CHAPTER 2

THEORITICAL FRAMEWORK AND RESEARCH HYPOTHESES

2.1 Stakeholder Theory

According to Rankin et al. (2018), stakeholder theory can be defined as a theory that considers the relationship between stakeholders that affect the achievement of an organization with different interests from society. Stakeholder theory states that all stakeholders have the right to know information about how company activities affect them (Ulum, 2017). Stakeholder theory proposes that every organization should consider stakeholders, and it would not be good if it only concentrates on maximizing profits for the company's interests.

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, suppliers, and others.

In this study, with stakeholder theory, management will determine the right policies related to stakeholders to maintain the company's financial performance. Meeting the needs of stakeholders will create added value from time to time which can be reflected in the company's financial

performance. Therefore, management can determine policies such as green process innovation and green product innovation that provide added value to the company to gain support from stakeholders.

2.2 Legitimacy Theory

According to Rankin et al. (2018), legitimacy theory can be defined as a theory used to understand a company's actual actions or activities, especially those related to social and environmental issues. Companies choose to disclose voluntarily because, with disclosure, the company will get acceptance from investors and the public (Donleavy, 2016). O'Donovan (2002) argues that organizational legitimacy can be assessed as something that the community gives to the company and is related to something the company seeks from the community. Therefore, the existence of legitimacy benefits the company's survival and the community's interests.

Rankin et al. (2018) state that the legitimacy theory is a positive theory based on the existence of a social contract. This social contract is an explicit and implicit expectation that society has about how a business should act to ensure it can survive in the future (Rankin et al., 2018). This states that there is an idea that society is an entity with absolute power, or it can be said that the public interest 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 company's operational processes.

Concern for the environment carried out by the company can fulfill the public interest and make the business continue to grow in the future, which is reflected in the company's financial performance. Environmental concerns can be determined by implementing green processes and product innovation in the company's operational processes.

2.3 Resource-Based View Theory

Wernerfelt (1984) states that the resource-based view theory indicates that valuable resources within a company can significantly influence its long-term performance and enhance its competitive advantage over competitors in the industry. A company can gain a competitive advantage by possessing professional resources unavailable to other firms. The attainment of a competitive advantage is based upon a firm's capacity to efficiently utilize and manage existing resources, comprising both tangible and intangible assets.

According to Barney's (1991) perspective, a company's resources include all its assets, capabilities, organizational processes, company attributes, information, knowledge, and other such resources that are under the company's management. Effective utilization of company resources can facilitate the implementation of strategies to enhance the organization's efficiency and efficacy.

As posited by Fahy & Smithee (1999), the fundamental essence of the resource-based view theory lies in creating a sustainable competitive

advantage by utilizing company resources that are valuable, rare, difficult to imitate, and lacking in substitutes. According to existing theory, resources possess value when employed in the execution of strategies that yield both effectiveness and efficiency. Rare resources refer to resources that are not owned by other firms, particularly those in competition. Implementing a company's strategy aims to prevent rival firms from replicating the same actions, conferring a competitive edge to those entities that possess these resources. Apart from possessing rarity and value, the resources in possession must have attributes that are difficult to replicate. Rival firms need comparable substitute resources, thereby rendering them incapable of executing identical strategies. The loss of competitive advantage may occur when competitors possess comparable alternative resources.

The resource-based view theory examines how companies can attain a competitive edge by developing and evaluating their resources. These resources are characterized by intangible assets that confer knowledge or economic benefits. Wernefelt (1984) proposes that the possession, management, and exploitation of crucial strategic assets, including tangible and intangible assets, are critical determinants of a firm's success in competitive markets and financial performance. According to the resource-based view theory, companies can attain a competitive edge by leveraging crucial assets and promoting new potential through learning, acquiring skills, and accumulating tangible and intangible assets over time.

This research relates to the resource-based view theory, which concerns an organization's capacity to use its tangible and intangible resources to attain a sustainable competitive advantage over time. Through the utilization of resources that have the potential to impact financial performance, organizations can formulate a strategic approach that serves as a distinctive advantage, enabling them to sustain their market position.

2.4 Company Financial Performance

2.4.1 Definition of Financial Performance

Financial performance is defined as a helpful analysis for understanding the extent to which the company has implemented the rules of financial enforcement effectively and efficiently (Fahmi, 2012). Meanwhile, Munawir (2010) defines financial performance as one of the basic assessments related to the company's financial condition, which is carried out based on an analysis of a company's financial statements. Based on these two definitions, it can be concluded that financial performance is an analysis used as the basis for a company's financial assessment that has been carried out in one period using an analysis of financial statements.

2.4.2 Financial Report

According to Kasmir (2013), financial statements are reports showing financial conditions derived from the company's operating results in a certain period. Meanwhile, according to Hery (2015), financial statements are the result of a process of recording and bookkeeping company business

transaction data that is used as a medium to convey financial data or company financial activities to interested parties.

Based on these two definitions, it can be concluded that the financial report is the final report of the company's financial transactions to be submitted to interested parties in a certain period.

2.4.3 Financial Report Analysis

Financial statement analysis is a set of analytical processes as part of the overall business analysis to obtain quantitative information through financial statements as a basis for decision-making (Sukamulja, 2019). Decision-making can be done for internal parties in conducting business evaluations and external parties in making investments. One way that is often used in assessing a company's financial performance is to calculate the relative financial position and performance using financial ratios (Sukamulja, 2019).

2.4.4 Financial Ratio

According to Sukamulja (2019), financial ratios are comparisons between elements in financial statements that can be classified into seven types of financial ratios, namely:

1. Liquidity Ratio

   The ratio reflects the company's ability to pay off short-term debt.

2. Solvency Ratio

The ratios can be used to measure the risk held by the company in the long term.

3. Profitability Ratio

   A ratio that measures the company's ability to generate profits and the rate of return on investment made by the company.

4. Efficiency Ratio

   The ratio measures the level of efficiency of the company in converting its assets into cash.

5. Market Value Ratio

   The ratio is used to see the company's performance with the performance of its shares through intrinsic value.

2.5 Green Process Innovation

2.5.1 Definition of Green Process Innovation

According to Salvado et al. (2013) green process innovation is a new process created because of modifications that aim to reduce the environmental impact on the company's business operational processes consisting of deployment and development that will affect the process and final results. Meanwhile, according to Bleischwitz et al. (2011) define green process innovation as a process that is modified into an environmentally friendly process in producing products. Based on these two definitions, it can be concluded that green process innovation is the development of an environmentally friendly process in a production activity within the company.

2.5.2 Dimension of Green Process Innovation

According to Salvado et al. (2013), green process innovation can be divided into two dimensions, namely:

1. End-of-pipe technologies

   End-of-pipe technologies are oriented towards complying with environmental regulations, such as waste disposal and water protection in a company's production process.

2. Clean technologies

   Clean technologies are cleaner process innovations emphasizing continuous improvement and cost minimization. Such as material recirculation and the use of environmentally friendly materials.

2.6 Green Product Innovation

2.6.1 Definition of Green Product Innovation

According to Salvado et al. (2013) define green product innovation as an innovation that affects product design to reduce environmental impacts during the production process, the period of use, and until the end of a product's life. Meanwhile, according to Bleischwitz et al. (2011) define green product innovation as a product that is developed or redesigned by minimizing the use of materials that are not environmentally friendly. Based on these two definitions, green product innovation is a modification to produce an environmentally friendly product.

2.6.2 Dimension of Green Product Innovation

According to Salvado et al. (2013) green product innovation can be divided into three dimensions, namely:

1. Use of biodegradable materials

   Utilize the use of product and packaging materials that can be recycled.

2. Energy consumption of a product

   Finding or developing a product design that implements the efficient use of renewable energy.

3. Prevention against pollution

   Designing a product becomes simpler to make it easier to decompose during waste treatment.

2.7 Previous Research

There are previous studies that have tested the effect of green process innovation and green product innovation on the company's financial performance. Research by Wang et al. (2021) show that green process innovation has a positive effect on green product innovation because it provides supporting elements such as capital, technology, management experience, and human capital. Green process and product innovation have a positive effect on the company's economic performance directly and indirectly. Green process innovation has a direct effect, while green product innovation has an indirect effect by increasing the company's environmental performance and market competitiveness.

Research by Ar (2012) shows that green product innovation has a positive effect on firm performance and competitive capability. In addition, managerial environmental concern is able to moderate the relationship between green product innovation and firm performance. Then, managerial environmental concern is not able to moderate the relationship between green product innovation and competitive capability.

Meanwhile, research conducted by Xie et al. (2019) shows that green process innovation which is divided into clean technologies and end-of-pipe technologies has a positive effect on financial performance. This study also states that industry differences and economic size have no effect on financial performance, financial constraints have a negative effect on financial performance, and environmental munificence and a firm number have a positive effect on financial performance. In this study, firm size, total asset turnover, and firm age have a positive effect on corporate financial performance, but financial constraints have a negative effect on corporate financial performance.

Table 2.1.
Previous Research Results

No.	Researcher	Variable	Object	Result
1.	Wang et al. (2021)	**Dependent Variable** - Economic Performance **Independent Variable** - Green Process Innovation - Green Product Innovation **Moderating Variable** - Market Competitiveness - Environmental Performance **Control Variable** - Firm Age - Firm Size - Employee Structure - Business Income	Industrial Enterprise in China	The results of this study state that green process innovation and green product innovation have a positive effect on the company's financial performance. Green process innovation significantly affects financial performance, and Green Product Innovation has no significant effect on financial performance. Market competitiveness and environmental performance can moderate the relationship between green process innovation and green product innovation. There is a positive relationship between environmental performance and market competitiveness. An enterprise's environmental performance can improve the market competitiveness of its products or services
2.	Xie et al. (2019)	**Dependent Variable** - Financial Performance **Independent Variable** - Green Process Innovation **Mediating Variables** - Green Product Innovation **Moderating Variable** - Green Image - Green subsidies **Control Variable** - Firm Size - Firm Age	Manufacturing Company listed on Stock A Markets of Shanghai or Shenzhen Stock Exchange in 2013	The results of this study state that green process innovation and green product innovation have a positive effect on financial performance. Green process innovation can facilitate green product innovation. Green Process Innovation mediates the relationship between green process innovation and financial performance. Green Image is positively related to financial performance while green subsidies do not moderate the relationship between green product innovation and financial performance.

		- Financial Constraints - Total Asset Turnover		
3.	Ar (2012)	**Dependent Variable** - Firm Performance - Competitive Compatibility **Independent Variable** - Green Product Innovation **Moderating Variable** - Managerial Environmental Concern - Green subsidies	Turkish manufacturer and exporter companies listed in Turkish Exporters Assembly (TEA)	The results of this study state that green product innovation has a more significant effect on competitive capability than firm performance. Managerial environmental concerns moderate the relationship between green product innovation, firm performance, and competitive capability.
4.	Chen et al. (2006)	**Dependent Variable** - Firm competitive advantage **Independent Variable** - Green Product Innovation - Green Process Innovation **Control Variable** - Firm Age - Firm Size	Information and electronics technologies companies in Taiwan	The results of this study state that green process innovation and green product innovation have a positive effect on firm competitive advantage. The age and size of the company affect the level of green process innovation and green product innovation implemented by the company.
5.	Asni & Agustia (2021)	**Dependent Variable** - Firm Value **Independent Variable** - Green Innovation **Moderating Variable** - Financial Performance **Control Variable** - Firm Size - Firm Age - Firm Ownership	Manufacturing companies listed on the Stock Exchange in each ASEAN country in 2015-2019.	The results of this study state that green innovation has a positive effect on financial performance, financial performance has a positive effect on firm value, green innovation has no effect on firm value, and financial performance is able to moderate the relationship between green innovation and firm value. In addition, firm age, firm size, and firm ownership have a positive effect on firm value, and leverage has no effect on firm value.

		- Leverage		
6.	Dai & Xue (2022)	**Dependent Variable** - Firm Value **Independent Variable** - Green Innovation **Moderating Variable** - Life Cycle - Sustainable Development Capacity - Debt Financing Cost - Corporate Governance **Control Variable** - Firm Size - Profitability - Leverage - Firm Growth - Firm Age - Firm Ownership	Non-financial company listed on the Shanghai and Shenzhen Stock Exchange in 2007-2019.	The results of the study state that green innovation has a positive effect on firm value. In addition, life cycle, sustainable development capability, debt financing costs, and corporate governance are able to moderate the relationship between green innovation and firm value. This study also states that firm size, profitability, leverage, firm growth, and firm age have a positive effect on firm value. Then, company ownership, board of commissioners duality, and state ownership have no effect on firm value.

Source: Previous Research

2.8 Hypotheses Development

2.8.1 The Effect of Green Process Innovation on the Company's Financial Performance

The implementation of a company's current business operations depends on environmental compliance aspects. Green process innovation can be a solution for businesses that can be integrated into a company's production system that can improve environmental compliance (Xie et al., 2019). The company's efforts in carrying out environmental compliance through the application of green process innovation bring its own advantages for the company.

Environmental compliance is one of the points that need to be considered by a company. In accordance with the concept of stakeholder theory which states that companies have an obligation to consider stakeholders and it would be bad if they only concentrate on maximizing profits for the company's personal interests. Through the implementation of green process innovation, it is stated that the company does not only concentrate on the company's personal profit. Instead, the company implements good practices in the form of environmental compliance in the company's operational processes. The application of green process innovation can bring companies to competitive advantage from the perspective of stakeholders which has an impact on improving the company's financial performance (Weng et al, 2021)

In addition, according to the legitimacy theory, environmental compliance provides benefits for the survival of the community. The implementation of green process innovation provides benefits for the survival of the community. When the company implements a production process that focuses on minimizing pollution emissions and environmental damage, it will reduce the manufacturing burden. The decrease in manufacturing expenses will affect the decrease in company's operating expenses which will increase the company's profits and it can be stated that the company's financial performance is getting better.

This theory is strengthened by the research of Xie et al. (2019) which states that green process innovation proxied through clean technologies and end-of-pipe technologies has a positive effect on the company's financial

performance. Based on the theory that has been described and supported by the research results of Xie et al. (2019), then the proposed hypothesis

***H1*: Green process innovation has a positive effect on the company's financial performance.**

2.8.2 The Effect of Green Product Innovation on the Company's Financial Performance

The development of the times has led consumers to prefer to buy environmentally friendly products or sustainable products. The existence of green product innovation can be said as the company's efforts to produce environmentally friendly products. Green product innovation encourages the use of directing companies to find new ways to convert waste into products that can be sold to generate additional income (Porter & Linde, 1995).

Following the concept of stakeholder theory which states that companies should consider stakeholders and it would be bad if they only concentrate on maximizing profits for the company's interests. Through the implementation of green product innovation, it is stated that the company does not only concentrate on the company's profit. Rather, the company runs good practices by providing environmentally friendly products. The application of green product innovation can bring companies a competitive advantage from the perspective of stakeholders which has an impact on improving the company's financial performance (Wang et al., 2021).

In addition, according to the legitimacy theory, environmental compliance provides benefits for the survival of the community. The

implementation of green product innovation provides benefits for the survival of the community due to the creation of environmentally friendly products. When a company implements green product innovation, it will increase consumer demand because it implements real evidence of environmental care that ensures the survival of the company. If there is an increase in demand for green products produced, it will affect in increasing the company's financial performance (Ar, 2012).

This theory is strengthened by the research of Wang et al. (2021) and Ar (2012) which state that green product innovation has a positive effect on the company's financial performance. Based on the theory that has been described and supported by the research results of Wang et al. (2021) and Ar (2012), then the proposed hypothesis:

***H2*: Green product innovation has a positive effect on the company's financial performance.**