

CHAPTER I

INTRODUCTION

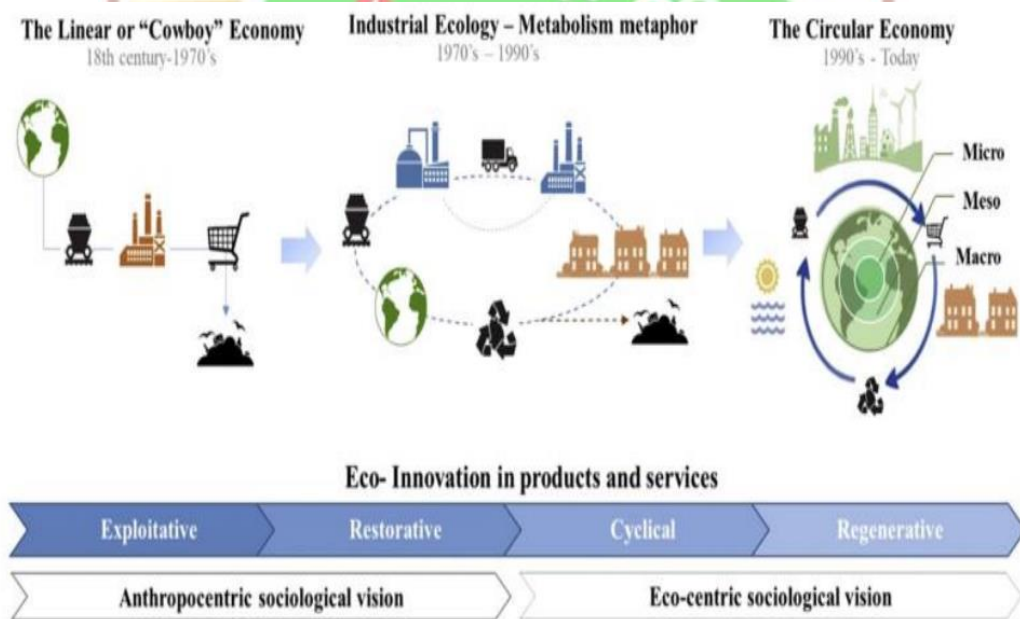
1.1 Background

In recent years, companies have been required to incorporate environmental elements into their business activities and make disclosures related to environmental aspects (Kuo & Chang, 2021). There is pressure from non-governmental organizations that are aware of environmental sustainability, where they urge companies not only to carry out business activities but also to manage the environment. This is because the company's activities use many resources as raw materials and if environmental management efforts are not made in its operations it will result in resource scarcity and natural damage. In their activities, manufacturing industrial companies are companies that use a lot of resources in their production processes, thereby having a greater impact on the environment. Environmental damage from production activities is also motivated by the continued application of a linear economic model by the manufacturing industry. The conventional economic model (linear economy) takes resources as its material with a straight-line working principle, namely by take, make, and dispose (Ellen MacArthur Foundation, 2023). Thus, this model is considered to be one of the causes of the environmental crisis which threatens economic stability and natural ecosystems (Shah & Rezai, 2023).

In overcoming these problems, the concept of circular economy emerged as a solution to the linear economy (Prieto-Sandoval et al., 2017). According to

the Ellen MacArthur Foundation (2023) and the Ministry of National Development Planning et al., (2021) the circular economy is an effort to eliminate waste from the company's production activities through a cycle of reduce, reuse, recycle, refurbish and renew which will ultimately minimize negative environmental impacts. The circular economy is increasingly becoming an attraction, especially for scholars and policymakers (Türkeli et al., 2018). In industrial practice, the circular economy is the right step in overcoming resource scarcity and environmental problems in companies (Frishammar & Parida, 2018).

Figure 1. 1 Linear Economy and Circular Economy



Source: (Sillanpää & Ncibi, 2019)

The figure above shows the difference between a linear economy and a circular economy. The left section provides an understanding of how linear economics works, namely: by taking as many resources as possible to produce and eventually sell to consumers. Products that have been consumed by consumers are then simply thrown away. The linear economy requires cheaper

costs and a lot of use of natural resources. Meanwhile, in the circular economy model products and natural resources are maintained in circulation through the design process of reduce, reuse, recycle, refurbish and renew. This circular economy design produces value that aims to maintain products and raw materials so that products that have been used can still be reused and still have value.

According to Hasbi (2021) & Shen et al (2019), the concept of circular economy leads to sustainable development and is closely related to green economics. Where circular economy promotes the use of more ethical and responsible resources in order to implement greener economics, in conjunction with new business models and innovative work environments (Ellen MacArthur Foundation, 2023). Implementing a circular economy requires costs in managing and overcoming environmental problems (Ashari & Anggoro, 2021). In promoting a circular economy, green accounting can help companies to identify opportunities to reduce waste, recycle, and reuse thereby reducing consumption of natural resources. Environmental accounting or commonly known as green accounting is an accounting system that includes accounts related to environmental costs (Zeraibi et al., 2023). In green accounting, environmental costs arising from environmental activities will be disclosed voluntarily in company financial reports (Rounaghi, 2019). In environmental accounting, costs that do not add value to the product can be reduced by making better business decisions, such as investing in environmental industries, using environmental technologies, and redesigning processes and products (Zhang et al., 2022; Rounaghi, 2019).

Manufacturing industry companies must pay attention to environmental concepts as part of their operational activities because waste generating from various production processes must continue to be reduce to move towards a zero-waste company (Santoso & Handoko, 2023). When manufacturing companies implement green accounting, it is expected to increase company performance. Ultimately, green accounting practices will have a direct impact on the company's environmental performance (Baah et al., 2021). Environmental performance refers to how much a company's activities, practices, and policies affect the natural environment (Rahman et al., 2022). In recent years, environmental performance has increasingly become important in practice organizations, stakeholders demand accountability for environmental impacts in order to create a more transparent organization and sustainability practices (Chen et al., 2023). Environmental performance is the company's effort to protect and overcome environmental problems caused by its production activities (Rahman et al., 2022). Good environmental performance is characterized by low environmental problems caused by the company's operating activities.

Previous research shows that green accounting has a significant positive impact on environmental performance with energy efficiency as a moderating variable, resulting in cost savings for companies and reducing negative impacts on the environment. (Rahman & Islam, 2023). According to Wang et al., (2018) it shows disclosure of the company's corporate social responsibility as fulfilling the expectations of the company's stakeholders which also has a good impact on achieving company success. Research conducted by (Peralta et al., 2020) also

shows that in achieving a society that is integrated in a sustainable manner the importance of the knowledge base as a basis in the transition to a circular economy. A previous study conducted by (Türkeli et al., 2018) also validates that the development of a circular economy in a country is supported by the availability of scientific literature so that it will increase good international cooperation in various sectors. Researcher Sumter et al., (2021) Testing international designers regarding the main competencies that must be possessed in implementing a circular economy, the results show that there are two main competencies that must be possessed in designing circular products, namely circular systems thinking (Aggesund, 2018; Probst & Bassi, 2017) and circular product processing (Bakker et al., 2010; Sumter et al., 2021) where these two competencies have been tested on an international scale.

Previous research also shows that implementing green accounting within companies is a form of promoting a circular economy (Ashari & Anggoro, 2021). However, currently, there is no research that studies the effect of applying circular economy knowledge on corporate environmental performance with green accounting practices as a moderating variable.

1.2 Research Questions

The high level of pollution and waste in Indonesia due to the production activities of industrial companies makes it important to implement a circular economy in Indonesia. This research is conducted to determine the application of circular economy knowledge to environmental performance and the relationship between scientific knowledge, circular system thinking, processing of circular

economy, and institutional involvement in the successful implementation of circular economy in companies.

This research uses manufacturing industry company as a target in implementing a circular economy because activities in industrial companies have a direct impact on the natural environment. This research uses managers at industrial companies as the subjects because managers in industrial companies definitely expected have a circular economy knowledge and expertise so as to reduce negative impacts on the environment. Thus, based on the background that has been described, there are several problem formulations raised in this research, namely as follows:

1. What is the relationship between circular economy knowledge and environmental performance?
2. What is the relationship between green accounting practices and environmental performance?
3. What is the effect of determinants of circular economy knowledge in environmental performance on perceived green accounting practices?
4. What is the intervening effect of perceived green accounting practices on the relationship between determinants of circular economy knowledge and environmental performance ?

1.3 Research Objectives

Based on the research questions that have been raised in this study, the purpose of this study are as follows:

1. To examine the relationship between circular economy knowledge and environmental performance.
2. To examine the relationship between green accounting practices and environmental performance.
3. To examine the effect of determinants of circular economy knowledge in environmental performance on perceived green accounting practices.
4. To examine the intervention effect of green accounting practices on the relationship between determinants of circular economy knowledge and environmental performance.

1.4 Research Benefits

Research on the determinations of circular economy knowledge on environmental performance: mediating effect to green accounting practices is expected to provide benefits, including:

1. Institution

This research can be used as material for consideration and evaluation for government and companies, especially the manufacturing industry in terms of preventing environmental damage by implementing a circular economy.

2. Academics

This research can be used as supporting material or reference in developing further research.

3. Readers

This research is expected to increase awareness, information understanding, and references regarding the application of circular economy knowledge to corporate environmental performance.

4. Researcher

This research is expected to provide researchers with insight and knowledge about the effect of applying circular economy knowledge on corporate environmental performance.

1.5 Systematic Writing

In this study, the researcher conducted a structured discussion through systematic writing. Systematic writing aims to provide a clear and concise description of the research to make it easier for readers to understand the writing of this research. Each chapter is described in outline as follows:

CHAPTER I: INTRODUCTION

The introduction chapter provides an overview of the research, including the research background, the formulation of the problem, research objectives, research benefits, and the research structure.

CHAPTER II: LITERATURE REVIEW

This chapter proposed a theoretical overview of the theories that support and connect to the topic discussed, an overview of previous research, and a framework for understanding and facilitating the conduct of this research and the development of hypotheses.

CHAPTER III: RESEARCH METHODOLOGY

This chapter discusses the methods used in this study along with the independent variables, mediating variables, and dependent variables that were used, as well as appropriate measurements; types and sources of data; data collecting methods; and data analysis methods which include data analysis test tools for hypothesis testing.

CHAPTER IV: RESULT AND DISCUSSION

This chapter consists of a brief explanation of information about the object of research, data analysis, interpretation of the results of the data that has been analyzed, and discussion of research.

CHAPTER V: CLOSING

The closing is the final chapter of this research which contains the conclusions of the study, the limitations of the authors, and the authors' suggestions.

