Multivariate time series analysis on correlation between inflation rate and employment rate with gross domestic product

ABSTRACT

Bearing in mind that GDP is the main indicator of a countryôs standard of living, this paper attempts to study the correlations that exist between inflation rate and employment with GDP. The variables were selected based on relevant economic theories that allow such interactions among variables. The study has been done using multivariate times series analysis available in STATA software. In the long run, the results indicate that the inflation rate does not affect the GDP while the employment rate has negative relationship with the GDP. Granger Causality is applied to test the causality between the variables. The findings revealed that both independent variables have unidirectional relationship with GDP in the short run. It is to be concluded that by using time series data, the researcher can discern the movement of variables clearly. It is recommended that future researchers should improve the reliability and validity of the results by replacing the other independent variables such as level of income, population and others.

Keyword: Multivariate time series analysis; Gross domestic product; Inflation rate; Employment rate