

Explaining the Relationship Between Market Orientation, Environmental Performance and Corporate Financial Performance (Case Study: Household Appliance Industry)

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Abstract: Today, the competitive advantage for companies that are active at the international level is crucial and important. Governmental and human institutions pressure to improve environmental performance, increase customer knowledge and laws and regulations as well as environmental standards causes more and more attention of academic researchers and activists in this field and the study of its effects on other aspects of company performance. The previous literature review has shown that environmental performance could take effect from some factors such as market approach and supply chain activities as well as effect on factors such as the company's performance. Therefore, this study examined the effect of market approach on environmental activities and financial performance. In this study, to analyze the assumptions and evaluate the overall fit of the conceptual model, structural equation modeling was used. The partial least squares method (least squares) was used for the implementation of the assumptions in the form of structural equation model. The research results showed that the market approach has a positive and significant effect on the environmental performance, supply chain management activities and financial performance. Markets approach not only directly but also indirectly and through green supply chain management activities' effects on the environmental performance significantly. Green supply chain management activities have a significant positive effect on environmental performance. About half of financial performance changes are predicted through three variables of the market approach, environmental performance and green supply chain management activities that are very significant.

Key words: Market approach, environmental performance, green supply chain management activities, financial performance, examined

INTRODUCTION

Ever since, the World Forum for Economic Development has raised the sustainability concept of consciousness and customer awareness >20 year ago, the customer's demand for environmentally friendly and produced products and services has been increased in such a way that it does not damage to the environment (Han *et al.*, 2009). Although a variety of terms have been used to describe a management response to this known process, Matten and Moon (2008) suggest that sustainability is tending to reflect a conception and understanding the accountability of business companies for broad social products. As, sustainability is a major

concern of customers (Rehman and Shrivastava, 2011) this issue has become a matter of importance for organizations of the 21st century with a market approach (Crittenden *et al.*, 2011). Therefore, the demand for sustainable products and services are created by final customers of that products and services. Lafferty *et al.* (2001) suggest that companies are with a market approach in a unique position to align their strategic with the needs and demands of customers and stakeholders that their care is about widespread social responsibility. Market approach facilitates the collection and use of market information and focuses on the coordination of resources to maximize value for the customer (Green *et al.*, 2015). Market-oriented companies work to provide better

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services to their customers based on market information (Kohli and Jaworski, 1990). Companies with strong market approach are better able to identify and respond to changes in customer's demand (Carr and Lopez, 2007). Green supply chain management activities include internal environmental management, green purchasing, working with clients, environmental design and renewed investment (Zhu *et al.*, 2008). Environmental performance reflects the productive capacity of the organization to reduce air pollution, reduce greenhouse gases, toxins as a result of the manufacturing processes. Green *et al.* (2015), based on the resource advantage theory as the theoretical basis of their research, have stated that, companies with strong market orientation have a competitive advantage compared to companies that do not have this approach. Green *et al.* (2005) have suggested a positive relation between market approach and organizational performance. Zhu *et al.* (2008) in a study have examined the relation between green supply chain management activities and environmental performance and have confirmed a positive relation between them as well as Green *et al.* (2012) have confirmed a positive relation between green supply chain management activities and environmental and corporate performance. According to a study of Horvathova (2010), 55% of the studies have found a positive relation, 30% have found negative relation and 15% have found no relation between environmental activities and financial performance. Based on studies conducted by Rodriguez (2013) and Alvarez *et al.* (2014), even in times of economic crisis, the companies' attention has not reduced on environmental activities and companies believe that investing in environmental practices and sustainable projects increases relations with stakeholders and shareholders and as a result better economic results.

According to the literature review and the works that have been done, it seems that, given the importance of researchers and activists about the relation between market approach and environmental activities as well as the relation between environmental activities and financial performance, few studies have been done about the relation between the market approach, environmental activities and financial performance, hence this study aims to examine the need for environmental activities and its effect on financial performance of companies, examines the effect of market approach on the environmental activities and financial performance.

Literature review: Since, the beginning of 1990 so far, the market approach was considered one of the central concepts in the marketing literature (Karaibrahimoglu,

2010). The market approach is the focus of marketing organizations in those companies that their responsibility is multiple and meeting the needs of customers is considered as a priority for the whole organization (Narver and Slater, 1998). According to Narver and Slater (1998) cultural thinking (1990), market orientation has been formed from the three dimensions of customer orientation, competitor orientation and cross-functional cooperation and two indices of decision which mean the long-term attention and profitability. Customer orientation and competitor orientation include all activities of acquiring information about the buyers and competitors in the target market and its publication, in all the businesses. Literature review of the relation between environmental performance and financial performance of the company does not show complete results (Albertini, 2013). Preliminary comments of studies suggest positive results regarding environmental performance on innovation and operational efficiency (Aguilera and Mandvjana, 2013), improved competitive advantage (Hart, 1995), increasing the company's environmental reputation and thus commitment of staff (Dogl and Holtbrugge, 2014), the increased legitimacy of the company (Hart, 1995) and reflect the ability of management and organization.

As long as pollution is as an indicator of an incomplete, inefficient and ineffective application, prevention and control strategies will help the company, in terms of cost reduction, product protection and environmental integration in designing the product and manufacturing processes which leads to a competitive advantage through the first attempt strategy in the emerging market of green products (Hart, 1995).

Ghanavati (2014), in a study examines the impact of company culture and market orientation on the performance of small and medium-sized industrial companies. The aim of this study was to analyze the simultaneous effect of corporate culture and market orientation on the performance of small and medium-sized industrial companies, respectively. In this study, to evaluate the research hypotheses, the cross-sectional survey and structural equation modeling, based on the variance were used. Samples were collected by using a stratified sampling method from the oil and professional production industry and it consisted of 930 executives and marketing managers of small and medium-sized industrial companies active in Iran. The results show that the classical path of culture, market orientation, consumer performance, financial performance were the only significant and positive path in these companies and culture and market orientation do not have a direct impact on financial performance. Fatvayi and Samadi in a study

have examined the effect of market orientation and organizational culture on the performance of small and medium-sized companies operating in the provinces of Tehran. To do this cross-sectional survey, structural equation modeling and available sampling method for managers of small and medium-sized companies were used. The research findings show that the market orientation is partly driven by organizational culture and both have a positive but insignificant impact on financial performance of companies. The results of the model in small and medium-sized companies will confirm the organizational culture path- the market orientation- customer performance, financial performance. In the following, the results of communication paths between research variables were compared with small and medium sized companies with larger types.

Muhammad *et al.* (2015), in a study, has examined the effect of environmental performance on the financial performance. In this study we investigate this effect, during the years 2001-2007 as the period before the recession and then from 2008-2010 as the recession period. The results of this research which were conducted in Australian companies, have shown that environmental performance had a significant positive effect on the financial performance of the companies in the period before and after the recession.

Green *et al.* (2015), in a study, have examined the effect of market approach on the company's environmental performance, through green supply chain management activities. In this study, based on data gathered from 225 companies and by structural equation modeling and partial least squares, results have shown that the approach to the market, directly and indirectly is effective through green supply chain management on the company's environmental performance.

Wang and Miao (2015) in another study examined the effect of market approach on financial performance through creativity and innovation. The results of this study have shown that a market approach through an intermediary such as creativity and innovation has the direct or indirect effect on corporate financial performance.

Developing hypotheses and research model: Based on the literature review, the following assumptions arise based on a research literature as follows:

- The market approach has a significant impact on environmental performance
- Green Supply Chain activities have a significant impact on environmental performance

- The market approach has a significant impact on the green activities of the supply chain
- The market approach has a significant impact on financial performance
- The market approach has a significant impact on financial performance

MATERIALS AND METHODS

This research, in terms of purpose is practical and in terms of data collection is field survey and in terms of nature, the descriptive results are correlatives. In this study, in connection with the collection of data related to research literature and background, mainly, the library methods with books, papers and dissertations were used and about collecting data, to test research hypotheses, the field method by using a 5-point Likert scale was used. In this study, to analyze the hypotheses and evaluate the overall fit of the conceptual model, structural equation modeling was used. The partial least squares method (least squares) was used for the implementation of the hypotheses in the form of structural equation model. The statistical population of this study consisted of manufacturers, suppliers and vendors of domestic green products such as Sony, LG, Samsung, Snowa and The number of these companies and suppliers and vendors is about 389. Statistical sample size is about 194 based on Cochran relationship. Sampling method is Simple random sampling. In this study, to evaluate the validity, content validity was used. In such a way that for designing questions from the research literature (similar themes of articles that had been completed) were used. To evaluate the accuracy of the question's content, the assistant professors and advisor's opinions were also used. Based on expert's opinion and matching questions with the research literature, the questionnaire has an appropriate validity. As well as to verify the validity or reliability of the questionnaire the Cronbach's alpha and composite reliability were used that results are expressed in the following. Based on the results obtained from Table 1, it can be seen that the loading factors are >0.5 which indicates a strong reputation of structures in structural equation modeling to test the hypothesis tests. In order to examine convergent and divergent validity of the model, the extracted the average variance and composite reliability are used (Fig. 1 and Table 1). According to Table 2, comparing the correlation between latent variables and the square root of the average variance extracted demonstrate the proper fit of the structural model of the research.

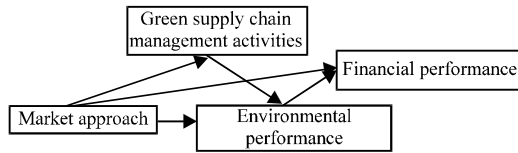


Fig. 1: Research theoretical model (Mohammed *et al.*, 2015; Green *et al.*, 2015)

Table 1: Results of the questionnaire reliability, confirmatory factor analysis, composite reliability and average variance extracted

The average variance extracted	Composite reliability	Cronbach's alpha	Load factor	Question	Latent variable
0.5	0.9	0.883	0.779	ENP1	Performance
			0.783	ENP2	
			0.833	ENP3	
			0.863	ENP4	
			0.849	ENP5	
			0.745	ENP6	Financial performance
0.598	0.94	0.924	0.845	FP1	
			0.812	FP2	
			0.882	FP3	
			0.864	FP4	
0.725	0.91	0.873	0.814	GSCMP1	Green supply chain management activities
			0.815	GSCMP2	
			0.849	GSCMP3	
			0.842	GSCMP4	
			0.827	GSCMP5	
			0.719	GSCMP6	
			0.762	GSCMP7	
			0.648	GSCMP8	
			0.745	GSCMP9	
			0.684	GSCMP10	
0.655	0.92	0.894	0.686	MO1	Market approach
			0.754	MO2	
			0.728	MO3	
			0.770	MO4	
			0.705	MO5	
			0.629	MO6	
			0.562	MO7	
			0.659	MO8	
			0.690	MO9	
			0.773	MO10	

Table 2: Correlation matrix and the square root of the average variance extracted (rows) of each of the variables

Latent variables	MO	GSCMP	FP	ENP
Market approach	0.700			
Green supply chain management activities	0.677	0.773		
Financial performance	0.598	0.760	0.85	
Environmental performance	0.680	0.650	0.693	0.81

RESULTS AND DISCUSSION

The research results, according to test the research hypotheses by using structural equation modeling showed that the market approach has a positive and significant effect on the environmental performance, supply chain management activities and financial

Table 3: The results of structural equation modeling

Path	Path coefficient	t-values	Hypothesis result
Market approach-environmental performance	0.194	4.42	Confirmed
Market approach-Green supply chain management activities	0.676	15.33	Confirmed
Green supply chain management activities-environmental performance	0.719	20.08	Confirmed
Market approach-Financial performance	0.235	2.7	Confirmed
Environmental performance-Financial performance	0.532	6.72	Confirmed
Financial performance R ²		0.51	
Environmental performance R ²		0.485	
Green supply chain management activities R ²		0.743	

performance as well. According to path analysis, it can be seen that the market approach has the greatest effect, respectively, on supply chain management activities with a path coefficient of 0.677, financial performance with a path coefficient of 0.234 and environmental performance with a path coefficient of 0.194.

On the other hand, the market approach not only directly but also indirectly and through green supply chain management activities has an impact on the environmental performance. Green supply chain management activities have a significant positive effect on the environmental performance and the path coefficient between these two variables is equal to 0.72. In fact, it can be said, the indirect effect of market approaches to environmental performance is > the direct effect. Market approach and supply chain management activities, indirectly have an impact on financial performance. This effect is through environmental performance. Environmental performance has a significant effect on the financial performance and path coefficient for this relationship is equal to 0.532.

According to the results and as it can be seen, approximately half of the financial performance is predictable through three variables of the market approach, environmental performance and green supply chain management activities that are noticeable. On the other hand, it is the effect that market approach and supply chain management activities have on their environmental performance. About 50% of changes in financial performance are predicted through the market approach and environmental performance. Results have shown that about 45% of environmental performance changes can be predicted by two variables that are very significant. Determining factor of 74%, for green supply chain management activities, also showed that the variable has a significant effect on the market approach (Table 3 and 4).

Table 4: Comparing the results of research and similar research results

Hypothesis	The effect of market approach on environmental performance	The effect of market approach on green supply chain management activities	The effect of green supply chain management activities on environmental performance	The effect of market approach on financial performance	The effect of environmental performance on financial performance
Current study	Confirmed	Confirmed	Confirmed	Confirmed	Confirmed
Larry and colleagues	Not checked	Not checked	Confirmed	Not checked	Confirmed
Mohammed <i>et al.</i> (2015)	Not checked	Not checked	Not checked	Not checked	Confirmed
Green <i>et al.</i> (2015)	Confirmed	Confirmed	Confirmed	Not checked	Not checked
Ghanavati (2014)	Not checked	Not checked	Not checked	Confirmed	Not checked
Ghanavati (2014)	Not checked	Not checked	Not checked	Confirmed	Not checked

CONCLUSION

As we have seen, the market approach has a significant effect on environmental performance and green supply chain management activities and ultimately, directly or indirectly on financial performance. As mentioned in the research literature, the results of this research are consistent with the results of Lari that showed environmental activities are effective on the financial performance. The results of this study also confirm the results by Mohammed *et al.* (2015) that showed environmental performance has a positive effect on financial performance. Green *et al.* (2015) also confirmed the results of this study. In their study showed the market approach has an effect on the environmental performance directly and indirectly.

Research proposals

A market approach that in fact is customer feedback on products of the company is effective on the environmental performance. Hence, based on this hypothesis, it is suggested that companies place the process of customer reviews primarily important. According to this hypothesis, the company's business objectives will be set based on customer satisfaction. Companies must be committed to clients. Market data will be spread among all units.

Green supply chain management activities have a significant impact on environmental performance. Based on the hypothesis results, it is suggested to the companies to review its suppliers based on green criteria. They should use green raw materials. The products are designed to be recycled. The product's environmental design will be studied and searched. The customer reviews will be consulted in the design of green products mainly in packaging. The management of the company will be top toward a commitment of green activities.

The market approach has a significant impact on green supply chain activities. According to this hypothesis, it is suggested that companies use their customer's comment in order to review green supply chain activities process. Evaluation of market changes

and its effect on newer product design change should be made. Customer's comments review should be taken about the quality of green products.

Market approach has a significant impact on financial performance. In order to earn higher share and income, the company should always be aware of its customer's views. The company must understand its target markets well has a partnership with its customers in the design of products and uses their thoughts on products.

SUGGESTIONS

Suggestions related to the fifth hypothesis: environmental performance has a significant impact on the financial performance. According to this hypothesis in order to earn a higher share and income, the top management commitment should increase from green supply chain management activities, the environmental programs continue to run, the environmental management systems run, products with an environmental label will be provided, the provider will be forced to have mandatory quality certification.

Research proposals: In the end for further research, the following items are suggested:

- Explain the relation between the market approach, green marketing and environmental and financial performance
- Explain the relation between governmental regulations, market approach and environmental performance
- Explain the relation between the market approach, the use of green products and environmental and financial performance
- Explain the relation between environmental advertising, the use of green products and environmental and financial performance
- Explain the relation between the use of green products, market approach, environmental performance due to the effect of structure type mediation and governance of the organization

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