Turkish Online Journal of Qualitative Inquiry (TOJQI)
Volume 12, Issue 10, October 2021: 5191-5200

The Significance of Environmental Factor on Financial Performance

Deepmala
lifeofdeep@gmail.com
(Research Scholar,
School of Management
GD Goenka University, Gurugram
122103, Haryana, India)

Dr Alok Pandey
alok.pandey@gdgu.org
Dean of School of Management
GD Goenka University, Gurugram
122103, Haryana, India

Abstract
The most difficult environmental crisis the world is facing is global warming and climate change. This issue will have ramifications for the planet's future, as seen from several perspectives. New environmental rules have emerged as a result of popular awareness about the difficulties created by climate change. One of the components that contribute to corporate governance is environmental accounting. The current study intends to analyses the existence of environmental disclosure and financial performance among India's top companies by reviewing previous research. It is motivated by the possibility that environmental accounting could accomplish sustainable growth and development.The existence of environmental disclosure procedures in India and financial success yield conflicting results, according to the report. Since environmental accounting is developing and expanding as the social attention on the environment grows, this subject is still being debated at the international and national levels. In India, there are no such regulations or regulatory requirements for businesses to provide information about environmental sustainability. However, if firms wish to justify their position in society and raise expectations in environmental measurement, environmental disclosure is still required. Regulators' duty is to make it easier for corporations to provide information that they are required to disclose without jeopardizing the needs of other parties.
Keywords: accounting; environmental disclosure; environmental accounting; environmental sustainability; financial performance.

Introduction

Environmental accounting was adopted in India in the late 1990s, and it is one of the elements that contribute to corporate governance. One of the aspects disclosed in corporate social responsibilities is environmental information (CSR). Even though environmental accounting was initially introduced as a voluntary disclosure, it has quickly gained popularity as a means of expressing stakeholder obligations, particularly in growing nations such as India (ACCA, 2002). The accounting profession

and authority authorities had raised the subject of maintaining a proper record of environmental performance since the corporate community saw it as a major concern (Rezaee, Szendi, and Aggarwal, 1995). The business world was becoming more conscious of the significance of releasing environmental information.

The goal of environmental accounting is to ensure long-term growth and development while also maintaining the community's relationship (Ministry of the Environment, 2005). Environmental accounting is a branch of accounting that deals with the environment (Mahenna and Dorweiler, 2004). It is also a necessary component of accounting. Environmental accounting is evolving and expanding as the public's awareness of environmental issues grows, raising the bar for evaluating environmental impact (Mahenna et al, 2004). The ISO 14000 series of standards, which covers various aspects of environmental management, was introduced by the International Organization for Standardization (ISO) in order to provide practical tools for businesses to improve their environmental performance while also increasing their productivity and success (Abdullah and Fuong, 2010).

Unfortunately, there are no such rules or legal requirements in India for companies to provide information about environmental sustainability (ACCA, 2002). Although the India Accounting Standard Board (IASB) does not provide a specific standard on environmental disclosure as a guideline for preparing environmental disclosure in a company's annual report, paragraph 10 of FRS 101, which is the Presentation of Financial Statements, encourages entities to prepare an environmental report in addition to the financial statements they provide (Buniamin, 2010). Apart from that, there is a requirement under the India Environmental Quality Act 1974, which is currently being used by Indian companies as guidelines for managing and disclosing their environmental sustainability, as Section 33A of the Act specifies an environmental audit and Section 34A specifies a report on the impact on the environment as a result of prescribed labelling (Bursa Malaysia, 2012). The Act's provisions are the only guiding principles for firms when it comes to establishing an environmental sustainability disclosure; however, the information to reveal is up to the company.

Environmental consciousness among various groups of stakeholders is not a new phenomenon (Johnson, 2005). There have been numerous studies on environmental disclosure (Nilandri, Pattanayak, and Mitali, 2008). Nowadays, there is a significant desire for companies to use environmental disclosure in order to save the world, and it has been proven that companies who use environmental disclosure may accomplish good results. The availability of environmental disclosure has several consequences on financial performance. The question to be answered is if the existence of environmental disclosure in a corporation has an impact on financial performance. The purpose of this study is to determine the impact of environmental disclosure reporting on financial performance.

The previous research focused solely on the financial success of ISO 14001 certification holders and their motives for environmental obligations (Goh E. A., Suhaiza, and Nabsiah, 2006). ISO 14001 specifies the environmental characteristics that an organization can regulate and influence. There are no explicit environmental performance criteria stated. As a result, this research focuses on the impact of environmental disclosure on financial performance, particularly for public-listed corporations (PLCs) in India. Although studies have been conducted to determine how environmental disclosure affects financial performance, few studies have been conducted utilizing the return on assets (ROA), earnings per share (EPS), return on equity (ROE), and profit margin as their subjects.

Literature Review

Using various samples and methodology, multiple studies have been conducted on the impact of a firm's environmental behavior and performance on its financial results. Unfortunately, there is no consensus on this topic, as previous studies have shown inconsistent results about the positive, negative, or neutral nature of the CEP-CFP link.

A favorable CEP-CFP link has been argued for by relevant management and corporate governance theories. As part of CSR efforts that involve environmental practices, the stakeholder-agency theory posits that enterprises can be more efficient at adapting to external demands and concerns by addressing and balancing the claims of various stakeholders; this efficient adaptation More specifically, the natural-resource-based view proposes that a firm's success is directly related to its relationship with its natural environment, through which firms can gain a competitive advantage through pollution prevention, product stewardship, and sustainable development; proper management of natural resources and capabilities ensures a firm's performance. Furthermore, high levels of CFP provide enterprises with greater resources (slack resources) to engage in CSR and environmental measures. Firms that have both a dearth of resources and competent management outperform in CEP and CFP.

Given the results observed, some scientists have argued in favour of a positive CEP-CFP relationship. One of the first studies to demonstrate a positive significant association dates back 20 years and found that environmental compliance had a clear positive effect on financial indicators like ROA or ROE in an S&P 500 sample. Furthermore, this study discovered that CEP has a negative impact on investor risk; that is, financial market investments in low-pollution firms perform as well as, if not better, than investments in high-pollution firms, without investors paying a premium for "green" portfolios. Studies like this one opened the door to the topic of "Does it Pay to Be Green?" which was answered favorably in studies of industrial enterprises in the United States in the 1990s and Japan in the 2000s, among others. Furthermore, as suggested by, a poor environmental performance may be negatively connected with a company's market value, even after controlling for standard CFP explanatory variables.

The huge number of studies on the CEP-CFP link that have been conducted in the last two decades prompted the development of meta-analyses by researchers who wished to examine this association by combining multiple previous studies and drawing conclusions across all of them. Even However, some of these meta-analyses indicated a favorable CEP-CFP connection even though they included multiple contradicting research. CEP has been shown to be positively associated with CFP in numerous researches. The intensity of this beneficial association is influenced by several parameters, including the length of the study, the metrics utilized, and the CEP method (proactive or reactive). Many of these researches identify a bidirectional relationship between CEP and CFP and reject the neoclassical idea of a trade-off.

Methodology

A thorough study of the literature was carried out in order to find both qualitative and quantitative studies on the impact of environmental practices on financial performance. The information was gathered using the Google Scholars Emerald, Trailer & Francis, and Science Direct databases. A review of the literature was undertaken to see how environmental performance, environmental

management, and environmental process performance resulted in financial benefits, both physical and intangible. From 1994 to 2015, research articles were collected.

Discussion

Suggested theoretical findings/negative and positive

The classic notion that better environmental performance damages economic performance is explained by international trade theory. According to theory, pollution and trash are both productive outputs. Based on that notion, it is suggested that the environment is a production factor, and that changes in it will alter a product's competitive position. According to Rauscher (1994), environmental restrictions will affect changes in both the international division of labour and the composition of production within an economy. Standard international trade theory shows that a firm operating in the open sector cannot influence market price and faces a horizontal demand curve, while improved environmental performance results in increased costs for the firm and shifts the supply curve. A downward-sloping demand curve is created when enterprises operate in a closed domestic market and are imperfectly competitive. It's also obvious that better environmental performance leads to higher costs and a change in the supply curve northward. According to the above-mentioned idea, better environmental performance results in private costs for businesses and a negative performance in organizations. According to Walley and Whitehead (1994), the great majority of environmental costs will not create positive financial returns, making win-win prospects inconsequential. Direct production cost rises owing to capital inputs such as machinery, equipment, and buildings were identified by the researcher as feasible ways to increase cost. Operating costs will be reduced as a result of lower energy, labor, and material costs, as well as regulation-related costs such as legal and other transactional costs, and technology will be frozen as a result of rules such as new plant investment. Furthermore, the most important cost highlighted there is productivity loss and opportunity costs as a result of switching costs and obsolete capital during the transitional phase. Production disruptions, losses, change to less efficient processes and practices, negative product quality impacts, environmental investments diverting precious money away from more profitable investments, management time, production resources, and R&D focus transferred to generating a non-saleable output Porter (1991) claims that there is a positive relationship between environmental and economic performance because of cheaper costs and/or better quality due to less pollution. According to Porter and van der Linde (1995), the demand to enhance environmental performance leads to environmental innovations, which boost economic performance directly. Furthermore, Barrett (1992) and Elkington (1994) proposed and discovered that both profitability and environmental benefits exist simultaneously. Schmidheiny (1992) argued and discovered that reducing resource use and pollution increased profitability prospects. Bonifant et al. (1995) described how creative environmental compliance tactics helped the company gain a competitive advantage. Many of the economic reasons in favour of high environmental performance have been refuted by Cairncross (1992), and Wassenhove (1993) claims that internalising environmental issues has no economic benefits. One of the most significant aspects of a firm, according to Waddock and Smith (2000), is to assess the financial consequences of internal auditing programmes. They advised that in-depth inspections of company operations should be conducted even in the best of organisations because more corporations take the time to write a mission statement as well as a detailed vision, values, goals, and strategies. These dialogues demonstrate significant discrepancies between stated

values and actual behavior. He suggested that firms perform audits to see if they are complying with defined standards, particularly in cooperating areas, and that this would assist them bridge the gap. Environment, health and safety, and cooperative giving practises are among the eight hard award winners in businesses, according to the author. They did, however, find substantial deficiencies in four operating areas, including employee relations, quality control, community relations, and environmental policies. Shrivastava (1995) went on to say that a positive green corporate image, as a primary driver of green or environmental corporate reputation, contributes significantly to the firm's legitimacy in the eyes of its stakeholders.

Suggested empirical findings

There was a total of 120 (quantitative) research that looked into the impact of the environment on financial performance. Taking certain metrics of environmental performance and regressing the financial terms to assess performance is perhaps the easiest technique to experimentally examining the relationship between firms' environmental and financial success. Quantitative research was chosen by the researcher between 1993 and 2015.

Suggested positive links in empirical data

The association between environmental practises and financial performance appears to be inconsistent, according to past research. Previous studies have revealed a positive relationship that can be classified as (Hart and Ahuja, 1994 ; Barth and Nichols, 1994; White, 1995; Nehrt, 1995 ; Hart and Ahuja 1996; Klassen and Laughlin, 1996; Klassen, 1996; Russo and Fouts 1997; michael, 1997 ; Gottsman and Kessler, 1998; Edwards, 1998; Garber and Hammitt, 1998; Sharma and Vredenburg, 1998; Dowell et al., 2000; Hart and Yeung, 2000; Konar and Cohen, 2001; King and Lenox, 2002; Schaltegger, 2002 ; Melnyk et al., 2003; Al- Tu, 2004; Carmona-Moreno et al., 2004 ; Menguc, 2005; Weber, 2005; Wagner, 2005; Ann et al., 2006; Nakao et al., 2007a; Nakao et al., 2007b; Montabon et al., 2007; Wahba , 2008; Mari a et al., 2009; Guenster et al., 2011; SjoerdVijfvinkel et al., 2001; Oba et al., 2012; Tung, 2014; Qi et al., 2014; Christmann, 2000; Soyka, 1996; Soyka, 1996; Diltz, 1995; Blacconiere, 2004; ghalu, 1993; Belkaoui, 1976). According to the final study, 62 out of 120 (51.67 percent) of the 120 people showed a positive relationship, indicating that nearly half of the people did not show evidence of a positive relationship. Previous researchers, such as Oba et al. (2012), conducted a study of 84 US corporations' voluntary GHG emissions. The financial indicator used in this study was market adjusted returns. According to the study, managers' voluntary green disclosure actions resulted in good shareholder returns. Nakao et al. (2007) conducted a study on CO2 emissions in conjunction with other variables and discovered that business environmental efforts have a beneficial impact on financial performance. Higher financial success was likewise linked to total emissions, relative emissions, and industry emissions in 652 US industrial enterprises that released harmful pollutants, according to King and Lenox (2001). According to these findings, the majority of emission-related environmental parameters have a positive financial relationship. However, some findings are perplexing, such as Wagneret et al. (2002), who discovered a negative and significant influence on ROCE's environmental performance with no evidence of a major impact on economic performance. Vinayagamoorthi et al. (2015) conducted research for the S&P BSE 500, selecting Environmental Performance (Energy Intensity Ratio) as an environmental variable in 191 companies, and discovered that profitability variables

such as ROA, ROE, and ROS have a positive impact on the sample firms' energy intensity (proxy of environmental performance). Simultaneously, one profitability metric, such as ROCE, had a negative impact. It was clarified that the outcome does not show a clear positive or negative relationship; rather, it is mixed. Nyirenda et al. (2011) also did a study on carbon reduction, energy efficiency, and water utilisation, and found no significant correlation between the variables. These findings also revealed that some conclusions are still contradictory. A favourable association was discovered by Russo and Fouts (1997). High levels of environmental performance are related with increased profitability, according to the theory developed by Russo and Fouts. Furthermore, they hypothesised that industry growth rate attenuated this link, and based on that finding, they concluded that the returns to environmental performance are higher in high-growth businesses. They looked at 243 companies and discovered that better environmental performance was linked to better financial performance. Hamilton set out to investigate how the stock market reacted to the revelation of pollution data. Hamilton (1995) used an event research methodology to choose a sample of 436 firms. He discovered that negative anomalous returns were accentuated by Toxic Release Inventory (TRI) pollution figures, especially when the TRI data differed negatively from the market's previous perceptions of pollution patterns. Feldman, Soyka, and Ameer (1996) hypothesised that environmental performance led to lower risk, and that financial markets valued excellent environmental management systems. Environmental signalling serves as a link between environmental indicators and risk. Signaling can be uncontrollable, such as regulatory reporting and media coverage, or controlled, such as press releases, ads, corporate environmental reports, and industry rules of conduct. Taking 337 Dutch and Chinese enterprises, Vijfvinke, Bouman, and Hessels (2011) proposed environmental sustainability and SMEs' financial success in terms of profit and revenue growth. The findings point to a strong link between environmental sustainability and corporate performance. According to lvarez (2013), there is insufficient information to finalise or agree on a relationship between company environmental and financial performance. They conducted study on a selection of 855 international corporations that emit a lot of greenhouse gases and CO2. From 2006 through 2009, data was taken from the Forbes Global 2000 Index and the Carbon Disclosure Project. According to their findings, there is a greater synergy between environmental and financial performance, indicating that companies have the option to invest in sustainable projects, resulting in larger economic gains. They concluded that environmental practises affect organisations as a soft performance element for reputation and image building based on the findings. Furthermore, due to product differentiation, this could boost competitive advantage. They indicated that the negative element is that ecologically proactive initiatives have certain competitive disadvantages, resulting in costs that may be avoided or should be borne by others. Customers and other stakeholders have more faith in sustainable businesses, which boosts their economic activity.

Suggested negative links in empirical data

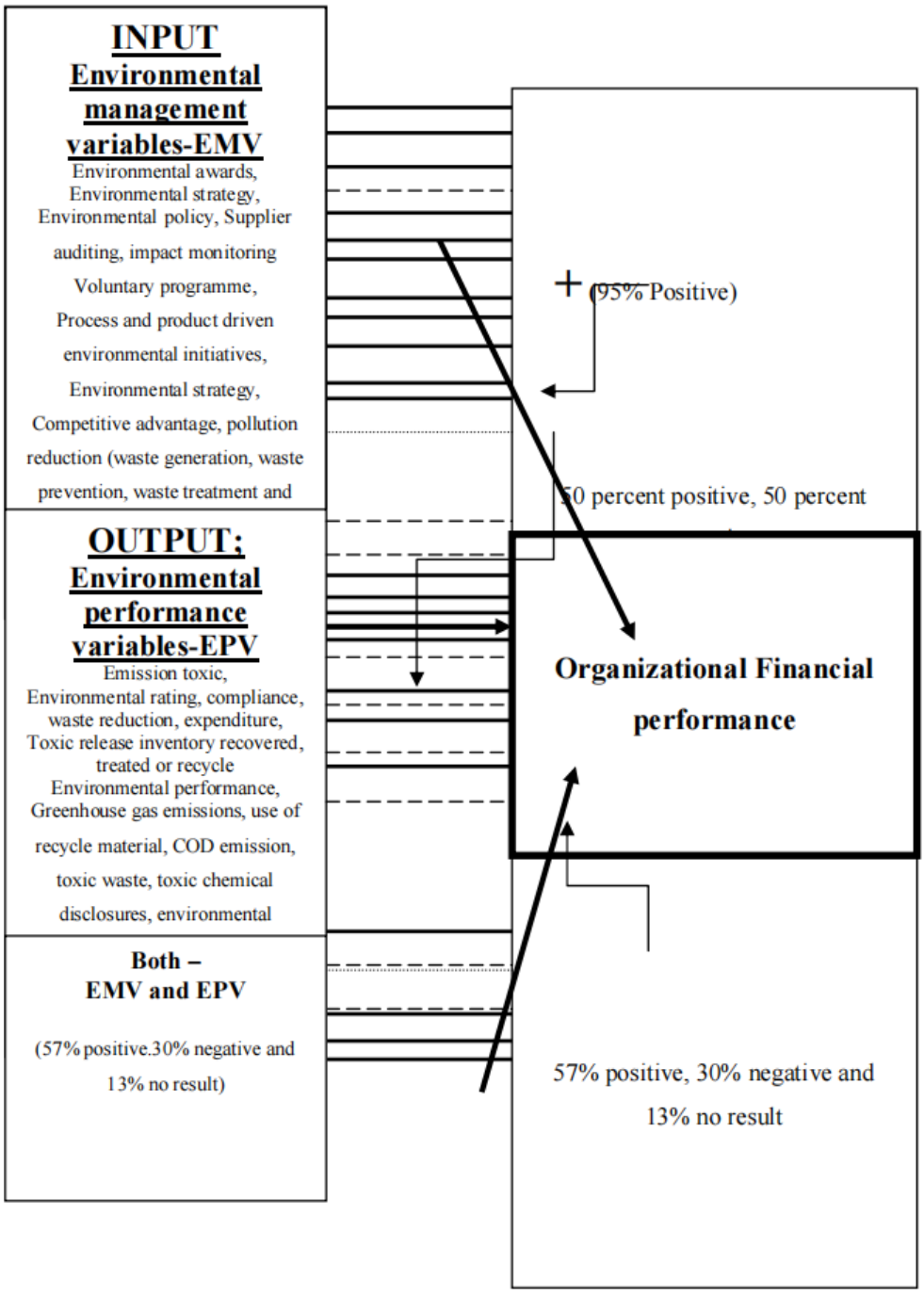
Many researchers discovered a negative relationship throughout the study. Barth and McNichols (1994); Blacconiere and Patten (1994); Hamilton (1995); White II (1996); Feldman et al. (1997); Blacconiere and Northcut (1997); Cordeiro and Sarkis (1997); Stanwick and Stanwick (1998); Judge and Douglas (1998); Karagozoglu and Lindell (2000); Watson (2004); Benito (2005); Hassel (2005); Canon (2006); Cormier (2007); Roque (2007); Ngwak In addition, Repetto and Austin (2001) conducted a study on 13 significant pulp and paper firms based on their operational operations in

protected water systems. A negative relationship between two factors was discovered by the researchers. Nichols (1994) discovered that the EPA'hazard score has a negative association with share price. Market reactions to print media announcements of 64 environmental investments done by 10 listed Finnish forest sector enterprises between 1970 and 1996 were studied by Niskanen and Halme. Niskanen and Halme (1997) discovered that the firms' shareholders suffered abnormal losses around the date of release of the investment news, using the event study approach with a 21-day event window and regression analysis. As a result, environmental investments were terrible for the stock market. Contrary to estimates, the effect was considerably stronger between 1987 and 1996 than it had been between 1970 and 1986. The authors also discovered that unidentified firm-specific factors were at play, causing the stock market effect to differ between organisations. However, there was no difference in the effect of mandated and voluntary environmental investments.

Suggested no relationship in empirical data

Few researchers have found no link between the two variables, such as (Cohen et al., 1995; David, 1995; Soyka and Feldman, 1998; Stone, et al., 2003; United Nations Environment Programme Finance Initiative, 2004; Link, 2006; Corren, 2007; Moneva, 2009; Lin, 201; Nyirenda, et al., 2011; Hetemäki, 1996; Arora, 1996; Arora, 1995; Färe, 1995; Khanna The Ministry of the Environment of British Columbia, Canada, releases a list of businesses that are in violation of environmental legislation on a regular basis.

Otherwise, the Ministry is concerned about their high levels of pollutants. Lanoie et al. (1997) employed event approach to investigate the impact of environmental performance on business equity values. They discovered that neither non-compliant enterprises nor firms that were "of concern" had high equity prices.



Relationship indicators in figure,

——— Positive relationship between environmental variable and financial variable
– – – – – Negative relationship between environmental variable and financial variable
..... No relationship between environmental variable and financial variable

Figure 1: Summery of Quantitative studies about environmental and financial performance
(Model created by- Based on 32 Qualitative studies)
Source: Author's elaboration

Mix result in empirical data

The results from Molina (2009), Plumlee et al. (2010), Repetto (1995), Johnson (1995), Bowman and Haire (1975), Bragdon and Marlin (1972), and Robert D. Klassen (1996) are mixed. Hetemäki (1996) examined the impact of water pollution abatement on pulp mill production using output distance functions and a plant level panel data set of eight Finnish sulphate pulp facilities from 1972 to 1990. He separated the examination of an uncontrolled pollution output, total wastewater flow, from regulated pollution outputs, biological oxygen demand (BOD) and total suspended solids (TSS), and identified positive and negative relationships in some cases.

Conclusion

This research was conducted to see if environmental initiatives increase financial success. From a theoretical standpoint, the firmlevel relationship between environmental performance and financial performance must be regarded as a case-specific, inverted U-shaped, and dynamic of environmental performance, according to a review of previous knowledge of the firm level relationship between environmental and financial performance. Previous empirical findings suggested that (quantitative) research is still needed to determine the exact relationship between environmental and financial performance in businesses. It was also discovered that there is an exact positive relationship between environmental management variables and financial performance in businesses. The lack of a consistent, uniform association between environmental performance indicators and financial performance, which may be waiting to be revealed between organisations' environmental and financial performance in future studies for further consequences. To determine consistency in a relationship, variations in the relationship between cases and over time must be separated. In order to improve the consistency of the results, sample selection was done at the industry level. Based on the foregoing findings, it is clear that environmental variables are not independent of business difficulties, but rather are intimately linked to various aspects of business strategies. This reveals that the issue to be handled is so extensive that it warrants its own in-depth analysis. Only the direction of the relationship between environmental and financial performance has been explored in this literature study.

References

[1] AGGARWAL, P. (2013) Relationship between Environmental Responsibility and Financial Performance of Firm: A Literature. Journal of Business and Management,Volume 13, Issue 1 (Sep. - Oct. 2013), p. 13-22.

[2] ANN, G. ZAILANI, S. & WAHID, N. (2006) A study on the impact of environmental management system (EMS) certification towards firms' performance in Malaysia. Management of Environmental Quality.17 (1) p. 73-93.

[3] ÁLVAREZ, I. G. SÁNCHEZ, I. M. G. & VIEIRA CDS. (2013) Climate Change and Financial Performance in Times of Crisis. Business Strategy and the Environment, doi: 10.1002/bse.1786

[4] AHMED, K. AND LONG, W. (2012) Environmental Kuznets Curve and Pakistan: An Empirical Analysis. Procedia Economics and Finance. 1, p. 4 – 13.

[5] AGAN, Y. ACAR, MF. AND BORODIN, A. (2013) Drivers of environmental process and their impact on performance: a study of Turkish SMEs. Journal of cleaner production. 51, p. 23-33.

[6] ABDELNABI, M. HASNAN, S. N. & OSMAN, N. H. (2011) can the Eco- efficiency represent Corporate Environmental Performance? International Journal of Humanities and Social Science. 1 (14).
[7] AMBEC, S. & LANOI, P. (2008) Does It Pay to Be Green? A Systematic Overview. Academy of Management Perspectives. 22 (4) p. 45-62.
[8]AZORIN, J. F. M. CORTES, E. C., MOLINER, J. P. & TARI, J. (2009). Environmental practices and firm performance: an empirical analysis in the Spanish hotel industry. journal of cleaner production. 17 p. 526- 524.
[9] AL-TUWAIJRI, S. A., CHRISTENSEN, T. E. & HUGHES, K. E. (2004) The relations among environmental disclosure, environmental performance, and economic performance: a simultaneous equations approach. Accounting, Organizations and Society. 29 (5) p. 447-471.
[10] BARTH, M. E., NICHOLS M. C & MAUREEN F. (1994) Estimation and Market Valuation of Environmental Liabilities Relating to Superfund Sites. Journal of Accounting Research. 32 p. 177-199.
[11] BARTH, M. & MCNICHOLS, M. (1994) Estimation and Market Valuation of Environmental Liabilities Relating to Superfund Sites. Journal of Accounting Research. 32 p. 177–208.
[12] BAMMI, R. (2013) An Empirical Analysis of Environmental and Financial Performance of BSE 100 Companies. Indian Journal of Finance.7 (6) p. 16- 30.
[13] BAMMI, R. (2013) An Empirical Analysis of Environmental and Financial Performance of BSE 100 Companies. Indian Journal of Finance. 7 (6). p. 16- 30.
[15] Razeed, A. 2010. Determinants of environmental disclosure practices of US resource companies: Hard copy versus internet reporting. Sixth Asia Pacific Interdisciplinary Research in Accounting Conference. Sydney: The Sydney University.
[16] Williams, S. M. 1999. Voluntary Environmental and Social Accounting Disclosure Practices in the Asia-Pacific Region: An International Empirical Test of Political Economy Theory. The International Journal of Accounting, 34 (2), 209-238.
[17] Ministry of the Environment, J. 2005, February. Environmental Accounting Guidelines 2005. Retrieved from Ministry of the Environment: http://www.env.go.jp/en/policy/ssee/eag05.pdf.
[18] Haslinda, Y., Glen, L. 2006. International Differences on Corporate Environment Disclosure Practice: A Comparison Between Malaysia and Australia. International Conference on Accounting and Finance in Transition (ICAFT), 1-17.
[19] Dr. AarushiKataria, Dr. Naveen Nandal and Dr. Ritika Malik, Shahnaz Husain -A Successful Indian Woman Entrepreneur, International Journal of Disaster Recovery and Business ContinuityVol.11, No. 2, (2020), pp. 88–93
[20] Aarushi, Naveen Nandal, Parul Agrawal. AN EXPLORATORY RESEARCH IN PRODUCT INNOVATION IN AUTOMOBILE SECTOR. JCR. 2020; 7(2): 522-529. doi:10.31838/jcr.07.02.98
[21] Kumar, S. (2022). Effective hedging strategy for us treasury bond portfolio using principal component analysis. Academy of Accounting and Financial Studies Journal, Vol. 26, no.2, pp. 1-17
[22] Almahirah, M. S., S, V. N., Jahan, M., Sharma, S., & Kumar, S. (2021). Role of Market Microstructure in Maintaining Economic Development. Empirical Economics Letters, Vol.20, no.2, pp. 01-14