

**ENVIRONMENTAL REGULATIONS, ENVIRONMENTAL & SOCIAL
PERFORMANCE AND COMPANY'S FINANCIAL PERFORMANCE:
AN EMPIRICAL STUDY ON INDONESIAN LISTED AND STATE-OWNED
ENTERPRISES**

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A THESIS

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Abstract

This thesis provides an empirical study of the effect of environmental regulations on environmental and social performance (ESP), the effect of ESP on financial performance (FP), and the effect of FP on ESP for Indonesian listed companies and state-owned enterprises (SOEs). This study also provides a comparison between listed companies and SOEs in terms of the effect of ESP on FP, and vice versa.

In 2007, the Indonesian government implemented Article 74 of Corporate Law No. 40/2007 and Article 15 of Investment Law No. 25/2007. Those two regulations require all corporations to implement actions to address corporate environmental and social responsibility obligations, and to report on those actions. The regulations require companies to allocate part of their budgets to managing their surrounding natural environment and society. The purpose of the regulations is to protect nature and society from the impacts of business. However, the enactment of those regulations has created conflict between government and the business community in Indonesia. Enactment of the regulations may not be an effective way to improve corporate performance in protecting the environment, and it is unclear whether implementation of the regulations has hurt or helped the enterprises to improve their economic and financial positions.

The study implemented T-test, analysis of variance (ANOVA) and univariate analysis to examine the effect of environmental regulation on ESPs. The study also selected multiple regression models using dummy variables to analyse the effect of ESP on FP and an ordered response model to discuss the effect of FP on ESP. Both multiple regression models and the ordered response model were then used to compare the performance of listed companies and SOEs in terms of the effect of ESP on FP, and vice versa.

The study finds that environmental regulations have a significant influence on ESP. After the enactment of the regulations in Indonesia, ESP for Indonesian companies improved. Many listed companies and SOEs not only complied with the regulations but also took action that exceeded what was required to meet the compliance level. However, companies needed time to implement action that would affect ESP. Both listed companies and SOEs needed around three years to achieve ESP that met or went beyond the level of compliance.

The study also provides evidence that a high ESP significantly enhances listed companies' return on assets (ROA) and Tobin's Q but does not significantly affect return on equity (ROE). The Indonesian listed companies with ESPs that exceeded what was required for compliance had higher ROAs and Tobin's Q than the companies that performed at or below the compliance level. Listed companies that complied or went beyond the compliance level had better ROE than companies that did not achieve compliance, even though ESP did not have a significant impact on ROE. Moreover, ESP has been proven to not significantly affect ROA for SOEs, but it does have a significant effect on ROEs for SOEs.

The study discovers that the financial position of listed companies (ROA, ROE and Tobin's Q) has a significant influence on ESP. On the other hand, the effect of FP on ESP for SOEs is twofold: ROA has no significant influence on ESP for SOEs, but ROE does.

Furthermore, the study finds that listed companies have lower performance compared with SOEs in terms of the effect of FP on ESP and the effect of ESP on FP. However, this estimated difference appears only when other variables – that is, leverage, size, current ratio and margin – are all set to zero, which is not close to being a possible scenario. When the other variables are not zero, the difference in performance between listed companies and SOEs might have different results.

The findings have several implications for theory, policy and practice. Firstly, the study supports the Porter hypothesis, stakeholder theory, legitimacy theory and slack resource theory in the Indonesian context. Secondly, the study shows that regulating environmental and social issues is an effective way to protect nature and society from business operations without harming companies. The findings in Indonesia can be applied to regulations around environmental and social responsibility in other countries. Thirdly, the finding that FP has a positive effect on ESP, and vice versa, can be a reference for managers in Indonesian listed companies and SOEs, indicating the need to integrate environmental and social issues with financial strategies in their strategic management programs, in order to improve their sustainability and triple bottom line – that is, their financial, social and environmental performance.

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DEDICATION

This thesis is dedicated to my mother –Djumaiyah-, my father – Sabar Priyoatmodjo- who passed away during my doctoral study, my sister –Ari Kristiana- and my brother –Bayu Issetyadi.

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List of Abbreviations

ANOVA	Analysis of Variance
CA	Current Assets
CFCs	Chlorofluorocarbon
CL	Current Liabilities
CoC	Cost of Capital
CSA	Canadian Standards Association
CSP	Corporate Social Performance
CSR	Corporate Social Responsibility
DTE	Debt to Equity
DW	Durbin-Watson
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortisation
EPA	Environmental Protection Agency
EPS	Earnings Per Share
ESP	Environmental and Social Performance
ESR	Environmental and Social Responsibilities
EU	European Union
FP	Financial Performance
FSC	Forest Stewardship Council
GDP	Gross Domestic Product
GP	Gross Profit
GRI	Global Reporting Initiative
IDX	Indonesian Stock Exchange
ILO	International Labour Organization
ISPO	Indonesian Sustainable Palm Oil
ISO	International Standard Organization
KLD	Kinder, Lydenberg, Domini and Co. Inc.
LPG	Liquid Petroleum Gas
MJRA	Michael Jantzi Research Associate
MNCs	Multinational Companies
MoE	Ministry of Environment
MoEF	Ministry of Environment and Forestry
MSoE	Ministry of State-owned Enterprises
NEPA	National Environmental Policy Act
NGOs	Non-Government Organisations
NI	Net Income
NS	Net Sales
OLS	Ordinary Least Squares
PROPER	Program for Pollution Control, Evaluation and Rating
R & D	Research And Development
ROA	Return On Assets
ROE	Return On Equity
ROS	Return On Sales
SEC	Securities and Exchange Commission
SFI	Sustainability Forestry Initiative
SOEs	State-Owned Enterprises

TA	Total Assets
TE	Total Equity
TEU	Treaty on European Union
TFEU	Treaty on the Functioning of the European Union
TRI	Toxics Release Inventory
VIP	Variance Inflation Factor
WWF	World Wildlife Fund