

# Literature Review on Triple Bottom Line Accounting, Business Sustainability and Environmental Reporting

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Abstract— This study presents a literature review related to the implementation of the concept of triple bottom line accounting, business sustainability, corporate performance and environmental reporting published in one of the reputable international journals, in this case, Emerald Insight (www.emerald.com), between 2015 and 2020. Most of them papers published in journals, Asian Journal of Accounting Research, Journal of Global Responsibility, Corporate Governance, Advances in Environmental Accounting & Management, and The International Journal of Business in Society. For each article, the objectives and results obtained, the methodology adopted, the data sources, the industry sector, and the countries involved are identified. The theory used is stakeholder theory. The aim of this study is to contribute to research in social and environmental accounting.

**Keywords**— Triple bottom line accounting, business sustainability, corporate performance and environmental reporting.

#### I. INTRODUCTION

The component that becomes the benchmark for the performance of a business is the nominal profit earned. It is undeniable that one of the main objectives of business activity is profit maximization. However, over time there has been an expansion of the paradigm. Profit is no longer the sole purpose of running a business. This is certainly very reasonable, considering the amount of profit is often a component that is manipulated for short-term business goals. Furthermore, it is often found that business activities only focus on achieving optimal profit, while on the other hand the company's operational activities are destructive to nature and the environment. This gradually triggers rejection from the community, which leads to the threat of the company's business sustainability (Utama, et al. 2018). Therefore, to create a sustainable business activity, there needs to be a synergy between financial and non-financial aspects. The financial aspect in this case is measured by profit (profit), and the non-financial aspect is the natural environment (planet) and society (people). This concept is known as Triple Bottom Line Accounting (TBLA).

Topics related to the natural environment, company performance, and business sustainability are increasingly widespread and interesting to be discussed by the academic community, professional associations, even to the realm of practitioners, namely companies. This is based on increasing awareness of the direct and indirect impacts of the implementation of the Triple Bottom Line Accounting concept on company performance and business sustainability. Furthermore, it is important to detect practices and strategies

that will enable the company to meet current needs, without negatively impacting the future. This can be done by implementing sustainable business practices, while taking into account social, economic and environmental aspects, known as the Triple Bottom Line Accounting approach. Wilson (2015) in his research states that a business strategy that pays attention to environmental aspects can produce positive financial and social benefits.

The development of interest in the above topics has resulted in an increase in academic publications. This is evidenced by the emergence of research that discusses the concept of Triple Bottom Line Accounting and its relation to business sustainability, especially in developing countries. Previously, studies conducted on this topic used only a few accounting journals as sources. However, nowadays there are more and more similar researches from leading journals. Among them are research conducted by Kumar (2017), Venkatraman and Nayak (2015), Nursimloo, et al. (2020), Famiyeh (2016), Wachira and Wang'ombe (2019), and Padin, et al. (2016).

This research aims to examine and identify each of these articles related to the methodology adopted, data sources, industrial sector, countries involved in the research, objectives and results obtained, practices and motivations related to environmental reporting and organizational development and company performance. The structure of this research begins with the introduction of the Triple Bottom Line Accounting concept, a grand theory that covers the topics discussed, and is followed by the adopted research methodology. The next section presents the results, and their discussion. The last part of the writer presents the conclusions of the research conducted.

## II. GRAND THEORY

Triple Bottom Line Accounting Concept

The term Triple Bottom Line appears in the book Cannibals with Forks, which was pioneered by Elkington, where the term 3Ps began to appear, namely profit, planet and people (Elkington, 1998). The concept of Triple Bottom Line Accounting can be interpreted as an alignment or balance between financial and non-financial performance. The framework provided for measuring organizational success and the performance of a business venture is divided into three components, namely economic, social, and environmental (Goel, 2010). It is important for every company to consider



the three dimensions that are interrelated and equally important to each other (Nayak, 2015).

Foran, et al (2015) stated that the concept of Triple Bottom Line Accounting is a way that was developed to expand social goals rather than only increasing shareholder value. Triple Bottom Line Accounting (TBLA) in the pillars of profit, planet and people is increasingly being discussed considering the increasing relevance of business concepts and nature and environmental sustainability today.

People is a humanistic touch by the company to its human resources. Examples include not exploiting underage workers, creating a comfortable working environment, assessing and providing decent and reasonable salaries and wages, determining tolerable working hours, giving rewards to employees who have good performance, inclusion of employees in safety insurance protection. work, the inclusion of employees in training in order to improve their expertise or skills, and the last is equality and the involvement of all employees to participate in decision making.

Profit is a pillar related to financial measures that show the company's ability to obtain profits or profits. It is undeniable that profit is one of the goals of every business activity. In the Triple Bottom Line Accounting concept, the profit pillar cannot be separated from other pillars, namely people and planet. The company's activities are not only looking for short-term profits, but must be able to create fair and ethical business activities for the sake of business continuity going forward. For example, the company synergizes with the community in the context of providing business raw materials, by adjusting the purchase price at a fair trade price.

The planetary pillar is the third pillar and is related to the company's efforts to preserve nature and the environment. Or at least the company's efforts to minimize the negative impacts caused by the company's operational activities on the quality of water, air and biodiversity. One example is CSR (Corporate Social Responsibility) activities.

The concept of Triple Bottom Line Accounting is something that should be implemented by every business activity considering the possibility that the company's operational activities will actually have a negative impact on nature. This gradually can actually lead to rejection from the surrounding community and threaten the sustainability of the business (Utama, et al 2018).

## Stakeholder Theory

The idea of the Triple Bottom Line Accounting concept and business sustainability can be covered by stakeholder theory. In general, stakeholder theory states that the purpose of a business activity is to provide value for the stakeholders that associated with the company (Freeman et al., 2010). Furthermore, stakeholder theory tries to expand the scope of organizational goals that are not only focused on achieving profit, but also have social and environmental attachments to the community. The consequence of this condition is that organizations are required to contribute to nature and social society (Schaltegger and Burritt, 2005; 195).

Thus, there is an expansion of the paradigm in which business goals are no longer merely maximizing short-term shareholder value or accounting-based earnings and sharing a broader understanding of the company's ties, dependencies, obligations, capabilities, and possibilities. Stakeholder theory helps position management within a broader framework to create sustainability strategies that enable companies to meet current needs, without having a negative impact on the future by implementing practices that take into account social, economic and environmental aspects, known as Triple Bottom Line Accounting. (TBLA). Adopting the Triple Bottom Line Accounting approach begins with a paradigm shift that involves redefining the company's objectives from initially focusing solely on profit for shareholders to creating value for all stakeholders. In this way, the company remains profitable, but also benefits the wider community of stakeholders.

#### III. RESEARCH DESIGN

This study aims to contribute knowledge about the concept of Triple Bottom Line Accounting and business sustainability based on the analysis of papers published in one of the reputable international journals in this case is Emerald Insight (www.emerald.com), between 2015 and 2020. To collect the papers published in the journal, the methodology applied by the researcher is through the search for the keywords Triple Bottom Line Accounting and business sustainability. Regarding the selection of articles, the researcher chose to exclude articles that had keywords only in the summary and detail section (summary and detail). In addition, articles that do not contain the targeted keywords will be excluded from the sample. Researchers only use articles that can be downloaded in full-paper format. Based on these criteria, 6 articles were obtained from several different journals, including the Asian Journal of Accounting Research, Journal of Global Responsibility, Corporate Governance, Advances in Environmental Accounting & Management, and The International Journal of Business in Society.

### IV. RESULT

This study analyzes the following dimensions for each article including the methodology adopted, data sources, industry sector and country studied, and the objectives and results obtained. Successively, the intent and results of the sample articles pay attention to matters such as practices and motivations related to environmental reporting and organizational development and company performance.

#### **Industry Sector and Country**

Several studies that the researcher reviewed were carried out in various sectors and countries. Padin, et al. (2016) tested the validation of the Triple Bottom Line construct which was implemented in Spain. This study departs from a study conducted by Høgevold et al. (2015) in Norway. Padin, et al. (2016) decided to collect data in Spain because it has an impressive environmental profile, ranking the Environmental Performance Index (EPI, 2012) number seven out of 178 countries. Given that the target is large Spanish companies, the criteria established for determining the population and compiling the sample frame for this study are companies that have a total asset value of more than €2.85 million, have a net



annual turnover of over €5.7 million; and has an average number of employees exceeding 100.

Meanwhile, Famiyeh (2016) conducted research using survey methods, especially on informants who are considered experts in sustainability issues as measured by the Triple Bottom Line in various manufacturing companies in Ghana. The focus of this study is to determine the relationship between latent variables, namely sustainability factors (economic, social and environmental), corporate image and company performance. To understand the impact of sustainability factors on the company's image and performance, a survey was conducted by asking managers of manufacturing companies in Ghana to share their experiences about sustainability, known as the Triple Bottom Line.

Furthermore, research conducted by Wachira and Wang'ombe (2019) examines the extent to which environmental management accounting practices have been applied by local manufacturing companies in Nairobi, Kenya. The population in this study are manufacturing companies that are members of the Kenya Association of Manufacturers (KAM), which is a body that represents the collective interests of manufacturing businesses that operate locally. The total number of manufacturing entities operating in Nairobi at the time of the study was 455 out of a total of 702 registered members (KAM, 2011). Nairobi was chosen for the scope of the study because the city has a prominent industrial estate/park where a large number of manufacturing entities are located. In addition, 65% of manufacturing companies that are members of the Kenya Association of Manufacturers (KAM) are based in Nairobi.

The study conducted by Kumar (2017) used a population of all manufacturing companies listed on the Dhaka Stock Exchange, Chittagong Stock Exchange, and issuers in Bangladesh listed under Company Law XVIII of 1994. The sample size consisted of 439 employees, and employers. work of these companies. The total number includes 95 employees and 49 employers from manufacturing companies listed on the Dhaka Stock Exchange, 65 employees and 67 employers from the Chittagong Stock Exchange and 89 employees and 54 employers from issuers listed under Company Law XVIII of 1994.

Next is the research conducted by Venkatraman and Nayak (2015), where this research was carried out on 600 Australian companies classified as large, medium and small. In this research design, the researcher uses a quantitative approach with data collection using a questionnaire that includes descriptive and exploratory with 38 questions entitled "Developing Sustainable Companies in Australia". A total of 102 questionnaires were completed and returned. The collected data were analyzed using factor analysis for three latent factors.

The last review the researcher conducted was on the research conducted by Nursimloo, et al. (2020) which studies the extent to which all three aspects of the Triple Bottom Line are disclosed in the top 50 companies for the two years 2016 and 2017 that are listed on the New Zealand Stock Exchange (NZX). Information is collected from various sections of the annual report, for example corporate governance disclosures,

directors' reports, chairman's statements and notes to financial statements for each company's checklist for each year, in which the three aspects of the Triple Bottom Line disclosure, namely, environmental, social and economy checked.

Motivation for Disclosure and Implementation of Triple Bottom Line Accounting and Business Sustainability Concepts

In a study conducted by Padin, et al. (2016) were tested regarding the construct validation of the Triple Bottom Line Accounting concept and the reasons for applying the business sustainability concept to the business being run. This study found that more than 70 percent of the companies studied believed that the economic, social and environmental efforts of sustainable business practices were interrelated, and only 5 percent believed otherwise. Furthermore, almost 80 percent of companies feel that economic, social and environmental efforts of sustainable business practices need to be carried out simultaneously. Two-thirds of the organizations in both the Norwegian and Spanish studies answered that they had implemented sustainable business practices within their companies to a large degree. In total, 55 percent of Norwegian companies and 76 percent of Spanish companies answered that efforts to implement the Triple Bottom Line in their organizations were well established. In the Norwegian study, more than half of the companies considered economic reasons the main reason for adopting sustainable business practices. Meanwhile, based on the results obtained from the Spanish survey, the main reasons for implementing sustainable business practices within companies are related to social reasons, followed by economic and environmental.

The research conducted by Wachira and Wang'ombe (2019) examines the extent to which environmental management accounting practices have been applied by local manufacturing companies in Nairobi, Kenya. This research was conducted in two different sequences of stages. Quantitative data were collected in the first stage by using a questionnaire. After the quantitative data were analyzed through descriptive statistical tests and correlation analysis, the research proceeded to the second phase consisting of semistructured interviews to gain managerial insight into adoption practices. The results of the multiple linear regression test indicate that there is a positive and significant effect between the level of adoption of environmental management accounting methods and the cost of compliance with local environmental regulations. This means that the extent to which environmental management accounting methods are applied by manufacturing entities is influenced by the amount of money spent on compliance with environmental regulations. However, the test of financial performance variables as measured by ROE correlates with the level of adoption of environmental management accounting practices. The next test obtained the result that firm size was not significantly correlated with the level of adoption of environmental management accounting practices. This finding contradicts previous research which shows that firm size is a significant factor that can explain the extent to which corporate environmental and/or social disclosures are made (Perez, et al. 2012; Stanwick & Stanwick, 1998). However, the results of



this study are consistent with research conducted by Wang'ombe (2013), which found the measure was not a significant factor in determining the quality of corporate environmental reporting among Kenyan firms. From the two control variables, namely the age of the company and the level of technology, it shows that there is no significant relationship related to the implementation of environmental management accounting.

Meanwhile, from the results of semi-structured interviews, questions were asked about whether they considered environmental issues when making managerial decisions. All but one respondent confirmed that environmental considerations were incorporated into decision making. One of the respondents who gave the statement disagreed stated that environmental considerations may only arise indirectly when making pricing, product, or budgeting decisions. Furthermore, the respondents collectively agreed that their company had taken several steps to preserve the environment. However, various responses emerged regarding the reasons for implementing environmental management accounting. Regulatory pressures, educational background and experience are some of the main reasons. This finding is similar to the findings (Seetharaman, Ismail, & Saravanan, 2007).

Meanwhile, the results of research conducted by Kumar (2017) strengthen the findings of previous studies (Lange, 2003; Ball, 2002; Milne, 1996; Lamberton, 2005; Schaltegger and Wagner, 2006; Taplin, Bent, and Aeron-Thomas, 2006). This study claims that the sustainable development of enterprises in Bangladesh depends on environmental, social and economic performance of which the environment is the first and most influential factor. Environmental accounting has a positive relationship with sustainable development. Sustainable development refers to social, environmental and economic development that must consider nature and people. However, very few companies disclose environmental information voluntarily in their annual reports. Lack of environmental awareness and knowledge, legal requirements, poor performance, and fear of bad publicity in terms of companies and stakeholders are reasons for low voluntary environmental disclosures. The volume of environmental disclosure is highly dependent on the company's total assets, gross income, and number of employees.

Furthermore, research conducted by Nursimloo, et al. (2020) examines the role of board characteristics on Triple Bottom Line reporting. The result of the research is that when the board size is large enough, board members can make effective decisions and are in a better position to disclose information about the environmental and social aspects of the Triple Bottom Line. In addition, there is a positive relationship between corporate profitability and Triple Bottom Line reporting, along with its environmental and social dimensions. Companies disclose more information to lift the company's image. This supports stakeholder theory because corporate image is an important aspect that has a major impact on stakeholder influence. Furthermore, because the results of the study found a significant positive relationship between firm size and Triple Bottom Line reporting along with its social and economic dimensions, it is correct to say that the larger the

firm size, the more information about the firm's aspects will be disclosed. However, different results were found related to testing the variables of gender diversity and leverage. This study did not find a significant relationship and so the hypothesis is not supported. It can be concluded that the presence of women on the board is not related to the level of environmental, social, or economic disclosure. Furthermore, no significant relationship was found for the Triple Bottom Line as a whole. When companies have higher levels of debt, they may be reluctant to disclose their information voluntarily.

The Effect of Environmental Accounting Implementation and Company Performance

Based on research conducted by Famiyeh (2016), the results show that, economic sustainability and environmental sustainability do not seem to have an effect on company performance, while on the other hand social sustainability is positively related to company performance. The results related to mediation analysis show that corporate image is able to mediate the relationship between social sustainability and company performance. This means that the mediating role of corporate image on company performance is partly supported in this study. It was determined that corporate image did not mediate the relationship between the constructs of economic sustainability and the constructs of environmental sustainability on company performance. On the other hand, corporate image mediates the relationship between social sustainability constructs and company performance.

In a study conducted by Wachira and Wang'ombe (2019), two respondents (R1 and R5) stated that there was a significant reduction in operational costs after implementing environmental management accounting methods in their companies. Technology plays an important role in ensuring companies are able to reduce their carbon footprint. The application of environmental management accounting is very useful in product development, making health and safety decisions for companies and compliance with local environmental regulations.

The last is the research conducted by Venkatraman and Nayak (2015). This study obtained a positive and weak relationship between the variables of Corporate Social Performance Outcome (CSPO) and Corporate Financial Performance Outcome (CFPO), which does not indicate that companies that are responsible for business are also responsible for the environment. Managers of companies in Australia do not see any benefits from implementing sustainable business practices, and there is no perceived value added to the company's financial performance. Integrating economic, social and environmental components is considered to increase the burden on management."

# V. CONCLUSION

Some of the research results presented above have validated the Triple Bottom Line construct, but of course it requires effective implementation to be useful in practice. Regulation is clearly a key factor influencing implementation as well as environmental reporting. Meanwhile, regarding the relationship between financial performance and environmental



# *International Journal of Multidisciplinary Research and Publications*

ISSN (Online): 2581-6187

management accounting implementation practices, mixed results were obtained, namely a significant reduction in operational costs after implementing environmental management accounting practices. However, other studies have found that there is no benefit from implementing sustainable business practices, and there is no perceived value added to the company's financial performance.

#### REFERENCES

- Ball, A., 2002. Sustainability Accounting in UK Local Government: An Agenda for Research. London: The Association of Chartered Certified Accountants; University of London.
- [2] Elkington, John. 1998. Accounting for The Triple Bottom Line. Measuring Business Excellence, Vol. 2 Issue: 3, pp.18-22
- [3] Famiyeh, Amoako Kwarteng Samuel Ato Dadzie Samuel. 2016. Sustainability and Competitive Advantage from a Developing Economy. Journal of Global Responsibility, Vol. 7 Iss 1 pp. –
- [4] Foran, Barney., Lenzen, Manfred., Dey, Christopher., and Bilek, Marcela. 2005. Integrating Sustainable Chain Management with Triple Bottom Line Accounting. Ecological Economics. Volume 52, Issue 2, Pages 143-157.
- [5] Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & de Colle, S. (2010). Stakeholder
- [6] Goel, P. (2010). Triple bottom line reporting: An analytical approach for corporate sustainability. Journal of Finance, Accounting, and Management. Volume 1(1), page 27-42.
- [7] Kumar, Tapos. 2017. Achieving Sustainable Development through Environment Accounting from the Global Perspective: Evidence from Bangladesh. Asian Journal of Accounting Research 1. pp 45-61.
- [8] Lamberton N, G., 2005. Sustainability accounting-a brief history and conceptual framework. Accounting Forum. 7, 13-14.
- [9] Lange, G., 2003. Policy applications fo Environmental Accounting. Environmental economics Series Paper No. 88. Washington, DC: World Bank.
- [10] Miline, MJ., 1996. On Sustainability; The Environment and Management Accounting. Management Accounting 7, 135-161.
- [11] Nursimloo, S., Ramdhony, D., and Mooneeapen, O., 2020. Influence of Board Characteristics on TBL Reporting. Corporate Governance, Vol. 20 No. 5, pp. 765-780.

- [12] Padin, C., Ferro, C., Wagner, B., Valera, J. C. S., Høgevold, M. N., and Svensson, G. 2016. Validating A Triple Bottom Line Construct and Reasons for Implementing Sustainable Business Practices in Companies and Their Business Networks. The International Journal of Business in Society, Vol. 16 Issue: 5, pp.849-865.
- [13] Perez-Batres, L., Miller, V., Pisani, M., Henriques, I., & Renau-Sepulveda, J. (2012). Why do firms engage in national sustainability programs & transparent sustainability reporting?: Evidencenfrom Mexico's clean industry program. Management International Review, 52, 107-136.
- [14] Schaltegger, S and M. Wagner., 2006. Integrative management of sustainability performance, measurement and reporting. International Journal Accounting, Auditing and Performance Evaluation 3(1),1-19.
- [15] Schaltegger, S., & Burritt, R. (2005). Corporate sustainability. In H. Folmer & T. Tietenberg (Eds.), The International Yearbook of Environmental and Resource Economics 2005/2006: A survey of current issues (pp. 185-222). Cheltenham, England: Edward Elgar.
- [16] Stanwick, P. A., & Stanwick, S. D. (1998). The relationship between corporate social performance, and organizational size, financial performance, and environmental performance: An empirical examination. Journal of Business Ethics, 17(2), 195-204.
- [17] Taplin, JRD., D. Bent and D. Aeron-Thomas., 2006. Developing a Sustainability Accounting Framework to Inform Strategic Business Decisions: a Case Study from the Chemicals Industry. Business Strategy and the Environment, p. 13.
- [18] theory: The state of the art. New York, NY: Cambridge University Press.
- [19] Utama, Yopi Yudha., Sukoharsono, Eko Ganis., Baridwan, Zaki. 2018. The Urgency in Implementing the Accounting Sustainability of Spiritual Dimension in the Sustainability of Company. Journal of Accounting and Business Education, Volume 3 (1).
- [20] Venkatraman, S., and Nayak, R. R. 2015. Relationships Among Triple Bottom Line Elements Focus on Integrating Sustainable Business Practices. Journal of Global Responsibility. Vol. 6 Iss 2 pp. 195-214.
- [21] Wachira, M. M., and Wang'ombe, D., 2019. The Application of Environmental Management Accounting Techniques by Manufacturing Firms in Kenya. Advances in Environmental Accounting and Management, Vol. 8, Bingley, pp. 69-89.
- [22] Wilson, John P. 2015. The triple bottom line: Undertaking an economic, social, and environmental retail sustainability strategy. International Journal of Retail & Distribution Management, Vol. 43 Issue: 4/5, pp.432-447.