

The Contribution of Environmental Commitment on Business Sustainability, Circular Economy Implementation, and Competitive Advantage

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Abstract

This study focuses on the contribution of environmental commitment to the achievement of business sustainability (business, environmental and social performance). Likewise, the author emphasizes the importance of contributing environmental commitment to the implementation of circular economy and the competitive advantage of Batik MSMEs in Sleman, DIY, Indonesia. Respondents were selected by purposive sampling on creative industry SMEs in Sleman, especially batik SMEs who have a commitment to business processes that use natural and not synthetic dyes. The statistical technique was processed with Partial Least square 3.0. The results of the study proved that MSMEs with an environmental commitment can improve their business sustainability (environmental and social), but not on business performance. Likewise, environmental commitment can improve the implementation of circular economy and the competitive advantage of batik SMEs in Sleman, DIY.

Keywords

Environmental commitment, business sustainability, implementation of circular economy and competitive advantage.

1. Introduction

In the last few decades, environmental commitment has become the main focus of the government, community, and businesses (Vu and Wilson, 2020). For business operations that are supported by ecological organizations, environmental commitment is very important in performance appraisal and market orientation (Jermisittiparsert et al., 2019). Environmental commitment requires organizations to look into a broad range of ecological alternatives, reflecting multiple dimensions of energy use and enthusiasm for a particular natural area that not only supports the firm's sustainability motives, but also meets its financial and non-financial performance criteria (Somjai et al., 2020). A firm's environmental commitment can have a positive impact on a firm's performance in today's business environment (Reche et al., 2019). Carrillo-Higueras et al. (2018) analyzed the role of ecological commitment in increasing firm performance. The results emphasized the importance of environmental commitment in altering the firm performance. In a similar vein, Luzzini et al. (2015) found the influence of ecological commitment in positively influencing environmental and social performance significantly. Delivery companies actively maintain, adjust, and link their social performance with the environment to maximize their business performance (Yuen et al., 2016). The study from Latan et al. (2018) also indicate that the commitment from top management regarding environment can enhance environmental performance of firms in Indonesia, and this finding also applies to firms operating in other countries (Latan et al., 2018). Commitment is also considered as a significant factor that accounts for the success of circular economy implementation (Moktadir et al., 2020). The results from Singh et al. (2018) proved that there is a positive and significant influence of environmental commitment on circular economy readiness in manufacturing MSMEs in India. It can motivate the MSME managers to carry out circular economy implementation on its business process (Singh et al., 2018).

This study is carried out on natural dye batik MSMEs in Sleman Regency, Special Region of Yogyakarta (DIY). The DIY Province is known as cultural city which prioritizes local wisdom in every product and service produced by creative MSMEs. This becomes more significant since the international recognition of Yogyakarta as the World Batik City established by the World Craft Council (WCC) in Dongyang, Zhejiang Province, China on October 18th-23rd, 2014. This is based on several considerations which include historical value, originality, preservation, economic value, environmental friendliness, global value, and sustainability. The current batik industry in Sleman, DIY, has grown very rapidly. Although the Covid-19 pandemic era had experienced a decline in production, it turned out that gradually, it had experienced a significant increase. The batik industry in DIY Province has also begun to be directed towards the orientation of using natural dye instead of synthetic dyes.

1.1 Objectives

The objective of this study is to fill the research gap by emphasizing the importance of the role of environmental commitment to business sustainability (business, environmental, and social performance), circular economy implementation, and firm competitive advantage in Batik MSMEs in Sleman Regency, which is oriented to natural dye business process and circular economy implementation.

2. Literature Review

2.1. Environmental Commitment and Business Performance

Environmental commitment is an individual's effort towards environmental sustainability, willingness to sacrifice personal pleasure, waste reduction of resources, use of environmentally-friendly new products, and supports for the governments' adaptation strategy. In short, a positive environmental commitment is to increase the efficiency and effectiveness of environmental outcomes by contributing to individual resource investment or waste reduction, as well as the adapting to the environmental behavior (Yu et al., 2019). Henriques and Sadorsky (1999) described environmental commitment as a process carried out by firms by referring to environmental issues (Nath and Ramakrishnan, 2015). Environmental commitment also refers to the extent to which firms integrate ecological issues within their business strategies to reduce the harmful impacts of its business activities regarding the environment (Hirunyawipada and Xiong, 2018). For the effectiveness of environmental performance, Cialdini (2001) realized that the commitment and behavior of individual is consistent to their commitment to performance. Environmental commitment is driven by economic opportunities and stakeholder influence, aside from personal values (Yu et al., 2019).

Somjai et al. (2020) conducted a study which indicates that environmental commitment has a positive and significant influence on the performance of multinational companies in Indonesia. The attitudes and perceptions of companies that are ecologically-driven, positively affect organizational environmental commitment, which in turn

has a positive influence on firm performance (Somjai et al., 2020). The previous studies on the relationship between environmental commitment on firm performance have indicated inconsistent results, such as Dowell et al. (2000; Zhu and Sarkis, 2004; Clarkson et al., 2011; Carrillo-higueras et al., 2018; Somjai et al., 2020), which yielded a positive relationship, while several studies (Cordeiro and Sarkis, 1997; Lopez et al., 2004) yielded a negative relationship. In addition, Hirunyawipada and Xiong (2018), considered the influence of environmental commitment on firm performance is an important issue that needs to be clarified. In their study, Hirunyawipada and Xiong (2018) found that firm's environmental commitment has a positive influence on short-term firm performance, but has no influence on long-term firm performance. The firm's greater environmental performance often requires reinventing their operations, strategies, and business models (Hart, 1995; Kotler, 2011; Dangelico et al, 2016). Not all firms were able to succeed in the process of recreation. Therefore, the relationship between environmental commitment and firm performance may depend on more specific firm factors that were not previously considered (Hirunyawipada and Xiong, 2018). Business performance is the degree of ultimate goal, or a set of targets measured by specific parameters as a way to achieve profit, or the process of monitoring the growth of the firm's value to maximize it (Wagner's, 2009; Paveloka and Knapkova, 2012, Vimrova, 2015). Financial analysis is very important in identifying the main factors that affect business performance since it is an objective measuring tool in evaluating performance (Vimvora, 2015).

H1: Environmental commitment has a positive and significant influence on business performance.

2.2. Environmental Commitment and Environmental Performance

Environmental performance refers to "organizational commitment to protect the environment and demonstrate measurable operational parameter within the defined limits of environmental preservation" (Roscoe et al., 2019). Environmental performance is the main results of employee involvement in environmental initiatives (Ojo and Muhammad, 2020). Environmental performance comes from the firm's sustainability strategy and employee commitment to take actions that minimize environmental degradation (Cooper and Alemayehu, 2017). If management is committed to be better to the environment, then better environmental performance will follow (Appiah et al., 2020). Green commitment is a valuable organizational resource that encourages green human resources, which in turn will contribute to superior environmental performance (Haldorai et al., 2022). Environmental commitment will play a key role in improving both environmental and business performance (Xing et al., 2019). The banking industry's commitment to the environment is related to high environmental performance, and both can mutually reinforce one another (Laguir et al., 2018). Environmental engagement also helps firms to build a good reputation that leads to better environmental performance in firms. Based on the previous studies, environmental commitment can have a positive impact on performance (Vu and Wilson, 2020). The results from prior research also stated that there is a significant positive direct and indirect influence (through GHRM) of green commitment on environmental performance (Haldorai et al., 2022). A number of previous studies also proved that willingness and strategic orientation of top managers can also encourage the implementation of environmental commitment (Xing et al., 2019). The previous studies have also concluded a positive and significant relationship of top management's environmental commitment to firm performance both directly and indirectly through environmental management accounting and environmental control systems (Amir et al., 2020).

H2. Environmental commitment has a positive and significant influence on environmental performance.

2.3. Environmental Commitment and Social Performance

According to Carroll (1991) and Ortlitzky and Swanson, (2012), corporate social responsibility refers to the firm's obligations and accountability to the community, while social performance refers to the results of the activities. Social responsibility and social performance are often used interchangeably. Wood (1991) argued that corporate social performance is defined as a configuration of business organization's social responsibility principles, social responsiveness processes and policies, programs, and observable outcomes related to corporate social relationships (Lahouel et al., 2020). Firms with a high reputation for social responsibility tend to be lucrative targets for shareholder investment. When a firm is committed to the environment and engaged in environmental activities, it can build a good reputation and a positive image in the eyes of shareholders and investors (Seth et al., 2018). Committed employees play an important role in helping organizations achieve better social performance (Rae et al., 2015). Managers are the real actors in ensuring good social performance (Beaudoin et al., 2019). When managers are committed to pro-environment, firms can improve social performance and operate in accordance with the government regulations (Rivera et al., 2017; Anser et al., 2020). Research on firm social performance is plagued with inconsistent measures due to insufficient agreement on social performance as a theoretical construct. The measurement approach used so far does not have a systematic conceptual basis and tend to select key performance indicator based on current desires (Lahouel et al., 2020). A number of previous studies have referred to Waddock

(2003), which used a weighting system that has become the de facto standard in the aggregation of social performance, but this system provides inaccurate and subjective research results (Wang et al., 2015; Crane et al., 2017).

H3: Environmental commitment has a positive and significant influence on social performance.

2.4 Environmental Commitment and Circular Economy Implementation

Circular economy is a regenerative system that minimizes resource inputs and waste, emissions, and energy leakage by slowing, closing, and narrowing the material and energy loops (Geissdoerfer et al., 2017). Circular economy is a dynamic, multidiscipline, and developing concept that pursues the separation of economic growth from resource use and social impact (Merli et al., 2017; Unal et al., 2018). It aims as a solution to the need for environmental resilience that is coherent with developing economic tendencies (Ormazabal et al., 2016). Circular economy shifts the focus from making a profit from sales to making a profit from the flow of products and resources over time (Bocken et al., 2016). With the implementation of circular economy practices, the waste generation from manufacturing firms can be reduced significantly (Moktadir et al., 2020). However, in its practices in the industry, the implementation of circular economy is still far and out of reach, especially in SMEs (Ormazabal et al., 2016). According to the statements of the European Commission in 2014 and 2015, the practice of reducing food waste is relevant to the increasing pressure to implement circular economy (Slorach et al., 2019). It has been suggested that the industry can achieve a circular economy through 5 phases, namely take, make, distribute, use, and recover, which transforms the linear business processes into circular ones (Prieto-Sandoval et al., 2018). The research and practices of circular economy for waste management has recently gained its popularity by attracting attentions from the practitioners and scholars in developed countries (Moktadir et al., 2020). Recent studies have been conducted to facilitate the implementation of circular economy in SMEs (Dey et al., 2020). Firms that have a commitment to the environment can be the cause of the successful implementation of circular economy practices (Moktadir et al., 2020). The previous studies have proved a positive and significant influence of environmental commitment on circular economy readiness in manufacturing MSMEs in India. This finding becomes a solid foundation in designing plans to drive the implementation of circular economy in MSMEs (Singh et al., 2018).

H4: Environmental commitment has a positive and significant influence on circular economy implementation.

2.5 Environmental Commitment and Competitive Advantage

For many firms, the main consideration as an indicator in achieving better environmental management is competitive advantage (Burritt and Schaltegger, 2010; Rodrigue et al., 2013; Appiah et al., 2020). Competitive advantage can only be maintained if there is an ability to create profits that are also supported by resources that are not easily imitated by competitors, which consists of three strategies, namely pollution prevention, product stewardship, and sustainable development (Latan et al., 2018). Pollution prevention is often a goal for firms with superior resource base, since it provides a unique competitive advantage (Nath and Ramakhrisnan, 2015). SMEs still find it difficult for gaining competitive advantage through environmental commitment due to the large number of high-cost environmental projects (Dey et al., 2020; Dey et al., 2018; Dey & Abdelaziz, 2018). Environmental commitment can reduce the pressure received by firms on environmental regulations, as well as maintain their competitive advantage (Xing et al., 2019). The reason behind firm commitment in applying green business strategy is to gain sustainability through competitive advantage (Anser et al., 2020). Through top management, a commitment will be able to be effectively integrated in a product development process, which will create potential competitive advantage (Latan et al., 2018). Environmental commitment will influence environmental collaboration, which will provide possibilities for firms to establish green competitive advantage as a result of environmental collaboration between the firms and suppliers (Seth et al., 2018; Vu and Wilson, 2020). Roxas and Lindsay (2012) indicated that the sustainability obtained by firms through competitive advantage tends to provide a high value, one of which is the commitment to environmental sustainability (Dangelico et al, 2016). When a firm is committed to the environment, it may have a better opportunity and ability to build a competitive advantage through investors and shareholders (Vu and Wilson, 2019). There are still studies which shows that firms can gain a competitive advantage by adopting environmental management practices (Nath and Ramakhrisnan, 2015). Previous studies have presented the positive influence of environmental commitment on competitive advantage (Lagares and Juan, 2018; Susana and Ni, 2018). The reasons and benefit in the form of competitive advantage justify firms in making decisions to commit to environmental management (Rahman and Reynolds, 2016).

H5: Environmental commitment has a positive and significant influence on competitive advantage.

3. Methods

Positivism approach is used in this study since the researchers have the aim to examine and analyze the relationship pattern between variables on a value-free basis (Hair et al., 2014). The researcher team conducted a survey and collected data by distributing questionnaires to the owners/managers of natural dye batik MSMEs in Sleman Regency. The population of this study are all owners /managers of natural dye batik MSMEs in Sleman Regency, while the target sample in this study is 150 MSMEs. The scale technique is a Likert scale with 7 score ranging from 7 (strongly agree) to 1 (strongly disagree) for the variable of environmental commitment, circular economy, competitive advantage, as well as business, social, and environmental performance. As for answering the performance measurement, respondents were asked to compare with competing companies for the last 3 years. The sampling technique uses purposive sampling. The data analysis technique used partial Least Square. After distributing the questionnaires, it turned out that the respondents who answered completely were 120 SMEs. This means that it meets the criteria as survey research using the PLS 3.0 statistical technique (Hair et al., 2014). The operational definitions of research variables, indicators, and questionnaire sources are as follows (Figure 1):

1. Environmental commitment is the effort of MSMEs in having a concern for environmental sustainability, willing to reduce resources waste, and producing environmentally-friendly new products. This variable is measured with 3 questionnaire items modified from Sing et al. (2018).
2. Circular economy implementation is to minimize resource inputs and waste, emissions, and energy leakage by using resources from natural (instead of synthetic) from roots, leaves, and plants. This variable has 10 questionnaire items modified from Kristoffersen (2021).
3. Business performance is the performance of business from MSMEs in the last 3 years, which is measured using 5 questionnaire items modified from Kraus et al. (2012; Muafi and Uyun, 2021).
4. Environmental performance is the performance of environment from MSMEs in the last 3 years, which is measured using 4 questionnaire items modified from Muafi and Uyun (2021).
5. Social performance is the performance of social from MSMEs in the last 3 years, which is measured using 4 questionnaire items modified from Muafi and Uyun (2021).
6. Competitive advantage is the competitive advantage owned by MSMEs in the last 3 years, which is measured using 4 questionnaire items modified from Nath and Ramakrishnan (2015; Latan et al., 2018).

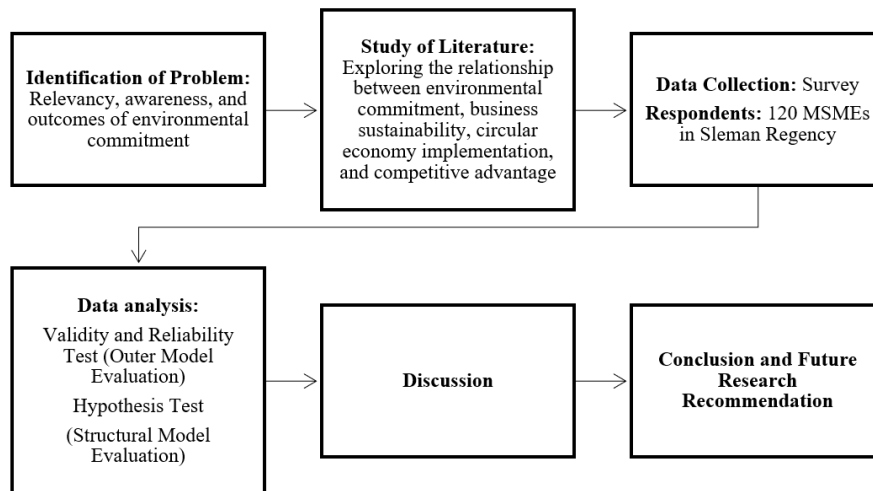


Figure 1. Diagram Flow of the Research Method

4. Results and Discussion

4.1. Respondents' Description

The majority of respondents in this study are: have establish their business for more than 2 years, owners/managers of MSMEs are women (94%), age above 40 years old (71%), have senior high school education (69%), and have the sales profit of > Rp 2 million.

4.2. Results

Before the hypothesis test is carried out, the author conducts validity and reliability test of the questionnaire. The results of validity test are presented on Table 1 and Figure 2.

4.3. Outer Model Evaluation

Outer model evaluation is carried out to understand the value of outer loadings, average variance extracted (AVE), Cronbach's Alpha, and composite reliability, which are all the indicators for validity and reliability test of the items used in this study. Figure 2 and Table 1 presents the outer loadings value for each item, indicating whether the item is valid or not.

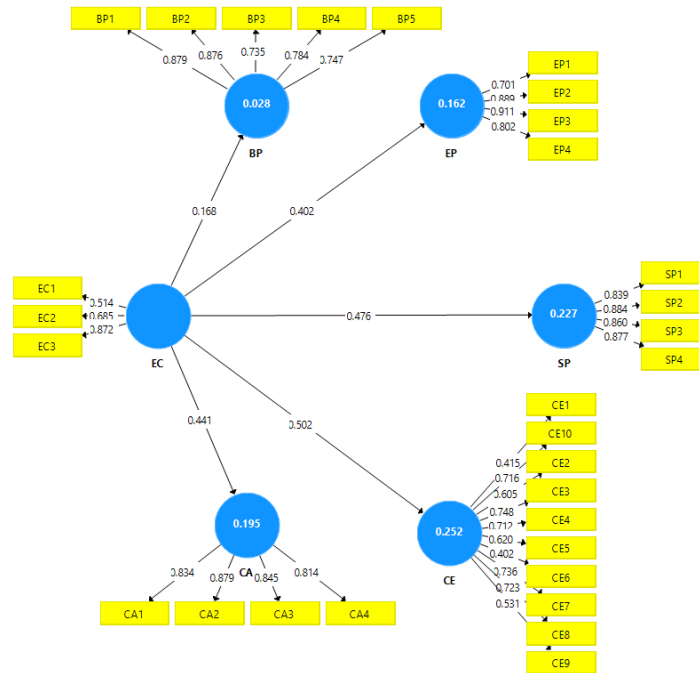


Figure 2. Analysis of CFA of First-Order Construct

Figure 2 shows the output from PLS for data processing of the validity test. The outer loading value for each item are presented in the research model. The researchers then displayed this data in the form of table in Table 1. The items are valid if the value of outer loadings is not less than 0.7.

Table 1. Loading Factor (Outer Loading)

	BP	CA	CE	EC	EP	SP
BP1	0,879					
BP2	0,876					
BP3	0,735					
BP4	0,784					
BP5	0,747					
CA1		0,834				
CA2		0,879				
CA3		0,845				
CA4		0,814				
CE1			0,415			
CE2			0,605			

	BP	CA	CE	EC	EP	SP
CE3			0,748			
CE4			0,712			
CE5			0,620			
CE6			0,402			
CE7			0,736			
CE8			0,723			
CE9			0,531			
CE10			0,716			
EC1				0,514		
EC2				0,685		
EC3				0,872		
EP1					0,701	
EP2					0,889	
EP3					0,911	
EP4					0,802	
SP1						0,839
SP2						0,884
SP3						0,860
SP4						0,877

Source: Processed primary data (2022)

Based on the results of the outer loading, it can be seen that there are several items or instruments of circular economy (CE) and environmental commitment (EC) constructs that indicate the loading factor value of < 0.7 , which is categorized as invalid and must be eliminated from the model. The revision of the research model by eliminating the items that belong to invalid category is presented in Figure 3 and Table 2.

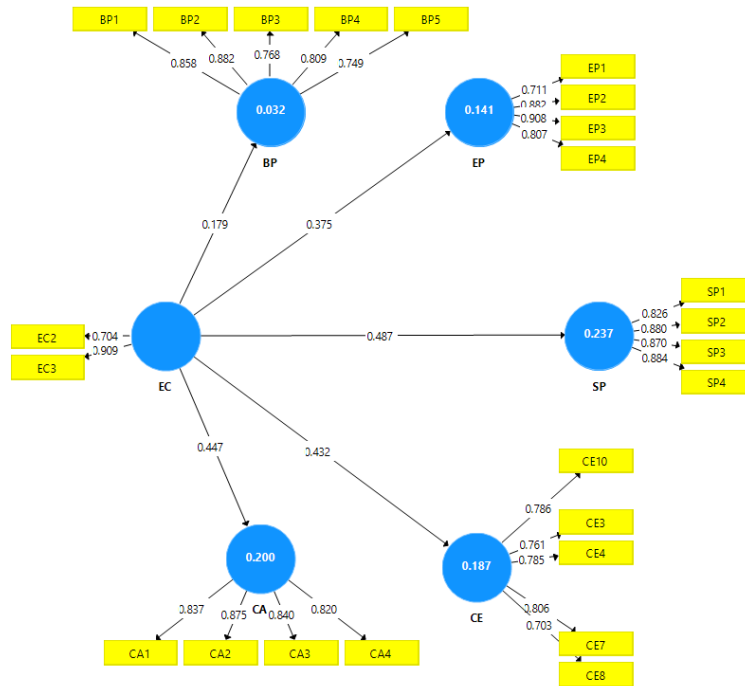


Figure 3. Full model PLS

Table 2. Loading Factor (Outer Loading)

	BP	CA	CE	EC	EP	SP
BP1	0,858					
BP2	0,882					
BP3	0,768					
BP4	0,809					
BP5	0,749					
CA1		0,837				
CA2		0,875				
CA3		0,840				
CA4		0,820				
CE3			0,761			
CE4			0,785			
CE7			0,806			
CE8			0,703			
CE10			0,786			
EC2				0,704		
EC3				0,909		
EP1					0,711	
EP2					0,882	
EP3					0,908	

	BP	CA	CE	EC	EP	SP
EP4					0,807	
SP1						0,826
SP2						0,880
SP3						0,870
SP4						0,884

Source: Processed primary data (2022)

The output of outer loading from the model revision indicates that all construct with the reflective item or indicator have the loading factor value of >0.7, thus all items or indicators of the construct in this study are valid. Furthermore, the research model has to meet the reliability requirement. Clearer explanation on reliability test results is displayed in Table 3.

Tabel 3. Construct Reliability and Validity

	Composite Reliability	Average Variance Extracted (AVE)
BP	0,908	0,664
CA	0,908	0,711
CE	0,878	0,592
EC	0,793	0,661
EP	0,898	0,690
SP	0,923	0,749

Source: Processed primary data (2022)

In Table 3, the output of construct reliability and validity presents the average variance extracted (AVE) value for all reflective constructs of >0.5, thus it has met the convergent validity requirement. Furthermore, the value of composite reliability for the reflective constructs displayed a very good category, or >0.7, thus it can be concluded that all reflective indicator constructs are reliable, or has met the assumption of the reliability test.

4.4. Structural Model Evaluation (Inner Model)

Furthermore, the results of the research hypothesis test are displayed in Table 4.

Tabel 4. Path Coefficients

	Original Sample (O)	Standard Deviation (STDEV)	P Values	Results
EC → BP	0,179	0,185	0,335	H1 rejected
EC → CA	0,447	0,092	0,000*	H5 accepted
EC → CE	0,432	0,094	0,000*	H4 accepted
EC → EP	0,375	0,059	0,000*	H2 accepted
EC → SP	0,487	0,081	0,000*	H3 accepted

Note: *Sign = alpha 0.05

Source: Processed primary data (2022)

In the structural or inner model evaluation, the author examined whether the hypothesis proposed are accepted or rejected based on the data obtained. The hypothesis can be accepted if the p-values are less than 0.05. From the results of this study, it can be known that the first hypothesis is rejected, namely environmental commitment does not have significant and positive influence on business performance, as indicated from the p-value of 0.335, which is greater than 0.05. Furthermore, the second hypothesis regarding the positive influence of environmental

commitment on environmental performance is accepted, as seen from the p-value of 0.000, which is less than 0.05. The third hypothesis of environmental commitment on social performance is accepted, as proven from the p-value of 0.000, which is less than 0.05. Similarly, the fourth hypothesis of environmental commitment on circular economy implementation is accepted, as seen from the p-value of 0.000, which is less than 0.05. Finally, the results of the fifth hypothesis of the influence of environmental commitment on competitive advantage is accepted, as shown from the p-value of 0.000, which is less than 0.05.

4.5. Discussion

The findings in this study prove that environmental commitment does not have significant positive influence on business performance. This result does not support the theory and findings from Henriques and Sadorsky (1999; Yu et al., 2019; Somjai et al., 2020; Hirunyawipada and Xiong, 2018; Cialdini, 2001). Somjai et al. (2020) suggested that in Indonesia, several firms have already owned a high commitment and concerns towards the environment. However, batik MSMEs in Sleman Regency have not yet believe that having an environmental commitment will be able to improve their business performance. Therefore, the strategic issue of environmental commitment to MSMEs seems to need to be continuously communicated by the government. This aims to be able to move MSMEs to continue to care and carry out business activities that are directed to green management business processes. However, it is necessary to support facilities and infrastructure as well as a strong and large capital, since it will have an influence on the re-creation of green operations, strategies, and business models to be applied to their firms (Hart, 1995; Kotler, 2011; Dangelico et al, 2016). This seems to be one of the causes of MSMEs for not having a high commitment towards the environment. Not all firms can succeed in the process of re-creation. It is also necessary to emphasize the confidence of the MSMEs, that when they have a high commitment to the environment, they can improve business, environmental, and social performance.

The findings in this study prove that environmental commitment positively and significantly influences environmental performance. This supports the theory and empirical findings from Roscoe et al. (2019; Ojo and Muhammad, 2020; Appiah et al., 2020; Cooper and Alemayehu, 2017; Haldorai et al., 2022; Xing et al., 2019). It is known that environmental performance will definitely involve leaders and employees in environmental initiatives. This can be used as an action for MSMEs to minimize the environmental degradation and have ecological behavior in the environment. Apiah et al. (2020) emphasized that when firms have a high environmental commitment, they will also be able to improve the environmental performance. There is a need for support for Green HRM practices within the firm's business processes, as it will lead firms to the attitudes and commitments of both the managers and the employees. On the other hand, it is also suggested by Xing et al. (2019), that there is a need for the willingness and strategic orientation from top managers to implement environmental commitments. The findings in this study prove that environmental commitment positively and significantly influences social performance. This supports the theory and empirical findings from Carroll (1991; Ortlitzky and Swanson, 2012; Lahouel et al., 2020; Seth et al., 2018; Rae et al., 2015). It should be noted that firms that have a high concern for the environment can directly or indirectly improve their environmental performance and reputation. This will also attract stakeholders or more specifically investors to invest their capital and transact in the long term. The firms' social performance can be carried out with various strategies and methods including providing scholarships to the community, social service work for the community, conducting mass circumcision, providing social assistance to the community, and other social activities.

The findings in this study prove that environmental commitment positively and significantly influences circular economy implementation. This supports the theory and empirical findings from Geissdoerfer et al. (2017; Merli et al., 2017; Unal et al., 2018; Moktadir et al., 2020). Circular economy implementation applies dynamically and develops according to the situation and conditions of MSMEs. In fact, the implementation of circular economy on Batik MSMEs in Sleman is still done in a simple way where the business process emphasizes natural dyes. Circular economy implementation starts from input, process and output activities, all of which emphasize environmental conservation. Things that have been carried out are making product samples by utilizing virtual services, treating, offering and repairing obsolete products, treating natural dyed batik products so that products can be more durable, sustainable and not easy to fade, using natural dyes and various other activities. With the implementation of CE, it is expected to be a solution to the need for environmental resilience (Ormazabal et al., 2016), last a long time over time (Bocken et al., 2016), and reduce waste from manufacturing significantly (Moktadir et al., 2020). Therefore, Batik SMEs in Sleman Regency should continue to have a strong foundation in designing plans to encourage the implementation of their circular economy.

Finally, the findings of this study prove that environmental commitment positively and significantly influences competitive advantage. This supports the theory and empirical findings from Burritt and Schaltegger (2010; Rodrigue et al., 2013; Appiah et al., 2020; Nath and Ramakrishnan, 2015; Dey et al., 2020; Dey et al., 2018; Dey and Abdelaziz, 2018). Latan et al. (2018) strengthened this by mentioning that competitive advantage can be maintained with pollution prevention strategies, product stewardship, and sustainable development (Latan et al., 2018). When these three strategies are applied by batik SMEs in Sleman Regency, SMEs can have a unique green competitive advantage and of course must be supported by superior resource ownership and green business strategies (Nath and Ramakrishnan, 2015). Leaders and managers must have a high commitment to implementing it because they will also get other benefits aside from sustainable business performance (Latan et al., 2018; Seth et al., 2018; Vu and Wilson, 2020).

5. Conclusion and Future Research Recommendation

The conclusions of this study are: (1) the environmental commitment can improve the business sustainability (environmental and social), but not on business performance, (2) the environmental commitment can improve the implementation of circular economy and the competitive advantage of batik SMEs in Sleman, DIY, Indonesia.

This study has a relatively small sample, thus it becomes a concern that it will not be able to generalize the MSME population in Sleman Regency, especially in DIY Province. In addition, this research still does not classify MSMEs based on small and medium business groups. Future studies need to explore research models by considering other factors, both by using a universalistic approach, contingency, and configuration in business processes. Several variables that can be considered and serve as antecedents of organizational performance include green transformational leadership, green attitude, green innovation, green culture and green strategy.

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