

**THE INFLUENCE OF GENERIC COMPETITIVE ENVIRONMENTAL
STRATEGIES ON MARKET VALUE IN MANUFACTURING
COMPANIES LISTED ON INDONESIA STOCK EXCHANGE**

(Undergraduate Thesis)

By

NABILA FEMILIANA



**MANAGEMENT DEPARTMENT
FACULTY OF ECONOMICS AND BUSINESS
UNIVERSITY OF LAMPUNG
2019**

ABSTRACT

THE INFLUENCE OF GENERIC COMPETITIVE ENVIRONMENTAL STRATEGIES ON MARKET VALUE IN MANUFACTURING COMPANIES LISTED ON INDONESIA STOCK EXCHANGE

BY

NABILA FEMILIANA

The objective of this research is to provide empirical evidence on how market value the generic competitive environmental strategies pursued by the companies. This research uses price book value (PBV) as a measure of market value. The sample of 113 manufacturing companies listed on Indonesia Stock Exchange period 2014 – 2017 were analyzed through panel regression of fixed effect model and tested by using E-Views 9.

The analysis shows that generally, the generic competitive environmental strategies positively and significantly enhance market value of the company. Specifically, based on the coefficient and the significance level of confidence of regression result shows that markets place a higher value on companies pursuing a cost leadership strategy than differentiation strategy. The findings align legitimacy and stakeholder theory as well as resource based theory arguments, and supports previous literature.

Keyword: Cost Leadership Strategy, Differentiation Strategy, Market Value.

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Researcher

NABILA FEMILIANA

Undergraduate Thesis

As One of Recruitments to Achieve
BACHELOR OF ECONOMICS

In

Management Department
Faculty of Economics and Business, University of Lampung



**MANAGEMENT DEPARTMENT
FACULTY OF ECONOMICS AND BUSINESS
UNIVERSITY OF LAMPUNG
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Thesis Title : The Influence of Generic Competitive Environmental Strategies on Market Value in Manufacturing Companies Listed on Indonesia Stock Exchange

Name : Nabila Femiliana

Student ID : 1311011112

Major : Management

Faculty : Economics and Business



APPROVING

Advisor Committee

Dr. Sri Hasnawati, S.E., M.Si.
NIP 19630831 198903 2 002

Prakarsa Panjinegara, S.E., M.E.
NIP 19740501 200801 1 007

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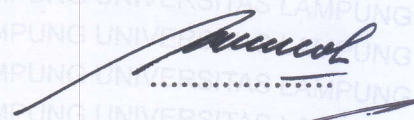
Chief of Management Department

Dr. R.R. Erlina, S.E., M.Si.
NIP 19620822 198703 2 002

VALIDATING

1. Examiner Team

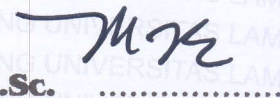
Chief Advisor : **Dr. Sri Hasnawati, S.E., M.Si.**



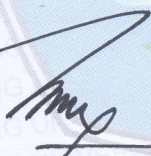
Secretary : **Prakarsa Panjinegara, S.E., M.E.**



Main Examiner : **Prof. Dr. Mahatma Kufepaksi, S.E., M.Sc.**



2. Dean Faculty of Economics and Business



Prof. Dr. Satria Bangsawan, S.E., M.Si.
NIP 19610904 198703 1 001

Thesis Examination Passing Date: **January 2nd, 2019**

INDEPENDENT STATEMENT OF PLAGIARISM

The undersigned:

Name : Nabila Femiliana

Student ID : 1311011112

Faculty : Economics and Business

Thesis Title : The Influence of Generic Competitive Environmental Strategies
on Market Value in Manufacturing Companies Listed on
Indonesia Stock Exchange

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Bandar Lampung, January 2nd, 2019

Researcher



Nabila Femiliana

NPM 1311011112

BIOGRAPHY

Nabila Femiliana was born on May 16th, 1995 in Bandar Lampung, Indonesia, and became the first child of Mr. Supriadi and Mrs. Rini Krisnawati. The researcher's initial academic stage started in 2001 at TK Amarta Tani HKTI. Then, the researcher continued studying at SDN II Perumnas Way Halim until 2007, then continued to SMPN 29 Bandar Lampung until 2010. The researcher was graduated from SMA Gajah Mada Bandar Lampung in 2013.

In 2013, the researcher was accepted in Faculty of Economics and Business, the University of Lampung, through SNMPTN program. She took the international-class and majoring financial management. During her study, the researcher became an exchange student at Yokohama National University, Japan in 2014. Besides, the researcher nominated as the Best Student in Management Department (MEBSA) in 2015, she also received a prestigious scholarship from the Central Bank of Indonesia in 2016.

The researcher actively plays role in the organization. She has an experience as VP Finance and Governance at AIESEC Unila in 2016-2017 periods, which have taken her to be the Chief of Internal Audit for AIESEC Indonesia in 2017-2018 periods. Prior to joining the AIESEC, the researcher was involved in several projects of Economy English Club (EEC). Some national conferences have been followed by the researcher to improve her leadership capacity, includes Indonesia Youth Leadership Conference 2015 in Yogyakarta, National Strategic Conference 2016 in Solo, National Leadership Conference 2016 in Bandung, also National Conference held by the Ministry of State Owned Enterprises in Jakarta regarding the Resurgence Day 2018.

DEDICATION

With gratitude of all blessing that have given by Allah SWT, this thesis is dedicated to the most important people in my life, my dearest family.

Ayah Supriadi, Ibu Rini, Adek,
Umbai Destina, Pangkal Yudi, Uwo Susi, and Cicik

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“Wherever you are, be there totally”.

(Eckhart Tolle)

“If you always do what you have always done,
you will always be where you have always been”.

(T.D. Jakes)

“Indeed, it is We who bring the dead to life and record what they have
put forth and what they left behind, and all things We have enumerated
in a clear register (Lauh Mahfuzh)”.

(QS. Ya-Sin: 12)

“Do not downgrade your dream just to fit your reality.
Translate your good intentions into actual deeds.”.

(Grenville Kleiser)

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I. INTRODUCTION

A. Background

Recent years have run into a growing intensity of competition in all areas of business. The competition has improved performance standards of the company, including environmental related concerns. Small, large, for-profit, and nonprofit organizations in all industries are being staggered and challenged by the opportunities and threats arising from changes in social and environmental variables (David, 2011). The environmental challenge facing all organizations requires managers to formulate strategies that maintain, preserve, and control natural environment from the negative impact of its business activities. These issues include ozone depletion, global warming, depletion of rainforests, destruction of animal habitats, protecting endangered species, developing biodegradable products and packages, waste management, clean air, clean water, and pollution control (David, 2011).

Strategic management can be defined as the art and science of formulating, implementing, and evaluating cross-functional decisions that enable companies to achieve its objectives (David, 2011). The strategic management implies integrating management, research and development, marketing, operations, accounting, and finance to achieve organizational success. Strategic choices are manifested in companies resource allocation decision to make an effective business plan in order to achieve the objective of the companies. A strategy is an

essential part of any effective business plan (Allen and Helms, 2006). Teeratansirikool *et al.* (2013) stated that strategy is a set of decisions and actions that managers make and take to attain superior companies performance compared to competitors. In short, a strategy can be understood as the choice and commitment of the companies. A strategy must be chosen in fitting company goals and objectives to gain a competitive advantage.

In 1980, Michael Porter introduces and identifies generic types of competitive strategies which are cost leadership, differentiation, and focus strategy. Porter (2008) argues that these three business strategies can be used as a company's positioning strategy in its industry. The generic strategies can be successfully linked to performance through the use of key strategic practices (Allen and Helms, 2006). Thus, a company must be competitive to become an industry leader. Orsato (2006) argue that environmental strategies could be used to identificate specific conditions that might improve the competitiveness of the companies. Moneva *et al.* (2010) found that companies that included environmental proactive in its strategic management would obtain a competitive advantage in the mid/long-term.

The notion of environmental proactive has grown increasingly. The main focus of environmental proactive on the company's business activities. Companies has an important role in developing society and environment since there is a high volume of products and services offered to the society that contribute to giving environmental footprint. David (2011) stated that the strategies of both companies and countries are increasingly scrutinized and evaluated from a natural environment perspective. According to the International Standards Organization

(ISO), the word environment is defined as surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelation. Basically, the drivers of proactive environmental strategy is to improve standards. According to Mazurkiewicz (2010), there is a market driver for company in response to a risk associated with the social and environmental impact of business activities.

TABLE 1. MARKET DRIVER FOR SOCIAL AND ENVIRONMENTAL RESPONSIBILITY

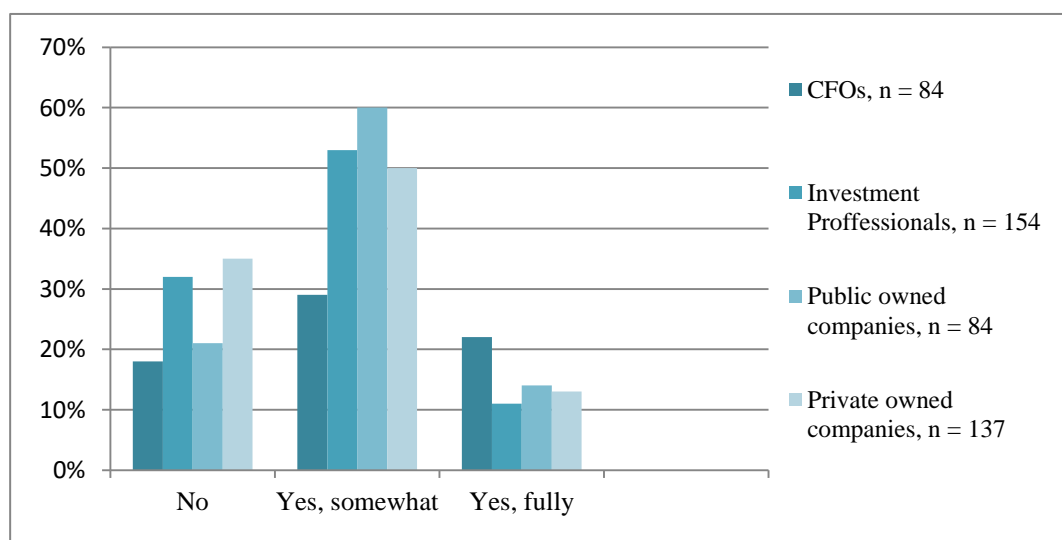
Economic drivers	Social drivers	Politic drivers
Company image/reputation	Pressure from NGO/CSOs	Improved standing with the government
Pressure from customer	Licinse to operate	Legal, regulatory drivers
Competitive advantage	Pressure from local communities	Political pressure
Improved risk management		
Pressure from business partners and investors		

Source: Mazurkiewicz, World Bank Paper (2010)

A business has no obligation other than to maximize stakeholder and shareowner's wealth (DiSegni *et al.*, 2015). Subsequently, it becomes a matter of concern and challenge for management to pursue more sustainable development and growth for companies through environmental strategy. Environmental strategy is important for the companies as its system of internal control. Companies perceive that the result of taking proactive environmental strategy can mitigate risk and build reputations with a view to enhancing over time the value of the shareholder's investment (Bonini *et al.*, 2009).

According to Bonini *et al.* (2009) on McKinsey and Company global survey about environmental, social and governance programs regarding its value-created, the survey found that 51% of 84 Chief Financial Officers (CFOs) around the world and 64% of 154 Investment Professionals said that they integrate environmental, social, and/or governance considerations into their evaluation of corporate project. Moreover, 74% of 74 public owned company and 63% of 137 private owned also agree to integrate those issues into their evaluation of the corporate project.

FIGURE 1. THE INTEGRATION OF ENVIRONMENTAL, SOCIAL, AND GOVERNANCE CONSIDERATIONS INTO EVALUATION OF CORPORATE PROJECT



Source: McKinsey and Company Global Survey (2009)

The importance of environmental proactive being potential highlights in the company's strategic plan for developing better environmental impacts. According to David (2011), preserving the environment should be a permanent part of doing business for the following reasons:

- 1) Consumer demand for environmentally safe products and packages is high.
- 2) Public opinion demanding that companies conduct business in ways that preserve the natural environment is strong.
- 3) Environmental regulations are changing rapidly and becoming more complex.
- 4) More lenders are examining the environmental liabilities of businesses seeking loans.
- 5) Many consumers, suppliers, distributors, and investors shun doing business with environmentally weak companies.
- 6) Liability suits and fines against companies having environmental problems are on the rise.

According to stakeholder theory, every organization has its unique stakeholders that influence and simultaneously are affected by its actions (Freeman, 2010). The stakeholders need to be provided for credible principles for ethical topics and the impact of the company on the natural environment. Porter (2008) noted that in many cases properly designed legal environmental standards could still trigger innovations that lower the total cost of a product and improve its value.

The environmental proactivity is an element that influences business performance, and companies are recognizing their environmental efforts as an important strategic factor (Testa and D'Amato, 2017). According to David (2011), competitive advantages can be built through a company's strengths that cannot be easily matched or imitated by competitors. Many prospective investors tend to consider an environmental proactive that implemented by the companies, thus environmental-related investments can become sources of competitive advantage

due to reasons linking the demands by stakeholders pressure from regulations and the influence of competitors to improve productivity and competitiveness of the companies. Previous research found that some categories of investors are likely to prefer to invest in the company that had a credible environmental record and market value significantly increase when company adopting more responsible stand towards environment (Wahba, 2008 and Guenster *et al.*, 2011). According to Bonini *et al.* (2009) on McKinsey and Company global survey about valuing corporate social responsibility, it stated that in the eye of investor, companies that are taking environmental proactive will having value added in improving its risk management, strengthening the competitive position and meeting society's expectation for good company behavior. Companies that include its proactive environmental management expect to get public recognition and a support on companies value creation especially in maintaining a good reputation and company brand which seen as beyond more legal compliance and promote ecologically sustainable practices.

The success of company's strategic management could be measured in financial terms. The financial measurements and stock valuation also needed for the investor in making investment decisions in the capital market. One of an approach in determining the intrinsic value of a stock is price book value (PBV). PBV is the relationship between stock market prices and book value per share. PBV also shows how far a company able to create relative company value to the amount of capital invested. The higher the PBV ratio can be interpreted the more successful the company creates value for stakeholders.

Prior literature on this subject has focused mainly on the contemporaneous effects of strategy on financial performance. In this research, we examine the market perception represented by the market value of different strategies pursued by the companies. Companies market value that represented by its stock price is being the key to remaining in the marketplace. In addition, this measurement tends to be more objective and beyond managers' control (Merchant *et al.* (2007). A basic idea of market-based measures is that return should be measured from the perspective of the stakeholders.

It was found that there are research gaps and contradictions in the strategy research in the previous literature. Porter (2008); Valipour *et al.* (2012); Asdemir *et al.* (2013); Teeratansirikool *et al.* (2013); Banker *et al.* (2014) found empirical evidence that cost leadership strategy has a positive influence on market value and financial performance. Those argue that companies pursuing cost leadership strategy has future growth opportunities and markets place a higher value. Previous literature concluded that differentiation strategy has a positive and significant influence on market value (Chauvin and Hirsche, 1993; Blundell *et al.*, 1998; and Gloria and Daniel, 2005). Conversely, prior literature by Gloria and Daniel (2005) which linking the influence between market orientation, competitive strategy, financial performance, and market value, found that the cost leadership strategy has a negative influence on the market value of the company. Testa and D'Amato (2017) found that the strategy of environmental management systems (EMS) which indicates the company pursuing a differentiation strategy does not affect the future market value of the company. Strategy for green processes which had cost in implementing sustainable and responsible projects are

not always offset by productivity gains or revenues sufficient to generate increases in profit, given that consumers are not always willing to pay a premium price to buy products or services made. Similarly, Sarumpaet (2005) also argue the same findings. These literature consider that the implementation of EMS and their related standards do not necessarily drive to more competitiveness. Thus, it seems reasonable to suppose that a company's generic strategies should be subject to deeper review.

This research also use company size as the control variable. Chauvin and Hirschey (1993) stated that the company size has the potential to obscure meaningful differences across size classes. This approach allows for a detailed consideration of the role played by the company size in order to avoid classification errors for a widely diversified company. The high number of the company size and from very a diverse line of business, control variable of size is suitable to represent the relationship among the variables. The main advantage of this measure is its accuracy to describe the result in order to control for potential differences between the company.

According to Chauvin and Hirsche (1993) found that the market value effect tends to be greater for relatively larger companies. Larger companies tends to invest more in environmental proactive because have more resources that can be devoted to support social and environmental proactive. Thus, it influence the investor's perception of future growth of the company which impacted to its market value. In contrary, Asdemir *et al.* (2013), the company size show a negative relationship to the company's value. It is potentially indicates that the market perceive that

large company have a lack of future growth opportunities compared to more dynamic and smaller counterparts. The smaller company also generally faster-growing, and more intangible asset-intensive which seen as the prospect growth for the investors.

The industry that is interesting to be observed about the implementation of environmental proactivity and its strategies is the manufacturing industry. Manufacturing industry that converting raw materials, components, or parts into finished goods, manufacturing industry is generally considered to have a closer relationship on the environment and surrounding communities.

This research is using Porter's generic competitive environmental strategies to eneric the cost leadership and differentiation strategies for yield competitive advantage. Consistent with prior research, we focus on two distinct strategies: cost leadership and differentiation. A method of Teeratansirikool *et al.* (2013) and Banker *et al.* (2014) were adopted into this research which excluded the focus strategy of Porter generic competitive strategies. The focus strategy is concentrated on a narrow product or market segments and appropriate for companies with the constrained resources that serve niche markets (Teeratansirikool *et al.*, 2013). Thus, focus strategy is not considered in this research. Thus, the aim of this research is to provide an analysis of the influence of generic competitive environmental strategies on market value in Indonesia at the manufacture sector. Based on the description above, the researcher interested in a research on the title of **“The Influence of Generic Competitive**

Environmental Strategies on Market Value in Manufacturing Companies Listed on Indonesia Stock Exchange”.

B. Problem Statement

Based on these descriptions, the researcher identified the following problem as follow:

1. Does generic competitive environmental strategies have a significant effect on market value in manufacturing companies listed on Indonesia Stock Exchange?
2. Does ISO certification have a significant effect on market value in manufacturing companies listed on Indonesia Stock Exchange?
3. Does company size have a significant effect on market value in manufacturing companies listed on Indonesia Stock Exchange?

C. Purpose of Research

1. To analyze whether generic competitive environmental strategies have a significant effect on market value in manufacturing companies listed on Indonesia Stock Exchange.
2. To analyze whether ISO certification have a significant effect on market value in manufacturing companies listed on Indonesia Stock Exchange.
3. To analyze whether company size have a significant effect on market value in manufacturing companies listed on Indonesia Stock Exchange.

D. Benefits of Research

There are several expected benefits which obtained from this research:

1. For academics, this research provides empirical evidence as reference material, especially in generic competitive environmental strategies. The research also can be a comparison to other researchers who discussed the same topics.
2. For company, this research can contribute thoughts about the importance of generic competitive environmental strategies as consideration in the company's strategic plan and policy-making to further enhance a competitive advantage.
3. For general public, this research can be used to get a further understanding of generic competitive environmental strategies and its impacts on market value.

II. LITERATURE REVIEW, FRAMEWORK, AND HYPOTHESIS

A. Literature Review

1. Legitimacy Theory

Legitimacy theory becomes one of the most cited theories within the social and environmentally proactive action related. The theory explains that companies and organizations in carrying out activities must be in accordance with the value system owned by the social or community and can be accepted by external parties. The legitimacy of the companies can be seen as something that society gives to the companies and what the companies wants from society, it has the role of explaining the companies behavior in implementing voluntary social and environmentally proactive.

According to legitimacy theory, social perceptions of companies activities are reported in accordance with the expectations of society. Companies are required to always take care of and respect the surrounding of social conditions, which means have to behave ethically. Companies must adjust their strategy and behavior to its surrounding community, then the companies can continue its business and accepted by society. A distinction between corporate values and social values, the legitimacy of the companies will be in a threatened position. The difference between corporate values and social values called the legitimacy gap, which could affect the companies to continue its business.

2. Stakeholder Theory

The stakeholder theory is commonly used in strategic management for a stakeholder approach. Freeman (2010) defines stakeholder as any group or individual who can affect or is affected by the achievement of the organization's objectives. The theory focuses on these relationships in terms of processes and results for the companies and the stakeholders.

Stakeholder theory determines that stakeholders need to be managed in order to further company interest, which will improve company's ability to create value and achieve competitive advantage (Freeman, 2010). The more important the stakeholder to the company, the greater effort placed on managing the relationship. The concept of stakeholder theory is to pursuing strict accountability to the owners of capital, the wealth created is sufficient to meet any social responsibilities. Thus, stakeholder theory has support corporate environmental proactive, social, and ethical reporting which viewed as a function of the companies economic performance, a strategic posture towards environmental proactive, and the intensity of stakeholder pressure. Social and environmentally proactive is then seen as a communication between companies and stakeholders.

3. Business Strategy

The increasing of public concern for the environment is influencing the way of business operates along with the importance of environmental issues that considered in terms of business risk. Environmental proactive which had been taken by the companies is aimed to saves the natural resources and creates an

environment with impact controlled. The strategy of the company may differ even though they are in the same competitive context.

The strategy can be understood as the choice and commitment of the companies. Companies faces a number of strategic options when it responds to environmental proactive. Environmental proactive play an increasing part in the business strategy as a matter of deciding which business as a whole should be in and determining the overall scope and mission of the entire organization. The strategies also to determine the goals of the companies and to generate plans designed to achieve the goals.

4. The Generic Competitive Environmental Strategies

Since the early 1980s, Michael Porter's strategic typology has been one of the most widely accepted methods of discussing, categorizing, and selecting company strategies (Allen and Helms, 2006). Porter generic competitive strategies classified into generic types; differentiation strategy, cost leadership strategy, and focus strategy. The focus strategy of Porter generic competitive strategies excluded from this research. The reason of doing so because focus strategy is concentrated on a narrow product or market segments and are appropriate for companies with the constrained resources that serve niche markets (Teeratansirikool *et al.*, 2013 and Banker *et al.*, 2014).

A company must be able to transform the environmental investments into a source of competitive advantage. Porter (2008) developed a framework that outlines how companies might choose a business strategy in order to compete effectively. Akan *et al.* (2006) stated that by implementing one of these generic competitive

strategies, company will have a competitive advantage and yields above average industry return. An environmental proactive is potentially beneficial to companies. According to DiSegni *et al.* (2015), consumers are increasingly considering social and environmental criteria in their buying decisions, a growing share of private and institutional investors are making investment decisions based on social screening services, and governments around the world are implementing stricter environmental and social policies. Therefore, higher environmental proactive levels result in a corporate value increase and increase the companies reputation which impacting to a higher market value of the company. A company could obtain a competitive advantage by selling a product with lower cost or could use differentiation strategies to create unique features within the products or services.

FIGURE 2. GENERIC COMPETITIVE ENVIRONMENTAL STRATEGIES

Cost Leadership	1: Eco-Efficiency	4 : Environmental Cost Leadership	Competitive Advantage
	2: Beyond Compliance Leadership	3: Eco-Branding	
Organizational Process		Product and Services	
Competitive Focus			

Source: Michael Porter (2008)

a. Cost Leadership Strategy

A company that follows cost leadership strategy are more likely to focus on developing the process that maximizes operational efficiencies (Banker *et al.*, 2014). Valipour *et al.* (2012) stated that the purpose of cost leadership strategy is the company's low-cost products offers in an industry. In pursues the competitive

advantage with cost leadership strategy, companies might use eco-efficiency and environmental cost leadership. Companies that follow the cost leadership strategy are likely to make significant investments in fixed assets in order to achieve economies of scale (Banker *et al.*, 2014).

The eco-efficiency means to transform cost into profits in its organizational process, which aims to develop organizational processes to maximize operational efficiencies. Banker *et al.* (2014) stated that operational efficiency can be met through assets use and employee productivity. A company will be able to achieve eco-efficient use through its assets use, using the ratio of sales to plant and equipment (Banker *et al.*, 2014). An efficient operational process perceived that the companies can maximize the efficiencies through the uses of assets which is plant and equipment that leads to its sales. According to Orsato (2006), the eco-efficiency practice could reduce the cost and generate a level of saving for companies, increases in process yields, and better utilization of products because of an efficient process, while reducing the environmental footprint of its business process.

Further, the main dimension of environmental cost leadership strategy is efficiency can be through process improvements and new technology, economies of scale. Orsato (2006) argued that cost leadership strategy aims to minimize the cost of goods sold to sales in order to increase the gross margin. Banker *et al.* (2014) stated that the ratio of sales on capital expenditure on property, plant, and equipment also used to assess how operational process in achieving a higher sales revenue. Porter (2008) noted that applying the business strategy of environmental

cost leadership may help companies to gain a low cost position which offers companies a defense against competitors.

Banker *et al.* (2014) stated that companies follow a cost leadership strategy are more likely to make investments in capital expenditures in order to achieve economies of scale. According to Akan *et al.* (2006), there are ways to achieve cost leadership strategy such as mass production, mass distribution, economies of scale, technology, product design, input cost, capacity utilization of resources, and access to raw materials. Valipour *et al.* (2012) and Asdemir *et al.* (2013) stated that cost leadership may be achieved through the large volume manufacturing utilizing economies of scale, process improvements, cost minimization, total quality management, benchmarking, overhead control, etc.

b. Differentiation Strategy

Companies that pursuing a differentiation strategy will invest in a variety of activities such as advertising, promotions, customer service, and other related activities in order to differentiate themselves from competitors (Banker *et al.*, 2013). In a differentiation strategy, the company focuses its efforts on providing a unique product or service, since the product or service is unique, this strategy provides high customer loyalty. Akan *et al.* (2006) argue that differentiation strategy fulfills a customer need and involves superior value and uniquely tailoring the product or service to the customer through product quality, features, or after-sale support and service.

In the organizational process, the company might use beyond compliance leadership strategy, which performs in moving towards more demanding issues.

Orsato (2006) stated that in improving its business activities of environmental management, companies also want to be acknowledged their efforts to the general public. Companies that pursues beyond compliance leadership tends to invest in product differentiation, advertising, and promotions and create a unique perception superior to its competitors. Thus, companies image could influence a positive public opinion about organizational practices.

There are also eco-branding in differentiation strategy. This type of strategy aims to provide something unique that valuable to customers. Eco-branding strategy offers innovative products and services through research and development (R&D). Banker *et al.* (2014) found that R&D allows companies to build technological capabilities which are viewable as one of the most important sources of sustainable competitive advantage. It requires the development of goods and services by relying on customer loyalty to the brand. According to Banker *et al.* (2014), a higher allocation of resources to marketing and research and development indicates companies wants to offers high quality and innovative products and services and create unique perception superior to its competitors. Akan *et al.* (2006) identified that companies which pursues differentiation strategy will concern on these things:

- 1) innovation in marketing technology and methods;
- 2) fostering innovation and creativity;
- 3) focus on building high market share.

5. **ISO Certification**

ISO certification is a set of standards adopted by thousands of companies worldwide. This research used ISO 14000 series of standards as it offers a universal technical standard for environmental compliance. ISO 14000 series of standards is to certify to company constituencies that they are conducting business in an environmentally friendly manner. It is concerns the extent to which the companies minimizes harmful effects on the environment caused by its business activities. The ISO 14000 series of standards also used to monitors and improves company's environmental proactive. Included in the ISO 14000 series are the ISO 14001 standards in fields such as environmental auditing, environmental performance evaluation, environmental labeling, and life-cycle assessment.

These standards are voluntary because ISO has no legal authority to enforce their implementation (David, 2011). Companies obtaining ISO 14000 series of standard or having some eco-labeled products can eventually be the best way of pursuing competitive advantage. Orsanto (2006) stated that ISO movement highlighted the influence organizational processes exert on the overall competitiveness of the company. Companies that continuous improving its organizational processes have improved the quality of products and services through identifying the main sources of quality problems, which reducing trade-offs between cost and quality. Adopting ISO certification which enhanced the quality because it minimized harmful effect of business activities and reduced environmental footprints that also reducing cost at the same time have influenced the competitiveness of the companies which leads to a better chance to succeed in the market.

Furthermore, the consumers appreciate the company that do more than is legally required to be socially responsible. In addition, ISO certification shown an environmental commitment of the company which affects its value in the market (Wahba, 2008). ISO certification positively can be seen as support evidence for the importance of corporate environmental responsibility as a valuable and rare resource that can be exploited to create competitive advantages. Thus, companies pursues ISO certification involve a significant investment and important modifications of manufacturing processes in order to reduce pollution and energy consumption and/or to use renewable sources of energy (Ballester *et al.*, 2017). Hence, ISO certification is associated with more objective measures of organizational practices.

6. Market Value

The success of strategic management decisions to lead competitive advantage could be measured in the market value of a company. Asdemir *et al.* (2013) used market value as a measure of a company's market (or stock price based) performance and future growth opportunities. Majid and Benazir (2015) stated that market value as important information and a significant factor for investor and stakeholders for investment decision making. The market value helps to assess the financial well-being of the company activities and become an important view and highlight for the stakeholder to see long term sustainability of the company. Market value ratios measure the market's perception of the future earning power of a company, as reflected in the stock share prices. It reflects shareholder valuation of all aspects of past performance and future performance expectations of the company.

Majid and Benazir (2015) argue that the investor usually used price book value (PBV) to indicate the market trust of a company's future prospects and indicate high stakeholder prosperity. PBV can be interpreted as a result of a comparison between stock price and book value per share. Another related indicator is the book value per share, the ratio of capital (total equity) to the number of shares outstanding. PBV ratio also used to distinguish where the stock price is reasonable, too high (overvalued), or too low (undervalued). Thus, this research used market value proxied by price book value (PBV) ratio.

7. Company Size

Such categories of investors are likely to prefer to invest in the company that had a credible environmental record (Wahba, 2008). There are size advantage exist in company that tends to invest more in such environmental strategies. Chauvin and Hirsche (1993) found that the market value effect tends to be greater for relatively larger companies that invests more in research and development (R&D). This finding shows that larger companies tends to invest more in environmental proactive because larger companies may have more resources that can be devoted to support social and environmental proactive. Research by Sarumpaet (2005) found that big companies can afford to invest in more environmentally friendly technology and management.

Chauvin and Hirschey (1993) stated that the company size has the potential to obscure meaningful differences across size classes. This approach allows for a detailed consideration of the role played by the company size in order to avoid classification errors for a widely diversified company. The high number of the

company size and from very a diverse line of business, control variable of size is suitable to represent the relationship among the variables. The main advantage of this measure is its accuracy to describe the result in order to control for potential differences between the company.

B. Previous Research

This research will examine the influence of the generic competitive environmental strategies on market value. This research is conducted based on previous studies which had a diverse and various results, as presented in the following table:

TABLE 2. SUMMARY OF PREVIOUS RESEARCH

No	Researcher	Title	Variable	Result
1	Chauvin, Keith W. and Mark Hirschey. 1993.	Advertising, R&D Expenditures and the Market Value of the Firm	Dependent (Y): Tobin Q Independent (X): Advertising RnD Expenditure Control: Cash flow Growth Risk Market Share	Advertising and R&D expenditures have consistently large, positive influences on the market value of the company. Like information on current cash flows, data on advertising and R&D spending appear to help investors form expectations concerning the size and variability of future cash flows. As a result, spending on advertising and R&D can be viewed as a form of investment in intangible assets with predictably positive effects on future cash flows.
2	Blundell, R., R. Griffith & J. V. Reenen. 1999.	Market Share, Market Value and Innovation in a Panel of British Manufacturing	Dependent (Y): Market share Market value Independent (X): Innovation	The innovative firms have higher future growth opportunities than the non-innovative ones. Market value is on average larger for high market share firms.

TABLE 2. SUMMARY OF PREVIOUS RESEARCH (CONTINUED)

3	Asdemir, O., G. D. Fernando & A. Tripathy. 2013.	Market Perception of Firm Strategy	Dependent (Y): Tobin Q Abnormal market returns Independent (X): Cost leadership Differentiation	Markets place a positive value on company successfully pursuing either a cost leadership or a differentiation strategy; moreover, markets place a higher value on company pursuing a differentiation strategy compared to a cost leadership strategy.
4	Banker, R. D., R. Mashruwala & A. Tripathy. 2014.	Does a Differentiation Strategy Lead to More Sustainable Financial Performance than a Cost Leadership Strategy?	Dependent (Y): ROA ROE ROS Independent (X): Cost Leadership Strategy 1. SALES/CAPEX 2. SALES/P&E 3. EMPL/ASSETS Differentiation Strategy 1. SG&A/SALES 2. R&D/SALES 3. SALES/COGS	Both cost leadership and differentiation strategy have a positive impact on contemporaneous performance. The differentiation strategy allows a firm to sustain its current performance in the future to a greater extent than a cost leadership strategy. The differentiation strategy is also associated with greater systematic risk and more unstable performance.
5	Gloria and Daniel. 2005.	Market Orientation, Competitive Strategy and Firm Performance: An Empirical Study of Chinese Firms	Dependent (Y): Market performance - sales growth - market share - new product success Financial performance - ROA - ROI Independent (X): Differentiation Cost leadership Quality enhancement	Company that place the highest priority on profitable creation & maintain superior value (differentiation strategy) has significantly positive impact on market and financial performance. Cost leadership strategy has negative effects on market performance. Quality enhancement strategy has positive effects.

TABLE 2. SUMMARY OF PREVIOUS RESEARCH (CONTINUED)

6	Testa, Mario., D'Amato, Antonio (2017)	The Relationship between Environmental Responsibility and Firm Performance	<p>Dependent (Y):</p> <p>1. EBITDA to Total Assets ratio</p> <p>2. Price to Book Ratio of equity</p> <p>Independent (X):</p> <p>EMS on ISO 14001 standards</p>	<p>Environmental management system on ISO 14001 standards does not affect future market value (presented by PBV).</p> <p>Strategy for green processes which had cost in implementing sustainable & responsible projects are not always offset by productivity gains or revenues sufficient to generate increases in profit, given that consumers are not always willing to pay a premium price to buy products or services made.</p>
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Source: Journals, processed.

C. The Conceptual Framework

The framework that describes the relationship between the generic competitive environmental strategies on market value that is shown in the following figure:

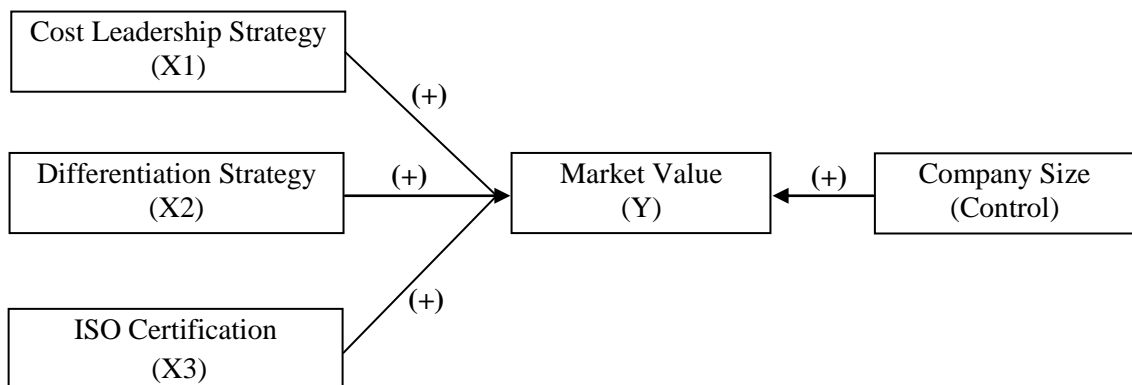
FIGURE 3. CONCEPTUAL FRAMEWORK

Figure 3 below shows the relationship variables examined in this research, which is the effect of independent variables X_1 : cost leadership strategy, X_2 : differentiation strategy, X_3 : ISO certification and control variable: company size on the dependent variable Y : market value proxied by price book value (PBV) ratio.

D. Hypothesis Development

The hypothesis is a temporary answer to the formulation of the problem that remains to be verifiable through research. Guenster *et al.* (2011) confirm that a higher levels of environmentally proactive associated with a higher market value. According to Porter (2008), a company that chooses and pursues its best strategy will be in a position to effectively deal with the competitive forces that determine success within an industry.

Companies adopting the cost leadership strategy aim to increase market share based on creating a low-cost position relative to their peers (Banker *et al.*, 2014). Gloria and Daniel (2005) stated that market-oriented company understands that lowering the buyer's cost/price or quality ratio is an important factor in creating superior customer value. Valipour *et al.* (2012) found on the optimum model, cost leadership strategy has a positive and a significant influence on market value of company. A similar result was also presented by Allen and Helms (2006) that cost leadership strategy show lower prices lead to a higher demand and, therefore, to a larger market value. Asdemir *et al.* (2013) proved that the market places a positive value on company pursuing a cost leadership strategy. Cost leadership strategy that provides low priced products could catch the attention of a wider market, this practice helped the company improve its market value (Valipour *et al.*, 2012 and Asdemir *et al.*, 2013).

According to Blundell *et al.* (1998), differentiation strategy generates a higher value and shows future growth opportunities. Research by Ho *et al.* (2005) found that companies spending on innovation, marketing, research and development

(R&D), and advertising expense respectively yield positive returns in terms of share price performance. A certain barrier exist on its unique advantages that can not be copied and more difficult for rivals to overcome, furthermore, differentiation strategy that provides more competitive and unique products and services had high brand loyalty because there is insulation against competitive rivalry which had lower sensitivity to price. Gloria and Daniel (2005) stated that differentiation strategy places the highest priority on maintaining superior value to customer needs, thus market positioned more value to differentiation strategy. Blundell *et al.* (1998), present the evidences that the innovative company with high research and development (R&D) intensity which indicates company pursues differentiation strategy, show that have a higher future growth opportunities than the non-innovative ones, so the possibilities of excessive stock return are high either, the higher stock return leads to the higher market value perceived by stakeholder. Investment in research and development (R&D) is contributing to the long term growth of the company (Ho *et al.*, 2005), furthermore, innovations, advertising, and R&D expenditures are seen as a forward-looking perspective of stock market investors (Chauvin and Hirsche, 1993).

Ballester *et al.* (2017), Orsato (2006), and Sarumpaet (2005) argue that there is a positive effect of organizational practice standardization such as ISO certification to company. They found that ISO certification has the influence organizational processes, being more efficient, and lowering the cost of quality, thus increasing productivity. These exert on the overall competitiveness of the company thus improve stakeholder's image. Wahba (2008) found empirical evidence that ISO certification exerts a positive and significant impact on the market value of

company comparing to company without certification. Meanwhile, Testa and D'Amato (2017) found that environmental management system on ISO 14001 standards has no effects to future market value (presented by PBV). They consider that the implementation of a management system and their related standards do not necessarily drive to more competitiveness.

Chauvin and Hirschey (1993); Gloria and Daniel (2005) found that size advantage has a positive relation on market value. As Chauvin and Hirschey (1993) reported, a leading company (20 largest companies) of their sample devoted an average of 20,44% of sales to advertising and devoted 41,6% of sales to R&D. It shows that differentiation strategy which tends to invest more in advertising and R&D relatively more profitable for a larger company. This means the investment and expense decision of a company is influenced by their size. Meanwhile, Asdemir *et al.* (2013) proved that company size proxied by total assets has a negative relationship on market value. The result potentially indicates the market's perception of lack of future growth opportunities for the large older company compared to their more dynamic younger and smaller counterparts. Therefore, hypothesis in this research is strengthened by previous research, the researcher concludes:

1. **H₀** : The cost leadership strategy, the differentiation strategy, the ISO certification, and the company size does not have a significant effect on market value in manufacturing companies listed on Indonesia Stock Exchange.

2. **H_a** : The cost leadership strategy, the differentiation strategy, the ISO certification, and the company size have a significant effect on market value in manufacturing companies listed on Indonesia Stock Exchange.

III. RESEARCH METHODS

A. Research Design

The research design is used as a guideline in conducting the research process. Based on the characteristics of the problems examined, this research uses a correlational study. According to F. Hair *et al.* (2008) at research method's book, a correlational study is a research design which aims to determine whether there is an association between two or more variables, as well as how far the correlation exists between those variables. This type of research emphasizes the determination of the level of relationship that can be used to make predictions.

B. Research Variable

In this research, the variables consist of three variables that would explain a relationship between the generic competitive environmental strategies towards market value in manufacturing companies listed on Indonesia Stock Exchange. The variables involved in this research are grouped into:

1. The Dependent Variable

The dependent variable is a variable that influenced or affected by the independent variables. The dependent variable (Y) in this research is presented by the market value. This research is using price book value (PBV) to measure the market value. The PBV ratio is useful for assessing capital-intensive businesses, as it captures market evaluation relative to the potential company growth over its

assets in place (Testa and D'Amato, 2017) thus, it reflects expected future gains.

The formula to calculate PBV adopted from Majid and Benazir (2015) as follows:

$$PBV = \frac{\text{Market price per share}}{\text{Book value of equity}}$$

2. The Independent Variable

The independent variable are variables that affect to other variables. The independent variable (X) in this research are the generic competitive environmental strategies, namely cost leadership strategy, differentiation strategy and ISO certification. Thus, the independent variables in this research are cost leadership strategy (X_1), differentiation strategy (X_2), and ISO certification (X_3).

The cost leadership strategy is a set of strategy to obtain the competitive advantage by selling products or services with the lowest cost in its industry (Porter, 2008). This strategy more likely to focus on developing a process that maximizes operational efficiencies through investing in property, plant, and equipment. Thus, the measurement to determine a company pursue cost leadership strategy by using SALES/P&E. This measurement described in the operational variable.

According to Porter (2008), the differentiation strategy is a set of strategy to create unique features for its products or its services. This strategy will invest in a variety of activities such as advertising, promotions, customer service, and other related activities in order to differentiate themselves from competitors (Banker *et al.*, 2013). Thus, measurements to determine a company pursue differentiation

strategy by using (SG&A + R&D)/SALES. This measurement described in the operational variable.

ISO certification variable is less affected by the subjectivity of the researcher (Testa and D'Amato, 2017). The assessment that used to assess environmental tools of the company is International Standard Organization (ISO) series of certification such as ISO 14001 series for environmental management system, 14020 series for environmental product label, ISO 14040 series for lifecycle assessment, ISO 14067 for the quantification and communication of the carbon footprint, and ISO 14046 related to water footprint assessment.

3. The Control Variable

The control variable is a variable that can explain the phenomenon to the optimum for other variables which also can affect the dependent variable. Company size variable is less affected by the subjectivity of the researcher (Testa and D'Amato, 2017). Thus, the company size used as the control variable which aims to have higher statistical power.

C. Operational Variable

1. The Dependent Variable

The PBV calculates the ratio of the market value of equity to the book value of equity at the end of the fiscal year. This ratio show the comparison between stock market prices and equity book value. The formula to calculate PBV adopted from Majid and Benazir (2015) as follows:

$$PBV = \frac{\text{Market price per share}}{\text{Book value of equity}}$$

Formula to calculate book value of equity:

$$BV = \frac{\text{Total equity}}{\text{Number of share outstanding}}$$

2. **The Independent Variable**

This research is adopting a calculation method from Banker *et al.* (2014) to measure cost leadership strategy and differentiation strategy:

a. Cost Leadership Strategy

$$X_1 = \frac{\text{Sales}}{\text{P\&E}}$$

It is ratio of net sales to net book value of plant and equipment. Company which allow cost leadership strategy are more likely developing a processes that maximizes operational efficiency to achieve higher sales revenue from every dollar or rupiah invested in property, plant, and equipment (Banker *et al.*, 2014). This ratio indicates how efficient company uses its assets.

b. Differentiation Strategy

$$X_2 = \frac{(\text{SG\&A}) + (\text{R\&D})}{\text{Sales}}$$

This is a ratio of selling, general, and administrative expenses plus research and development expenses to net sales. This ratio captures the company's investment in activities such as advertising, promotions, product distribution, customer service, and other related activities to differentiate its products and services offering from its competitors (Banker *et al.*, 2014). This ratio also captures the

company's propensity to spend on research and development in order to offer high quality and innovative products and services.

c. **ISO Certification**

This research used a dummy variable that takes the value 1 if company *i* in the year *t* hold an ISO 14000 series of certification such as ISO 14020, ISO 14040 and so on, and 0 otherwise. According to Testa and D'Amato (2017), this variable is the most significant standards in the management and assessment of environmental issues as system standards also less affected by the subjectivity of the researcher. This research took a data of ISO 14000 series of certification from the annual report of the company.

3. The Control Variable

a. **Company Size**

The company size can be categorized according to their size that can be measured by market capitalization, total assets, or total sales. The present research used total assets as the proxy for the company size.

$$SIZE = \ln \text{ Total assets}$$

TABLE 3. DESCRIPTION OF THE VARIABLES

Variables	Proxies	Calculation
Market Value	Price book value ratio	Market price per share / Book value of equity
Business Strategies	Cost leadership strategy	Sales / P&E
	Differentiation strategy	(SG&A + R&D) / Sales
ISO Certification	ISO certification	Dummy, 1 for the company have ISO 14000 series of certification and 0 otherwise
Size	Size of the company	A logarithm function of total assets

D. Population and Sampling Research

1. Population

The population refers to the entire group of people or things of interest that the researcher wants to investigate. A population of manufacturing companies listed on Indonesia Stock Exchange has been selected for the empirical analysis. On the basis of consideration, manufacturing company as the industry that converting raw materials, components, or parts into finished goods, has a direct impact on the environment and surrounding communities. Furthermore, manufacturing companies have more legal regulations and environmental laws. Additionally, the environmental indicators are from the year 2014 to 2017 period. The year of 2014 to 2017 period is selected as the time lapse of this research, which aims to ensure the robustness of the result.

2. Sampling

The sample was taken from population that uses purposive sampling method in order to ensure the representativeness of the sample and minimizes any possible bias. Purposive sampling refers to obtaining information from specific target groups. The criteria for taking the sample as follows:

1. The company listed on Indonesia Stock Exchange during 2014 – 2017.
2. The company has presented the complete annual report and financial report, covering the time period 2014 – 2017.
3. The sample of the company has the needed information during the period in this research.

The data used in the research were collected from the annual reports and the financial reports of the official bulletins of the Indonesia Stock Exchange and

from the company's official website. Based on the criteria outlined above, then we obtained all of the population as the sample and shown in the following table:

TABLE 4. RESEARCH SAMPLE

Sample Characteristics	Emiten
The manufacturing company that listed on Indonesia Stock Exchange	145
The manufacturing company not listed in consecutive years from 2014 to 2017	(26)
Incomplete financial statements and annual report for the year of observation consecutive years from 2014 to 2017	(6)
Total Research Sample	113
Total Observations	452

Based on the sample obtained, the type of data analyzed in this research is the type of panel data.

E. Data Collection

The collection of such data in this research uses secondary data. Secondary data is a data obtained and recorded by other parties.

1. The Research Literature

This research is intended to obtain foundations to support the theory, as well as references, consists of journals, books, and other sources that are related to the problems examined.

2. The Field Research

The field research is data collection obtained from the websites related to the topic of this research. The documentation methods which collecting and recording data needed were used in this research.

F. Analysis Tools

1. Descriptive Analysis

Descriptive analysis used to provide a qualitative overview of the problems examined associated with theories or approaches relating to generic competitive environmental strategies and company's market value.

2. Multiple Linear Regression Analysis

The analytical tool used in this research using multivariate analysis with multiple linear regression. Multiple linear regression analysis aims to describe the strength of the relationship between the independent variables and the dependent variable.

The multiple linear regression model as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Description:

- Y : PBV
- X₁ : Cost leadership strategy
- X₂ : Differentiation strategy
- X₃ : ISO certification
- X₄ : Company size
- α : Constanta
- β : Coefficient of Regression
- ε : Error

This research uses an Eviews 9.0 software to do the multiple regression models for panel data, where there are three approaches on the panel data, that are:

a. Common Effect Model

This approach is the simplest approach with two other approaches. With this approach, we can not see the differences between individuals and differences over time because the intercept and slope of the model are the same (Widarjono, 2013).

b. Fixed Effect Model

On this approach, the panel data model has an intercept which may vary for each individual and the time is each cross-section unit is fixed in time series (Widarjono, 2013).

c. Random Effect Model

On this approach, the difference between time and individuals are accommodated by error. Error in this approach is divided into error for the individual components, an error for the time component and composite error. Random effect model will estimate panel data where interference variables may be interconnected between time and between individuals. This approach also called Error Component Model or Generalized Least Square.

Tests were conducted to select the best estimation model used to this research, using the Chow test and the Hausman test.

- The Chow test is a test that is performed to determine whether the model used is the common effect (panel least squares) or the fixed effect. This test uses F distribution statistics, whereby:

If the value of F-statistic $> \text{sig } \alpha$: using common effect model.

If the value of F-statistic $< \text{sig } \alpha$: using fixed effect model.

- The Hausman test is a test that is performed to determine whether the model used is the fixed effect or the random effect approach. This test using chi-square distribution, whereby:

If the probability of Hausman $> \text{sig } \alpha$: using random effect model.

If the probability of Hausman $< \text{sig } \alpha$: using fixed effect model.

G. Classical Assumption Testing

A good regression model result is a test result that met and does not violate the classical assumptions. Classical assumption testing as the basis of multiple linear regression aims to avoid violations of the classical assumptions of research conducted.

1. Normality Testing

Normality testing is used to determine the normality of the error term and variable, for both independent and dependent variables, whether the data is normally spread. A good regression model is the normal distribution of data or nearly normal. This research is using Jarque-Bera to measure whether the data is normally distributed or not.

- If the significant value is $< \alpha = 0,05$ then the residual distribution is not normally distributed.
- If the significant value is $> \alpha = 0,05$ then the residual distribution is normally distributed.

2. Multicollinearity Testing

Multicollinearity testing is used to determine whether there is a correlation among each independent variable. A good regression model should have a correlation among the independent variables. This research using correlation coefficient to determine the multicollinearity testing. If the correlation coefficient is higher than 0,85 then we assume there is multicollinearity in the model (Widarjono, 2013).

3. Heteroscedasticity Testing

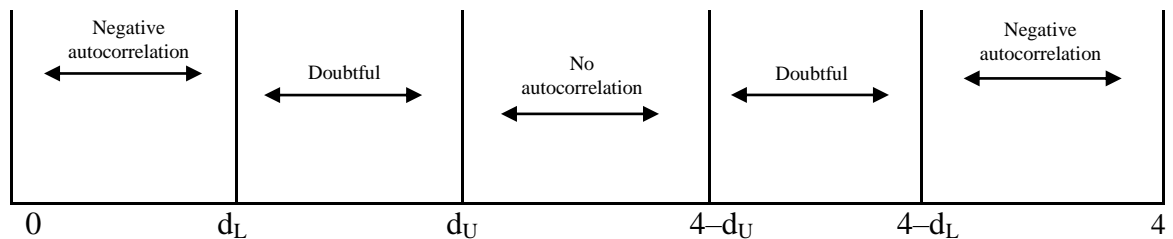
Heteroscedasticity testing aims to test whether there is inequality variance from one observation to another observation in the regression model. If the residual variance of observation to another observation remains, it called homoscedasticity, and if there is a difference it called heteroscedasticity. A good regression model means that a variance in the regression model is equal or called homoscedasticity. This research is using Glejser test with rule of thumb is if the significance probability value of each independent variable is greater than 5% (> 0.05), it is concluded that the regression model does not occur heteroscedasticity (Widarjono, 2013).

4. Autocorrelation Testing

The autocorrelation test aims to test whether there is a correlation between the intruder error in period t and period $t-1$ (previous year). If there is a correlation, it is called an autocorrelation problem. A good regression model is a regression that does not have autocorrelation. This research is using Durbin-Watson test (DW test) to examine whether there is autocorrelation or not in the regression model. The DW test is comparing the DW value with the value in the table at the level of

k (number of independent variables), n (number of sample), and α (significance level) that exist.

FIGURE 4. DECISION AREAS OF DURBIN-WASTON TEST



Source: Widarjono (2013)

The basis of decision making is, if DW test $> d_U$ and DW test $< 4 - d_U$, means that there is no autocorrelation at certain significance level (Widarjono, 2013).

H. Hypothesis Testing

1. Hypothesis Testing in Overall (F-Test)

The F statistic test is used to determine whether all the independent variables included in the regression model have a simultaneous effect of the dependent variable. In addition, the test uses additional control variables that were entered in this research which is the company size. Determining the level of significance:

- A significance level of $\alpha > 0,05$ means that there is no significant effect of the independent variables on the dependent variable simultaneously.
- A significance level of $\alpha < 0,05$ means that there is a significant effect of the independent variables on the dependent variable simultaneously.

2. **Hypothesis Testing in Partial (T-Test)**

The statistical T-test used to determine the influence of the variation of independent variables partially in explaining the dependent variable. Besides, this test also will show the value of coefficient or beta which determine how big each independent variables in explaining the dependent variable, as well as positive or negative influence based on positive or negative sign on the coefficient.

- A significance level of $\alpha > 0,05$ means that there is no significant effect of the independent variables on the dependent variable partially.
- A significance level of $\alpha < 0,05$ means that there is a significant effect of the independent variables on the dependent variable partially.

V. CONCLUSION AND SUGGESTION

A. Conclusion

This study has shown that the market value has positively influenced by the generic competitive environmental strategies. Based on the results of regression and analysis of data on the influence of generic competitive environmental strategies on market value in manufacturing companies listed on Indonesia Stock Exchange covering period 2014 – 2017, it can be concluded that:

1. Both generic competitive environmental strategies which are cost leadership strategy and differentiation strategy are significantly affect the market value in manufacturing companies listed on Indonesia Stock Exchange covering period 2014 – 2017.
2. The ISO certification is does not significantly affect the market value in the first regression. Meanwhile, there is a significant effect between ISO certification and market value when we excluded the control variable (company size).
3. Regarding the company size as control variable, it is statistically have significant effect on market value. This means that the market value effect tends to be greater for relatively larger companies because they tend to invest more in environmental proactive, then it is influence the investor's perception of future growth of the company which impacted to its market value.

4. Based on the regression, the variable that have the dominant influence on the market value is the cost leadership strategy.
5. So, the generic competitive environmental strategies are important because it affects the market value and consequently the company's value. By having the key strategic practice of proactive environmental as the major effect in this study, the manufacturing companies has competitive advantage to obtain the competitiveness of the companies which seen from the market value. Finally, the relationship between generic competitive environmental strategies would be affected by industry differences.
6. This study supporting the international review of business research papers of Asdemir *et al.* (2013) that generic competitive environmental strategies is having the particular importance role to the market value.
7. This study also support the legitimacy theory and the stakeholder theory. Company must adjust their strategy and behavior to its surrounding community, means to behave ethically in reducing the environmental footprint of its business activities, then company can continue its business and accepted by society. Furthermore, through environmental proactive, this generic environmental strategies seen as the commitment of the companies in pursuing strict accountability which will improve company's ability to create value and achieve competitive advantage to the owners of capital and to the general public.

B. Suggestion

Under the circumstances of various challenges and changes that occur all over the world such as rising temperatures, increasing scarcity of water, mounting hygiene and sanitation challenges, etc, the current business must be reducing an environmental footprint and increasing a positive social impact.

1. The companies that pursue cost leadership strategy must always improving its organizational process through significant investments in fixed assets in order to maximizes operational efficiencies and achieve economies of scale while decreasing the environmental footprint.
2. For companies that pursue differentiation strategy, the intensity of R&D, advertising, promotions, customer service, and other related activities need to be maximized in order to provide products and services that more various and unique, thus it can differentiate themselves from competitors.
3. ISO certification is needed for manufacturing companies to provide an organization with the capability to measure and monitor the environmental aspects of its operations, with additional notes that there must have a good synergies among the different systems, which in turn makes the integrated management system more efficient. Besides, market values of company significantly increase when they adopt a more responsible stand towards environment.

C. Limitation Research

The limitation of this research is that the sample only focus on manufacturing companies listed on Indonesia Stock Exchange. For other researcher who will do further research about generic competitive environmental strategies and market value, it is advised to extend the study period and have bigger sample in order to explore the complexity of the relationship.

In addition, further research need to make a clear specification for the calculation of cost leadership strategy, whether only use productive equipment or the total equipment of the company. Finally, in subsequent studies it is advised to combine the secondary data from company's financial and annual report with primary data through questionnaire distributed to company managers in order to provide quantifiable information on how extensively companies used various strategies.

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