Modeling Colombo Consumer Price Index (CCPI) Using Time Series ARIMA Model

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Abstract

The monthly Colombo Consumer Price Index (CCPI) is the most widely used tool for measuring changes in the inflation which are important in formulating economic policies and making investment decisions. However, no methodology has been developed so far to predict CCPI at least one month ahead. Using monthly series of CCPI from January 2003 to December 2010, ARIMA (1, 1, and 1) model was identified as the best fitted for the CCPI series. The error series of the fitted model was found to be a white noise process. The model was also tested to an independent data set using CCPI index from January 2011 to May 2011.

Keywords: Colombo Consumer Price Index, ARIMA.

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