

Green Marketing as the source of the competitive advantage: The case of sensitive markets.

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Cite as:

Lievano Pulido Yineth, Ramon-Jeronimo Maria (2021), Green Marketing as the source of the competitive advantage: The case of sensitive markets.. *Proceedings of the European Marketing Academy*, 50th, (94260)

Paper from the 50th Annual EMAC Conference, Madrid, May 25-28, 2021



Green Marketing as the source of the competitive advantage: The case of sensitive markets.

Abstract

This work contributes to the existing literature proposing green marketing as a source of competitive advantage. We attempt to determine if green variables have influence on the economic profitability of the companies. It is important to highlight that this study is based on different industries than the food one. The major result of this research is that we found that exist a real connection between green marketing policies and competitive advantage. Our results show that there is a latent factor, called green marketing, which can be traduced as the firm's performance. That opens a stream of possibilities for developing sustainable enterprises beyond food industries but also for detergent, vehicle components, and motor vehicle manufacturing industries.

Keywords:

Green marketing, competitive advantage, sustainable development.

Track:

Social Responsibility & Ethics

1. Introduction

Green marketing has become one of the most important topics for practitioners and academics (Massey & Singh, 2019). In our work, we focus on green marketing politics as a source of competitive advantage for companies. Green marketing has been studied most frequently in the context of food industries (Woo & Kim, 2019). However, we wanted to open the spectrum toward other industries to see the impact of green politics on firms' performance. Moreover, corporations that want to weigh the actual situation (Covid-19) should enter the digital world with innovative proposals that go hand in hand with the idea of sustainability (Cohen, 2020). In order to this, the aim of this paper is to analyze which are the sources of competitive advantage in international markets, in this case: whether Spanish companies that implement green marketing policies develop present higher levels of performance.

This paper first presents a theoretical review of the importance of green marketing. Secondly, the study identifies Germany as a key market for green strategies in Europe. Then we analyze the impact of green policies on key sectors of Spanish companies. Finally, the results of this study show that the green marketing variables need to be managed to give companies a competitive advantage.

2. The importance of green marketing

The concept of green marketing was born in 1980 to promote strategies and activities focused on markets that need satisfaction mitigating the environmental impact (Govender & Govender, 2016). Since then, a lot of companies have developed different green strategies involving not just the marketing area but also the whole supply chain process (Groening et al., 2018). Previous studies have found that green marketing is a source of competitive advantage (Moravcikova et al., 2019), due in part to the rapid increase in the last ten years of green purchasing behavior (Do Paco et al., 2019). However, it is important to understand that green purchasing behavior does not correlate strongly with a customer environment-friendly decision. In fact, according to Groening et al., (2018) there are different consumer characteristics as values – knowledge, beliefs, attitudes, intentions, motivations, and social dimensions, that motivate the consumer to buy a green product. Likewise, other works show that this green purchase can be adopted by the customer due to prioritization of self-interest, motivation by relative status (vs. absolute status), unconscious social imitation, focus on the short-term vs. long-term, and low regard for distal or intangible issues (Griskevicius et al., 2012). Moreover, the role of public policymakers is important to build stronger consumer perceptions of the environmental effects of products, leading to greater purchase intentions

and behavior (Groening et al.,2018). The following section shows the importance of green markets and their influence on consumer environmental consciousness.

2.1 Green markets:

The countries, particularly the governments, can influence the level of environmental awareness of its citizens by public policies. The European Union has led the green policies since 1997 with the Treaty of Amsterdam sought sustainable economic, social, and political growth in Europe. Also, in 2001 the European Commission presented the green paper on corporate social responsibility to promote a new socio-economic scenario where companies should give greater importance to sustainable development and their relationship with society. The success of Corporate Social Responsibility (CSR), therefore, is the result of its implementation within the business culture from the policy and as an institutional strategy (Rodríguez, 2011).

Germany is one of the countries with the highest environmental citizens' awareness, they have a strong and positive attitude towards the environment, which makes them willing to pay more to obtain ecological products (Moser, 2015). Moreover, Germany aims to implement one culture based on sustainable development with deeper roots in the structures of its educational system, succeeding in implementing environmental education (Singer-Brodowski, 2019). Therefore, Germany became one of the most attractive countries to export green products, an example of this is that the country is the main European consumer of organic food and the second consumer worldwide (International Trade Centre, 2019).

2.2 Benefits of green marketing in business

Green marketing has played an important role in company strategy to obtain a competitive advantage (Moravcikova et al., 2019). Some examples of these advantages are: *Corporate image*: green marketing directly affects the firm image providing a lead differentiation, that increases sales, attracts new investors, and creates customer loyalty (Nadanyiova et al., 2020). This because the 'corporate image' is built over a long time is difficult to imitate (Yadav et al., 2016). *Production*: one of the main benefits of green marketing is the reduction in the cost of production. A sustainable production process raises the profit of the company cutting down costs in terms of less waste, more recycling, less use of raw materials, and clean energy (Arseculeratne & Yazdanifard, 2014). *Pleasant business environment*: producing and selling green products enhances the work environment. Moreover, employee engagement increases due to a more sustainable holistic focus alignment for all functions of the company (Zintom & Frederick, 2001) which also contributes to value creation. Research has shown us how green marketing affect positively

on companies (Cronin et al., 2011). Along those lines, we attempt to demonstrate that companies that implement green policies, develop a competitive advantage observable higher performance. However, it is relevant to understand when a company is considered sustainable and has applied green marketing strategies.

2.3 Sustainable companies and green marketing variables

Green marketing involves different investments and activities to consider a company sustainable, those include product modifications, changes in production processes, packaging changes, and modifying advertisements amongst others. Nevertheless, one of the most chief changes is sustainable innovations: developing efficient operational energy, pollution control, or having a recycling process where variables create a balance between companies interests and their profitability (Moravcikova et al., 2019).

Papadas et al., (2017) conceptualized some factors to measure the green marketing orientation of companies: invest in low-carbon technology, use a specific environmental policy for selecting partners, invest in R&D programs in order to create environmentally friendly products/services, use renewable energy, created a separate department/unit specializing in environmental issues, participate in environmental business networks, apply a paperless policy, use recycled or reusable materials in products/services, among others. These variables are considered key measures of green marketing practices.

Considering the mentioned benefits of green marketing for business and the possibility to measure green marketing through the strategies implemented in the firm we propose:

Hypothesis: There is an observable and positive effect of green marketing on firm performance.

3. Method

3.1 Data and measures

To test the hypothesis proposed, two key steps were taken. First, we determine what kind of companies should be analyzed and second, what kind of variables should be used to measure green marketing and performance. It is important to note that this work was determined as objects of study: Germany and Spain. Germany because it is one of the countries with the highest consumption of green products and can be considered one sensitive market and Spain because of its interest.

In the first step, based on the ICEX report we analyzed which were the products that Spain most exported to Germany, using to identify its respective activity classification code. Thus finding that the most accurate data available were: (a) motor vehicle manufacturing

products, (b) manufacturing of components, parts, and accessories for vehicles and, (c) manufacture of soaps and detergents. It was also defined that the database that would be chosen for this research would be SABI's since it contains found more information both in quantity and in the actuality of the data.

The database yielded a total of 945 companies in these three industries, of which only the complete information of 651 could be determined. The memories and digital information of each of the companies were reviewed one by one to understand what kind of green policies they were investing in. Next, we combined that information with the variables that Papadas et al., (2017) and Moravcikova et al., (2019) explain in their research as green factors that are a source of competitive advantage. One coding process made by two researchers and, discussed with a third one has given as result the 8 dummy variables shown in table 1. These variables can be considered as ordinal because there is not the mere classification of firms in categories. For instance, the existence of "responsible use of energy and water" represents a higher level of green marketing than no existence.

In industries, (a) and (c) we analyzed all firms, while in the case of industry b) we selected a random sample of 248 companies out of the 694 that made up the total population. The sample data corresponds to that of 2018 since SABI offered the largest amount of complete data. The mix of secondary data about performance and green marketing variables gave a final sample size of 645 with complete data. Differences between complete and incomplete firms' characteristics were tested and there was no evidence of bias due to missing data during the coding process.

To test the hypothesis proposed it was necessary first to check if there were a latent factor called green marketing and second if this factor could positively affect firms' performance. We have used Mplus to run this analysis and the results. All indicators were ordered binary indicators, this is referred to as a two-parameter logistic model, that is referred to as Smejima's graded response model (Baker and Kim, 2004, du Toit, 2003), where one company can successfully implement one strategy related with green marketing but fails no implementing others. We propose to measure green marketing as a set of steps that can be successfully or not implemented by a company. In our study, a single factor is measured by 9 binary variables measuring if firms have implemented each specific green marketing tool.

3.2 Analysis

Table 1: Model tested.

Factor / items	Loading (Standard error)	T-value
No emis: WRITE THE MEANING	1	
Use: responsible use of energy and water	1.276 (0.055)	23.241***
Waste: waste management	1.220 (0.053)	22.824***
Bio: biodiversity prevention	0.889 (0.065)	13.593***
Logist: reverse logistics	0.927 (0.075)	12.283***
Product: ecologic products	0.613 (0.067)	9.205 ***
Ocer: reduction of carbon footprint	0.872 (0.056)	15.470***
ISO 14001: international standard for designing and implementing an environmental management system	1.111 (0.047)	23.471***
ISO 50001: Energy Management System Certification	0.913 (0.062)	14.737***
ROI18	3.660(1.754)	2.086**
Model fit: Chi-Square: 166.035; d.f.=35; RMSEA=0.076; CFI=0.979; TLI= 0.973; *** p<0.01; **p<0.05.		

Consistently with the Confirmatory factor analysis previously conducted, all loading factors were significant showing the existence of a latent factor to measure green marketing (see table 1). Additionally, the effect of green marketing of performance (ROI18) was significant and positive, giving support to the hypothesis proposed.

4. Conclusions:

This paper contributes to the previous literature supporting the impact of green marketing in the activity of the company. We tested satisfactorily the main hypothesis: there is a latent factor, called green marketing, which can be traduced as the firm's performance. This factor also can be measured with secondary data. And, as we detailed before, we collected the memories of the companies in order to identify their green marketing strategies, aiming to minimize the risk of social desirability bias that could be introduced by previous measures based on surveys (Kumar, 2016) This is relevant due to when green marketing is analyzed, the data is commonly based on interviews or questionnaires that can be subjective according to the perspective of the individual who answers. Regarding this, as we outlined in the analysis conducted, green marketing affects in a positive way the firms' performance. In consequence, we can conclude there exists a competitive advantage related to it. Further, companies that are into sensitive markets, and have integrated green marketing policies,

justify their results. Also, there is a combination of the market and the ability of companies to take advantage of this opportunity that allows them to obtain a higher or lower income in profitability (Lieberman and Montgomery, 2013).

Secondary data are a source of useful information for decision making. With the research method provided in this paper, firms can understand how to generate higher results with the implementation of the necessary green marketing tools. These tools are associated with positive results for the firms that implement them. This fact can be explained by the special sensitivity of some markets to green marketing. One of the constraints of this work is that we cannot really conclude if green marketing is perceived in these industries as a minimum to compete or as an added value. In any case, there are still some firms that have not implemented all the tools proposed in this study, which analysis could deserve more attention in future research, estimating the expected results of the implementation.

Additionally, we attempt to promote sustainable strategies as green marketing in companies beyond of food industries, we believe that enterprises and consumers as part of a complex ecosystem (Vargo and Lusch, 2006) must contribute in a positive way to it.

Further research should extend the scope of this analysis including more industries and countries and analyzing the possible impact of green marketing in countries that are not as sensitive as Germany, which could be a source of heterogeneity interesting to explain.

Reference:

Arseculeratne, D., & Yazdanifard, R. (2014). How green marketing can create a sustainable competitive advantage for a business. *International business research*, 7(1), 130.

Baker, F.B., Kim, S. (2004). *Item response theory. Parameter estimation techniques*. Second edition. New York: Marcel Dekker, Inc.

Cohen, M. J., (2020). Does the COVID-19 outbreak mark the onset of a sustainable consumption transition?.

Cronin, J. J., Smith, J. S., Gleim, M. R., Ramirez, E., & Martinez, J. D. (2011). Green marketing strategies: an examination of stakeholders and the opportunities they present. *Journal of the Academy of Marketing Science*, 39(1), 158-174.

Do Paco, A., Shiel, C., & Alves, H. (2019). A new model for testing green consumer behaviour. *Journal of cleaner production*, 207, 998-1006.

Du Toit, M (ed). (2003). *IRT from SSI: BILOG-MG MULTILOG PARSCALE TESTFACT*. Lincolnwood, IL: Scientific Software International, Inc.

Govender, J. P., & Govender, T. L. (2016). The influence of green marketing on consumer purchase behavior. *Environmental Economics*, 7(2), 77-85.

Groening, C., Sarkis, J., & Zhu, Q. (2018). Green marketing consumer-level theory review: A compendium of applied theories and further research directions. *Journal of Cleaner Production*, 172, 1848-1866.

Griskevicius, S.M., & Cant, M.V. (2012). The evolutionary bases for sustainable behavior: implications for marketing, policy, and social entrepreneurship. *Journal of Public Policy & Mark.*, 31 (1) (2012), pp. 115-128.

International Trade Centre, (2019), *The European Union Market for Sustainable Products: The retail perspective on sourcing policies and consumer demand*. Geneva, Suiza.

Kumar, P. (2016). State of green marketing research over 25 years (1990-2014). *Marketing Intelligence & Planning*.

Lieberman, M. B., & Montgomery, D. B. (1988). First-mover advantages. *Strategic management journal*, 9(S1), 41-58.

Lusch, R. F., & Vargo, S. L. (2006). The service-dominant logic of marketing: Reactions, reflections, and refinements. *Marketing Theory*, 6(3), 281–288.

Massey, V. J., & Singh, M. (2019). The role of green marketing practices for sustainable development and consumer purchase intention towards green products. *Administrative Development' A Journal of HIPA, Shimla'*, 6(1), 143-155.

Moravcikova, D., Krizanova, A., Kliestikova, J., & Rypakova, M. (2017). Green Marketing as the Source of the Competitive Advantage of the Business. *Sustainability*, 9(12), 2218.

Moser, A. K. (2016). Consumers' purchasing decisions regarding environmentally friendly products: An empirical analysis of German consumers. *Journal of Retailing and Consumer Services*, 31, 389-397.

Nadanyiova, M., Gajanova, L., & Majerova, J. (2020). Green Marketing as a Part of the Socially Responsible Brand's Communication from the Aspect of Generational Stratification. *Sustainability*, 12(17), 7118.

Papadas, K. K., Avlonitis, G. J., & Carrigan, M. (2017). Green marketing orientation: Conceptualization, scale development and validation. *Journal of Business Research*, 80, 236-246.

Rodríguez, C. G. (2011). Empresas Socialmente Responsables y mercado verde internacional. *Economía Informa*, (366).

Singer-Brodowski, M., Brock, A., Etzkorn, N., & Otte, I. (2019). Monitoring of education for sustainable development in Germany—insights from early childhood education, school and higher education. *Environmental education research*, 25(4), 492-507.

Woo, E., & Kim, Y. G. (2019). Consumer attitudes and buying behavior for green food products. *British Food Journal*.

Yadav, R., Dokania, A. K., & Pathak, G. S. (2016). The influence of green marketing functions in building corporate image. *International Journal of Contemporary Hospitality Management*.

Zintom, M., & Frederick R. (2001). Marketing and advertising, A Deep Green Company. *The Journal of Corporate Citizenship*.