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Effect of Environmental Accounting Implementation and Environmental Performance and Environmental Information Disclosure as Mediation on Company Value

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ABSTRACT :*This study aims to examine stakeholder theory and legitimacy as well as eco-efficient related to effect of environmental accounting implementation and environmental performance and environmental disclosure as mediation on company value. Samples are 59 companies that selected with purposive sampling technique. Analysis technique used is the Partial Least Square (PLS). Research results indicate that environmental accounting implementation is able to affect on company value, environmental accounting implementation affect on environmental information disclosure , environmental information disclosure affect on company value, environmental performance affect on company value, environmental performance affect on environmental information disclosure. However, environmental accounting implementation has not been able to affect on company value through environmental information disclosure, as well as environmental performance has not been able to affect company value through environmental information disclosure.*

KEYWORDS*: Environmental Accounting Implementation, Environmental Performance, Environmental Disclosure, Company Value.*

I. INTRODUCTION

Environmental disclosure is important information regarding company's activities that conducted in an ethical manner at globalization era. This is caused by proliferation of media coverage on issue of climate change and global warming, as well as national disasters, both naturally or company negligence. This symptoms encourages greater attention to sustainability reporting, and raises questions about transparency of disclosure and role of accounting information in generating financial information relevant and reliable ([47], [10] ; 45]). This phenomenon is a serious problem that needs to be thought the solution by all parties, including accounting disciplines. On other hand, cost that must be borne by production activities have not been able to include environmental degradation and future costs [50]. This company's environmental responsibility should be one of performance indicators.Environmental performance is needed because company legitimacy can be achieved by showing activity that accordance with local stakeholder value [39]. Based on environment context, there are two dimensions of legitimacy achievement, namely action and presentation, (1) action is an organization activity tailored to local community values, and (2) presentation related to activities carried out, whether it has met stakeholder's expectations or not [38]. On other hand, a significant environmental problem is associated with existence of company activity ([11], [29]). It become an important environmental issue and an increase due to ever-expanding range of company stakeholders, which include customers, shareholders, potential investors, creditors, employees and general public ([20], [64], [65]).

To achieve these objectives, management uses certain techniques and procedures as well as maximum resources exploitation [62]. One main resources that exploited many companies in effort to achieve the goal is natural resources. It has been responded the academic world, including accounting profession. Accounting usage includes economic development by taking into account the consequences on environment, such as how to communicate environmental accounting information on environment impact [19].Management of environmental costs is a top priority and interest [62]. There are several reasons for this; at least two. First, in many countries, regulations have increased significantly, even expected to be tighter again. Laws and regulations often mention penalties and huge fines, thus creating a high incentive to comply. Moreover, compliance costs can very large. Thus, company should selects of most inexpensive method to stick to main purpose. To meet this goal, compliance cost should be measured and main causes must be identified. Second, successful completion of environmental issues becomes increasingly competitive issue.Internal system refers to organizational process that designed to improve environmental performance, including environmental audit program, vision and mission statement of environment, dealing with stakeholders, offer incentive compensation to managers and employee's environment, as well as providing staff for environmental activities. External stakeholder relations refers to interaction between company and various external constituencies, including shareholders, local communities, government, customers, suppliers, and industry.External impact is defined as a negative externality in business behavior. This impact is a direct consequence or second -order effects of enterprise market activities [12]. Second-order effects include the release of hazardous materials into air, water, or soil. Research links between environmental responsibility and economic performance by using pollution emissions as a proxy for responsibility ([53], [49], [7]). Internal compliance refers to how far company meets the minimum standards required by law and regulation. From social accounting and environmental performance perspective, concept of conventional profit showed a bias in performance measurement. It is because company's profit is result of a transformation process the natural resources and also potentially causes damage to environment. Conventional income concept recognizes only internal costs in an accounting period. Relying on definition of earnings (income), accounting can be seen from aspect of difference between revenue (realized revenues) derived from a transaction with a period matched historical cost [12].

Performance, in form of profit and return on investment as a measure of a company's success, is based on conventional performance indicators that contain fundamental flaws. One of them related to matching concept that not proportional between revenues and costs. Income is derived from its activities in managing resources (natural). But cost recognized is only costs incurred to acquire, transport, and processing of resources (raw materials). Company could not account for losses due to damage arising from resource extraction and its impact. It shows that companies only recognize expense related to performance or measure implementation activities to generate revenue in that period, while costs that may arise in future is a result of environmental damage with a long time horizon. It should be integrated with perceptions concerning how objects embedded in environment with respect to source of raw materials acquired, how raw materials are mass produced, and how its usage affects environment, and where community take advantage [12], [37].

Performance concept that oriented to achieve individual or group for a specific field become less relevant, because organization and accounting systems operated in context of social, political and economic. Sustainability of their existence depends on acceptance and maintenance of social approval, namely legitimacy, as stated by [35]. If the public is not satisfied with organization performance, then he or she can use pressure on company to live up to expectations or they can use the legal system to improve performance required [21].Environmental disclosure of companies listed on Stock Exchange is still not uniform for type and items that must be presented in financial statements due to unclear regulation in SAK. Most of them are only present in images form and narrative even serving separately on websites. Research realm on environmental disclosure is expected will raise awareness for companies in Indonesia to be willing to present report in addition to mandatory voluntary reporting. Long-term environmental programs provide a more cost efficient alternative, especially to select more efficient production process and raw materials source usage that can be recycled as well as cheaper energy sources diversification. Company environmental programs can improve performance and increase investor interest. The above explanation has been proven by research of, among others, [26], [24], [3], [2], [12], [37].

Voluntary disclosures provide space for companies with other companies because each company (management) provides information that would be attractive to investors. Therefore, environmental disclosure is intended to improve information usefulness that based on management's evaluation in order company likely to deliver good news ([68], [23]). Through disclosure of company image are expected to rise and improving stakeholder’s perception, will further enhance shareholder value. Research results of [48], [4], and [16] prove the existence a strong affect between environmental performance on environmental disclosure. Some revious studies have examined relationship between characteristics of companies with environmental disclosure, either partially or simultaneously ([4], [11], [15], [6], [56]). Most of these studies results suggest links between company’s characteristics with environmental disclosures. Research diversity in this domain due to differences in analytical tools used and number of samples used. Investors in developed countries have positive awareness towards environmental disclosure that disclosure of such information (good news).One elements of eco-control (management control system based on environment) is based on provision of data and information environments [37]. Therefore, company environmental management system can not work well without accounting process support and integrating costs into management decisions, while accounting role in environmental management system includes management of environmental costs, environmental performance evaluation have been applied, and analysis environmental impact of company activities. This is actually a function of environmental accounting and related to environmental performance [52], as demonstrated by [22], [28], with the argument that polluting companies pay three times greater for non-product output such as waste and emissions. Study [42] found that proactive environmental management is proxied by 5 indicators namely waste minimization, pollution prevention, environmental design, product excellence and full-cost accounting environmental that affect on environmental performance.In contrast to previous studies of [56], [11], [62], [8] that more focused on accounting output variables related to characteristics of company category structure (size, leverage), performance (profitability), market-related (industry type), it is considered less effective because it has not touch realm of practice. It is very important to investigation role of environmental accounting information to steer management decisions as strategies that encourage to improve company performance in terms of environmental management. Therefore, implementation need to integrate environmental accounting and environmental performance that believed will drive efficiencies by identifying costs, classification, so do not generalize environmental costs in overhead costs that there is missing link between environmental costs that occur with responsibility products, processes, and activities that create difficulties for managers to track and control costs ([67], [31]) This study differ in some respects, but remain to include variables related to external disclosure, also integrates role of environmental accounting as a tool in internal decision making / management. Management can not perform any action relating to environment until accountant is able to identify and integrate the management decisions, in order to evaluate effectiveness of accounting-related environmental performance and environmental performance of company, which has not been studied in Indonesia. This study uses a voluntary approach / discretionary disclosure theory [16].

The reason is simply, Bapepam requires mandatory disclosure of financial statements, although such environmental liabilities for investors are regulated under Law No.25 of 2007.This research was motivated by global and local issues emergence related to pollution and environmental damage. This has implications to company viability (going concern of entity). Capital inflows from investors outside Indonesia provide investment opportunities in real conditions in Indonesia. But on other hand, potential investors need enough information to ensure the safety of investment [56]. Businesses are increasingly face keen competition that requires companies a strategy that is more cost efficiency and improved product quality by implementing quality assurance standards or ISO 14001 and label products with guarantees of environmental friendly (eco-labeling) so that company can compete on price and quality of product. This research purposes are to analyze the effect of environmental accounting implementation on company value, effect of environmental accounting implementation on environmental information disclosure, analyzed the affect of environmental disclosure on company value, the effect of environmental accounting implementation on company value through environmental information disclosure as well as the effect of environmental performance on company value. Furthermore, it analyzed effect of environmental performance on environmental information disclosure, effect of environmental performance on company value through environmental information disclosure.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Effect of Environmental Accounting Implementation on Company Value

Company value is reflected in stock price. Company value has become a major concern of company owners. This is because company value indicates shareholders (investors) prosperity. Company value is measured by Tobin's q ([20], [35], [66]). Tobin's q usage is believed to provide an overview of company's market valuation because Tobin's q is obtained from market value of equity plus the book value of debt divided by the book value of assets so that Tobin's q gives an overview not only fundamental aspects, but also company's market valuation.Environmental accounting implementation (X1) is identification (calculating and recording), allocation, and analysis of material flow and cost by using environmental accounting system to test their effect on environmental performance and company value [61]. Environmental Protection Agency [27]) states that environmental cost information can be used in internal management decisions. Environmental accounting is a sub- area of accounting -related activity, method and system for recording and analysis [58].Study [56] found that environmental cost information that generated by accounting environment can help to increase company value because absence of such information makes managers more accountable for costs and trying to make efforts to reduce cost. Study [44] found that by implementing environmental accounting, companies can make cost savings that improved company's performance, also [25] found that environmental accounting implementation can increase profit growth through cost reduction of annual production. As for [20] added that in addition to cost reduction, environmental accounting can also be used to indicate potential for environmentally beneficial investment to generate significant financial benefits through avoidance of environmental liability. Based on descriptions above, this research hypothesis is:

H1: Environmental accounting implementation affect on company value

2.2 Effect of Environmental accounting implementation on Environmental Disclosure

Environmental information disclosure (Y1) is a disclosure related to company's attitudes, policies or actions toward environmental impact, emissions, pollution, cleaning, planting, or energy efficiency [15]. Environmental accounting serves as a provider of environmental information to internal and external parties. Environmental accounting functions internally (Environment Management Accounting or EMA) to provide information to assist management in improving environmental performance of company, while function of external environmental accounting (Environment Financial Accounting or EFAs) is present information to external parties or company stakeholders [13], [5], [67]). Environmental information generated by environment accounting system is part of overall environmental information that disclosed by company.

Study [2] found an association between environmental accounting choices with environmental information reporting or disclosure by companies. Ability to assess and control environmental costs is associated with environmental reporting. Proactive environmental management, as measured by the minimization of waste, prevention of pollution, design environment, byproducts and full-cost environmental accounting, significantly affect company's decision to publish or not publish environmental disclosure in annual reports [43]. Presence or absence of disclosure statement is indicated by company in annual report which contains various information about environmental aspects of company [17]. External Monetary Environmental Accounting (EMEA) is used to generate information for external parties such as investors, creditors and insurance companies related to amount of funds that invest in waste treatment equipment or pollution control, potential value of insurance for equipment, and so on [13]. External Physical Environmental Accounting (EPEA) produces physical information derived from Physical Environmental Management Accounting (PEMA). Based on descriptions above, this research hypothesis is:

H2: Environmental accounting implementation affect on environmental information disclosure

2.3. Effect of Environmental Disclosure on Company Value

Information is one media to get support and manage relationships with stakeholders [33]. Meanwhile, from stakeholders perspective, they have right to get more specific information about benefit of its decision-making and company must disclose information [32]. Investors are more often associated with market -based performance measures that often referred to as economic performance and its shape is share value ([29], [49], [46]).Management should provide and disclosing sufficient environmental information to reduce agency gap and to strengthen company's market share [4]. Information can also eliminate asymmetry information, especially if presented in a form that easily accessible and broad range as media disclosure on Internet [33]. However, environmental information disclosure in annual reports are widely used by companies because remain effective to report main source of information for investors, creditors, customers, employees, government and environmental groups ([49], [30]). More disclosure can generate greater opportunities for company to improve its reputation. Most companies present environmental information in statement of intent and purpose of company or a statement about what companies do and want [68]. The statement reflects the aim to build a good company image. Based on descriptions above, this research hypothesis is:

H3: Environmental information disclosure affect on company value

2.4. Implementation of Environmental Accounting, Environmental Disclosure and Company Value

Accountability is a company effort to transparent and responsible for activity that has been performed. Accountability is needed when company's activities affect and affected by external environment. Accounting as a accountability tool functioned as a control over a business unit activity. This can be explained by the effect of company activity quantitative on internal and external parties [1]. Accountability becomes a medium for company to build image and network of stakeholders.Some studies as [12], [37] state the level and breadth of company information disclosure has social and economic consequences. Level of accountability and responsibility will determine the company legitimacy to external stakeholders, as well as increase company's stock transactions. Companies that making environment financial statements in sustainable manner likely will have better financial and market performance (market value) than companies that only makes conventional financial statements ([13], [1], [20]). Company will still exist when the system operates in a consistent value range with the value system of local community so company is required to operate in accordance with the value growing [2]. Consistent with [49], company purpose to do environmental disclosure is to obtain good images from stakeholders. Based on descriptions above, this research hypothesis is:

H4: Environmental accounting implementation affect on company value through environmental information disclosure

2.5 Effect of Environmental Performance on Company Value

Eco-efficiency is expressed by [51] and [9] suggested a link between environmental performance and financial performance through cost efficiencies that generated by good environmental performance. This synthesis is supported by [12] who declared that eco-efficiency to improve efficiency comes from improved environmental performance.

This viewpoint is different from conventional view that assumes the efforts to improve environmental performance will actually increase cost of environment, thus causing a profits decrease. Pollution or poor environmental performance reflects a fact that resources are used less complete, less effective and less efficient; it will have an impact on lower earnings [51].Study [64] on companies listed in Indonesia Stock Exchange found that environmental performance (measured with ISO 14001 certification, disclosure on website, disclosures in financial statements, and PROPER) affect company's financial performance (measured by ROE, ROI, EPS). According to [64], investment in waste treatment program in short term has visible impact on lower profits, but in long run it will give a good image because there is no regulatory violations and company value will rise. Environmentally friendly image and company social sensitivity is very important because competitive business world today has led to competition to build and keep the image in eyes of consumers. Based on descriptions above, this research hypothesis is:

H5: Environmental performance affect on company value

2.6 Effect of Environmental Performance on Environmental Information Disclosure

Achievement of good environmental performance is not the ultimate goal of a company. The hope is good environmental performance will increase company performance, as proposed by [20] that industry today became very concerned with environment aspects because they believe it affect on company financial report.Companies with good environmental performance use proactive environmental strategy have an urge to inform investors and other stakeholders about their strategy through voluntary environmental information disclosure and the disclosure wide [41]. There is a positive and significant relationship between environmental performance as measured by ratio of waste recycled or TRI (toxic releases index) and level of environmental disclosure index as measured by GRI (Global Reporting Initiative) [16]. Study [62] proved that environmental performance that measured with PROPER has positive and significant impact on environmental information disclosure. Based on descriptions above, this research hypothesis is:H6: environmental performance affects environmental information disclosure

2.7. Environmental Performance, Environmental Disclosure and Company Value

Study [41] shows there is effect between environmental performance and disclosure content. There is significant positive effect of company’s decision to disclose information on tendency of pollution generated. According to [49], companies with good environmental performance are still not affecting the extent of environmental disclosure level. Adversely, research of [4] actually found a significant positive effect between environmental performance with environmental disclosure, thus it can be interpreted that better environmental performance will create higher environmental disclosure level. This is further supported by results of [62] that environmental performance positively affects on environmental disclosure. Eco-efficiency proposed by [51] and [9] stated that there is a relationship between environmental performance and financial performance through cost efficiencies generated by good environmental performance.

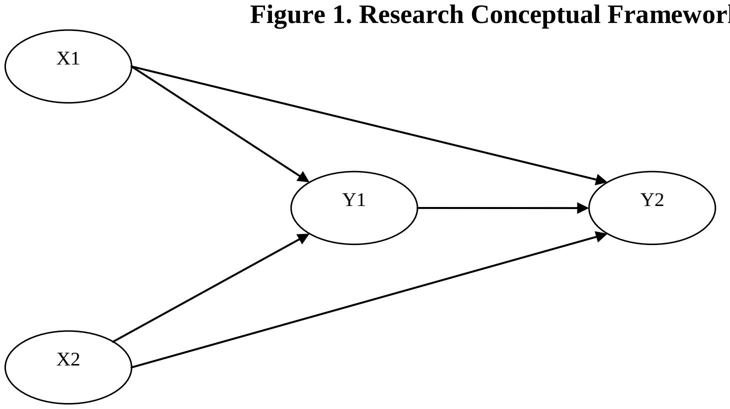
Manager should change its strategy related to environmental performance, by further highlight the attention to prevention of pollution and environmental damage (pollution prevention costs), rather than on cost of handling pollution and environmental damage (pollution abatement costs) ([57], [4]). Investment in sewage treatment program for short term looked affect on earnings, but in long run it will give a good image because there are no regulatory violations and company value will increase [64]. Based on above research, it predicted that level of environmental disclosure affect on company's financial performance. Company performance is company value that based on Tobin’s q. Tobin’s q measurements has been done by previous researchers such as [66]. Performance measurement with Tobin’s q is believed to provide an overview of company market valuation, because Tobin’s q is obtained from the equity market value plus book value of debt divided by book value of assets. It shows not only on fundamental aspects, but also company's market valuation. Based on descriptions above, this research hypothesis is:

H7: Environmental performance affects on company value through environmental information disclosure

III. CONCEPTUAL FRAMEWORK FOR RESEARCH

Conceptual framework is a conceptual model related to how a researcher makes a logical understanding and relationship among several factors that have been identified in a problem. Systematic theoretical framework preparation is believed will assist in hypotheses development and certain relationships test, thereby improving researchers' understanding of dynamics situation under study [59]Eco-efficiency can explain relationship between environmental performance and company value through cost efficiency ([12], [14], [36]). This view was rejected by traditional perspective that efforts to improve environmental performance by improving business environment will decrease profits. Adversely, pollution or poor environmental performance precisely reflects resources that have not been fully used, less effective and efficient. It will lead to increased costs to address externalities, so that will have an impact on company profits [51]. However, it will different when pollution levels are reduced in accordance with regulations. Therefore companies can be categorized as efficient in handling pollution when not get sanctions that followed by reduced costs to be borne by company. For more details, conceptual framework of this research can be presented in figure below.

Figure 1. Research Conceptual Framework



Description

X1: Environmental Accounting Implementation
X2: Environmental Performance
Y1: Environmental Information Disclosure
Y2: Company Value

IV. METHODS

This is a quantitative research with explanatory approach. Study population come from directory of Indonesia Stock Exchange of 2010. Based on Indonesian Capital Market Directory (ICMD) in 2010, populations are 179 companies. Sample was determined by using purposive sampling method. The criteria used are follows: 1) companies listed on Indonesia Stock Exchange in 2010 period, 2) Company is contained in company's annual report of BEI directory in 2010, 3), company presents environmental disclosure in annual reports or sustainability reports, 4) must answer questionnaire, 5) questionnaires sent back by respondents, 6) variables are available completely in annual report or sustainability report 2010. Based on that criteria, final samples obtained were 59 companies.This research uses primary data that collected using questionnaires and secondary data from Indonesia Stock Exchange and Indonesian Capital Market Directory. Environment Accounting Implementation variables (X1) is measured by dimensions and indicators that developed from environmental Quality Cost Model approach of [37], [34], [67]. Environmental Performance variables (X2) is measured by rating results in environmental management or PROPER for 2010 period that conducted by Ministry of Environment. Disclosure Environment variables (Y1) was measured by dichotomy procedure, with score 0 if disclosure item is not applicable, a score 1 if applying GRI. Company value is measured by Tobin's q.The data obtained was analyzed using PLS (Partial Least Square). Reasons for using PLS in this study because the sample size was small and the research model uses formative and reflective indicators. PLS is a derivative of SEM that based on a variant or covariance [60].

V. RESULTS AND DISCUSSION

Coefficients analysis of inner model the effect of environmental accounting implementation on company value resulting path coefficient value of 0.503 with a t-statistic value of 8.631. Because value of t-test > 1.96 at 5 % level of significance, it can be concluded that environmental accounting implementation affect on company value. Positive coefficient indicates that inner model of environmental accounting implementation affect on company value positively.Managements that integrates environmental management in their business analysis will takes into account cost and efficiency of environmental programs, potentially would reduce environmental impact of products and production processes, such as company prepares related data regarding the amount and purpose of energy, water, and raw materials usage [40]. Furthermore, it is analyzed the costs and benefits in relation to how much the costs absorbed by the final product, then see how the rest of ingredients are absorbed into waste. According to [21] environment is a critical element of accounting related to data records in physical or monetary units. In line with previous statements, [58] within [10] noted the importance to explores measurement of environmental aspects in standardization assessment of physical flows (such as energy, materials, waste) as well as the relation to cost [54].Management need physical information to control environmental impact resulted, such as quantity of gas emissions, waste, and quantity of recycled waste treatment, and then define emission and waste reduction targets ([58]

within [10]). Environmental cost information is useful for control to make efficiency [13]. It allows companies to prioritize prevention of environmental damage before it occurs, because the environmental damage handling will incur far greater cost than prevention. It is consistent with [4] that manager should change its strategy towards environmental performance, through suppression costs related to pollution prevention and environmental damage (pollution prevention costs) from handling of pollution and environmental damage (pollution abatement costs).This finding is consistent with previous studies of [43], [50], [37]. These results prove that environmental accounting implementation indicators can be developed through dimensions of physical environmental accounting and environmental accounting monetary. This study is consistent with previous studies as [55], [44], [25], that there are significant effect of environmental accounting implementation on company value. Environmental accounting implementation makes company can control environment cost in which previously disadvantaged due to integrated control cost to overhead expenses ([63] within [19]). Furthermore, environmental accounting implementation can identify measure and allocating environmental costs appropriately to process or product. It makes managers easier make control and efficiency. Then [19] added that cost control facilitate information presentation related to efficiency achievement that can help in designing management reporting with respect to environmental information disclosure. It able to provide positive information to stakeholders and increase company value.

One dimension of environmental accounting implementation is the monetary or environmental costs dimension. Environmental accounting implementation will calculate and record environmental costs absorbed. According to [47] in [26] there is a balance between companies that have not invested in environmental aspect, then for cost, product price will be able to compete compared with companies that investing in environment aspects that will have a high cost. But there are consumers who care, capable and interested in environmental aspects. They are members of community of Socially Responsible Investors (SRI). It is an organization of environmentally concerned investors, refuses to invest in companies that do not care about environment, arguing that if they invest to that company then indirectly will harm environment.Analysis the effect of environmental accounting implementation on environmental information disclosure resulting path coefficient values of 0.431 and t-statistic of 5.244. Because t-statistic > 1.96, then the 5% level of significance can obtained. It can be concluded that environmental accounting implementation affect on environment information disclosure. Positive coefficient indicates that inner model of environmental accounting implementation has effect on environmental information disclosure.This finding is consistent with previous studies of [17], [18] to prove the effect of environmental accounting implementation on environment information disclosure. Through environmental accounting implementation, in addition to give data and information to management to be used to assess environmental impacts related to investments, it also able to improve environmental performance after analyzing costs and benefits as well as efficiency of environmental programs, presenting further data and information on environmental costs and then determine whether these costs are treated as capital costs if they have long-term benefits and is treated as an operating cost benefit for short-term (annual). Data and information regarding environmental cost assessment is used by management for benefit or preparation of environmental information disclosure to stakeholders. Data and information related to environmental information disclosure is included in accounting data, especially with regard to physical dimensions of environmental accounting such as number of materials, energy and water usage as well as amount of emissions and waste generated.Financial point of view [67] show that EFA is focused on reporting environmental liabilities, then considering significant environmental costs, presenting the financial information related to environment as investments value in pollution control equipment or waste processing, and making report to external stakeholders. It means external functions will facilitate data presentation and disclosure for environmental accounting implementation exposure [13].

Environmental accounting implementation is relevant to be considered in order to identify environmental problems costs such as laboratorium fees for emissions testing, contamination testing, air handling unit to keep air in plant comfortable, contingent cost related to value of damage caused by company activities. Another thing beyond measurement that needs attention is allocation of environmental costs for groupings, whether as overhead costs, by averaging products value that produced in one period. However, allocation of environmental costs into overhead costs is a measure that is less convincing because not all products and processes have the same contribution to environment.Analysis of inner model the relationship between the variable environmental disclosures on company value generates path coefficient value of 0.130 with a t-statistic value of 2.122. Because value of t-statistic > 1.96 with 5% level of significance, it can be concluded that information environment disclosure affect on company value. Inner model with positive coefficient indicates that environmental information disclosure affect on company value.These findings can be interpreted that environmental information disclosure significantly affect on company value, but environmental information disclosure has not been fully done.

It suggests that information orientation within annual report is more focused on financial performance. It means management considerations in presenting annual report and sustainability report more specific on stakeholder groups, namely management and shareholders.Empirically, environmental information disclosure is directed to get legitimacy from relevant stakeholders as well as company's operations to create a company image. Environmental disclosure was not a reflection of awareness on environmental preservation. As expressed by [22] and [49], environmental disclosure is made for business strategy to acquire legitimacy and create images. It is proved empirically that companies listed on Stock Exchange makes environmental disclosure only to obtain stakeholders legitimacy. As described in descriptive analysis of previous section, majority of environmental information disclosure level is still within narrative and qualitative form. Environmental programs do not fully integrate with business processes.

This result proves that company is concerned about environment that reflected in vision and mission. But information is only narrative, but not fully integrated into financial reporting that reflects conservation cost. Environmental information disclosure indicates company’s compliance with government regulations (Law No. 23 of 1997 and Law no. 25 and no. 40 of 2007). It determined that any industrial manufacturing company with environment operations required to preserve environment, although disclosure level by company is still has not been carried out, and in an effort to comply with regulations that require company to make report on environmental responsibility implementation.Some underlying reasons of why more extensive environmental disclosure able to give effect on company value. First, awareness of environmental disclosures by companies the longer the better it is in line with the increasing demands of public, NGO, and government as well as most of investors who are very concerned about environment. Publication of Law. No. 25 of 2007 in a comprehensive set of investment and environmental management, and law. No.. 40 of 2007 which regulates environmental responsibility is a strategic step in effort to raise awareness of owners of capital. Second, adverse selection argument says that company has not been able to follow the disclosure policy in an industry that is interpreted by the market that company is hiding bad news. Third, environmental disclosures made to provide security for investors, and potential investors on investment (protective information). Fourth, environmental disclosure is made into a political tool to change company's outlook (image) stakeholders on company activity and avoid the pressure and criticism from environmental activists [21].

In addition, management's decision to make the disclosure is based on vigorous demands and movement of several community groups, especially environmental group, encourage businesses industry to have environmental preservation awareness. Many environmental issues that arise is suspected by the community because impact of exploitation process and industrial operations. Public awareness demands honest entrepreneurs in providing environmental information disclosed in annual report and sustainability report, so society selective to choose products with environment awareness.Management is urged to inform stakeholders about what has been done in order to preserve environment. In relation to environmental preservation or environment conservation, it aims to create healthier work environment, conducive, and to encourage efficiency because may wipe out any claims or damages become disappear. For companies whose main business is natural resources exploitation, they should to conduct environmental efforts to conserve natural resources, and can survive in long term. Sustainability of natural production factors can be maintained and can eventually create a sustainable business environment.

Environmental damage due to pollution or environmental pollution will lead to inefficient company's operations. It will lead to social costs that must be borne by company and local government. In addition, selecting factors of production (raw material) with good quality and efficient materials usage can reduce waste and the end increase company profit.MOU between Ministry of Environment and Bank Indonesia (BI) is signed in 2005. This agreement then followed by BI regulation No. 7/2/PBI/2005. Banks regulation in credit appraisal and environmental aspects become a factor in credit scoring. BI use PROPER rating to assess credit worthiness at annual reports or sustainability reports that disclose environmental conservation.Test results of indirectly affect produce path coefficients of 0,056. It can be interpreted that environmental accounting implementation has an indirect effect on company value through environmental information disclosure. It proved from probability value of 0.339 > 0.05. It means insignificant at 95% confidence level. The test results show there has not been enough empirical evidence to accept the hypothesis (H4) that better environmental accounting implementation affect on company value through environmental information disclosure. But by looking at positive sign, it means path coefficient the effect of environmental accounting implementation on company value through environmental information disclosure is unidirectional.

Test results indicate that environmental accounting implementation has not been able to affect company value through environmental information disclosure because companies calculate and recording environmental aspects of physical and monetary (environmental accounting implementation) but has not been fully integrated with company reporting. It was explained earlier that company makes environmental accounting implementation because required by regulation. Furthermore, environmental disclosure content was still little applied. It demonstrates lack of awareness on management part.Coefficient analysis result of models inner the effect of environmental performance on company value generates path coefficient value of 0.397 with a t-statistic values of worth 5.536. Because value t-statistic > 1.96 at 5% significance level, it can be said that environmental performance affect on company value. Positive coefficient of inner model indicates that environmental performance affect on company value.

This finding is consistent with previous studies of [57], [16], [24], [64], [12], [48], that environmental performance affect on company value. It also supports eco-efficiency that suggests a relationship between environmental performance and company value through cost efficiency to improve environmental performance. According to [51] and [9], lower pollution levels actually increase efficiency that able to reduce costs. It will increase company profits, reduce emission of pollution below the required level. Company able to increase compliance with the regulations so overcome liability problem. It followed by an increase in reputation as a company concerned about environment. Through the good reputation company appreciated by investors and prospective investors.Companies with good environmental performance will be followed by a good financial position, because it increase efficiency, consolidate financial situation and meet the demands of company stakeholders [48]. If management ignores environmental factors when designing strategic policy, in long term company will lose the ability to compete [51] within [48].

Coefficient analysis of inner model the effect of environmental performance on environmental information disclosure produced path coefficient value of 0.298 with a t-value of 4.091. Because the value of t-test> 1.96 at 5 % level of significance, can be concluded that environmental performance affect on environmental information disclosure. Positive coefficient of inner model indicates that environmental performance affect on environmental information disclosure.This finding is consistent with previous research of [16], [35], [4], [62] that there environmental performance affect on environmental information disclosure. These results also reinforce voluntary/discretionary disclosure theory [65], [23], [4], [16]. It stated that good environmental performance will encourage companies to conduct environmental information disclosure because good environmental performance is a good news.

But its effect has not been included in good category. It means that environmental performance has not been able to affect company in doing environmental information disclosure. This is partly due PROPER ratings as environmental performance indicators that on average still have trend in not good category. There is possibility the companies still doing environmental disclosure, but using rhetoric as a method for greenwashing.
These results are consistent with a study of [41] that company's environmental performance has positive and insignificant effect on environmental disclosure level. Insignificant relationships is due to no oversight on environmental information disclosure so companies management are free to use discretionary information report and have not been able to give a positive effect on investors perception to pay attention to environmental information issues.

Companies that included PROPER ranking assessment seeks to meet provisions required or PROPER assessment criteria, and then express it in a company's annual report. Company's participation in ranking PROPER IDX has not been obliged. To encourage companies to comply environmental regulations, it is necessary to create government oversight system. Surveillance system was created in form of rules or laws that require companies to list environment conservation as well as reporting in annual report and sustainability report. Furthermore, it made technical report, and then assign items that must listed in environmental disclosure (mandatory disclosure). This time environment information disclosures is still voluntary. Standards to regulate environmental reporting process are made according to manufacturing industry type.This is consistent with legitimacy and stakeholder theory which emphasizes that organizations must consider general public rights, not only shareholders only. Legitimacy theory assumes that there is a social contract between organization and local community. This social contract meant that community allows organization to carry out its operations if the operations meet their expectations. Failure to meet society expectations makes organization will be sanctioned, for example in form of legal restriction, limitation of resources, resulting reduction in products demand, or claims damage by people.

In addition, effect of other factors such as environment regulatory, business climate and competitive strategy also makes effect of environmental performance on environmental information disclosure has not been good. Environment regulatory and business climate become dominant factor that affecting environmental information disclosure [29].Indirect effects testing produce an path coefficient estimation value of 0.039. It can be interpreted that of environmental performance does not have indirect effect on company value through environmental information disclosure. This is evident from probability value of 0.361. Probability value greater than 0.05 means insignificant at 95% confidence level. Test results show there has not been enough empirical evidence to accept hypothesis that better environmental performance affects company value through environmental information disclosure. Sign a positive path coefficient the effect of environmental performance on company value through environmental information disclosure means the effect is unidirectional.

The test results indicate that environmental performance has not been able to affect company value through environmental information disclosure. It is because most environmental information disclosure from manufacturing companies that listed on Indonesia Stock Exchange only revealed vision, mission, and business strategy related to environment, does not in quantitative form that integrated with financial statements. It can be proven empirically that environmental disclosure implementation level is still relatively low. The empirical evidence is consistent with management behavior in preparing annual report which is still oriented on financial performance. On other hand, stakeholder’s appraisal on operational company performance has not been based on environmental performance. In other words, environmental performance has not been able to create a positive perception of stakeholders. This results become management consideration in preparing annual report and sustainability information report that is more focused on financial performance.This result is inconsistent to studies of [25] that environmental disclosure has positive affect on company value that proxied by Tobin’s q. It states that there is a relationship between company performance with environmental responsibility and company value. Results of previous studies also prove that level of environmental disclosure has a positive effect on company value. It is reflected in Tobin’s q proxy value. That is, better environmental performance will affects environmental disclosures by management followed by an increase in positive perception of company's stakeholders. Financial performance and environmental performance disclosure is good news that will improve or change external parties (stakeholders) perception (company image). Furthermore, positive image increase company's reputation and then appreciated by stakeholders such as investors (potential investors). Through good reputation then company value can be capitalized, classified, and reported in intangible assets at annual report. These results provide ample empirical evidence that environmental disclosure can enhance positive image in stakeholder’s eyes. It can further enhance company's value, but the level is still relatively not a good. That is, information about environment that has been disclosed in annual report can not be appreciated properly by shareholders and other capital market participants. Assessment of market participants is still oriented on financial performance.

VI. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

Based on research findings, the following conclusions can be put forward. First, environmental accounting implementation is able to give an effect on company value. Cost control facilitates information presentation with respect to efficiency achievement and assist in designing management reporting with respect to environmental information disclosure. It is able to provide positive information to stakeholders followed by company value increase.

Second, environmental accounting implementation is able to affect on environmental information disclosure. Through external functions, environmental accounting implementation facilitates the data presentation and information for environmental information disclosure.Third, environmental information disclosure affect on company value. Environmental information disclosure indicates that company obedient to regulations. Company's awareness to environmental information disclosure becomes better. It is consistent with higher demands of public, NGO, and government as well as most of investors who very concerned about environment.

Fourth, environmental accounting implementation has not been able to make an effect on company value. Companies make environmental accounting implementation because obliged by regulation. Furthermore, analysis of environmental disclosure content was still little applied, still dominant at partial level. This proves there is low awareness on management part.Fifth, environmental performance is able to affect on company value.

It is consistent with eco-efficiency. There is relationship between environmental performance and company value through cost efficiency to improve environmental performance.Sixth, environmental performance has insignificant positive effect on environmental information disclosure. Good environmental performance will encourage companies to conduct environmental disclosure because good environmental performance is good news. This insignificant relationships is related to environmental information disclosure that not monitored so companies management are free to use discretionary information report.Seventh, environmental performance can affect on company value through environmental information disclosure. Environmental information disclosure is partial dominant, only reveals vision, mission, and strategy related to business environment, but not in a quantitative form that is integrated with the financial statements.

6.2 Suggestions

Based on some research limitations, suggestions for next researcher presented as follows. First, items of environmental information disclosure assessment are based on GRI criteria Version 3.1 [34] that is still too little. Number of items is only 68 in 5 categories. It is advisable to develop disclosure items that suitable with environmental conditions for companies in Indonesia, for example to taken account an explanation of environmental costs components.Secondly, period of annual report and sustainability report which analyzed only in 2010. Future studies can use longitudinal data in order to know the progress and development of environment disclosure practices. In addition, it needs to add a proxy to measure environmental performance in addition to PROPER.Third, value determination of environmental disclosure score measurement should involve opinion from specialists who have obtained a certificate from the NCSR (National Center for Sustainability Report). It also needs to test the difference between expert's perceptions and researchers. If the test results are significant, we can conclude there is no difference in perception.

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