Linking green marketing strategy, religiosity, and firm performance: Evidence from Indonesian SMEs

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\section*{ABSTRACT}

The purpose of this study is to investigate the moderating effect of religiosity on the relationship between green marketing strategy and firm performance in the context of Indonesian small-medium enterprises (SMEs). This study applied the convenience sampling method to survey 235 Muslim entrepreneurs through a self-administered questionnaire. Data were analyzed using Smart PLS v.3 to test the hypothesis. The result showed that green product, green promotion, and green price have a positive relationship with firm performance. On the other hand, the study found an insignificant relationship between green distribution and firm performance. According to the moderating effect of religiosity, the interaction between green marketing strategy dimensions and religiosity was significantly related to SMEs’ performance with the notable exception of green distribution. This present study provides both empirical and theoretical contributions focusing on green marketing in SMEs.

\section{1. Introduction}

Green marketing has proliferated and become a critical part of sustainable business development. Due to the growth of green consumption generation, an enterprise should be considered environmental issues as an essential role in marketing strategy. Recent studies have revealed the benefit of green marketing strategy on firm performance (Eneizan et al. 2019; Wanjohi et al. 2013; Leonidou et al. 2013; Gleim et al., 2013). However, we found only few studies have investigated green marketing in the context of small and medium enterprises (SMEs). In fact, SMEs have distinctive characteristics from a large company or other types of business. Therefore, addressing this gap, the present study examined the role of green marketing in the SMEs’ perspective related to firm performance. In the context of Indonesian SMEs, the present study also investigated the moderating effect of religiosity on firm performance. There are two main reasons regarding the moderating effect of religiosity. First, religiosity has been considered as the critical factor that determines individual behavior and decision making, in turn, become an enabler for positive behavior., Hari Adi and Adawiyah (2018) reveal that religiosity becomes a trigger that promotes green strategy implementation. Second, this study conducted in Indonesian entrepreneur, in which 80% of Indonesian society is Muslim. This study attempts to prove the hypothesis by conducting a survey on environmental awareness of Muslim-owned SMEs located in Indonesia. The results must fill gaps in the existing literature relating to environmentally friendly marketing practices in SMEs.
2. Theoretical Framework and Hypotheses

2.1. Green Marketing

Discussion on green marketing cannot be separated from the four elements of marketing, namely products, prices, places and promotions. Green marketing uses environmental issues as a marketing strategy for products. The application of green marketing in a company includes several things, the production process, the price determination process, the promotion process, and the distribution process. In accordance with Kotler (2001) statement “green marketing as a movement directed towards the production of an environmentally friendly product organization”.

The green marketing is not a new concept. This concept was introduced in 1971, and stated that the concept of marketing was limited to satisfying the consumers’ desires and by ignoring the interests of society and the environment in the long run (McDaniel & Rylander, 1993). Others introduced the ecological marketing as a study of the positive and negative impacts of marketing activities on pollution, energy depletion, and depletion of non-energy resources (Polonsky, 1994).

In the 1970s environmental concern was known as “Environmentalism”, whereas starting in the 1990s it was known as “Green” where the main emphasis was on social and economic issues rather than just environmental problems. Now it is more global than local environmental problems. The term “green” is usually used interchangeably with “pro-environment” (Shrum et al., 1995) and “environment”. However, due to different definitions for the environment, this term is not very precise but is usually used to indicate environmental concern (air, water, and soil) (Shrum et al., 1995).

The American Marketing Association (AMA) states, green marketing as marketing products that are considered environmentally safe, combining several activities such as product modification, changes in production processes, packaging, advertising strategies, and also raising awareness about marketing compliance between industries. The concept of market mix according to Payne is a well-developed tool that is used as a structure by marketers. This concept consists of various types of marketing program elements that need to be considered in order to successfully implement a strategy by segmenting, targeting, marketing positioning in corporate markets. Peattie in 1995 defined green marketing as a holistic management process that is responsible for identifying, anticipating and satisfying the desires of consumers and society in a profitable and sustainable way (Kärnä et al., 2003). Meanwhile, Polonsky (1994), states that environmentally friendly marketing includes all activities designed to produce and facilitate the changes expected to meet the needs and desires of humans, with minimal impact on the destruction of the natural environment. This happens because the fulfillment of human needs and desires has the potential to have a negative impact on the natural environment.

The Green Marketing approach in the product area enhances the integration of environmental issues in all aspects of the company’s activities ranging from strategy formulation, planning, preparation, production and distribution with customers. According to Czinkota and Ronkainen (1992), “companies will be able to find solutions to environmental challenges in marketing strategies, products, and services in order to remain competitive”. “Green Marketing” refers to the holistic marketing concept in which production, marketing consumption, and disposal of products and services occur in a way that is less damaging to the environment by increasing awareness about the implications of global warming, solids that cannot be destroyed (Pillai & Patil, 2012). Research on green marketing are still under contradictions in research results. Abzari et al. (2013) reported a significant, and positive relationship between the green marketing mix and increasing market share, Ilami and Khosravi (2014) reported that green marketing has a positive and significant impact on excellence and Hasan and Ali (2015) state that green innovation, products and processes have a positive influence on company performance.

2.2. Firm Performance

Firm performance is something that is produced by a company in a certain period by referring to a set of standards. These criteria can be in the form of financial and non-financial criteria (Wibisono, 2006). The firms’ performance is reflected from the perceived benefits which expected from the integration of environmental management in their business operation (Hasan & Ali, 2015). Firm performance is the level of success of the company in achieving its goals through the use of various resources it has (Ismanu & Kusmintarti, 2019).

2.3. Green Product

Green product programs are decisions and actions whose purpose is to protect or benefit the natural environment, save energy or resources and reduce pollution and waste associated with the product (Dangelico & Pujari, 2010; Ottman et al., 2006). Sustainable Packaging Alliance (2010) defines sustainable packaging as effective (which achieves functionality minimum environmental and social requirements impact), efficiently (designed to use energy and materials efficiently during the product life cycle), cyclic (using renewable energy and recycling material), and safe (non-polluting and non-toxic). As reported by Scott and Vigar-Ellis (2014), ecological packaging and its benefits are largely based on the nature of the packaging itself. For example, it can be recycled, reused, or produced from the environment, friendly material, resulting in less natural use reduction of packaging resources. Source of savings even before promotion. Companies face choices about how they can package and label products in ways that are more environmentally friendly. Leonidou et al. (2013) reveal that the green market program is beneficial towards the firms’ performance. Fraj et al. (2011) reported that green marketing strategy helps firms manage their resources efficiently and improve corporate image and reputation and leads firms to improve profitability.
Based on the theory stated above, the hypothesis proposed in this study are:

**Hypothesis 1:** Green product has a positive effect on firm performance.

2.4. Green Price

Green pricing programs are prices that take into account both the economic and environmental costs of production and marketing, while providing value to customers and fair profits for the business (Sippel & Neuhoff, 2008). Companies can use price measures, such as higher prices for environmentally friendly products (Polonsky & Rosenberger, 2001). Based on the theory stated above, the hypothesis proposed in this study are:

**Hypothesis 2:** Green pricing has a positive effect on firm performance.

2.5. Green Distribution

Green distribution programs involve activities related to suppliers and distributors to improve environmental performance (Godfrey, 1998; Sippel & Neuhoff, 2008). The company develops distributors recycle product packaging and requires suppliers and distributors to be environmentally friendly (Zhu & Sarkis, 2006). Based on the theory stated above, the hypothesis proposed in this study are:

**Hypothesis 3:** Green distribution has a positive effect on firm performance.

2.6. Green Promotion

The green promotion program is communication designed to inform stakeholders about efforts and commitment to environmental conservation (Byrne & Glover, 2002; Frank-Martin & Peattie, 2009; Dahlstrom, 2010). Such efforts are like communicating environmentally friendly products and socialization related to protecting the environment (Banerjee, 2002; Menon et al., 1999). Green promotion is also referred as the communication that promotes the product and the services. Besides promoting the green advertising campaign, it should also have the characteristics to enhance the corporate image of social responsibility. The green promotion has a positive effect on the firms’ performance (Hasan & Ali, 2015). Based on the theory stated above, the hypothesis proposed in this study are:

**Hypothesis 4:** Green promotion has a positive effect on firm performance.

2.7. Religiosity

Religiosity can be defined as a way of life that is reflected in the values and attitudes of society and individuals which can affect a person’s behavior. Indonesia is a country with a vast majority of Muslims; therefore, the religiosity measurement used in this study comes from an Islamic perspective. Lately, there has been a high interest in the Muslim religiosity as an area of empirical investigation. Therefore, some of the new scales that are based on the theological worldview of Islam have been created (Hari Adi & Adawiyah, 2018). Based on the theory stated above, the hypothesis proposed in this study are:

**Hypothesis 5a:** Religiosity moderates the relationship between green product and Firm performance.

**Hypothesis 5b:** Religiosity moderates the relationship between green pricing and Firm performance.

**Hypothesis 5c:** Religiosity moderates the relationship between green distribution and Firm performance.

**Hypothesis 5d:** Religiosity moderates the relationship between green promotion and Firm performance.

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Fig. 1. Research Model
3. Research Methodology

This study is quantitative with a survey type. In particular, the study is causal research as the research is designed to find the relationships between independent and dependent variables at one point in time (cross-sectional). The primary instrument used for data collection was questionnaires with close-ended questions. The authors sent questionnaires to Muslim small business owners with environmental friendly labeling. Respondents were 235 SMEs owner-managers focused on handicraft (leather bag & natural clothing) located in Central Java, Indonesia. According to data survey, the majority of respondent were male (74.4%). Most of owner-manager aged 40-50 years (52.45%).

All the items on the scale are measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). Respondents were asked about their perceptions of green marketing, religiosity and performance. The authors undertook a comprehensive literature review to determine the most appropriate measures for each variable used in the model. To measure green product (three items), green price (four items), green distribution (five items), green promotion (five items) were adapted from Banerjee (2001), Fraj-Andrés et al. (2009), and Menon et al. (1999)), religiosity (five items) was adapted from El-Menouar (2014) and firm performance (three items) was adapted from (Song & Parry, 1997).

4. Results and Discussion

Testing outer model

The data were analyzed by the structural equation modelling approach of the Partial Least Square technique using SmartPLS 3.0. Before the data were analyzed, it was necessary to assess its properties. Convergent tests and discriminant validity show that the model is good. The Reliability of factors in the model was measured by examining Cronbach’s $\alpha$. The cut-off point for reliability is normally taken as 0.7. However, 0.6 is acceptable for exploratory research.

![Fig. 2. Outer Model](image)

Based on Fig. 1, it appears that P-value on the influence of green product on firm performance is 0.042. Thus, it can be concluded that green product has a positive and significant impact on firm performance, so the first hypothesis is accepted. In line with the recent study, Leonidou, Katsikeas, & Morgan (2013) and Fraj, Martinez, & Matute (2011) found that the green market program has a positive effect the firms’ performance.

Hypothesis 2 suggests that green pricing has a positive effect on firm performance. Based on Fig. 1, it can be seen that P-value on the influence of green pricing on firm performance is 0.002. It can be concluded that green pricing have a positive effect on the firm performance. Thus, H2 is accepted.
Hypothesis 3 suggests that green distribution has a positive effect on firm performance. Based on Fig. 1, it can be seen that P-value on the influence of green distribution on firm performance is 0.276. It can be concluded that green distribution does not have a positive effect on the firm performance. Thus, H2 is rejected.

Hypothesis 4 suggests that green promotion has a positive effect on firm performance. Based on Fig. 1, it can be seen that P-value on the influence of green promotion on firm performance is 0.011. It can be concluded that green promotion has a positive effect on the firm performance. Thus, H4 is accepted. In line with recent study Hasan and Ali (2015) reported that green promotion have a positive effect on the firms’ performance.

Hypothesis 6, 8 & 9 suggest that Religiosity moderates the relationship between green product, green pricing, green promotion and firm performance. Based on Fig. 1, it can be seen that P-value < 0.05. Thus, it can be concluded that Religiosity moderates the relationship between green product, green pricing, green promotion and Firm performance. But religiosity has not moderated the relationship between green distribution and firm performance. Table 1 shows that all the latent variables have internal consistencies above 0.6, indicating that the constructs are internally consistent and hence reliable.

Table 1
Measurement Model

| Construct              | Item                                                                 | Factor Loading | AVE   | Cronbach alpha |
|------------------------|-----------------------------------------------------------------------|----------------|-------|----------------|
| Green Product Program  | 1. We are careful when choosing the contents, ingredients, and raw materials of our products in order to be environmentally friendly. | 0.785          |       |                |
|                        | 2. We are geared to designing and developing products that are friendly to the environment. | 0.781          | 0.747 | 0.887          |
|                        | 3. We have significantly increased the recycling content of our packaging over the past few years. | 0.739          |       |                |
|                        | 4. We tend to modify our packaging and labeling decisions to emphasize any environmental benefits. | 0.788          |       |                |
| Green Pricing Program  | 1. We build the environmental benefits and/or costs into the product price | 0.780          |       |                |
|                        | 2. We employ pricing tactics (e.g., rebates, discounts) to encourage environmental actions (e.g., reusing, recycling) by end-users | 0.887          | 0.699 | 0.782          |
|                        | 3. We charge higher prices for environmentally friendlier versions of our products | 0.675          |       |                |
| Green Distribution Program | 1. We team up with our channel members to develop appropriate product and packaging after-use arrangements | 0.799          |       |                |
|                        | 2. We cooperate with our channel members to make joint commitments to environmental protection | 0.799          | 0.744 | 0.914          |
|                        | 3. We cooperate with our suppliers and distributors to develop environmentally friendly marketing programs | 0.969          |       |                |
|                        | 4. We encourage our suppliers and distributors to embrace & reflect environmental responsibility and responsiveness in their activities | 0.872          |       |                |
| Green Promotion Program | 1. We communicate the environmental friendliness of a product by positioning its features or ingredients in our branding efforts | 0.819          | 0.729 | 0.906          |
|                        | 2. We make efforts to reduce any negative impact of our marketing promotions on the natural environment | 0.895          |       |                |
|                        | 3. We emphasize the environmental aspects of our products in our advertisements efforts | 0.715          | 0.542 | 0.788          |
|                        | 4. We highlight our commitment to environmental preservation in our corporate communications | 0.815          |       |                |
|                        | 5. Our promotions highlight and inform customers about the firm’s environmental | 0.715          |       |                |
| Religiosity            | 1. By paying attention to the environment, the more reward you will get. | 0.790          |       |                |
|                        | 2. Attention to the environment, in accordance with your own intentions | 0.742          | 0.772 | 0.788          |
|                        | 3. When you pay attention to the environment, you feel calmer in living life | 0.742          |       |                |
|                        | 4. You know about the command of Allah in paying attention to the environment. | 0.832          | 0.542 | 0.788          |
|                        | 5. You pay attention to the environment because you feel it is your duty as Muslims. | 0.781          |       |                |
| Firm Performance       | 1. My firm is usually satisfied Sales growth | 0.781          |       | 0.607          |
|                        | 2. My firm is usually satisfied Consumer growth | 0.828          | 0.607 | 0.673          |
|                        | 3. My firm is usually satisfied Sales volume | 0.808          |       |                |
4.1. Results

Testing the hypothesis in this model is based on the results of the p-value. P-values in this model can be seen in Fig. 1 and Table 2.

| Variable               | Original Samples | p-Values | Hypothesis     |
|------------------------|------------------|----------|----------------|
| Green Product → FP     | 0.140            | 0.042    | H1: Supported  |
| Green Price → FP       | 0.322            | 0.002    | H2: Supported  |
| Green Distribution → FP| 0.016            | 0.276    | H3: Unsupported|
| Green Promotion → FP   | 0.340            | 0.011    | H4: Supported  |
| Religiosity → FP       | 0.320            | 0.036    | H5: Supported  |
| Moderating             |                  |          |                |
| Green Product*R → FP   | 0.254            | 0.016    | H6: Supported  |
| Green Price*R → FP     | 0.119            | 0.003    | H7: Supported  |
| Green Distribution*R → FP| 0.035          | 0.176    | H8: Unsupported|
| Green Promotion*R → FP | 0.473            | 0.026    | H9: Supported  |

4.2. Discussion

Regarding the rapid concern about environmental research, this study gives new insight into the importance of green marketing strategy on firm performance. The present study has revealed that green product, green price, and green promotion were significantly related to SMEs' performance. This research also found that religiosity has a moderating role in the relationship between green marketing strategy and SMEs' performance with the notable exception of green distribution. However, contrary to prediction, green distribution was not related to SMEs' performance. Green product positively affects SMEs performance by added new value to the product, such as natural coloring, recycling materials, which in turn could improve firm sales performance. Besides, green price has charged higher prices for environmentally friendlier versions of products. Therefore, green pricing has an impact on firm performance.

This study also stated that green promotion created customer awareness about the companies' commitment to the environmentally friendly product. On the other hand, green distribution has not related to firm performance. The basic rationale of this finding is the fact that most SMEs practically had a limited distribution network. Furthermore, according to the moderating effect of religiosity, this study found that religiosity could enhance the relationship between green marketing strategy and firm performance. The interaction between green marketing strategy and religiosity found to be a determinant of firm performance. The religiosity of owner-managers becomes a trigger to involve ethical behavior in business. In other words, more religiosity could be a motivation to be more concerned with environmental sustainability. This study conducted in Indonesia which is the largest population of Islamic society. Islam gives a clear understanding of the importance of a caring environment. This view might be a reason for the critical role of religiosity.

5. Conclusion

This research contributes both theoretically and practically. Theoretically this research uses the theory of green marketing strategy and religiosity and examines its effect on performance. This study found that religiosity moderates the relationship between green products, green prices and green promotions and company performance as measured through marketing performance. Besides this research also contributes practically, that SMEs can improve their marketing performance through a green strategy.

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References

Abzari, M., Shad, F. S., Abedi, S. A. A., & Morad, A. P. (2013). Studying the effect of green marketing mix on market share increase. *European Online Journal of Natural and Social Sciences*, 2(3), 641–653.
Banerjee, S. B. (2002). Corporate environmentalism: The construct and its measurement. *Journal of Business Research*, 55(3), 177–191.
Byrne, J., & Glover, L. (2002). A common future or towards a future commons: Globalization and sustainable development since UNCED. *International Review for Environmental Strategies*, 3(1), 5–25.
Czinkota, M. R., & Ronkainen, I. A. (1992). Global marketing 2000: A marketing survival guide. *Marketing Management*,
I(1), 36–43.

Dahlstrom, R. (2010). *Green marketing management.* Nelson Education.

Dangelico, R. M., & Pujari, D. (2010). Mainstreaming green product innovation: Why and how companies integrate environmental sustainability. *Journal of Business Ethics,* 95(3), 471–486.

El-Menouar, Y. (2014). The five dimensions of Muslim religiosity. Results of an empirical study. *Methods, data, analyses,* 8(1), 26.

Eneizan, B. M., Matar, A., Al-Zawahreh, A., Alkhawaldeh, A. M., & Eneizan, O. (2019). Effects of green marketing strategy on firm financial performance. The moderating role of government policy. *Business and Economic Horizons,* 15(2), 304–324.

Fraj, E., Martinez, E., & Matute, J. (2011). Green marketing strategy and the firm's performance: the moderating role of environmental culture. *Journal of Strategic Marketing,* 19(4), 339–355.

Frank-Martin, B., & Peattie, K. J. (2009). *Sustainability marketing: a global perspective.* Wiley.

Gleim, M. R., Smith, J. S., Andrews, D., & Cronin Jr, J. J. (2013). Against the green: a multi-method examination of the barriers to green consumption. *Journal of Retailing,* 89(1), 44–61.

Godfrey, R. (1998). Ethical purchasing: developing the supply chain beyond the environment. *Greener Purchasing: Opportunities and Innovations,* 244–251.

Gordon, R., Carrigan, M., Hasting, G., & Gordon, R. (2011). A framework for sustainable marketing. *Marketing Theory,* 11(2), 143–163. https://doi.org/10.1012/es202595w

Hari Adi, P., & Adawiyah, W. R. (2018). The impact of religiosity, environmental marketing orientation and practices on performance: A case of Muslim entrepreneurs in Indonesia. *Journal of Islamic Marketing,* 9(4), 841–862. https://doi.org/10.1108/JIMA-09-2016-0067

Hasan, Z., & Ali, N. A. (2015). The Impact of Green Marketing Strategy on the Firm’s Performance in Malaysia. *Procedia - Social and Behavioral Sciences,* 172, 463–470. https://doi.org/10.1016/j.sbspro.2015.01.382

Ilami, A. H., & Khosravi, A. (2014). The effect of green marketing on competitive advantage with the mediation role of social responsibility (case study: tabarok Mashhad food industry co.). 4(1), 29–40.

Ismanu, S., & Kusmintarti, A. (2019). Innovation and Firm Performance of Small and Medium Enterprises. *Review of Integrative Business and Economics Research,* 8, 312.

Kärnä, J., Hansen, E., & Justin, H. (2003). Social responsibility in environmental marketing planning. *European Journal of Marketing,* 37(5/6), 848–871.

Kotler, P. (2001). *Marketing Management,* 10. Pearson Education Canada

Leonidou, C. N., Katsikeas, C. S., & Morgan, N. A. (2013). “Greening” the marketing mix: Do firms do it and does it pay off?. *Journal of the Academy of Marketing Science,* 41(2), 151-170.

McDaniel, S. W., & Rylander, D. H. (1993). Strategic green marketing. *Journal of Consumer Marketing,* 10, 4–10.

Menon, A., Menon, A., Chowdhury, J., & Jankovich, J. (1999). Evolving paradigm for environmental sensitivity in marketing programs: a synthesis of theory and practice. *Journal of Marketing Theory and Practice,* 7(2), 1–15.

Otman, J.A., Stafford, E.R., & Hartman, C. L. (2006). Avoiding Green Marketing Myopia: Ways to Improve Consumer Appeal for Environmentally Preferable Products, Issue of Environment. *Heldref Publications,* 48(5), 22–36.

Peattie, K., & Crane, A. (2005). Green marketing: legend, myth, farce or prophesy? *Qualitative Market Research: An International Journal,* 8(4), 357–370.

Pilai, B. S., & Patil, K. P. (2012). Green marketing. *International Journal of Research in Commerce and Management,* 3(7), 64–75.

Polonsky, M. J. (1994). An Introduction to Green Marketing. *Electronic Green Journal.*

Polonsky, M. J., & Rosenberger, P. J. (2001). Reevaluating green marketing: A strategic approach. *Business Horizons,* 44, 21–30.

Scott, L., & Vigar-Ellis, D. (2014). Consumer understanding, perceptions and behaviours with regard to environmentally friendly packaging in a developing nation. *International Journal of Consumer Studies,* 38(6), 642-649.

Shrum, L. J., Lowrey, T. M., & McCarty, J. A. (1995). Applying social and traditional marketing principles to the reduction of household waste: Turning research into action. *American Behavioral Scientist,* 38(4), 646-657.

Sippel, M., & Neuhoff, K. (2008). *Lessons from Conditionality Provisions for South-North Cooperation on Climate Policy.* EPRG Working Paper 08/25, Climate Strategies, Cambridge, UK.

Song, X. M., & Parry, M. E. (1997). The determinants of Japanese new product successes. *Journal of marketing research,* 34(1), 64–76.

Wibisono, D. (2006). Manajemen Kinerja: Konsep, Desain, dan Teknik Meningkatkan Daya Saing Perusahaan. *Jakarta: Erlangga.*

Zhu, Q., & Sarkis, J. (2006). An inter-sectoral comparison of green supply chain management in China: drivers and practices. *Journal of Cleaner Production,* 14(5), 472–486.
