

Impact of Electricity Consumption on Output in Malaysian Manufacturing Sector

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Abstract

This paper investigates the relationship between electricity consumption, price and output in Malaysia's manufacturing sector by using multivariate framework. This study has two objectives. The first objective is to discover the existence of long-run relationship among the variables and the second objective is to examine the short-run causality among the variables. This is a time series analysis with the sample period covers from 1978-2010. Johansen and Juselius cointegration test and Granger causality test are employed in order to achieve the objectives of the paper. We found that electricity consumption, output and price are cointegrated in long run. VECM Granger causality test indicates that it has one unidirectional causality running from output to electricity consumption. On the other hand, only one unidirectional relationship exists in the short run which is running from electricity consumption to output. Hence, this result indicates the output is the significant determinant of electricity consumption. However, there is not enough evidence to prove that the electricity consumption significantly determine the growth in output.

Keywords: Electricity consumption; Output; Granger Causality; Cointegration

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