SOCIAL AND ENVIRONMENTAL RESPONSIBILITY IN DEVELOPING COUNTRIES: A THEORETICAL APPROACH TO REGULATION

*Lindrianasari¹, Mahatma Kufepaksi², Yuztitya Asmaranti³, Agrianti Komalasari⁴

¹²³⁴Economics and Business Faculty, University of Lampung, Indonesia

*Corresponding Author, Received: 17 Jan. 2018, Revised: 06 Mar. 2018, Accepted: 16 April. 2018

ABSTRACT: This study aims to analyze and describe the social and environmental responsibility of companies listed on the stock exchange in three developing countries, namely Indonesia, Malaysia, and Thailand, before and after 2007. In 2007 chosen as the cut-off year of observation as we find in each country was issued a significant environmental policy. By doing a differential test on a sample of 24.626 independent firms/years, the study found that four variables used in this study overall showed a significant difference. Environmental costs, the disclosure of environmental, social disclosure, and ESG that observed in three developing countries has increased significantly after 2007. However, we did not find a significant increase in environmental costs in Indonesia. The findings of this study indicate that the theory of regulation, particularly for public interest theory, can explain clearly the reasons why the four variables research has increased after the environmental regulations issued.

Keywords: Environmental accounting, accounting and social disclosure, developing countries, regulation.

1. INTRODUCTION

Scheme of government policies related to the environment in Indonesia has been demonstrated with the exclusion of some policies. The government policy was issued as Republic Act No. 17 the Year 2004 on the Kyoto Protocol on Framework Convention of the United Nations on Climate Change; Republic Act No. 40 Year 2007 regarding Limited Liability Company; and Government Regulation No. 47 Year 2012 on Social and Environmental Responsibility (Social and Environmental Responsibility - TJSL) Company Limited. Implementation of Corporate Social Responsibility (CSR) in Indonesia has been strengthened and reinforced by the issuance of Government Regulation No. 47 the Year 2012.

In other countries, Malaysia and Thailand, we also found that environmental policy was issued in 2007. The findings provide strong reasons for us to determine that 2007 be the year of the revival environmental issues in three developing countries, and then in 2007 became the cut-off on this research. This study aims to analyze and describe the social and environmental responsibility of companies listed on the stock exchanges of developing countries. The three countries intended are Indonesia, Malaysia, and Thailand.

The study found that the cost of the environment, the disclosure of environmental, social disclosure, and ESG observations in the three countries has increased significantly after 2007. Only in Indonesia, we found no significant increase in environmental costs after 2007. The

findings of this study indicate that the theory of regulation, particularly for public interest theory, can explain clearly the reasons why the four variables research has increased after the environmental regulations issued.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Chen and Roberts (2010) explain that the theory of legitimacy and stakeholder theory is regarded as an influential theory in the domain of social and environmental accounting research. In our previous studies also have used both of these theories [1-3]. All of the above studies refers to the opinion of [4] which explains that the theory of legitimacy and stakeholder theory are two theories that explain each other (overlapping theories). Both theories have differences in the level of perception and settlement and not the conflicting theories. In other words, [5] try to conclude, legitimacy theory and stakeholder theory can both explain and predict the relationship between the organization and the social environment, but with different approaches and decomposition. However, both have profound benefits in providing an understanding of the social and environmental accounting research.

The theory of legitimacy focus on the value system of society [6,7]. So that the legitimacy theory predicts if the value system of an organization is congruent with the value system in the society around it, then the organization will survive. Therefore, organizations must be able to

meet the expectations and subsequent revenues from the public. Meanwhile, stakeholder theory focused on the relationship between the organization and various stakeholders that form (affect) the environment [8]. Stakeholder theory explains that each group of stakeholders has not the same impact on the environment. On the other hand, each stakeholder expectations are often at odds with each other [5].

The public interest theory is the economic theory first developed in 1934 [12], currently known as part of the regulation theory [13]. Public interest theory is expressed as a regulation given in response to society to improve inefficient or unfair market practices. Public interest theory assumes that the policy issued not only benefits people or groups but also benefits for society [14]. This theory predicts that the government issued policies related to the environment, should be able to improve the environmental quality in the country.

This study re-examines whether there is a relationship regulation issued by the government on the actions of companies in environmental conservation. The corporate response that reflected their actions shows their firm adherence to the regulator [9]. Although some have been inadequate disclosure quality and only limited social contract to meet the legitimacy to people around the company (in [1]), but the research conducted by [1] and [2] found a significant relationship between the regulations issued by the government to accountability on the environment by companies in Indonesia. The findings of previous studies indicate that the regulations issued by the government are very effective in encouraging compliance with company. If in earlier studies we have conducted investigations of companies in Indonesia related to compliance with the policies issued in Indonesia, then this study will conduct an empirical overview of the three developing countries which relatively have similar cultures and economies, namely Indonesia, Malaysia, and Thailand.

Studies found that the management companies that do not have the basic laws of the government can run but without a clear direction [10]. That research conducted also explained the importance of the role of a state in the making of rules and policies regarding corporate governance. Mandatory action in protecting the environment by the company can be seen as a gesture to the government that it is time for the regulation of an integrated environment in all activities seriously formulated. This would greatly support the voluntary action taken by the companies earlier [11]). Previous research found that the rules issued by the government for an entity would increase the compliance of these entities is greater than ever before [11].

Environmental research in Malaysia found that the application of good environmental management proved to improve the company's performance, although it still had consequences of increasing the cost of resource use [15]. In addition, the motivation of management to apply environmental accounting because of the high desire of investors and creditors in companies that have good environmental performance ([16] and [17]). From the above, we establish the following research questions as below:

RQ: how adherence of companies in developing countries on government regulation of social and environmental responsibility.

3. RESEARCH METHODS

The sample used in this study are all companies listed in Bloomberg data based 2016. The selected country is a country in ASEAN, namely Indonesia, Malaysia, and Thailand. The reason we chose the three countries is that these countries are in the same economic level, in relative terms. In addition, these three countries because it is in the same region, furthermore comparisons are expected to be conducted fairly fit.

The data used are secondary data, such as archives (company annual reports and government policies) that contain information about the social and environmental. Investigations carried out by the company in the years around the implementation of policies in their respective countries. Observations will be focused on the company's response to government policies related to social and environmental responsibility. Therefore, this study assesses how environmental performance before and after the issuance and promulgation of regulations related to the environment. The variables measured in this study are the environmental costs, the disclosure of environmental, social disclosure, and governance. Data obtained from Bloomberg database at Gadjah Mada University in 2016. Data were analyzed using Independent Sample test.

The data comes from the Bloomberg database. Until 2016, companies listed on the stock exchange in each of these three countries is as much as 532 Companies Indonesia, Malaysia 958 companies, and 556 companies Thailand. With the 12-year observation (period of 2004-2015), then the total sample of this research is as much as 24 626 years of the company. This amount is sufficient to generalize the results obtained. Furthermore, Table 1 shows the distribution of the sample of the study. 2007 became cut-off because of that year in each country issuing important policies related to the environment.

- a) Countries Indonesia issued Law No. 40 of 2007, which in Article 66 and Article 74 explained that companies are obliged to report on social and environmental activities of the company. This law is very revolutionary and very eagerly by the public.
- b) 2007 until 2009 are the years where Malaysia issued a lot of environmental policies. Department of Environment, Ministry of Natural Resources and Environment, 2010. Malaysia is a country that since 1974 has adopted and implemented the concept of Environmental Impact Assessment (EIA). The EIA is a concept of environmental assessment aimed at ensuring that the likely impacts on the environment due to the proposed development are fully understood and taken into account before development is allowed to move forward. Table 1 explains that 2007-2009 was the year in which the Malaysian government has consistently issued policies related to the environment [18]. At the very least, data from the Malaysian Department of Environment, Ministry of Natural Resources Environment indicate there are as many as twelve environmental policies issued after 2007. The drafting and issuing of these policies show the Malaysian government's seriousness in improving the environment's quality in the country.
- c) Thailand is the third country to be the sample of this study. This study also undertook the assessment of corporate compliance with state-issued regulations. From the literature study conducted, there are several periods of enactment of law in Thailand, such as: (1) year 20014 about land quality standard, (2) year 2007 about standard of noise and air quality, (3) year 2007 about waste management solid, (4) in 2009 on water quality standards [19].

Based on the Constitution of the Kingdom of Thailand B.E.2550 In 2007, the state environmental management in Thailand changes from the imposition of the previous constitution. This law gives the right of people to participate in the prevention and elimination of business actions that may damage natural resources and pollute the environment. This law has clearly asked the people around the corporate environment play an active role in controlling the operations of the company. On the other hand, companies are required to obey the legitimate social contract and the environment around the company premises.

Since 2007 was the year in which there was a great momentum in environmental policy in the three developing countries that became the sample of this study, this study chose 2007 to be the cut-off year in this study.

Table 1 Environmental Policy Issued in Malaysia in the period 2007-2009

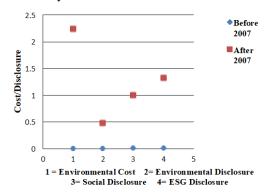
No.	Regulations	Year
1	EIA Guidelines for Mines and Quarries (latest edition)	2009
2	EIA Guidelines for Development of Resort and Hotel Facilities in Hill Station (latest edition)	2009
3	EIA Guidelines for Development of Tourist and Recreational Facilities in National Parks (latest edition)	2008
4	EIA Guidelines for Development of Tourist and Recreational on Island in Marine Parks (latest edition)	2008
5	EIA Guidelines for Petroleum Industries (latest edition)	2008
6	EIA Guidelines for Coastal and Land Reclamation (latest edition)	2008
7	Guidelines for the Siting and Zoning of Industries (latest edition)	2008
8	Guidelines for Prevention and Control of Soil Erosion and Siltation in Malaysia (latest edition)	2008
9	Environmental Requirements: A Guide for Investors (latest edition)	2008
10	EIA Guidelines for Industrial Projects (latest edition)	2007
11	EIA Guidelines For Municipal Solid Waste And Sewage Treatment And Disposal Projects (latest edition)	2007
12	EIA Guidelines for Toxic and Hazardous Waste Treatment and Disposal Projects (latest edition)	2007

Source: Department of Environment, Ministry of Natural Resources and Environment, 2010 [17].

Table 1 shows the enthusiasm of the Malaysian government in drafting and issuing legal instruments (regulations) related to environmental control.

4. DISCUSSION

Figure 1 shows that before the Act No. 40 of 2007 was issued and applied in Indonesia, environmental and social performance in Indonesia is very low, even some variables worth null. But after it is issued and the enactment of Law No. 40 of 2007, environmental and social performance in Indonesia getting better, although there are still companies that do not respond properly government regulation. Nevertheless, it is generally seen that the regulations issued by the government have an impact on the preparation of the purpose of these regulations. This evidence also indicates that the regulations were issued related to this environment has been consistent with the public interest theory which predicts that the regulation should be made for the benefit of society.

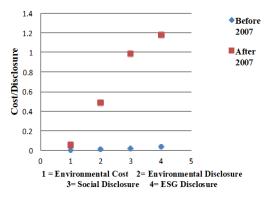


Source: Bloomberg, 2016.

Fig. 1 Environmental and Social Performance Before and After 2007 in Indonesia

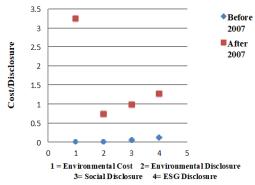
The same condition also occurs in Malaysia and Thailand [see Fig. 2 and Fig. 3]. In the period prior to release and promulgation of regulations related to the environmental and social performance of companies in each country do not show a good performance compared with after the enforcement of the regulations. From the three countries observed, changes in the allocation of environmental costs on average occur in all countries, with the greatest increase occurred in Indonesia (relative to the value of the unit of measure) is from 0 before 2007 to 22270 after 2007.

To value environmental disclosure, Thailand experienced the greatest increase, from 0.0072 prior to 2007, to 0.7278 after 2007. Meanwhile, Indonesia and Malaysia are the same relative value changes. For social disclosure and disclosure of ESG, Indonesia showed the highest value of disclosure, then Malaysia and Thailand. However, the numbers change in each of these countries reached more than 95%.



Source: Bloomberg, 2016.

Fig. 2 Environmental and Social Performance Before and After 2007 in Malaysia



Source: Bloomberg, 2016.

Fig. 3 Environmental and Social Performance Before and After 2007 in Thailand.

Test of performance of Environmental, Social, and ESG

Environmental cost

Environmental costs are allocated Indonesia, Malaysia, and Thailand on average increased from before and after it is issued and the enactment of regulations on the environment in these countries. From the test results of independent sample test found that there were significant differences in the allocation of environmental funds in Malaysia and Thailand, respectively at a significance level of 0.000 and 0.001. However, there are no significant differences were found for the allocation of environmental funds in Indonesia (P-value of 0.244) (see Table 2, Panel 1). Table 2 shows the overall different test results of environmental performance in three developing countries.

Investigations into the findings of the environmental cost allocation in Indonesia shows that no account name can be used to record and report the costs associated with managing an environmental company. The absence of the name of this account is suspected as the cause the level

of lack environmental cost allocation found in the company's financial statements.

Table 2 Test of performance of Environmental, Social, and ESG

Panel 1. Environmental Costing				
		Sign.	F-value	t-value
1	Thailand	0,001	10.956	-1.655
2	Malaysia	0,000	18.431	-2.144
3	Indonesia	0,244	1.357	-0.0585

Panel 2. Environmental Disclosure Score				
		Sign.	F-value	t-value
1	Thailand	0,000	128.646	-5.61
2	Malaysia	0,000	230.727	-7.545
3	Indonesia	0,000	123.284	-5.505

Panel 3. Social Disclosure Score				
		Sign.	F-value	t-value
1	Thailand	0,000	177.847	-6.561
2	Malaysia	0,000	336.522	-9.001
3	Indonesia	0,000	181.699	6.617

Panel 4. Environmental, Social, and Governance Score

		Sign.	F-value	t-value
1	Thailand	0,000	274.414	-8.117
2	Malaysia	0,000	533.08	-11.094
3	Indonesia	0,000	406.386	-9.786

Environmental Disclosure Score

Results of independent sample test showed a significant difference in the score disclosure of the company's concern the environment in Indonesia, Malaysia, and Thailand (see Table 2, Panel 2). Each level of significance obtained from the statistical test result is 0000 for all countries. Malaysia has a value F-value is higher (ie 230.727) compared to Thailand and Indonesia (which is 127.646 and 123.284).

Social Disclosure Score

On average, a social disclosure made by the company increased before 2007 and thereafter. Social disclosure in Indonesia, Malaysia, and Thailand experienced a significant increase from before and after it is issued and the enactment of regulations on the environment in these countries. The test results of independent sample test showed a significant difference at the level of 0000 in all countries. Respectively, Malaysia showed the

highest increase, then Indonesia and Thailand (see Table 2, Panel 3).

Disclosure of Environmental, Social and Governance (ESG) Score

Results of independent sample test showed a significant difference in scores ESG disclosure in Indonesia, Malaysia, and Thailand, Each level of significance obtained from the statistical test result is 0000 for all countries. Malaysia has a value Fvalue is higher (which is 533.080) compared with Indonesia and Thailand, with each value of the Fvalue of 406.386 and 274.414. (see Table 2, Panel 4). These results indicate that the government's policy governing environmental, social and governance very effective in improving environmental awareness by companies.

5. CONCLUSIONS

By doing independent sample t test on a sample of 24 626 firms /years, the study found that the cost of the environment, the disclosure of environmental, social disclosure, and ESG observations in the three countries has increased significantly after 2007. In Indonesia was found no significant improvement only in environmental costs

The findings of this study indicate that as predicted the theory of public interest that the existence of the policy should be aimed at the interest of the people is confirmed by this study. It is seen from the four variables were observed in this study as a whole showed a significant difference from before and after the issuance and implementation of policies in 2007. Each of the companies in the three countries that were observed in this study indicates compliance with the regulations issued in each country. In addition, the results of this study also indicate that the rules are mandatory (regulatory) much more real impact than just voluntary, especially for developing countries.

7. ACKNOWLEDGEMENTS

This research can be done well thanks to the funds provided by the government of the Republic of Indonesia through a research grant scheme at the University of Lampung. We would like to thank for the financial support of this research. In addition, we would also like to thank our colleagues at the Faculty of Economics and Business, University of Gadjah Mada, Indonesia to access the data. Participant feedback and suggestions in Third International Conference on Science, Engineering & Environment (SEE), USQ, Brisbane, Australia, Nov.13-16, 2017.

6. REFERENCES

- [1] Lindrianasari, The relationship between environmental performance and the quality of environmental disclosure with the company's economic performance in Indonesia. Jurnal Akuntansi dan Auditing Indonesia, Vol. 11, No.2, 2007, pp.159-172.
- [2] Asmaranti, Yuztitya. and Lindrianasari, Comparison of Greenhouse Gas Emission Disclosure Before and After Establishment of the Indonesian Act No. 17 of 2004. Issues In Social and Environmental Accounting (ISEA) Vol. 8, No. 3, 2014, pp. 225-234.
- [3] Lindrianasari and Asmaranti, Yuztitya., Investigative studies on environmental disclosure and the costs of R&D as a compliance with government policy on corporate social responsibility in Indonesia. International Journal of Environmental and Sustainability, Vol. 5, No. 2, 2016, pp. 61-71.
- [4] Gray,R., R. Kouhy and S. Lavers, Corporate Social and Environmental Reporting: A Review of the Literature and a Longitudinal Study of UK Disclosure. Accounting, Auditing and Accountability Journal, Vol. 81, No. 2, 1995, pp. 47-77.
- [5] Chen, J. C. and Roberts, R. W., Toward a More Coherent Understanding of the Organization–Society Relationship: A Theoretical Consideration for Social and Environmental Accounting Research. Journal of Business Ethics, Vol. 97, No. 4, 2010, pp. 651-665.
- [6] Lindblom C. K., The of Implications Organizational Legitimacy for Corporate Social Performance and Disclosure. Conference proceedings in the Critical Perspective on Accounting Conference. 1994. New York.
- [7] Suchman, Managing Legitimacy: Strategi Approaches. Academy of Management Review, Vol. 20, No. 3, 1995, pp. 571-610
- [8] Freeman, R. Edward, Strategic Management: A stakeholder approach. Boston: Pitman. 1984.

- [9] Lindrianasari, Compliance audit to environmental management companies in Lampung Province. Conference Proceeding of Department of Education Republic of Indonesia, Jakarta, 2004.
- [10] Börzel, Tanja A., and T. Risse. Governance without a state: Can it work? Regulation and Governance, Vol. 4, No. 2, 2010, pp. 13–134.
- [11] Potoski, M and Aseem, P., Green Clubs and Voluntary Governance: ISO 14001 and Firms' Regulatory Compliance. American Journal of Political Science, Vol. 49, No. 2, 2005, pp.235–248.
- [12] Pigou, A. C. The Economics of Welfare. London: Macmillan and Co. 1932.
- [13] Scott, William R. Financial Accounting Theory. Edition 6th. Pearson Prentice Hall: 2012. Toronto.
- [14] Deegan, C., Unerman, J. Financial Accounting Theory. Maidenhead: McGraw-Hill Education. 2011.
- [15] Ann, G.E., Zailani, S. and Wahid, N.A., A study on the impact of environmental management system (EMS) certification towards firms' performance in Malaysia", Management of Environmental Quality: An International Journal, Vol. 17 No. 1, 2006, pp. 73-93.
- [16] Elijido-Ten, E.O. Can stakeholder theory add to our understanding of Malaysian environmental reporting attitudes? Malaysian Accounting Review, Vol. 8 No. 2, 2009. pp. 85-110.
- [17] Yusoff, H., Lehman, G., and Nasir, N.M., Environmental engagements through the lens of disclosure practices. A Malaysian story. Asian Review of Accounting Vol. 14 No. 1/2, 2006 pp. 122-148
- [18] http://www.doe.gov.my/eia/wp-content/ uploads/2012/03/A-Guide-For-Investors1.pdf.
- 19] http://www.pcd.go.th/info serv/en regulation http://www.pcd.go.th/info serv/en regulation http://www.pcd.go.th/info serv/en regulation

Copyright © Int. J. of GEOMATE. All rights reserved, including the making of copies unless permission is obtained from the copyright proprietors.