

## **BEHAVIOR OF ECONOMIC FACTORS ON ELECTRICITY CONSUMPTION IN SRI LANKA**

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### **Abstract**

Electricity consumption in developing countries has been increasing drastically due to their economic growth in recent decades. Sri Lanka, as a developing country, is also experiencing an increase in electricity consumption along with a shortage of energy supply. This study attempts to examine the relationship between electricity consumption (EC) and economic growth variables such as gross domestic product (GDP), consumer price index (CPI), and population density (PD) in Sri Lanka. The Augmented Dickey Fuller (ADF) test was used to check for stationarity of the variables, and the Johansen cointegration test and vector error correction model (VECM) were employed to assess the relationship between EC and corresponding economic variables (GDP, CPI, and PD) from the period 1971 to 2019. This empirical study reveals that GDP, CPI and EC are cointegrated, and there is a long run relationship between EC, CPI, and GDP. Also, the results of VECM shows that 1% increase in the value of log (GDP) leads to 0.0156 % increase in log (EC), while 1% increase in the value of log (CPI) leads to 0.1378% increase in log (EC).

**Keywords:** *economic growth, cointegration, CPI, GDP, VECM*