi Eleba; & Jack Obiazi Tubotamuno Ojas, 2024) show that while expansion investments have the potential to increase firm value, uncontrolled expansion can increase the firm's financial risk, especially if not conducted with a comprehensive risk analysis.

Theme 2: The Influence of External Factors on Stock Performance

The stock performance of food and beverage companies is highly sensitive to external economic changes. Global economic conditions and government policies have a significant impact on market stability and the stock performance of companies in this sector. For example, research by (Dau et al., 2024) shows that the COVID-19 pandemic has caused major disruptions to companies' cash flows and financial stability, leading to significant declines in stock values in several major markets. This disruption has forced many companies to adjust their business models and financial strategies in order to survive amidst economic uncertainty. In addition, the volatility of raw material prices also plays a role in the performance of stocks in the food and beverage sector. According to (Robinson et al., 2024), fluctuations in commodity prices such as wheat and sugar can disrupt profit margins and reduce the stock value of companies operating in this industry. Therefore, companies need to consider external risks in their investment strategies and adopt effective mitigation measures.

Theme 3: Responsible Investment and Sustainable Growth

Sustainability is a major concern in the food and beverage industry. Many studies have shown that companies that integrate ESG (environmental, social, and governance) principles into their investment decisions are better able to maintain stable long-term growth. (Robinson et al., 2024) revealed that companies with strong ESG metrics tend to be more attractive to investors looking for long-term value and a positive impact on the environment.

This literature review also highlights that responsible investment not only generates financial returns, but also strengthens the company's relationship with society. For example, investing in environmentally friendly production practices can improve brand image and attract consumers who care about sustainability. This also increases the company's competitiveness in the global market, where sustainability is becoming an increasingly important standard.

Theme 4: The Role of Multinational Investment in Economic Development

Foreign direct investment (FDI) plays a vital role in driving local economic growth, especially in developing countries. A study by (Assamah & Yuan, 2024) revealed that investment by multinational companies in the food and beverage sector in Ghana creates many jobs and improves the skills of the local workforce through technology transfer. In addition,

FDI provides vital economic support to developing countries by introducing innovation and improving infrastructure.

However, the literature also shows that FDI does not always have a positive impact on the local economy, especially if the investment is not well managed. Several studies have shown that imbalances in investment structures or bureaucratic constraints can hinder the benefits of FDI. Therefore, supportive government policies and good supervision are needed to ensure that FDI really brings benefits to the local economy.

4. RESULT AND DISCUSSION

The discussion in this article focuses on a deeper understanding of the impact of investment decisions in the food and beverage sector. These decisions involve various strategic elements that not only affect the value of the company but also determine the competitiveness of this sector in the long term. From the perspective of the literature that has been reviewed, it can be seen that a wise capital investment strategy is key to achieving a balance between short-term growth and long-term sustainability.

Capital Investment and Impact on Firm Value

Capital investments made by food and beverage companies must be considered carefully, especially when it comes to spending on operational capacity expansion. Increased production capacity is often accompanied by increased efficiency that has a positive impact on customer satisfaction and, ultimately, profitability. However, large investments in infrastructure and equipment also require careful consideration to avoid the risk of excessive cost burdens, especially during volatile market conditions.

On the other hand, investment in human resource development also plays an important role. Through training and skills development, companies can increase innovation and efficiency that have a positive impact on productivity and long-term profits. However, literature shows that spending on human resources is often overlooked in investment budgeting, which can hinder the company's potential to achieve sustainable competitiveness.

External Influences and Economic Uncertainty

Economic uncertainty is one of the main challenges for companies in the food and beverage sector. Events such as the COVID-19 pandemic show how vulnerable this sector is to external shocks. The pandemic forced companies to adjust their financial strategies to survive, and in some cases, restructuring operations became an inevitable choice to reduce costs and maintain cash flow stability.

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In addition, the volatility of raw material prices also poses a challenge to the company's financial management. Fluctuating commodity prices affect profit margins and make it difficult to predict financial performance. This requires companies to have strong risk mitigation strategies, such as long-term contracts with suppliers or efficient inventory management to reduce the impact of raw material price fluctuations.

Responsible Investment as a Sustainability Strategy

Food and beverage companies are increasingly recognizing the importance of responsible investment that incorporates sustainability and ESG principles into their business strategies. Responsible investment, especially in terms of environmentally friendly production, not only reduces the company's negative impact on the environment, but also improves consumer trust and the company's image in the eyes of the public. In this context, responsible investment becomes an integral part of modern business strategies, where companies focus not only on short-term profits but also on long-term sustainability.

The success of ESG implementation is highly dependent on management commitment and stakeholder engagement. Several companies have demonstrated success in improving energy efficiency and reducing carbon emissions through sustainability programs, which in turn resulted in operational cost savings and stronger competitiveness. With the adoption of cohesive ESG metrics, companies are expected to meet the demands of consumers who are increasingly concerned about environmental and social issues.

The Role of Foreign Investment and Government Policy

Foreign direct investment (FDI) has great potential to support economic development in developing countries. However, to achieve maximum benefits, governments need to create an enabling environment for FDI with policies that reduce bureaucratic barriers and provide incentives for multinational companies. In addition, transparent regulations and good legal protection are essential to attract foreign investors and ensure that these investments provide real benefits to local communities.

Although FDI can provide significant economic benefits, the literature also shows that imbalances in the investment structure can pose risks to host countries. For example, overreliance on FDI in a particular sector can disrupt the local economy if multinationals decide to cease operations or move investments to other countries. Therefore, governments need to ensure that foreign investment is diversified and aligned with long-term economic development plans.

Long-Term Investment and Sustainability Strategy

The literature shows that long-term sustainability in the food and beverage industry is highly dependent on well-planned investment decisions. By incorporating sustainability principles into investment strategies, companies can ensure that their growth is not only financially profitable but also has a positive impact on the environment and society. Investment strategies that focus on sustainability, whether through responsible investment or efficient resource management, will be a key factor in maintaining the competitiveness of the sector in the future.

5. CONCLUSION

Investment decisions in the food and beverage sector play a vital role in strengthening a company's competitiveness, operational efficiency and long-term sustainability. By investing in advanced technology and modernizing facilities, companies can increase productivity and respond to market demand more quickly and effectively, which in turn can lower production costs and optimize profits. In addition, human resource development through continuous training allows employees to adapt to technological innovations, improve skills and encourage the creation of a culture of innovation within the company.

On the other hand, companies need to be aware of unstable raw material price fluctuations and global market uncertainty, which have the potential to reduce profit margins. Risk mitigation strategies, such as efficient inventory management, supplier diversification, and long-term purchase contracts, are important steps to maintain the company's operational and financial stability. In addition, the implementation of good corporate governance and proactive risk monitoring help companies remain resilient amid rapid economic changes. With a planned investment approach and mature risk mitigation, food and beverage companies have a great opportunity to grow sustainably, maintain customer satisfaction, and strengthen their position in the competitive global market.

Recommendation

Based on the results of this literature review, companies in the food and beverage sector are advised to increase investment in physical assets and human resources to strengthen competitiveness and achieve long-term sustainability. Investment in modern production technology and continuous employee training can improve operational efficiency, product quality, and innovation. In addition, companies need to implement effective risk mitigation strategies, such as supplier diversification, long-term purchasing contracts, and proactive risk monitoring, to address raw material price uncertainty and economic fluctuations. The combination of these strategies will help companies maintain financial stability and strengthen their position in the competitive market.

Limitation

This study has limitations, including reliance on secondary data that is limited to certain studies, so it may not fully represent the regional context or current market trends in the food and beverage sector globally. In addition, this analysis has not deeply discussed specific external variables, such as government regulations and dynamic consumer preferences, which also have a significant influence on investment decisions. Therefore, further research with broader empirical data and more diverse market contexts is needed to provide a more comprehensive understanding.

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