The Nexus between Electricity Generation/Supply and Manufacturing Sector Performance in Nigeria (1975-2011).

Anthony Osobase
University of Lagos
Nigeria
osobaseanthony@gmail.com

Abstract: This paper investigates the relationship between electricity generation/supply and manufacturing sector performance in Nigeria using time series data from 1975-2011. The variables utilized to test this relationship are index of manufacturing production, electricity generation, government capital expenditure, inflation rate, exchange rate and capacity utilization. By employing series of tests such as correlation techniques, the result obtained infer that, there exist a positive nexus between index of manufacturing production and electricity generation, government capital expenditure, inflation rate, exchange rate but negative relationship between capacity utilization. The Granger causality test shows unidirectional causal relationship that runs from capacity utilization to index of manufacturing production. Similarly, there is unidirectional causal nexus that occurs from electricity generation to index of manufacturing production. For government capital expenditure and index of manufacturing production it was observed that, unidirectional relationship runs from index of manufacturing production to government capital expenditure without feedback effect. The Johansen co-integration test shows three co-integration equations at five percent level for the trace statistics but no co-integration at five and one percent level for the Max-Eigen test. The implication of this study is that, electricity supply is a key determinant of output growth in the manufacturing sector; therefore the power sector should be given more attention for the growth of the nation economy.

Keywords: electricity generation, manufacturing performance, Nigeria.