

**Relationship between FDI, Trade Openness and Environmental Degradation:
With Special Reference to Sri Lanka**

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Environmental degradation (ED) is a global crisis and an influencing factor of climate change. To bring forth sound policy implications, it is essential to identify the determinants of ED. In Sri Lanka, several studies have been conducted on the relationship between economic growth and ED. Yet, there is little to find the direct relationship among macroeconomic variables such as Foreign Direct Investments (FDI) and Trade Openness (TO) in terms of ED. Filling this gap, the present study investigates the long run and causality relationship among these variables employing the ARDL Bound Testing approach and Granger Causality respectively. The annual time series data from 1980 to 2019 has been used for the variables ED, TO and FDI. Here, the variable TO is used as the ratio of total trade to Gross Domestic Product and ED is used as the annual amount of CO₂ emissions. As a developing country, Sri Lanka escalates to attract more FDI and engages in more trade agreements. In this context, the results of the study are important to make the future trade and investment decisions more sustainable. According to the ARDL bound test results, there is a long-run relationship among the variables FDI, TO, and CO₂ emissions in Sri Lanka in terms of FDI. The coefficient value (1.3238) of one-year lagged CO₂ has a positive and significant impact on FDI in the long run. The cointegration equation is negative with a coefficient estimate of -1.3238 which is highly significant (0.00015). This implies that the speed of adjustment towards long run equilibrium is 132% within one period of disequilibrium. The Granger Causality test indicates that there is a bidirectional relationship between FDI and CO₂. Finally, the study concludes that concentrating on the environmental quality of the country is crucial when implementing policies to develop FDI and international trade.

Keywords: Environmental degradation, FDI, Trade openness, ARDL bound test, Granger causality