European Journal of Molecular & Clinical Medicine
ISSN 2515-8260 Volume 07, Issue 08, 2020

"The Concept Of Corporate Environmental Performance (CEP) – A Review Of Literature"

Acharya Supriya Pavithran[1], Dr. Baby Niviya Feston[2], Dr. C. Nagadeepa[3]

[1]Research Scholar,
[2]Associate Professor, School of Commerce and Management, Garden City University, Bangalore
[3]Assistant Professor, Department of Commerce, Kristhu Jayanti Autonomous College, Bangalore.

ABSTRACT
Environmental responsibility is the reason for the survival of many species in the world. The humans are not apart from this, as they are the ones who have to take this responsibility to the full extent. What we learn from our mistakes, help us to evolve and respect the decisions we make. The same applies to the firms, whose sole responsibility is not restricted to earning profit but also to give its share of that profit towards serving the environment. This attempt has resulted in sanctioning by the Government, the Section 135 of the Companies Act, 2013 clearly stating to set aside up to 2% of its capital investment for Corporate Environmental Responsibility (CER). While brownfield projects would be required to earmark 0.125% to 1% of additional capital investment for CER purposes, the slab for green-field projects ranges from 0.25% to 2% of the capital investment ([17]). This study thus attempts to unravel the theories, variables adopted and adapted by the researcher in their study toward environmental performance in the nature of firms' financial performance. The previous studies have resulted in multiple relationships that the environmental performance has with the firms' financial performance. They had emerged with positive, negative, mixed, or no relationship between them. The study also gives the review on the varied relationship that exists between the corporate environmental responsibility and corporate financial performance of the firm. This study provides an insight on the past studies which will help to build further research with more prominent results.

Keywords: Environmental performance, firms, relationship, financial performance.

1. INTRODUCTION:

The company can have all the requirements to make a profitable business throughout the year with its business strategy, profit maximization, optimum utilization of resources and such. The word CSR and CER has become potential strategy used to attract the best talent in this era. CER is, in many ways related to CSR, as both of them influence environmental protection. CER, however, is strictly about consideration of environmental implications and protection within corporate strategy. The main elements that cover the environmental implications of a company's operations are: a) Eliminate waste and emissions, b) Maximize the efficient use of resources and productivity, c) Minimize activities that might impair the enjoyment of resources by future generations. Over the past years many authors have diagnosed the relationship that exists between the environment and the financial performance of the firm. The previous studies have revealed two approaches on the literature: a) Cost-concerned approach and; b) Value- creation approach. They had emerged with positive, negative, mixed, or no relationship between them. The study also gives the review on the varied relationship that exists between the corporate environmental responsibility and corporate financial performance of the firm. This study provides an insight on the past studies which will help to build further research with more prominent results.

1.1 Corporate Environmental Responsibility, Sustainability and Corporate Environmental Performance:

Corporate Environment Responsibility (CER) refers to company's duties to abstain from damaging natural environment. The term derives from Corporate Social Responsibility (CSR). The World Commission on Environment published the Brundtland Report in 1987 to address sustainable development. Since then managers, scholars and business owners have tried to determine why and how big corporations should incorporate environmental aspects into their own policies. ISO 14063 is the international standard for environmental management and communication.

Brundtland (1987) defined sustainability as "meeting the needs of the present generations without compromising the ability of future generations to meet their own needs." The tripe bottom line term was developed by Elkington (1998) to emphasis on the three aspects – profits(economic), people(social) and planet(environmental). According to Global Reporting Initiative (GRI) (2011) "environmental dimension of sustainability concerns an organisation's impacts on living and non-living natural systems, including ecosystems, land, air and water". GRI covers performance indicators related to inputs (materials, energy, water) and outputs (emissions, effluents, waste), biodiversity, environmental certifications and expenditure.

The ISO 14063 defines Corporate Environmental Performance (CEP) as "the results of an organisation's management of its environmental aspects". The concept of CEP was first utilized by Judge and Douglas (1998) who defined it as an effectiveness of a firms' commitment to reach environmental excellence. Xie and Hayase (2007) developed a two-dimensional construct consisting of Environmental Management Performance (EMP) and Environmental Operational Performance (EOP).

2. OBJECTIVE OF THE STUDY:

This paper attempts to fulfill the following objectives:

- To provide an empirical study analysis of the previous literature on the concept of CER, sustainability and CEP.
- To understand the relationship between environmental performance and financial performance based on the related theory.
- To establish the understanding of findings, conclusions and limitations of studies related to the research through the review of the previous literature.
- To establish a gamut for future research in this area.

3. RELATED APPROACH TO THE LITERATURE REVIEW:

With the recent events that have gripped the entire nation, the soul concern of each being is to protect and preserve its living beings. The companies play a major role in its entirety. The economy has affected with a big down, wherein the culprit is humanity itself. The role play for each being is being introduced with their task from time to time, but in no vain. This can be termed as human nature or animal instinct whichever applies. The way company performs towards the environment depends upon its positive impact on environment and society. Hansen and Mowen (2007) argue that successful treatment of environmental concerns is becoming a significant competitive issue and meeting sound business objective and resolving environmental concerns are not mutually exclusive. Clarkson et al. (2011) provide empirical evidence to support this argument.

Egri and Ralston (2008) covered that Corporate Responsibility is well established international management literature and has a social and an environment aspect. Cunningham (2009) provide that significant changes in global climate and environmental conditions result in a growing public awareness of the second element of corporate responsibility, making corporate environmental responsibility an important topic for both the business world and academic literature. This research is gaining momentum from the popular approach on the literature review:

a) Cost-Concerned Approach: High environmental activities require high cost investment leading to decrease in firm earnings with decline in market value.

b) Value-Creation Approach: Green (Environmental) initiatives taken by firms provide them with an increased competitive advantage, which contributes to higher profitability for the firm. (Hassel et.al 2005)

4. LITERATURE REVIEW:

The research goal is to examine the frequency of CER research in international management journals from 2001 to 2019 and to assess its impact for future researchers in theory and practice. From the year 2001, there have been shortcomings on the number of articles based purely on CER; averaging three articles per year, the number however rose to a fair increase per year on an average. With the rejection of the Kyoto Protocol by the US the IPCC released The IPCC Third Assessment Report to assess scientific, technical and socio-economic information relevant for the understanding of climate change(). In the recent year of 2019 where Earth Day and National Cleanup Day was organized to coordinate cleanup event held in all 50 US states and US territories. This helped the research to outline the umbrella of CER and the changes it has undertaken in that specific time period, and whether or not these particular events influence the CER research.

Lockett et al. (2006) revealed that environmental concerns and ethics as one of the most popular Corporate Responsibility(CR) research issues combined with an increasing proportion theoretical papers relative to empirical studies and an overwhelming majority of quantitative studies. Egri and Ralston (2008) also noticed that an emphasis on ethics and governance more than social and environmental concerns with empirical studies outnumbering theoretical studies with a focus on wealthy, western countries. But the study lacked a balance between quantitative and qualitative studies as revealed by Lockett et al (2006). For conducting the study, a review of papers is conducted on the relationship between financial performance and environmental performance of the firms. Many researchers have used various financial performance measurements like (ROA) return on assets, (ROS)return of sales, (ROI)return on investments. In the past, researchers have found that Tobin's Q measurement gave a favourable relation to the financial performance of the firm. Many a research work has showed negative relation and at times no or mixed relation among the financial performance and environmental performance.

This study being focused on only the environmental aspect of the literature, the research and the results of the study is exclusively on CER addressing only the initial research objectives.

The environmental performance of the firm may have positive, negative, mixed or no relationship with the financial performance of the firm. It was noted that firms with high

environmental ratings had positive relationship with their financial performance (Murphy, 2002).
For better understanding the study has been designed on the basis of the relationship that exist between the financial performance and environment of the firm.

4.1 Positive Relationship:

In the past the researchers have argued the lack of the CER knowledge is one of the factors which derive a negative or no relation between the firms' attributes and the environment. The firms attributed to establish the firm's reputation with the stakeholders & customers-potential or existing.
Fuji et.al (2013) showed a significant positive relationship between financial performance and environmental performance based on CO_2 emissions. Helm (2010) found a positive relationship between employees' pride and perceived corporate reputation, and employees' job satisfaction and perceived corporate reputation.
Many researchers have attributed that stakeholder management has a positive relationship with the financial success of the corporation (Hilman & Keim, 2001). Table 1 shows the positive relation that has been researched by the past studies.

Authors	**Financial Variable**	**Environmental Variable**	**Control Variable**	**Findings**	**Further Research**
Clarkson et.al (2011)	Enterprise Value	Toxic Substances Emission	Liquidity, R&D ratio, growth, ROA, capital expenditure ratio.	The application of voluntary disclosure theory to a cross-sectional comparison of environmental disclosure may be partly unsuitable, as firms' disclosure strategies may be influenced more by internal factors than by attempts to distinguish themselves from other firms.	The application of voluntary disclosure theory to a cross-sectional comparison of environmental disclosures may be partly unsuitable, as firms disclosure strategies may be influenced more by internal factors than by attempts to distinguish themselves from other firms.
Gotschol et.al (2014)	Financial score	Environmental score	-	Green supply chain initiatives are more effective and more economically	The data is limited to only Italian firms. The data set is not suitable for a longitudinal analysis and

				sustainable than internal actions.	therefore limits the interpretability of the effect order of the reciprocal causality between green actions and economic performance.
King & Lenox (2001)	Tobin's Q	Toxic Chemicals emission	Size, capital expenditure ratio, growth, leverage, R&D ratio, regulatory stringency, permits.	A firm's attributes and different strategies for environmental improvement may moderate the apparent link.	The study should explore how underlying firm characteristics affect the relationship between relative environmental performance and financial performance.
Konar & Cohen (2001)	Tobin's Q	Toxic Chemical emission, environmental lawsuits	Replacement costs of tangible assets, market share, age of assets, capital expenditure, R&D expenditure, growth, advertising expenditure, import penetration	A positive correlation between environmental performances with the intangible assets value of the firms. The degree of these effects will differ from industry to industry with larger losses accruing to the traditionally polluting industries.	The environmental reputation is a proxy for good management.
Nakao et. al (2007)	Earnings per share Tobin's Q	Environmental management score	Growth, advertising ratio, R&D ratio, leverage, capital ratio	Information based environmental policy measures are effective to encourage the ongoing transition	This theory of two-way positive interaction appears to be only a relatively recent phenomena.

				towards a more sustainable market economy.	
Wahba (2008)	Tobin's Q	ISO 14000/1 environmental certificate	Capital investment ratio, leverage, number of employees, firm age, ownership structure, industry	A firm's capital intensity can be controlled, measured as the capital expenditure to total sales revenue ratio.	

4.2 Negative Relationship:

With every research conducted on the relation between firms' performance and environmental performance, studies have shown even negative relationship (Thornton, et.al, 2003). The lack of little or no knowledge is also responsible for the firms to ignore to contribute towards environmental performance. This has led to finding a negative impact on the firm's financial performance. Konar and Cohen (2001) showed a negative correlation between bad environmental performances with the intangible assets value of the firms. The degree of these effects will differ from industry to industry with larger losses accruing to the traditionally polluting industries. The previous studies have identified the following factors to be responsible for creating a negative impact on the financial platform by the environmental score:

- Socially irresponsible behavior of the firm towards environmental performance.
- Higher environmental costs / expenses would result in lower profitability.
- Short term investments provide immediate returns to the stakeholders. The environmental effort gives only long term benefits.
- No or minimal legal proceeding towards penalizing firms.

Table 2 shows the negative relation that has diagnosed by the various researchers.

Authors	**Financial Variable**	**Environmental Variable**	**Control Variable**	**Findings**	**Further Research**
Gracia Sanchez & Prado-Lorenzo (2012)	ROA, Market to book	Climate governance index (emission reduction)	R&D ratio, leverage, size, industry	An inverse-linear effect on firm performance by the greenhouse-gas emission effect.	It is necessary to consider other indicators of corporate performance different to the financial perspective and the impact that these factors have on value creation.
Lioui	ROA,	Environmental	R&D	A negative	The focus of the

and Sharma (2012)	Tobin's Q	strength, environmental concern	expenditure, size, leverage, ROA, year, industry	correlation between the firms' financial performance with environmental performance as investors perceive environmental initiatives as potential costs or penalties.	frame work should be extended to other indirect effects related to ECSR.
Sarkis & Cordeiro (2001)	ROS	Pollution prevention ratio, end-of-pipe ratio	Size, leverage	A negative relation exists between financial performance with the pollution prevention and end-of-pipe efficiencies which is larger and more significant for the pollution prevention efficiencies. These would be pertinent for pollution prevention approaches for long term but not for a short term performance	There is a need to conduct industry-by-industry studies that would accurately capture the variances in cleanup costs and proactivism.

4.3 Mixed or No relationship:

In certain significant study the results have showed no or mixed relationship between the financial performance and environmental performance of the firms. Horvathova (2012) showed while the effect of environmental performance on financial performance is negative for environmental performance tagged by 1 year lag, it becomes positive for 2 years lag with

Porter hypothesis in the long run. Some other research showed mixed responses with the usage of dual analysis on the part of the research (Nakao et. al 2007). In certain research work there has been no relation between environmental performance and stock prices (Deegan, 2004). Table 3 shows the case of mixed or no relation that has been concluded by the previous researchers:

Authors	**Relationship**	**Financial Variable**	**Environmental Variable**	**Control Variable**	**Findings**	**Further Research**
Cavaco & Crifo (2014)	Mixed	ROA Tobin's Q	Environmental score	Sales, total assets, debt ratio, R&D ratio, advertising ratio, industry, country, year, HR score, business behavior score	The different dimensions (HR dimensions & business behavior dimensions) of CSR should be taken into consideration for an in-depth investigation of the relationship between CSR and financial performance	The research should look into the various dimensions of CSR and deeply investigate the sub-criteria behind each broad domain.
Delmas, et.al (2013)	Mixed	Tobin's Q	Environmental processes environmental outcomes	Total assets, debt ratio, growth, capital expenditure ratio, year, industry	Processes that companies put in place to do 'good' and reduce future environmental impacts constitute one dimension, whereas actual current negative releases	Further research should examine and incorporate the social dimensions, integrating it into future analyses of CSR.

					that are 'bad' for the environment constitute a different dimension	
Earnhart & Lizal (2007)	No relation	ROA ROE ROS	Toxic substance emission	Ownership, size, turnover, asset structure, industry, total liabilities, equity, debt	Better pollution control neither improves nor undermines financial success. In other words, it gave lower costs and greater profitability for the firms	Further research should expand the time period of analysis in order to assess whether the evolution of Czech transition economy alters the link from air pollution control to financial performance.
Elsayed & Paton (2005)	Mixed	Tobin's Q ROA ROS	Environmental score of Management Today (reputation)	Size, R&D ratio, advertising ratio, industry, leverage, capital ratio	Firms invest in environmental initiatives until the point where the marginal cost of such investments equals the marginal benefit.	Further studies should not ignore the existence of firm effects which are likely to lead to incorrect inferences.
Fuji et.al (2013)	Mixed	ROA ROS Capital productivity	Environmental efficiency	Size, R&D ratio, capital ratio, capital investment	Positive relationship between financial performance and	Further research should investigate the differences

					environmental performance based on CO_2 emissions, and no relation between ROS, capital productivity with the environmental performance.	between the environmental efforts of firms in the service sector in addition to the manufacturing sector.
Gallego-Alvarez et. al (2014)	No relation	ROA	CO2 emission	Economic crisis, Kyoto protocol, sector, total assets	The companies should continue to invest in sustainable projects in order to enhance relations with their stakeholders, leading to higher economic profits.	Future research should consider the possibility of including a broader time period and the behavior of the firms before, during and after the period of economic crisis.
Horvathova (2012)	Mixed	ROA ROE	Toxic substances emission	Size, leverage, sales, industry, environmental certification	The effect of environmental performance on financial performance is negative for environmental	Future research should consider for more than one accounting period for study as the Porter hypotheses considers

					performance tagged by 1 year lag, it becomes **positive** for 2 years lag with Porter hypothesis in the long run	the results for a long run.
Lucato et. al (2017)	No relation	Gross margin, net revenues, ROS, profit	Eco-efficiency	Size	Larger the size of the company, the worst is its environmental performance as measured by their eco-efficiency level	The inclusion of an indicator that measures the environmental impact of the analysed industrial operations could present new insights that would give more density to studies performed.
Misani & Pogutz (2015)	Mixed	Tobin's Q	Carbon emission reduction, carbon performance score	Country, year, industry, size, corporate governance score, patents, R&D ratio, leverage	Firms do not generally internalize the costs of poor carbon performance, but those stand out in both environmental outcomes and processes achieve the financial	Further research should consider the effects of specific regulatory contexts in more depth, as the CO2 emissions costs are affected on historical and institutional conditions.

					benefits	
Muhammad et. al (2015)	Mixed	ROA Tobin's Q	Toxic substances emission	Size, leverage, current ratio, dividend yield, environmental awards, environmental management team, environmental supply chain management	A **positive** relationship between environmental performance during the pre-financial crisis period (2001-2007) and no relationship between environmental performance and financial performance during the financial crisis (2008-2010)	The management should seek resource productivity model rather than the pollution control model as environmental impact for further research. This proxy is given a way for further detailed research.
Nishitani et. al (2017)	Mixed	Profit, sales, productivity improve	GHG emissions, pollution emissions	Size, market orientation, type of firm, industry, supply chain area	Environmental performance enhances financial performance but environmental management alone should not be solely responsible to improve the environmental performance	Further research should be considered on corporate environmental management in developing countries.

Semenova & Hassel (2016)	Mixed	ROA Tobin's Q	Environmental management environmental policy environmental risk	Size, leverage, growth, age	Environmental management had varied impacts on operating performance at high and low environmental risk of the industry while environmental policy had a stronger signal on market premium in industries with low environmental risks	Further research should focus on the theoretical implications of the results and extend the underlying arguments of the natural resource based theory of the firm.

4.4 Relationship Between Environmental Performance And Financial Performance:

Prior researches have observed that many firms had provided theoretical base for their environmental contributions pertaining to social, economic and governance. These situations changed with the compulsion of the government through CSR and CER guidelines ([17]). Only selective and large scale industries, firms and institutions have successfully attempted to practically contribute towards CSR and CER initiatives. Clarkson et.al (2011) have argued that poor environmental performance (high polluting firms) make more voluntary disclosures on environmental performance. In other words, high environmental reporting does not generally mean high environmental performance. Magness (2006) researched that firms that maintain themselves in public eye through press release activity disclose more environmental information than other firms. They also take external finance following the year in which the environmental incident in supposed to appear posing non-financial information. Clarkson et.al (2011) revealed that firms with higher pollution tendency disclose high environmental information and also rely on definite disclosure that GRI views as inherently more objective and verifiable. This requires more vigilant and mandatory reporting requirements with improved implementation.

5. DISCUSSIONS AND RECOMMENDATIONS:

As discussed in the beginning of the research, the study is purely based on the approaches that the researchers have adopted or adapted in their research work in identifying the relationship between environmental performance and firms' financial performance. In this context, the study discovered that strict law enforcement in required to ensure mandatory, transparent, verifiable and credible reporting by the firms with reliable proof and

documentations. The various databases like KPMG, ProwessIQ, KLD, Nikkie and such should also ensure authentication of the information given by the firms in regard to environmental performance and score them accordingly. The stakeholders should rely on the firms' maximum environmental performance which in turn will garner them better returns for their investments.
The research has considered only limited research papers for review. Further research is required in the field of social, economic and governance on the financial performance of the firm. This research has undertaken and revealed only the relationship between environmental performance and firms' financial performance. Future research is required on the other financial performance indicators apart from Tobin's Q, ROA, ROE, etc. to test the reliance for better investigation. The research should also be conducted more in developing countries and even underdeveloped countries for more coverage.

REFERENCES:

[1]. Beckman, T., Colwell, A. and Cunningham, P. H. (2009) 'The emergence of corporate social responsibility in Chile: The importance of authenticity and social networks', Journal of Business Ethics, 86(2), 191-206.
[2]. Brundtland, G. H. (1987).Our Common Future.United Nations World Commission on Environment and Development (Brundtland Commission). Oxford: Oxford University Press.
[3]. Cavaco, S.; Crifo, P. CSR and financial performance: Complementarity between environmental, social and business behaviours. Appl. Econ. 2014, 34, 3323–3338.
[4]. Clarkson, P.M., Li, Y., Gordon, R.D. and Vasvari, F.P. (2011), "Does it really pay to be green? Determinants and consequences of proactive environmental strategies", Journal of Account. Public Policy, Vol. 30 No. 2, pp. 122-44.
[5]. Delmas, M.A.; Etzion, D.; Nairn-Birch, N. Triangulating environmental performance: What do corporate social responsibility ratings really capture? Acad. Manag. Perspect. 2013, 27, 255–267.
[6]. Earnhart, D.; Lizal, L. Effect of pollution control on corporate financial performance in a transition economy. Eur. Environ. 2007, 17, 247–266.
[7]. Elsayed, K.; Paton, D. The impact of environmental performance on firm performance: Static and dynamic panel data evidence. Struct. Chang. Econ. Dyn. 2005, 16, 395–412.
[8]. Fujii, H.; Iwata, K.; Kaneko, S.; Managi, S. Corporate environmental and economic performance of Japanese manufacturing firms: Empirical study for sustainable development. Bus. Strategy Environ. 2013, 22, 187–201.
[9]. Gallego-Álvarez, I.; García-Sánchez, I.M.; Silva Vieira, C. Climate change and financial performance in times of crisis. Bus. Strategy Environ. 2014, 23, 361–374.
[10]. García-Sánchez, I.M.; Prado-Lorenzo, J.M. Greenhouse gas emission practices and financial performance. Int. J. Clim. Chang. Strateg. Manag. 2012, 4, 260–276.
[11]. Gotschol, A.; De Giovanni, P.; Vinzi, V.E. Is environmental management an economically sustainable business? J. Environ. Manag. 2014, 144, 73–82.
[12]. Hansen, D.R. and Mowen, M.M. (2007), Managerial Accounting, Thomson South and Western, Mason, OH.
[13]. Hassel, L., Nyquist, S., & Nilsson, H. (2005). The value relevance of environmental performance. European Accounting Review, 14(1), 41-61.
[14]. Helm, S. (2010), 'Employees' awareness of their impact on corporate reputation,' Journal of Business Research, 64, pp. 657-663.

[15]. Hillman, A. J. and Keim, G. D. (2001), 'Shareholder value, stakeholder management, and social issues: What's the bottom line? Strategic Management Journal, 22, pp. 125-139.
[16]. Horváthová, E. The impact of environmental performance on firm performance: Short-term costs and long-term benefits. Ecol. Econ. 2012, 84, 91–97.
[17]. https://economictimes.indiatimes.com/news/economy/policy/pay-2-of-capital-investment-for-green-clearance-environment-ministry-to-corporates/articleshow/64008830.cms
[18]. Judge, W. Q., & Douglas, T. J. (1998). Performance implications of incorporating natural environmental issues into the strategic planning process: An empirical assessment. Journal of Management Studies. 35(2), 241-262.
[19]. King, A.A.; Lenox, M.J. Does it really pay to be green? An empirical study of firm environmental and financial performance. J. Ind. Ecol. 2001, 5, 105–116.
[20]. Konar,S.; Cohen, M.A. Does the market value environmental performance? Rev. Econ. Stat. 2001,83, 281–289.
[21]. Lindblom, C. K. (1993). The Implication of Organization Legitimacy for Corporate Social Performance and Disclosure. Paper presented at the Critical Perspectives in Accounting Conference, New York
[22]. Lioui,A.;Sharma,Z.Environmentalcorporatesocialresponsibilityandfinancialperformance : Disentangling direct and indirect effects. Ecol. Econ. 2012, 78, 100–111.
[23]. Lo, C.W.H., Egri, C.P., Ralston, D.H., 2008. Commitment to corporate, social, and environmental responsibilities: an insight into contrasting perspectives in China and the US. Organization Management Journal 5, 83–98.
[24]. Lockett,A.,Moon,J.,Visser,W.,2006.Corporatesocialresponsibilityinmanagementresearch:focus,nature,salienceandsourcesofinfluence.JournalofManagement Studies 43(1),115–136.
[25]. Lucato, W.C.; Costa, E.M.; de Oliveira Neto, G.C. The environmental performance of SMEs in the Brazilian textile industry and the relationship with their financial performance. J. Environ. Manag. 2017, 203, 550–556.
[26]. Magness, V. (2006). Strategic posture, financial performance and environmental disclosure: an empirical test of legitimacy theory. Accounting, Auditing & Accountability Journal, 19(4), 540-563.
[27]. Misani, N.; Pogutz, S. Unraveling the effects of environmental outcomes and processes on financial performance: A non-linear approach. Ecol. Econ. 2015, 109, 150–160.
[28]. Muhammad, N.; Scrimgeour, F.; Reddy, K.; Abidin, S. The relationship between environmental performance and financial performance in periods of growth and contraction: Evidence from Australian publicly listed companies. J. Clean. Prod. 2015, 102, 324–332.
[29]. Murphy, C. J. (2002). The profitable correlation between environmental and financial performance: a review of the research. Light Green Advisors, Inc. Retrieved from http://www.lightgreen.com/files/pc.pdf.
[30]. Nakao,Y.;Amano,A.;Matsumura,K.;Genba,K.;Nakano,M.Relationshipbetweenenvironmentalperformance and financial performance: An empirical analysis of Japanese corporations. Bus. Strategy Environ. 2007, 16, 106–118.
[31]. Nishitani, K.; Jannah, N.; Kaneko, S. Does corporate environmental performance enhance financial performance? An empirical study of Indonesian firms. Environ. Dev. 2017, 23, 10–21.

[32]. Sarkis,J.;Cordeiro,J.J.Anempiricalevaluationofenvironmentalefficienciesandfirmperformance: Pollution prevention versus end-of-pipe practice. Eur. J. Oper. Res. 2001, 135, 102–113.
[33]. Semenova, N.; Hassel, L.G. On the validity of environmental performance metrics. J. Bus. Ethics 2015, 132, 249–258.
[34]. Thornton, D., Kagan, R.A. and Gunningham, N. (2003) Sources of corporate environmental performance. California Management Review 46 (1), pp. 127–141.
[35]. Wahba, H. Does the market value corporate environmental responsibility? An empirical examination. Corp. Soc. Responsib. Environ. Manag. 2008, 15, 89–99.
[36]. Xie, S., & Hayase, K. (2007). Corporate environmental performance evaluation: A measurement model and a new concept. Business Strategy and the Environment, 16(2), 148–168.