GREEN INNOVATION, FINANCIAL PERFORMANCE, AND FIRM VALUE: A CONTENT ANALYSIS METHOD

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Abstract
A rapid increase in environmental concerns has prompted firms to engage in green innovation. This study aimed to analyze and synthesize theories that explain the effect of green innovation and financial performance on increasing firm value and financial performance on increasing firm value. This study uses a qualitative approach with the literature review method, which is an approach that examines and synthesizes previous research by selecting relevant literature, conducting analysis and mapping and interpreting literature synthesis. This study examines 25 articles from Google Scholar, Mendeley Search, Emerald insight and Harzing’s Publish or Pherish. This study maps the theoretical basis, other explanatory variables and research results from the previous literature. The underlying theories include the signaling theory and legitimacy theory. The synthesis of the research results shows three types of research results. The first is research which explains that green innovation has a significant positive effect on increasing firm value. Second is the research group which explains that green innovation has a significant positive effect on increasing firm value. The third is the research group which explains that financial performance significantly affects increasing firm value. The contribution of this research provides a conceptual framework that provides direction for future research.

Keywords: green innovation, financial performance, and firm value

Abstrak
Peningkatan pesat masalah lingkungan telah mendorong perusahaan untuk terlibat dalam inovasi hijau. Tujuan dari penelitian ini adalah untuk menganalisis dan mensintesis teori yang menjelaskan pengaruh inovasi hijau dan kinerja keuangan terhadap peningkatan nilai perusahaan dan kinerja keuangan terhadap peningkatan nilai perusahaan. Penelitian ini menggunakan pendekatan kualitatif dengan metode literature review, yaitu pendekatan yang menelaah dan mensintesakan penelitian sebelumnya dalam memilih literatur yang relevan, melakukan analisis dan pemetaan serta menginterpretasikan sintesis literatur. Penelitian ini mengkaji 25 artikel yang bersumber dari database Google Scholar, Mendeley Search, Emerald insight dan Harzing’s Publish or Pherish. Penelitian ini menajikan pemetaan landasan teori, variabel penelitian lainnya dan hasil penelitian dari literatur sebelumnya. Teori yang mendasarinya antara lain teori signaling, teori legitimasi. Sintesis hasil penelitian menunjukkan tiga jenis hasil penelitian yaitu pertama penelitian yang menjelaskan bahwa inovasi hijau berpengaruh positif signifikan terhadap peningkatan nilai perusahaan, kedua penelitian kelompok yang menjelaskan bahwa inovasi hijau berpengaruh positif signifikan terhadap peningkatan nilai perusahaan, nilai perusahaan dan ketiga adalah kelompok penelitian yang menjelaskan bahwa kinerja keuangan berpengaruh positif signifikan terhadap peningkatan nilai perusahaan. Kontribusi penelitian ini memberikan kerangka konseptual yang memberikan arah untuk penelitian masa depan.

Kata Kunci: Inovasi Hijau, Kinerja Keuangan dan Nilai Perusahaan
INTRODUCTION

Competition in the business world in both the manufacturing and the service sectors is getting more challenging, especially during the Covid-19 pandemic, which has been ongoing until now, so there are always developments and changes that significantly impact the company's business environment. The establishment of a company aims for the company to develop and be able to maintain and maintain business continuity in the future and also to achieve maximum profits or get large profits for the survival of the company. To maintain and maintain business continuity in the future. Every company certainly wants to have good management to achieve company goals. It takes good management to achieve company goals, and it takes management that can improve company performance with high effectiveness. Company performance is the level of achievement in achieving company goals. For the evaluation of financial performance can be done by using financial statement analysis.

Economic Development is exposed sharply as a cause of environmental problems, producing greenhouse gas emissions due to economic development. Leading scientists carry out extensive research on the question of how environmental protection interacts with economic growth. Restricted by strict environmental regulations, companies are motivated to engage in green innovative activities to achieve better environmental performance.

Firm value is the company's performance, as reflected by the stock price, formed by the demand and supply of the capital market. It reflects society's assessment of the company's performance (Harmono, 2009). Good corporate value reflects appropriate policies continuously set by management to build market confidence in the company. The company's value needs to be maintained, especially at this time; business competition is increasing, which makes companies compete to maximize their performance, affecting the company's growth. Along with the times, managers in determining policies do not only focus on the company's economic goals but need policies that consider social and environmental interests. The right policy can put the company in a more stable business competition position because, at this time, many stakeholders consider environmental aspects in the operational activities of a company.

COP26 is a new opportunity to increase the green economy to reduce the rate of global warming (Primary, 2021). The COP26 meeting discussed one of the essential issues related to climate change: the promise regarding funding for developing countries in the framework of transitioning energy, deforestation and the sea (Utomo, 2021). COP26 also held a meeting with the Ministry of Environment and Forestry which emphasized that the second Nationally Determined Contribution (NDC) still maintains the target of reducing emissions by 29% -41% in 2030 and will minimize coal consumption slowly up to 60% in 2050, continuing towards net no-emission conditions by 2070 (Ministry of Environment and Forestry, 2021).

According to (OECD, 2009) green innovation is defined as an innovation carried out intentionally or unintentionally which results in a reduction in environmental impact. Green innovation can be one of the strategies in realizing sustainable development. Green innovation can be one of the strategies for realizing sustainable development. Applying green innovation can improve the company's production structure and produce new environmentally friendly technologies. This product differentiation strategy can provide new market opportunities and affect the company's growth opportunities.

The factors influencing firm value in this study, namely green innovation and financial performance, have been used and tested in previous studies. Research by (Asni & Agustia, 2021) shows that green innovation has a positive effect on financial performance, financial performance has a positive effect on firm value, green innovation does not affect firm value, and financial performance can moderate the relationship between green innovation and firm value. Research by (Dai & Xue, 2022) shows that green innovation positively affects firm value. Research by (Rizki & Hartanti, 2021) shows that environmental responsibility and green innovation positively affect firm value. With these conditions researchers want to conduct research on green innovation, financial performance and firm value.

Problem Formulation

Based on the background of the problem, through a literature review approach will analyze the concept of the problem formulation as follows:
1. Is *Green Innovation* positive effect on Firm Value?
2. Is *Green Innovation* positive effect on Financial Performance?
3. Is Financial Performance influential positive to Firm value?

**Research purposes**
The purpose of writing this “Literature Review” are as follows:
1. To know and analyze whether *Green Innovation* positive effect on Firm Value.
2. To know and analyze whether *Green Innovation* positive effect on Financial Performance.
3. To find out and analyze whether the Financial Performance influential positive to Firm value.

**Benefits of research**
1. Theory Benefits
   This research is expected to be a source of reference for future researchers regarding the influence of *green innovation* and Company performance on firm value and can be a complement to the next similar research.
2. Practice Benefits
   a. For Investors
   This research is expected to be useful for investors to make investment decisions by considering aspects of green innovation and financial performance
   b. For Companies
   This research is expected to be useful for the company as a material consideration to be able to maintain the level of stability of the company's value by carrying out green innovation practices

**LITERATURE REVIEW**

**Stakeholder Theory**
According to (Rankin et al., 2018), Stakeholder theory is a theory that considers the relationship between stakeholders that influence the achievement of an organization with different interests from society. Stakeholder theory states that all stakeholders have the right to know how a company's activities affect them (Ulum, 2017). Stakeholder theory proposes that every organization must consider stakeholders, and it would not be suitable to concentrate only on profit maximization for the company's self-interest.

This theory explains the influence of stakeholders on the actions of an organization. The more stakeholder-controlled resources are required for organizational success, the more likely managers will address stakeholder concerns. Therefore, managers must manage the company's business to reach the optimal point all stakeholders desire (Rankin et al., 2018). The intended stakeholders are the government, investors, customers, employees, and suppliers.

In this study, with the existence of stakeholder theory, management will determine appropriate policies relating to stakeholders to be able to maintain and improve financial performance and corporate value. By fulfilling the needs of stakeholders, it will create added value and competitive advantage from time to time which can be reflected in the value of the company. Therefore, management can determine green innovation policies that provide added value and competitive advantage to the company to gain support from stakeholders.

**Legitimacy Theory**
According to (Rankin et al., 2018), Legitimacy theory is a theory used to understand a company's actions or activities, especially those related to social and environmental issues. The company chooses to make voluntary disclosures because with disclosure, the company will gain acceptance from investors and the general public (Donleavy, 2016). (O'Donovan, 2002) argues that organizational legitimacy can be assessed as something given by society to companies and related to what companies seek from society. Therefore, the existence of legitimacy benefits the company's survival and society's interests.

(Rankin et al., 2018) states that legitimacy theory is a positive theory based on the existence of a social contract. This social contract is society's explicit and implicit expectations for how businesses must act to ensure that it survives into the future (Rankin et al., 2018). This states that there is an idea that society is an entity that has absolute power, or it can be said that there is a public
interest that must be fulfilled (Donleavy, 2016). Through social responsibility, the company can be one step ahead.

In this study, the theory of legitimacy relates to the company's concern for the environment in the implementation of the company's operations. Through concern for the environment, the company can fulfill public interests which have an impact on acceptance by the general public and investors. In addition, the business can continue to grow in the future which is reflected in the company's value. Concern for the environment can be determined by implementing green innovation in the company's operational processes.

**Signal Theory**

According to (Rankin et al., 2018), Signal theory is an action that can be taken by companies that issue shares in order to maximize their value by disclosing information. This states that signal theory can increase the value of reporting entities through financial reporting. The signal theory explains the importance of information that the company will convey to investors. The signal given to investors is in the form of information related to the performance that has been implemented by management in realizing the owner's wishes (Khanifah et al., 2020). Through information published to the market, investors can state that information has a positive signal (good news) or negative signal (bad news) that can be used to make investment decisions.

In this study, signal theory relates to company managers who provide information to shareholders. Company managers as parties who need funding from investors need to maintain the stability of the company's value by providing signals regarding the company's performance to investors. Therefore, companies need to provide a signal through the disclosure of information that can be seen with green innovation.

**The value of the company**

According to (Harmono, 2009) firm value is defined as the company's performance as reflected by the stock price, formed by the demand and supply of the capital market, and reflects society's assessment of the company's performance. Meanwhile, according (Mardiyanto, 2009), the company's value is the present value of a series of cash inflows generated by the company in the future.

According to (Sukamulja, 2019), firm value can be measured using the market value ratio because the market ratio is the ratio used to compare the firm value from an investor's point of view with the firm value recorded in the financial statements, which can be measured by Tobin's Q ratio, which is the ratio that measures the market value of the number of outstanding shares and debt to the replacement cost of the company's assets (Sukamulja, 2019).

\[
\text{Tobin's } Q = \frac{\text{MVE} + \text{D}}{\text{BVE} + \text{D}}
\]

Information:
- \( Q \) = Firm value
- \( D \) = Book value of total debt
- \( \text{MVE} \) = Market value of equity
- \( \text{BVE} \) = Book value of assets

**Green Innovation**

According to (OECD, 2009), green innovation is defined as an innovation carried out intentionally or unintentionally, which reduces environmental impact. Meanwhile, according (Salvado et al., 2013), green innovation is an activity consisting of developing and applying new ideas, behaviours, products, processes, procedures, and organizational systems that contribute to reducing environmental impact. Based on these two definitions, green innovation is a series of innovation activities that aim to reduce environmental impact. The application of green innovation can be seen in the technology used in preventing environmental pollution or in carrying out environmental control (Salvado et al., 2013).
Financial Performance

Financial performance is an analysis to see how the company has implemented the financial implementation rules properly and correctly (Hutabarat, 2021). Good or bad banking financial performance is reflected in its financial ratios. Bank financial ratios include capital, asset quality, liquidity, efficiency, and profitability ratios. Financial performance in this study is measured using profitability ratios proxied by Return on equity (ROE).

Return on equity, namely the ratio between profit after tax to own total capital (Equity) originating from owner deposits. The higher Return on equity indicates the more efficient the company is in managing its capital to generate profit/net profit. This ratio is used to measure the company's rate of return or the company's effectiveness in generating profits by utilizing the equity owned by the company (Alpi, 2018).

Return on equity is a ratio that shows the rate of return earned by business owners from the capital that has been issued for the business, which is calculated by comparing the company's net profit after tax and interest to the value of the company's equity (Jony, 2020).

The following is the formula used to calculate the return on equity (Hutabarat, 2021):

\[
\text{Return On Equity} = \frac{\text{Net Profit}}{\text{Total Equity}}
\]

Conceptual Framework

Based on the formulation of the problem of writing this article and the study of literature reviews both from books and relevant articles, the framework for this article is processed as follows:

![Conceptual Framework Diagram](image)

**Figure 1 Conceptual Framework**

Based on the theoretical study and review of the results of relevant articles and pictures from the conceptual framework, then: Green Innovation and Financial Performance have an effect on Corporate Value and Green Innovation has a positive effect on Financial Performance.

RESEARCH METHODS

This research uses a qualitative approach with the literature review method, which is a method that examines and examines previous research by selecting literature according to the research, conducting analysis, mapping and interpreting with a synthesis of previous research literature. In qualitative research, the literature review must be used consistently with methodological assumptions. This means that it must be used inductively so that it does not direct the questions posed by the researcher. One of the main reasons for conducting qualitative research is that it is exploratory (Ali, H., & Limakrisna, 2013).

The author uses the google scholar database, mendeley search, emerald insight and harzing’s publish or perish to access articles that are relevant to the topic. The author determines several keywords in the literature search relevant to the research topic. The author uses "green innovation, financial performance and firm value. From the number of articles generated from the literature
search, the authors then filtered the data by making exclusions by eliminating several articles that did not match the topic and research criteria. The author carries out the data exclusion process by filtering inappropriate titles, filtering inappropriate abstracts and filtering inappropriate full text in order to obtain 25 articles that fit the author as a research sample. The author performs an extraction with a table view presenting the column number, year, author, title, object, and results. This table makes it easy to analyze for writing and compiling a literature review.

RESEARCH RESULT

**Effect of Green Innovation has a positive effect on firm value**

Implementing a company's operational business processes currently depends on environmental compliance aspects. Green innovation can be a solution for businesses that can be integrated into a company's production system to reduce negative impacts on the environment and participate in creating a sustainable business (Asni & Agustia, 2021). The company's efforts to conduct environmental compliance through green innovation bring distinct benefits.

Environmental compliance is one of the points that a company needs to pay attention to, by the concept of stakeholder theory, which states that companies must consider stakeholders. It would not be good if it only concentrated on maximizing profits for the company's interests. Implementing green innovation states that the company concentrates on its benefits and carries out good practices in environmental compliance in its operational processes. The application of green innovation can bring a company to a competitive advantage which will improve the company's image because of the high trust from stakeholders, including investors, to increase the company's value (Dai & Xue, 2022).

The legitimacy theory, namely environmental compliance, benefits the community's survival. The implementation of green innovation provides benefits for people's survival. When a company implements a production process that minimizes pollution emissions and environmental damage, it will minimize environmental impact. The reduction in environmental impact will be appreciated by the public, including investors, as this will increase trust in the company and impact increasing its value.

In addition, the signal theory states that the existence of information about a company can determine the value of a reporting entity. The implementation of green innovation can be valuable information for investors. When a company implements green innovation, investors will have more confidence and judge that it will continue to grow because it has a competitive advantage. The investor's assessment will increase the company's value (Rizki & Hartanti, 2021).

In the discovery of (Dai & Xue, 2022) stated that green innovation has a relationship to Firm value means importance of green innovation in enhancing a firm's value, particularly in the growth and maturity stages of the enterprise life cycle. The findings also suggest that firms should consider the stage of their life cycle and the industry and social context when developing green innovation strategies to maximize the benefits for their shareholders.

There are research findings from (Zhang et al., 2020) finds that the positive effect of green innovation on firm value is more pronounced in firms with a higher level of social responsibility, the study highlights the importance of the interaction between green innovation in enhancing firm value, and the role of information disclosure in strengthening this relationship. (Z. Xie et al., 2022) show that green innovation has a positive and significant impact on firm value, higher levels of green innovation have higher Tobin's q, indicating higher market value. (Yan & Zhang, 2021) the study show that green innovation has a positive impact on firm value, importance of integrating green innovation to achieve better environmental performance and value.

This theory is reinforced by research (Dai & Xue, 2022), (Rizki & Hartanti, 2021), (agustia, 2019), (Putra & Ginting, 2021), (Zhang et al., 2020), (Yan & Zhang, 2021), (Husnaini & Tjahjadi, 2020) which states that green innovation has a positive effect on firm value.

From the results of some findings above can be concluded companies that implement green innovation have the potential to increase their market value. In this context, green innovation can be considered as an important factor that can increase the competitiveness of companies and enhance business sustainability in the future.
Effect of Green Innovation Has a Positive Impact on Financial Performance

The development of the times has given people hope for companies to be more responsible for the surrounding environment. The existence of green innovation is the company's efforts to carry out environmental responsibility by combining efficiency from both an economic and environmental perspective. Green innovation exists due to a management control process to minimize environmental impact and increase economic benefits (Sinkin et al., 2008). The existence of efforts to be responsible for the environment through applying green innovation principles will place the company in an advantageous position.

The concept of stakeholder theory states that companies must consider stakeholders, and it would not be good if it only concentrated on maximizing profits for the company's interests. Through the implementation of green innovation, it states the company concentrates on its personal benefits and carries out good practices by minimizing the environmental impact of the entire company's business processes. The application of green innovation will bring the company to a competitive advantage which will improve the company's image because of the high trust from stakeholders, including investors so that it can improve the company's financial performance (Sinkin et al., 2008).

The legitimacy theory, namely environmental compliance, benefits the community's survival. The implementation of green innovation benefits the community's survival, which states that there are efforts to minimize the environmental impact on business processes. The application of green innovation can help companies achieve environmental sustainability goals and company financial goals. Companies can produce more products and services with less energy, thereby reducing waste and pollution. When a company implements green innovation, it will have its appeal to the public, including investors, and this will improve the company's financial performance (Sinkin et al., 2008).

In addition, the signal theory states that the existence of information about a company can determine the value of a reporting entity. The application of green innovation principles will become information that investors consider. Companies that effectively provide signals related to information on the implementation of green innovation are assessed by investors as having reduced business risks to survive sustainably and continue to develop in the future. The investor's assessment is considered good news that can improve the company's financial performance (Sinkin et al., 2008).

This theory is reinforced by research (Asni & Agustia, 2021), (Xie et al., 2019), (Aastvedt et al., 2021), (Yi et al., 2022), (Rezende et al., 2019), (Ma et al., 2021), (Xie et al., 2022) which states that green innovation has a positive effect on the company's financial performance.

From the results of some findings above can be concluded companies that invest in environmentally sustainable practices and innovations can achieve better financial outcomes than those that do not. This is because green innovation can lead to cost savings through improved efficiency and reduced waste, as well as increased revenue through the development of new green products and services that meet the growing demand for sustainable solutions. Additionally, adopting sustainable practices can improve a company's reputation and brand image, leading to increased customer loyalty and retention.

Effect of Financial Performance Has a Positive Influence on Firm value.

Good company financial performance will have an impact on increasing the value of a company. This good firm value will attract investors to invest in the company in the hope that they will get profits (dividends). If the company gets a large profit this year, the amount of dividends distributed will also be even greater, automatically in the coming year investors will flock to invest in the company so that they will also benefit. They will be more motivated to invest in the company in the future. So that the greater the investors who invest in the company, the higher the share price of the company as well as the greater the number of outstanding shares. These two things can increase the value of the company. The value of a company is determined by the earning power of the company's own assets. Research results from (Santosa et al., 2020) shows that ROE has a significant effect on Tobins Q. From the results of the partial test of ROE on firm value it is known that ROE has an effect on firm value. According to (Djazuli, 2021), company performance information is needed to assess potential changes in the future. Performance information is also useful for predicting a company's capacity to generate cash flow from existing resources. And also useful in the formulation of considerations about the effectiveness of companies in utilizing resources. Based on the research results from the elaboration above, it can be concluded that the better the financial performance of a
company, the higher the company's ability to generate profits. When the profits generated continue to increase, the dividends received by investors will also increase or it can be said that the welfare of the shareholders increases. Investors whose welfare is maintained will automatically give a good assessment of the company.

In accordance with the concept of stakeholder theory, management will determine appropriate policies related to stakeholders to be able to maintain and increase the value of the company. By fulfilling the needs of stakeholders, it will create added value and competitive advantage from time to time which can be reflected in the value of the company. Therefore, management can determine policies such as improving financial performance that provides added value and competitive advantage to the company to gain support from stakeholders (Rankin et al., 2018).

Refers to legitimacy theory (Rankin et al., 2018) which says that it relates to the company's concern for the company's financial performance in the implementation of the company's operations. Through improving the financial performance carried out by the company, it can fulfill the public interest which has an impact on acceptance by the general public and investors. In addition, the business can continue to grow in the future which is reflected in the company's value. Concern for financial performance can be determined by implementing financial performance improvements in the company's operational processes to create increased corporate value. These results also support the signal theory, namely companies with high financial performance have good prospects for the company in the future, so that many investors like to buy their shares (Santosa et al., 2020). This theory is reinforced by research (Asni & Agustia, 2021), (Robiyanto et al., 2019), (Santosa et al., 2020), (Sirigean et al., 2019), (Djaziul, 2021), which states that the company's financial performance has a positive effect on firm value. From the results of some findings above can be concluded company with strong financial performance is better positioned to invest in growth opportunities and to weather economic downturns, which can further enhance its long-term value.

Conclusion

By implementing environmentally sustainable practices and innovations, companies can achieve cost savings, increase revenue, and improve their brand reputation, which can lead to improved financial outcomes. Furthermore, financial performance has a positive influence on the value of a firm. When a company performs well financially, it is seen as a more attractive investment opportunity, which can drive up its stock price and increase its overall value. Therefore, incorporating green innovation practices into a company's operations can not only enhance its financial performance but also increase its long-term value.

Suggestion

Practical Suggestion

Green Innovation has a positive and significant influence on financial performance and firm value. It can serve as a basis for applying green principles in company operations. By socializing this concept with employees and stakeholders, companies can motivate them to be more environmentally conscious and improve overall company performance. Companies can use the results of this research to evaluate their strategies and consider adopting green innovation as part of their future corporate strategy. In doing so, the company can enhance its firm value and financial performance sustainably and responsibly towards the environment.

Theoretical Suggestion

Based on the description of these conclusions, the authors suggest that a more comprehensive research is carried out regarding the existence of several other variables that affect Firm value besides Green Innovation and Company Performance and other variables that affect Financial Performance besides Green Innovation. Therefore, further studies are still needed to find out other indicators that can affect firm value besides the variables examined in this article. Other indicators such as:

a. Corporate Governance (Dai & Xue, 2022), (Robiyanto et al., 2019), (Putra & Ginting, 2021)
b. Environmental Management Accounting (Putra & Ginting, 2021)
c. Social Responsibility (Zhang et al., 2020)
d. Green Subsidies (Hu et al., 2021)
REFERENCE


