The Analysis of Green Accounting Cost Impact on Corporations Financial Performance

Hosam Alden Riyadh1*, Maher A. Al-Shmam2, Henry Hongren Huang3, Barbara Gunawan4, Salsabila Aisyah Alfaiza5

1Universitas Muhammadiyah Yogyakarta, Indonesia, 2University of Mosul, Iraq, 3National Central University, Taiwan, 4Universitas Muhammadiyah Yogyakarta, Indonesia, 5University of Airlangga, Indonesia. *Email: hussam_19860@yahoo.com

Received: 16 January 2020  Accepted: 13 August 2020  DOI: https://doi.org/10.32479/ijeep.9238

ABSTRACT

This research aimed to analyze the green accounting (GA) impact on financial performance (FP). The research question pertaining to this research will answer empirical investigation and analysis in the top 100 multinationals corporations. The research seeks to answer the questions: Does green accounting cost have an impact on financial performance in the top 100 multinationals corporations? Thus, secondary data and multiple regression analysis were employed in this research, such as CSR reports, sustainability reports, and financial statements. The selected corporations were 100 largest multinational corporations in the year 2018. Then, the green accounting used a proxy of the environmental cost (EC), while financial performance employed a proxy of Return on Capital Employed (ROCE). The finding of autonomous Green Accounting costs on financial performance has a negative relationship.

Keywords: Green Accounting, Environmental Cost, Financial Performance
JEL Classifications: O14, D24, C41

1. INTRODUCTION

The impact of environmental problems on business management issues, auditing, accounting, and disclosure systems must inevitably be considered by accountants as the principal custodians and mild bearers of financial development. At present, environmental protection and the potential involvement of accountants is a popular issue among accountants throughout the world (Pramanik et al., 2007). Thus, accountants for now and in the future are predicted to take on the cost function of environmental safety technique with the liberalization, by getting rid of exchange boundaries. It becomes logical that the environmental degradation costs are due to industry matters that must be internalized in the company’s account as far as possible. For this reason, the reporting and accounting of the environment are critical at this time.

The ultimate goal of green accounting or environmental accounting at any organizational level is aimed to determine the organization’s needs to make sure that the economy has a good level of efficiency for its environmental preservation activities and the company’s overall business operations (Kundu and Hauff, 2009). Accounting of environmental management is contained in the environmental accounting. In environmental management accounting, this accounting is converged like material, aspects of energy stability, and the information of environmental cost. This accounting is included in the environmental accounting segment, which is an internal environmental accounting instrument, for carrying out investment activities or projects related to environmental conservation during all operating tactics, as well as estimating environmental impact for a specific duration (Gray et al., 1996). Moreover, Eco Balance is a branch of environmental accounting and classified under environmental management. It is considered an internal environmental accounting instrument to reinforce actions and activities for the management of sustainable environmental. Then, accounting of corporate environmental, which is an
instrument to tell the community of related information, is arranged accordingly. It can be stated as corporate environmental reporting. Thus, consequently, from environmental conservation activities in monetary amounts and values, it utilizes costs and effects. The second form of environmental accounting, according to Kundu and Hauff (2009), concentrates on the costs of environmental liability and other substantial environmental expenses reporting.

According to Banerjee (2001), there is a need for green accounting at the level of corporate, for example, green accounting at the corporate level that assists the management in understanding whether or not the organization has been on the right path for responsibilities towards sustainable development with business objectives. On the other hand, environmental issues could affect financial statements arranged on an accrual basis in several ways. At the corporate level, environmental accounting is needed, according to Banerjee (2001). For example, it is to assist understanding of management, whether or not the sustainable development responsibilities with the business goals of the organization have been on the right path. On the other hand, financial statements can be affected by environmental problems in many ways, which are arranged on an accrual basis. Several standards of international accounting state the general principles for measurement, disclosure of environmental issues, and recognition in statements of financial (IAS-39), such as International Financial Reporting Standard (IFRS), Financial Accounting Standard Board (FASB), and International Accounting Standard Board (IASB). A commitment to recognizing assets impairments could be involved in the environment associated laws introduction and result in requirements for writing down the carrying amount. The need for workers to redress costs, compensation, or legal costs, is a result of failure to adjust legal requirements regarding environmental issues, such as waste disposal and emissions (Rahman, 1999). The author pinpoints that companies can risk fines or penalties if they fail to meet legal requirements related to pollution management. Some annual costs related to the natural environment, for example, energy costs, need to be considered at the level of association of environmental values due to fossil fuels use that can be a supply of pollution and dioxide.

In addition, small part profits for the company themselves accrued from the environmental performance have been stated by the traditional economic debate view, and as a result, companies have incentives to implement and under-adopt in environmental accounting. On the other hand, the interference of the government to impose the standard of environmental will consequence in the transaction between costs to the firm (from lower profits) and benefits to society (from improvements in environmental measures). On the contrary, tighter regulations might offer a broad performance boost for company profitability, as claimed by several authors such as (Porter and van der Linde, 1995), by directing them to emphasize on increasing customer satisfaction and sales, as well as reducing production costs. Therefore, to date, in the literature, specific gaps exist, namely the fact that very few studies that control dynamic impacts or company heterogeneity are considered in financial performance and environmental accounting costs. Besides, a significant body of literature has observed that the green accounting technique is very limited attention has been set to scrutinize the environmental accounting costs impact on financial performance. This research aims to fill this gap by exploring this issue by developing a framework that can be employed to explain the environmental accounting costs impact and financial performance. This framework will be built by using previous studies, legitimacy theory and stakeholder theory. These are the gaps in the research that wants to be bridged.

It is essential, in this context, that there is an empirical correlation between firm environmental accounting costs and financial performance. In particular, a finding of a positive connection between the two factors could be deduced as offering help for the ‘win-win’ contention. Indeed, many of these research experienced limited data and/or model specification errors although previous empirical research in the two fields have found different results. To date, in the literature, specific gaps exist, namely the fact that very few studies that control dynamic impacts or company heterogeneity in financial performance and environmental accounting costs. As a result, this study analyzes the relationship between the environmental accounting costs impact on financial performance.

Moreover, this research expects to have several theoretical contributions, first, it expecting to expend environmental accounting literature by coming up with a theoretical framework that helps explains a dearth of environmental accounting utilization. Second, it is expecting to provide a new insight interpretation to developing a scientific model by giving accounting-based recommendations of environmental accounting that can hold a better effect.

The practical contribution presents recommendations that can aid corporations in grasping several types of environmental accounting. An overview of the previous literature has indicated a dearth in research on environmental accounting status in multinationals corporations, and specifically, multinationals corporations should have ideal practices as notable that past studies with regards to the environmental issues only focused on descriptions disclosures, and not on the effect of environmental accounting cost or practices (Abdulhamid et al., 2005a; Ahmad et al., 2004; Bayoud and Kavanagh, 2012). Therefore, this study provides comprehension enhancement of the status and the impacts of environmental accounting in multinationals corporations. In addition, this research may help to generate or improves the awareness and consciousness of the decision-makers overworld towards environmental accounting topics in enhancing both the economic and environmental performance and achieving sustainable financial performance.

2. THEORETICAL REVIEW AND EMPIRICAL REVIEW

2.1. Theoretical Review

2.1.1. Stakeholders theory

The fundamental and essential recommendation of the stakeholders’ theory that the company’s accomplishment depends upon the viable and effective administration of the considerable
number of connections that an organization owns with its partners. Stakeholders’ theory, a term initially presented by Stanford Research Institute (SRI) (SRI), highlighted that stakeholders are those groups without whose help the association would stop to exist (Freeman, 1983). In building up the stakeholder theory, it fuses the stakeholder’s idea into classifications (i) a business policy model and planning, and (ii) a corporate social responsibility model of stakeholder management. In the first model, stakeholder evaluation emphasizes making and assessing the agreed choice of company approach by using groups whose assistance is needed for company sustainability. Despite the fact that these companies are not adverbal in nature, their penchant contradictory conduct is viewed as a steady on the technique created by the management to top-notch coordinate their company’s assets with the environment (Deegan and Gordon, 1966).

Consistently, in the second model, corporate analysis and planning comprise external effects that can conflict with the company. These hostile teams could exemplify the limited reformers as well as intrigue groups associated with social issues (Guthrie and parker, 1990). The second model causes accountants and managers need to anticipate a versatile strategic arrangement to differ inside the social requests of the non-traditional stakeholder team.

Stakeholder theory suggests multiple stages of environmental recognition that causes the group’s need to extend their company planning to comprise non-traditional stakeholders, such as business hostility regulations to alter the social needs changes (Trotman, 1999) cited in (Bassey et al., 2013). The core worry of stakeholder theory in accounting establishing is to look at the components of environmental values and valuations, and include them in the money statements. The management (agent) company would higher perceive the inner state of a corporation compared with the owner (principal). Such conditions would trigger the potential for fraud management to satisfy personal interests. One sort of fraud that presents info that does not correspond to the particular condition of the corporate. This spatial property could result in a misallocation of capital.

2.2.1. Legitimacy theory
This theory has been ensuing from the social science paradigm and emphasizes this supposition that a company should reserve its social function by meeting to social needs and contributing the community a higher image. The companies increasingly try and show their positive operations to social activities unusually, to attain legitimacy, and show a favorable image of their corporation. In earlier times, profit maximization was an honest benchmark for the legitimacy of any organization, but given dynamical expectations in societies in recent decades, the quality of legitimacy in organizations is that they avoid harming the atmosphere or compensate incoming harm. This theory is extensively wont to clarify social and environmental info reportage motivations. Moreover, the social compression on firms, additional, they have to allow their activities legitimacy ahead of society and additional they use such instruments as a social and environmental info speech act by Ali Khani et al., 2014. second citation in (Noodezh and Moghimi, 2015).

2.2. Empirical Review and Hypothesis Development

2.2.1. Green accounting and financial performance
Green accounting is a wide field of accounting used at different accounting levels, such as the national accounting level, financial accounting level, and management accounting level (Boyd, 1998). Green Accounting or Environmental accounting in the broader term aims to provide environmental information to both external and internal stakeholders (Ditz et al., 1995). Environmental accounting could be employed to reveal the potential benefits of environmental investments to generate profits, and avoid environmental liabilities (Beer and Friend, 2006).

In this regard, Gray and Bebbington (2001, p. 7) describe that green accounting covers several aspects which include evaluating potential environment-related liabilities; re-evaluating environment-related assets and capital projections; developing accounting information systems in order to include different environmental performance aspects; evaluating investments in environmental terms; analyzing costs in several areas, for example, environment protection, wastes, and energy; developing new accounting techniques that express environment-related assets, costs and liabilities in both non-financial and financial terms, and assessing environmental programs in terms of expenses and benefits.

The main aim of green accounting is providing information about environment-related activities in addition to information generated by conventional accounting. In fact, several and varied definitions of environmental accounting were drawn up by several researchers, that defined environmental accounting as the field that comprises three distinctive contexts: Financial accounting, management accounting and national income accounting at several levels at national, regional and firm levels, and applicable to a product line, a facility, an activity, or a system (Bennett and James, 1998; Graff et al., 1998; Gray and Bebbington, 2000; Schaltegger and Burritt, 2006). The research focuses on the impacts of environmental accounting in firms at level or subsets of environment accounting as environmental, and financial accounting focuses on disclosing information related to environment, such as costs linked to environmental liabilities and other costs associated with environment.

Continuously, the final measure of financial performance, how well the firm usage its resources to get profits. It had been measured by exploitation accounting measures of profit. Dunk (2002) examines the degree to which the quality of product and the application of environmental accounting positively affect quality performance. He recommended that the coordination of environmental problems into the financial decision process by utilizing environmental accounting would add to improving the quality and overall performance of the company. Extensively, environmental accounting involves identifying, measuring and allocating environmental costs, integrating these costs into business, identifying environmental obligations, if any, and finally communicating this information to company stakeholders as a component of general-purpose of financial statements.

According to Adediran and Alade, in 2013, they investigated the environmental accounting impact on the performance
of a company in the Republic of Nigeria. It investigates the relationship among return on capital employed (ROCE) and environmental accounting; earnings per share (EPS) and net profit margin (NPM) dividends per share (DPS), as secondary knowledge obtained from the annual report and account of the fourteen (14), voluntary selected companies quoted in the Nigerian securities market for the year 2010. The information was then examined mistreatment multivariate analysis. The result referred that environmental accounting incorporates an essential relationship with the assorted variables utilized in activity company performance. In addition, over that general image that arises from recent reportage since the revelations of environmental info measures voluntarily, there is a diversity of observations. Giant corporations tend to report much setting info in their annual reports compared to the medium-scale businesses. Therefore, even though there is a significant correlation between company performance and environmental accounting, the speech act tends to be a lot of qualitative than quantitative.

According to Makori and Jagongo in 2013, they describe environmental accounting as the skill to produce correct information in monetary statements. It is related to the calculated social value caused by the externalities of the surrounding assembly. It is the way that many intentional intervention values have been issued to connect the gap between marginal social values. Therefore, the marginal personal value of a company supports their research that examines the correlation between environmental accounting and the profits of designated companies registered in Asian countries. It was a study of information gathered from accounts of fourteen randomly selected company and annual reports quotes on the Mumbai stock market in an Asian country. The information was analyzed exploitation, multiple correlation models. The findings of his research showed that there is a significant negative relationship between environmental accounting and come on capital utilized (ROCE) and earnings per share (EPS) and a significant positive relationship between environmental accounting and profits margin and dividend per share. Supporting this research, it has been suggested that the government ought to provide a step-down for companies that accommodate their environmental laws, which environmental news must be made compulsory in Asian countries, thereby improving organizational performance and therefore the nation as a whole.

The study (Bassey et al., 2013) scrutinized the effect of reporting and accounting of environment on organizational performance with specific reference to oil and gas companies operating in Nigeria. This research was conducted using the Pearson product-moment correlation coefficient. Unfortunately, environmental costs have a significant relationship with company profits. This study concludes that environmental cost management thoroughly influences company profits and improves organizational performance, so many companies report and disclose environmental related information. In addition, environmentally friendly organizations enjoy a high level of company amenability. Finally, the scarcity of environmental reporting and disclosure standards significantly influences the uniformity of reportage and the revelation of information related to the environment in annual reports, money reports, and accounts.

Based on Sarumpaet’s (2005) study, entitled “the relationship between environmental performance and financial performance in Indonesia,” it concluded that, in Indonesia, environmental performance is not significantly correlated with financial performance. The data were collected from 252 companies; however, the result revealed that financial performance is not significantly correlated with environmental performance and company size; while stock exchange listing and ISO 14001 are significantly related to environmental performance.

The issues of politics and socioeconomics are assumed to be essential by the environment throughout the world. According to Pandey (2016), the study mainly seeks to prove whether there is a significant correlation between environmental costs experienced by companies and profitability. This study utilized secondary data obtained from company annual reports for a 5-year period that was from 2010-2011 to 2014-2015 and various web sources. NTPC, NHPC, Hindalco, TATA Steel, and NMDC were chosen to reveal the environmental expenditure effect on company financial performance. The environmental costs for the dependent variable and EPS, P/E ratios and ROCE (a good indicator of financial performance) data for the independent variable. Each annual report of company was for the data of environmental costs, while the company’s website and database provided data for independent variables and control variables. This examination joins organization size (as far as market capitalization) and the proportion of price value to books as a control variable. This study employed a regression analysis based on the sample data and analysis, which found that there was no critical connection between the company’s environmental expenditure and its financial performance. Furthermore, it was also discovered that organizations with greater market capitalization spent more on environmental problems. Based on the arguments above, this leads to investigate and formulate the following proposition:

Ho: There is a positive relationship between green accounting and return on capital employed

3. RESEARCH METHOD

3.1. Research Design

Many scholars have termed the research design. Beck (2003) describes research design as an arrangement to find solutions to the inquiries being examined and for dealing with some issues experienced during the examination process. To seek out the impact between totally different variables, it can be analyzed the data using exploitation multiple regression analyses through the employment of the economic model, which means that economics models square measure applied mathematics models employed in economic science.

3.2. Research Variables and Measurements

3.2.1. Environmental accounting

Green accounting is a cost issue related to the environment that is more transparent with company accounting reports and systems. In other words, it is a system that tries to make the best quantitative judgment possible. The measurement in this study would utilize the sum consumed by each corporation as their environmental costs...
are operated as an intermediary for environmental accounting on return on capital employed (ROCE).

3.2.2. Financial performance
Financial performance is how well a company could employ resources from its primary business mode and create incomes. This term is additionally utilized as a general proportion of the company’s overall financial wellbeing over a period and can be employed to compare similar companies in the same industry. Financial performance is uncovered by the later markers: added value or profit; budget, costs, sales; expenses or costs; indicators of the stock market (e.g., stock prices); and autonomy. Intermediaries for financial performance additionally incorporate the measures of performance accounting, return on assets (ROA), and return on equity (ROE). The financial performance features to be measured are ordered into four indicators: net profit margins (NPM), return on assets (ROA), and earnings per share (EPS). Then, this research would be ROA.

Variable name, indicators and measurement

| Variables          | Indicators            | Measurements                                      |
|--------------------|-----------------------|---------------------------------------------------|
| Green accounting   | Environmental cost    | Amount of money by USD spent on - environmental protection reduce emission |
| Financial performance | Return on capital employed | profit before tax × 100 / capital employed 1 |

3.2.3. Data collections
The secondary data for this research were obtained from annual reports, financial statements, sustainability reports, and CSR selected corporations 100 largest corporations in the year 2018, the multinational corporations had drawn.

3.2.4. Data analysis
Data analysis in this study used statistics to describe and search the relationship among variables. The statistical method used in this research is utilizing the analysis of multiple regression.

3.2.4.1. Empirical analysis
The following section presents the results of the measure of environmental accounting and company profitability, such as return on capital employed. Table 1 presents the data collected from several financial statements:

Overall, the result showed above the variable except (ROCE) is in line with previous expectations. It might also be seen that adverse relationship with (ROCE). Thus, free environmental accounting costs is a negative 8939618, which is represented by (ENVC) as observed using the variation coefficient from the above model. As a result, a unit change (ENVC) will cause a negative change of around 29863504 units in the ROCE minus the autonomous component provided that other variables remain constant.

4. CONCLUSION
Green accounting include all expenses gained related to environmental protection, such as the treatment of emissions as wasted material, labor, and capital, which is thus referred to as “non-product output,” caused by inefficient production activities. Completely different thoroughly companies might contemplate different parts into environmental prices; however, it is necessary that each one important and relevant price square measure incorporated for sound deciding purpose. The final picture, which arises from current reporting, is that since disclosure of environmental information units is voluntary, there has been a variety of reporting actions. In addition, giant corporations tend to report much setting info in their annual reports compared to the medium-scale businesses. Therefore, even though there is a significant correlation between green accounting and company performance, the speech act tends to be a lot of qualitative than quantitative.

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