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Impact of energy sector reforms on power generation in Tanzania: time series analysis, 1981-2014

Muzuka, Alvin Alfred

University of Dar es Salaam

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Alvin Alfred Muzuka

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University of Dar es Salaam, College of Social Sciences, 2017

Reliable and affordable supply of energy has been identified as a key factor for development of the Tanzanian economy. The government efforts towards development of the energy industry have been evident through various initiatives. Despite the country being endowed with abundant sources of energy still there has been low amount of electricity generated. This study was therefore undertaken to empirically investigate impacts of reforming the energy sector on electricity generation in Tanzania. The study, which covered a period 1981-2014, was based on the theory of supply and production. It adopted the use of time-series data and econometric approach of error correction mechanism.

The results showed that electricity generation in Tanzania is largely affected by demand factors rather than performance policies. Furthermore, statistically significant correlation among electricity demand, Gross Domestic Product (GDP), population growth and labour supply suggests that reform variable which had a negative sign but statistically insignificant plays a minor performance role. The unit root test for stationarity showed that all variables were integrated at order 1. Short- run and long-run relationship existed between variables which meant that co-integration existed between non-stationary variables. It was observed that a speed of adjustment between the short run and long run of electricity generated with its independent variables was 76 percent. From the results, the study found that electricity generation in Tanzania is largely affected by demand factors rather than performance policies which have largely been advocated. The study suggests that reforms in the energy sector will have positive impacts on electricity generation only if other determinants of electricity generation are wellorganized.