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In most instances, economic growth is accompanied by heightened emissions. Nevertheless, effective governmental governance can potentially ameliorate the adverse environmental ramifications of economic growth. In this vein, utilizing a case study of Bulgaria, this article seeks to investigate the links between GDP levels, emission levels, and the quality of governmental administration. This study utilizes annual data for Bulgaria spanning from 1996 to 2022. To derive the outcomes, the following methodologies were employed: correlation analysis; logarithmic transformation; Dickey-Fuller test calculation; determination of the first differences of logarithms for non-stationary time series; correlogram construction; Granger causality test calculation; and graphical analysis. The study revealed causal links from RL to CC and from METH to GE in the short term. Moreover, connections were identified from GDP to CC, from RL to CC, and from METH to GE. In the long term, causal links were observed from GE to VA, from PV to CO2E, from PV to METH, from RL to CO2E, from RL to VA, from VA to GE, from VA to GDP, and from CO2E to GE. In all cases, the links were unidirectional. No direct correlation was detected between GDP and emission levels, as well as between GDP and the quality of government regulation in the case of Bulgaria. All computations were conducted using the EViews 12 software.

Keywords – economic growth; emissions; quality of governance; Dickey-Fuller test; Granger causality.