



(RESEARCH ARTICLE)



Ecological activities costs and line of work cost-effectiveness: The current trend in Nigeria

Glory Tony Effiong¹ and Inyang Ochi Inyang^{2,*}

¹ Department of Accounting, University of Calabar, Calabar, Nigeria.

² Department of Accounting, Faculty of Management Sciences, University of Calabar, Calabar, Nigeria.

World Journal of Advanced Research and Reviews, 2022, 15(01), 466–475

Publication history: Received on 18 June 2022; revised on 20 July 2022; accepted on 22 July 2022

Article DOI: <https://doi.org/10.30574/wjarr.2022.15.1.0732>

Abstract

The study investigated the cost effects of ecological activities as they affect corporate cost-effectiveness of establishments. It highlighted on influence valuation of cost consequences on the managerial challenges and prospects towards enrichment of the cost-effectiveness of Nigerian oil trades. Facts for the study were collected by the use of a well-developed instrument and extraction from the commercial accounts, and these facts were analyzed using the ordinary least square method. The results discovered that there is positive relationship between organizational cost-effectiveness and major determining factor of ecological activities. Thus, these determining factors of ecological activities should be considered when making proceeds decision since it is desirable that establishments must sustain their proceeds amidst ecological challenges. Founded on findings of the study, it was suggested amongst others that Nigerian oil businesses should show statistics on ecological expenditure, ecological cost charged to income in the account as well as details in the notes to the accounts. To enhance the effectiveness of the policy as well as its compliance, separate financial records should be maintained for ecological expenditures.

Keywords: Ecological activities; Ecological cost; Cost-effectiveness; Impression valuation; Cost benefit theory

1. Introduction

Asuquo [1], Asuquo, Dan and Effion [2] submitted that, in years past, ecological issues were often ignored by both firms and individuals, but currently ecological friendly is entreated. Dangerous and perilous wastes and other such items were considered a necessary lost of a growing economy. Times have changed as people now realize the effect of waste product that actually could impair the surroundings. He went on to say that most people now recognize that preserving green air, water and land is more essential than lower cost product for consumers or high profit for business firms. That many people are willing to pay more for products that are ecologically friendly. The bottommost line of this squabble is that both the host municipal who owns/makes up the surroundings and oil conglomerates and other conglomerates that are domiciled in the environs derived a measure of benefit from the surroundings. If this is therefore accepted by both parties, then effort should be made to ensure that the surroundings is protected to allow for sustainable benefits. Sustainability here refers to the long term health of the global economy; and maintainable ecological growth/benefit aimed at meeting the needs of the present without conceding the ability of future generations to meet their own needs. The major obligation lies on the corporate organizations in our surroundings to ensure that the surroundings is treated as an essential part of the economic process and not treated as a free good [3, 4].

There is a great need to realize that everything that happens in the surroundings has an underlying cost, and just like any other cost, may contribute to both the success and failure of the business respectively. This study intended to ascertain the various ecological activities and also establish how their costs affect the cost-effectiveness of organizations

* Corresponding author: Inyang Ochi Inyang

Department of Accounting, Faculty of Management Sciences, University of Calabar, Calabar, Nigeria.

in the Nigerian oil trades. In other words, the study looked at how social and responsible the organizations in the Nigerian oil trades are to the environs they operate in. In the last two decades of the twentieth century, there has been great concern over corporate social obligation and behaviour of companies have gained currency and generated debates among interested parties; in an attempt to determine the locus of obligation between actors in the corporate business arena as well as societal demand. The expected role of companies in terms of corporate social obligation assumed new dimension with the major issue which hinges upon the consideration as to whether, in the context of the prevailing memorandum of understanding packaged between the company and the host municipal, the company should be burdened with additional obligation which were not originally demarcated.

This argument is strengthened by the fact that business entities are increasingly being asked to take additional responsibility in terms of securing a better surroundings and formulating/executing socially oriented programs that would increase the net benefit of the host communities while still making their expected profit. To assess the efforts of companies toward the accomplishment of their obligation to the environs is the ecological audit, which this study also tried to explore as an instrument to highlight conditional liabilities arising from ecological deprivation. The overall emphasis is on ecological protection, and on the ability of the ecological audit to predict legal responsibility for past, present as well as future activities in our changing environs [5, 6, 7].

1.1. Statement of the problem

Despite the huge benefits organizations earned from their environment, there has been a serious lack of concern for the conservation of the environment. Organizations ignore the cost implications of the various interactions that exist between them and the environment. This is a disservice not only to the host community but also to the organizations themselves. There are fears as to what the future holds for our esteemed environment considering the various uses it has served. It should be pointed out the future generations are unlikely to condone our lack of prudent concern for the integrity of the natural world that supports all life, one sees that the natural world (the environment) needs to be protected. Long-term benefit of the environment has been mortgaged for the short term cost-effectiveness. Organizations need to know that a conducive social environment will enhance cost-effectiveness; some of which should be ploughed back to the host community for social growth as is generally argued. Consequent upon the above issues, this study was conducted to offer elucidations to the difficulties recognized.

1.2. Theoretical Contextual

The top management contend that profit maximization alone is not, and cannot be the sole management objective. He went on to say that there is a believe that the employed manager hoped to satisfy his own personal benefit vis-à-vis the benefit of the organizations. This implies that those saddled with the obligation of articulating business objective (top management), should take into consideration the personal interest of the employed manager as prescribed by code of professional ethics to ensure effective and efficient management of ecological resources. There should be a thoughtful management policy to satisfy the benefit and pension of the employees as rewards for their present and past contribution. This will undoubtedly motivate the employees to achieve the firm's objective. Drawing from the above inference, it is pertinent to argue that today's concern should not only be on the employees, but on the entire interested party of the organization.

To achieve this aim, every organization should be able to know who its stakeholders are. This often includes, but not limited to suppliers of inputs, employees and trade union, members of local communities, society at large, and government. Different interested party have different rights of information and task expected of them to perform to justify costs incurred on their welfare. This right can be stipulated by law, but also by non-legal codes, corporate values, mission statements, and moral rights, the rights of information using modern information technology analytical tools and professional ethics as instruments, as are thus determined by society, the organization and its stakeholders. Simply, a stakeholder analysis needs to be carried out to identify the relevant parties that have a stake in the organization. They could be individuals, groups, or organizations. There is a great need for management objective to be given wider scope. Management overall accomplishment of objective should no longer be viewed in terms of how much it has satisfied the need of the internal members and perhaps the government, the local community must be taken into consideration [8, 9, 10, 11, 12]. To buttress this point, the top managers advanced the stakeholders theory. This theory states that "there are a number of interested parties to be considered in the formation of objectives, and these extended widely to include not only shareholders and managers, but also other groups, such as workers, consumers, suppliers and local community", Eyre [9]. Eyre in his submission concluded that the extended concern as opined by the top managers, means that management objectives must be set to include the interest of all who are likely to be touched by the business activities of the firm. The emphasis is that interests of the stakeholders must be taken into account.

In other words, if this policy is ignored or not given the attention it deserves even the major objective of the organization, being profit and wealth maximization objective of firms, will be adversely affected [13, 14]. It is also necessary for the organization to analyze its roles as well as its relationship with the interested party both individually and collectively. This will help in setting out healthy boundaries that will enhance effective and efficient operation. A successful putting into practice of this maiden plan will help management set objectives that will fulfill their own interest as well as produce profit that will satisfy the owners. The profit that will satisfy the owners here may not be the maximum profit but a sustainable profit. Every plan for the attainment of the long term goal of the organization should and must incorporate the resources needed to achieve the set goal. A growing body of evidence holds that, in many situations, improved ecological and social performing provides financial advantage [15].

1.2.1. Ecological maintainability viewpoint

Prestone [16], documented that there is no superior between conserving the environs because you cannot have one without the other, “The matter of maintainable progress besides the environment are interconnected and often jointly reinforcing. Cohen [15] demarcated justifiable progress as a progress plan that is manages all assets, both the natural and human resources for wellbeing. One sees that there can be no meaningful progress or development where such could not be continued. Every business organization thrives in an environs. Awasthi [17] opined that, “at a fundamental level, the environment provides biological, chemical and physical systems that enable human life to exist”. He went on to say that it is from the environment that human obtains raw material and energy for economic production and household activities. If the environment is so important to man, then the need for it to be conserved and/or protected cannot be over-emphasized. With the development in communication which has driven a growing public awareness on ecological and social issue, none should be in doubt about what our environment holds to life [15]. One really needs to know that anything that is exposed to any form of usage at any time cannot remain the same: it is prone to deterioration. Both individuals and corporate organization depend on the environment. It is true that there is a dissimilarity between internal economies of scale and external economies of scale. As argued by various researchers, “the external economy arises outside the firm from enhancement (or deterioration) of the surroundings in which the firm operates.” Here, common sense dictates that if the surroundings is only subjected to use without measures for its improvement, it will deteriorate. The possible consequent of that will be an increase in the cost of production because the firm no longer enjoys external economics of scale. It then informed the need for the environs to be sustained. It is interesting to note that because of the important role of the environment, its sustainability has carried currency in recent times. Much efforts and resources have been put in place to ensure that stakeholders do not compromise their stand as far as the preservation of the equality of their (ecosystem) environment, is concerned [16, 17].

This should save as a panacea to the growing public concern for ecological and social issues. The main aim is to ensure the long-term financial and economic viability of organizations while also requiring compliance with minimum ecological and social standard. It was discovered by IFC that an organization’s ability to identify areas they can deliver more beneficial corporate ecological and social impact will enhance their financial interest. It is rather unfortunate that some organizations are still ignorant of the importance of ensuring ecological sustainability. Moreover, the reform and harmonization processes including deregulation or privatization should also be used proactively to enhance ecological sustainability. The whole essence is a total commitment to promoting sustainable projects in our communities that are economically beneficial, financially and commercially sound and ecologically and socially sustainable, thereby “promoting an environment which is conducive to all stakeholders both in the short-term and in the long-term [18, 19]. This can however be enhanced through a proper assessment of all relevant impact of all projects and activities embarked upon by organizations in our local communities. This is to ascertain whether the various projects do contribute to the improvement of the environment or not. It will involve the use of a systematic approach to evaluate organization’s ecological priorities as well as the environmental implications of key policies, and their capacities to address development priorities and related environmental concerns [20]. In other words, how well the different scheme help achieve management goal in relation to their cost; of course, the answer depends on the beneficiaries perception of the expected incremental/extra benefit in relation to the additional cost. This will involve an evaluation of the resultant benefit in relation to the actual cost outlay known as Cost Benefit Analysis or cost benefit notion.

1.2.2. Cost benefit model

The ecological cost-benefit theory says for example, that we should install a guard rail on a dangerous stretch of mountainous road if naira cost of doing so is less than the implicit naira value of the injuries, death, and property damage that is prevented. It is the theory that seeks to analyze the cost-effectiveness of different alternatives in order to see whether the benefit outweighs the cost. The aim is to measure the efficiency of the intervention to the existing circumstance. The concept is most often practice by government to evaluate the desirability of a given project. The cost and benefit of the impact of project are evaluated in terms of the public willingness to pay for them, known as benefit or the willingness to pay to avoid them, known as cost. Inputs are typically measured in terms of opportunity costs –

the value in their best alternative use. The guiding principle is to list all the parties affected by the project; and place a monetary value of the effect it has on their welfare as it would be valued by them [21, 22].

The process involves monetary value of initial and ongoing expenses versus expected returns. In practice, analyst tries to estimate cost and benefit either by using survey method or by drawing inferences from market behaviour.” For instance a product manager may compare manufacturing and marketing expenses to projected sales for a proposed product, and only decides to produce it if he expects the revenues to eventually recoup the cost. Ecological cost-benefit theory attempts to put all relevant environmental costs and benefit together.

A discount rate is chosen, which is then use to compute all relevant future cost and benefits in present value terms [22]. Most commonly as Dogo [23] observed “the discount rate used for present value calculation is an interest rate taken from financial market.” According to Frank [21], “this can be very controversial for example, a high discount rate implies a very low value on the welfare of future generations, which may have a huge impact on the acceptability of the project to help the environment” The essence of ecological cost-Benefit theory is that “all social benefit and all social cost are expressed in monetary terms, and are adjusted for the time value of money, so that all flows of benefit and flows of project cost overtimes (which tend to occur at different point in time) are expressed on a common basis in terms of their present values [24]” Closely related, but slightly different formal techniques include Cost-Effectiveness Analysis, Economic Impact Analysis, Standard Magnitude Variance Analysis, Fiscal Impact Analysis, Creative accounting analysis, Thin Capitalization Technique, Transfer Pricing Method and Social Returns on Investment analysis. The latter builds upon the logic of cost-benefit analysis, but differs in that it is explicitly designed to inform the practical decision-making of enterprise managers and investors focused on how to optimize their social and ecological impression and benefit [22, 25, 26, 27, 28, 29].

The main concern is the contentious issue of matching the expenditure incurred on each ecological activity with the benefit associated with it. There is no doubt that the corporate organizations in our local communities are the major generators of income, employment, and providers of technology, which influences accounting practices and managerial skills [17, 30]. This explains the utility of the theory of balance of power in examining the relationship between local communities and corporate organizations which essentially is a relationship of unequal. Thus, the host community naturally has, raw materials, including mineral resources but lacks the requisite financial capital and technology to exploit them. It has surplus labour and raw materials but lacks the productive capacity [17]. This logically implies that they will rely on the organization to harness these resources for the benefit of all the stakeholders. It then places a high level of obligation on the corporate organizations to ensure that they create positive impact on the host community through their various programs and activities.

1.2.3. Ecological impression valuation

Ecological impact assessment Decree of 1992 is one of such legislations. The decree has to do with the assessment of the possible impact of a project on the environment. It makes it mandatory for ecological impact assessment to be carried out before all new developmental projects are embarked upon. Ecological impact assessment is defined as a systematic process involving the identification, protection, evaluation and presentation of the probable as well as possible consequences (Positive/Negative) of a proposed project, policy or programs at a stage in the decision-making process where serious ecological damages can either be avoided or reduced [31]. In the United Nations Ecological Programs, goals and principles of ecological impact Assessment, is demarcated to mean “an examination, analysis, assessment of planned activities with the view to ensuring ecologically soundness and sustainable development.” Literally, it is a study of the biological, physical and socio-economic impact of a proposed developmental action [31]. In the view shared by Raw [32], it is the process of anticipating or establishing the changes in physical, ecological and socio-economic component of the environment before, during and after an impending developmental project so that undesirable effect if any can be mitigated. A thorough assessment of the likely impact which a proposed plan or project shall cause, is therefore, essential so that even the minor seemingly insignificant changes are brought to the notice of policy makers. Sada [33], argued that this is necessary because as opined by Raw [32], the socio-economic quality of life cannot be sustained indefinitely if the project causes adverse changes in the environment. Sustainable development cannot be achieved if the impact of projects on the environment is not given serious attention. Furthermore, Okon [31], submitted that, it is through the process of identifying impact of the projects on the environment that those projects having negative impact on the environment can be avoided thus enhancing the use of the environment in a manner to meet the need of the present without compromising the ability of future generations to meet their own needs. The process of ecological impact assessment has to be integrated with the relevant development, that is to enable the effect of the development activity to be examined at early stage in the planning of the project and not after decisions regarding its design and location has been taken [32].

Ecological impact assessment is usually conducted in three stages [34] These proceed every decision making step of the project, extending and intensifying itself as the project planning is elaborated, viz: (a) Initial scrutiny (b) Rapid ecological impact (c) Comprehensive ecological impact assessment. Initial scrutiny: The step involves a critical evaluation of the intended project as to whether ecological impact assessment is necessary or not. This screening helps clear certain project which is not likely to cause serious ecological problems in the nearest future. Rapid ecological impression valuation: It is at this step that if it is felt that the project is likely to cause some adverse effect, on the environment, the project is then subjected to rapid ecological impact assessment. This however involves, identification of the important impact of the project on the environment evaluation of the impact of the project on the locality or entire region, conducting a cursory cost-benefit analysis, and listing of the issues which are unresolved and which need examination in detail [32]

Rapid ecological assessment, thus attempts to identify the key issues in a particular case so that attention or resources could be directed to relevant aspect. Issues which are not important enough to deserve further studies are omitted in order to optimize resources. Wide-ranging ecological impression valuation: This valuation is always carried out based on the information obtained from the first two steps earlier examined. It involves a wide-ranging study of the critical aspect of the project. It involves collection and evaluation of time base data about the existence of the project in the environment, identification of the cost of the impact, evaluation of the impact, adopting initiative measures and monitoring plans as well as provision of information for the society and other decision makers. It should be submitted that human activity which causes adverse influence on large scale must be vulnerable to a close scrutiny, before being undertaken, and for the ecological damage it would cause, proper mitigates steps should be taken to repair the damage [35].

1.2.4. Cost consequences of ecological activities

Various activities have been identified ranging from business expansion, deforestation, exploitation of the natural resources, waste generation, pollution etc. A careful valuation of the above listed activities reveals that these activities whether carried out directly or indirectly, are for the exclusive benefit of the organization. But we do appreciate the fact that there are other parties with full right to the environs known as stakeholders. In order to meet the need of other stakeholders, certain measures need to be taken; where such measures are ignored or may not be given the attention they deserved, it has a far reaching implication to organization [36, 37]

According to Wright and Noe [38], ecological cost consists of ecological measures and ecological losses. They include clean-up cost, cost of recycling materials /conserving energy, closure cost, capital expenditure and expansion expenditure. Ecological measures here are those cost incurred in preventing, reducing or repairing damage to the environment and conserving resources. Ecological losses on the other hand are cost which brings no benefit to the business, such as fines, penalties, compensations and disposal losses, closure cost etc. This implies that organizations cannot afford to ignore its commitment to the surroundings. The issue here is, considering the benefit organizations derived from the environment, certain measures must be taken to preserve the environment. This implies additional cost to the organization. In the words of Torstein [39] the real and disguised economic cost associated with ecological protection are easily the greatest obstacles to cleaner air and water, improved preservation of ecosystems and biodiversity and slower depletion of natural resources. Improving the ecosystems etc and slower depletion of natural resource are all geared towards sustaining the economic environment.

Harrington [40] observed, ecological cost is the ecological damage cost to the environment and its users as a result of alternative competing use. Here, he made a distinction between damage cost to the environment and damage cost to those who use the environment. He looked at this from the perspective of the traditional economic distinction between different components of the total economic environmental. This makes ecological cost both a concrete inevitability and a moral obligation for every organization. It should be pointed out that there is always a differential influence of historical cost and current cost proceeds on the operating capabilities of the firm in the ecological setting [41]. In order to avoid incurring ecological losses, organizations initiate measures aimed at conserving ecological values for sustained benefit. They try to invest as well as make expenditure towards the improvement of the economic environment known as ecological conservation cost.

Asuquo and Akpan [42], Smith [43], observed that the challenge/problem of ecological accounting is the inability to adopt professional proficiency for effective ecological accounting and practices for coping with dynamic world so as to expand the practices to include new accounting procedure for costing pollution control measures in the ecology and comparing alternatives. This has become very necessary if managers are aware of the potential of cleaner production to increase the profit of the firm applying the principle of discretionary accruals and ensuring the going concern of both ecology and the operating firms [44]. A major barrier to the adoption of cleaner production and eco-efficiency is that

firms do know the ecological cost of operating their business and therefore do not know the financial benefit that can arise by reducing their ecological impact [45]

2. Material and method

The study adopted both survey and ex-post facto research designs for the purpose of obtaining data to help in testing hypotheses or answering the research questions formulated for the study. The population for the study comprises of the 25 oil companies operating in Nigeria. From this, 10 oil companies were purposively selected to form the sample size. This was in consideration of the fact that all the companies operate in the Niger Delta Region of the country. Thus, the basic assumption was that the population was homogenous, that all the studied elements were identical. Data were generated by the use of structured questionnaires. A thirty item questionnaire was developed to measure the key variables in the study, such as ecological conservation cost, fines and penalties paid on ecological sustainability, etc.

3. Results

Regression result of the relationship between cost-effectiveness and the indices of ecological activities where cost-effectiveness is the dependent variable.

Table 1 Cost-effectiveness and indices of ecological activities

Variable	Estimated coefficient	Standard Error	T Statistic	P Value
Constant	76.0360	10.2360	8.40600	000
Fines & price	0.65700	0.23700	2.34500	0.017
Interested Party benefit	1.75100	0.33700	5.45600	000
Ecological conservation cost	0.23700	0.12900	1.99100	0.078
R- Square	= 0.87500			
Adjusted R-square	= 0.80500			
F-statistic	= 12.7810			
Durbin Watson	= 2.07200			

Source: Field survey and estimation, 2022

3.1. Test of hypotheses

$$CE = 76.036 + 0.657FP + 1.751IPB + 0.237 ECC$$

$$T\text{-value (7.605) (2.445) (5.465) (1.761)}$$

- EC = Cost-effectiveness
- FP = Fine & Prices
- IPB = Interested party benefit
- ECC = Ecological conservation cost.

3.1.1. Hypothesis one

Ho: There is no significant correlation between ecological conservation cost and the cost-effectiveness of organization

Using the t-statistics as the test criterion the computed t-value is 1.761 while the table value at degrees of freedom n-2 (i.e. 1498) is 1.96. This implies that the computed value is greater than the table value, the null hypothesis is rejected and the alternative accepted, meaning there is a significance relationship between ecological conservation cost and cost-effectiveness.

3.1.2. Hypothesis two

Ho: There is no significant connection between fines and prices and the cost-effectiveness of organizations.

Using the t-statistics from the result presented, the computed t-value is 2.445 while the table value at degrees of freedom n-2 (i.e. 1498) is 1.96. This implies that the computed value is greater than the table value, the null hypothesis is rejected and the alternative accepted, meaning there is a significance relationship between fines and prices and cost-effectiveness.

3.1.3. Hypothesis three

Ho: There is no significant association between interested party benefit and the cost-effectiveness of organizations.

Using the t-statistics, the computed t-value is 5.465 while the table value at degrees of freedom n-2 (i.e. 1498) is 1.96. This implies that the computed value is greater than the table value, the null hypothesis is rejected and the alternative accepted, meaning there is a significant correlation between interested party benefit and cost-effectiveness.

4. Discussion

To properly place cost-effectiveness as the dependent variable and its relationship with some macroeconomic variables especially those considered to be the major determinants of ecological activities, it becomes necessary to apply the ordinary least square to estimate the variables' coefficients. The empirical results revealed that: The coefficient of fines and penalties is positive. This implies that an increase in fines and prices will reduce cost-effectiveness. And this is in line with the study on environmental accounting by Effiong and Asuquo [36]. The coefficient of interested party benefit is positive, meaning that there exist a positive relationship between interested party benefit and cost-effectiveness in Nigerian oil companies. This is in line with the work of Asuquo [1]. The estimated coefficient of ecological conservation cost is positive. This shows that there exist a positive relationship between ecological conservation cost and cost-effectiveness in Nigerian oil companies. Although the relationship is supported by the ecological sustainability theory, it is also a pointer to the fact that cost-effectiveness is made possible through ecological conservation cost. This result is in line with the work of Asuquo, et al [6].

5. Conclusion

Based on empirical and non-empirical analyses and findings, it was concluded that as the oil companies in Nigeria exert impact on the environment where they domiciled through various activities, there is an implied cost of such impact (whether negative or positive) on the cost-effectiveness of the oil company. Again, ecological resources are being depleted in several ways as a result of the existence of the organizations in the environment. Simply, the activities of oil companies in Nigeria do exert serious negative impact on the environs through pollution, deforestation, oil spillage, etc. and these have greatly impeded sustainable development in the sector.

Recommendations

The following recommendations were made based on the findings of the study: The Nigerian oil companies should show data on ecological expenditure, ecological cost charged to income in the account as well as details in the notes to the accounts. To enhance the effectiveness of the policy, separate account should be maintained for ecological expenditures based on required accounting and reporting standards. This will ensure measuring and reporting of ecological expenditures and ecological cost-effectiveness of each company as well as the whole sector [46]. The oil companies should establish a standard ecological unit where expert should be saddled with the responsibility of managing the environmental issues of the organization. The oil companies should ensure proper management of ecological matters, ecological costs taking into major macro-economic variables such interest rate, inflation rate, etc. The positive effect of this will be adequate provision of stakeholders benefit to avoid unnecessary conflict [47]. Companies should make provision for the cost of restoration and reclamation of the environs damaged as a result of their operations. Companies should use the services of forensic accountants alongside with information technology for strict adherence to full disclosure of ecological cost in the account. It is expected of the researchers that if all the recommendations made in this study are sincerely implemented through management involvement, then there would be sustainable development in the Nigerian oil sector [8, 42, 48].

Compliance with ethical standards

Acknowledgments

The Authors sincerely thanks all the contributors to the successful preparation of this manuscript. May God bless and grant your heart desires.

Disclosure of conflict of interest

No conflict of interest.

References

- [1] Asuquo AI. Environmental friendly policies and their financial effects on corporate performance of selected oil and gas companies in Niger Delta Region of Nigeria. *American International Journal of Contemporary Research: Centre for Promoting Ideas*, 2012a, 2(1), 168-173.
- [2] Asuquo AI, Dan NO, Effiong, GT. Effect of eco-friendly costs on net revenue of cement producing firms. *International Journal of Scientific and Technology Research*, 2020a, 9(9), 235-240.
- [3] Nwafor CB, Asuquo AI, Inyang EO, Fadenikpo AA. Effect of [green Accounting on financial performance oil and gas companies. *Journal of University of Shanghai Science and Technology*. 2021, 23(12), 166-190.
- [4] Nwafor CB, Asuquo AI, Inyang IO, Inyang EO. Environmental perpetuity costs and earning yields of oil and gas marketing firms: Nigeria's experience. *Journal of University of Shanghai Science and Technology*, 2021, 23(12), 158-165
- [5] Backman, MP. *Social Responsibility and accountability*. 2nd Edition. New York, New York. P. 56, 2003.
- [6] Asuquo AI, Dan NO, Odey IO, Linus MU, Uklala AP, Tapang, A. Environmental operations review and stakeholders' wealth of extracting firms: Evidence from Nigeria. *International Journal Financial Research*, 2021, 12(3, Special issue), 172-180.
- [7] Babbie, XK. *The practice of social responsibility*. 4th ed. Belmont, Ca; Wads Worth Publishing Company; 1999.
- [8] Asuquo AI. Empirical analysis of the impact of information technology on forensic accounting practice in Cross River State-Nigeria. *International Journal of Scientific and Technology Research*, 2012b, 1(7), 25-33.
- [9] Eyre EC. *Mastering Basic Management*. Macmillan master series, 1st ed. Britain Macmillan Press Ltd; 1982.
- [10] Asuquo AI, Akpan AU, Tapang AT. Nigerian pension reforms and management: New strategies for rewarding past intellectuals towards sustainable development in the third world. USA, *Global Journal of Management and Business*, 2012, 12 (13) 11-18.
- [11] Udoayang, JO, Asuquo AI, Akpan AU. Tasks based Costing Technique and labour place effectiveness in processing firms. *International Journal of Scientific*, June 2020, 9(6), 285-291
- [12] Asuquo AI, Akpan AU. Professional proficiency for effective Accounting and practice for coping with the changing world: Nigeria's perception. *Education International Journal of Management Sciences*. Research Academy of Social Sciences, 2014, 4 (6), 241-252.
- [13] Friedman HJ. "Does Business have social responsibility?" *Bank Administration*, 1st ed. New York: Harper and Row Limited; 1980.
- [14] Uwah UE, Asuquo AI. Capital budgeting processes and wealth maximization objectives: Implications for firms in Nigeria. *Research Journal of Finance and Accounting*, 2016, 7(10), 73-85 RJFA@iiste.org.
- [15] Cohen AR, Fink SL, Gadon H, Willits RD (2001). *Effective Behaviour in Organizations*. Cases, Concepts, and Student Experience, 7th ed. United States of America: USS Printing Press; 2001.
- [16] Prestone LT. "Responding to the Development Challenge, Finance and Development). *The World Bank*, 1992; 29 (2).
- [17] Awasthi AK. *Social Choice and individual values*. 1st Edition, Yale. Yale University Press, p.99, 1999.
- [18] Olugbile A. "Environmental Consideration is Health." In *Environmental Policies in Nigeria*. Bulletin of Science Association of Nigeria, 1987, 3 (2).

- [19] Asuquo, AI, Akpan AU. Emerging issues in International Accounting and their effects on global financial reporting (A comparative study of United State, China, Germany and Nigeria). *International Journal of Pure and Applied Research in Engineering and Technology*, 2012, 1(2), 31-50.
- [20] Munasinghe M. "The Economist Approach to sustainable development" *Finance and Development*, Quarterly Publication of the IMF and The World Bank, 1993, 30 (4), 14–14.
- [21] Frank IA. *Environmental issues and management in Nigeria Development*. 2nd ed. Ibadan, Nigeria: Evans Brothers Publishers; 2000.
- [22] Hodges L. *Environmental Pollution*. 1st Edition, Holt Rinehart and Winston Inc. New York, p.331, 1973.
- [23] Dogo I.B. *Advanced Accounting theory*. 1st ed, Zaria, Nigeria: Edy Publications; 2004.
- [24] Dawkins WE . *Cost Benefit analysis and project evaluation, a comparison of alternative approaches*. *Journal of Public Economics*, 2003, 2(5):623-302.
- [25] Asuquo AI. Applicability of standard magnitude variance in the determination financial progress of business organizations. *International Journal of Scientific and Technology Research*, 2020, 9(3), 6351-6358.
- [26] Asuquo AI. Impact of creative accounting and earnings management on modern financial reporting. *The Nigerian Academic Forum*, 2011a, 20(1), 1-6.
- [27] Asuquo AI. The application of standard magnitude variance in optimal capital structuring/working capital management in business organizations. *Multi-Disciplinary Journal of Academic Excellence*, 2011b, 5(1), 109-120.
- [28] Asuquo AI, Ejabu FE. Effects of thin capitalization and International law on performance of multinational companies in Nigeria. *Journal of Accounting and Financial Management*, 2018, 4(2), 47-58.
- [29] Udoayang JO, Akpanuko EE, Asuquo AI. Multinational transfer pricing and international taxation: What, why, how and reporting challenges. *African Research Review*, 2009, 3(5.), 165-181.
- [30] Asuquo AI, Udoayang JO. Effect of Accounting Practices on trade and Information technology in Calabar Metropolis. *International Journal of Recent Technology and Engineering*, March, 2020, 8(6), 1572-1577.
- [31] Okon EE. Legal Framework of Environmental Impact Assessment in Nigeria: the poor state of the law. *African Journal of Environmental Studies*, Nov, 2001, 2 (2), 129–140.
- [32] Raw JE, Jackson TT. Pollution Abatement and Control expenditures. *Survey of current business*, 2006, 24(5), 36–41.
- [33] Sada, SP. *Current issues in Environmental Management*, 1st Edition, Evans Brothers. Ibadan, p.45, 1999.
- [34] Edwards OB. *The marginal effects of Environmental Science*. 2nd Edition, Ultimate Index Book Publishers, Calabar, Nigeria, p.35, 2005.
- [35] Gilpin A. *Environmental Impact Assessment*, 1st Edition, Cambridge University Press, Cambridge, p. 68, 1995.
- [36] Effiong SA, Asuquo AI. Environmental accounting and environmental cost reporting: Implications and prospects for business survival. *African Journal of Management and Administration*, 2010, 3 (4), 144 -147
- [37] Fadenikpo AA, Asuquo AI, Ogeni JO, Nwafor CB, Okoi JO. Environmental smog control costs and proceeds of oil and gas. *Journal of University of Shanghai Science and Technology*, Dec, 2021, 23(12), 361-374.
- [38] Wright CJ, Noe BF. *The Theory of environment and planning*. 1st Edition, India Prentice Hall p.106, 2006.
- [39] Torstein EU. *Environmental and Natural Resources Economics* 1st Edition, Ashford Colour Press. London, p.34, 2006.
- [40] Harrington WR. The Cost of Airk Pollution Abatement, *Applied Economics Journal*, 2006, 29, 759–774.
- [41] Effiong SA, Udoayang JO, Asuquo AI. Correlation and Differential influence of historical cost and current cost profits on the operating capabilities of the firm. *International Journal of Financial Research*. 2011, 2(1), 64–70.
- [42] Asuquo AI, Akpan AU. Management involvement and the relevance of forensic investigations of selected financial institutions in Cross River State. *Nigerian Journal of Education, Health, and Technology Research (NJEHETR)*, 2011, 1(2), 35-44.
- [43] Smith LM. *Accounting Guidelines for Environmental issues Websites Article*, 2003.

- [44] Effiong SA, Asuquo AI, Enya EF. Discretionary accruals and going concern of the manufacturing companies. *International Journal of Scientific and Technology Research*, 2020, 9(3), 2976-2983
- [45] Welford, R. Environmental strategy and sustainable development. *The corporate challenge of the 21st century*, 1995.
- [46] Asuquo AI. Analysis of financial accounting standards and their effects on financial reporting and practices of modern business organizations in Nigeria. *European Journal of Business and Management*, 2013, 5(4), 60-68.
- [47] Asuquo AI. Inflation accounting and control through monetary policy measures in Nigeria: Multi-regression analysis (1973-2010). *Journal of Business and Management*, 2012c, May-June; 1(2), 53-62.
- [48] Asuquo AI, Dan NO, Effiong GT. Impact of information Technology on accounting line of works. *International Journal of Recent Technology and Engineering*, 2020b, 9(2), 1572-1577.