

Financial Development and Environmental Degradation in ASEAN-5

Rosita Hamdan, Rossazana Ab-Rahim & Sang Sook Fah Faculty of Economics and Business, Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia

ABSTRACT

This study investigates the relationship between financial development and environmental degradation in ASEAN-5 countries namely Indonesia, Malaysia, Philippines, Singapore, and Thailand over the period of 2000 to 2014. The Panel Unit Root test, Panel Cointegration test, Vector Error Correction Model (VECM) Granger Causality, and Fully Modified Ordinary Least Square (FMOLS) are used in this study to examine the short-run and the long-run as well as the causality relationship among the variables. Variables employed in this study are carbon dioxide (CO₂) emissions, foreign direct investment (FDI), private domestic credit (DC), and market capitalization (MC). The empirical findings show that all the variables are stationary at order I(1) and there is a cointegration relationship among the variables. The results show that there is a bidirectional causality relationship between the CO₂ and FDI. Meanwhile, there is a unidirectional causality running from CO₂ to DC, MC to FDI, and MC to DC respectively. The strong policy and institution structures are suggested to improve environmental degradation through new technologies and financial development and financial reforms play a role in protecting the environment.

Keywords: Financial Development, Environmental Degradation, ASEAN

INTRODUCTION

Financial development is considered as one of the important factors in respect to the relationship between economic growth and the environment. On the one hand, financial development mitigates the environmental problems by redirecting the financial resources such as foreign direct investment (FDI) and higher investment may speed up economic growth and hence affects the dynamic of the environmental performance (Tamazian et al., 2009). It also helps to preserve the environment and produce environment-friendly products which can help to reduce the environmental issue and prevent the environment from serious hurt by human activities. On the other hand, financial development such as stock traded and industry value added leads to the increase of the energy consumption; as a result, the emission of carbon dioxide (CO₂) increase and eventually leads to environmental degradation. Based on these two different viewpoints, the nexus of financial