



The Behavior of Consumer Price Indices in Southeast Asian Countries under the COVID -19 Pandemic

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ABSTRACT

The Consumer price index (CPI) is an economic indicator used to measure inflation. It is useful to know the effectiveness of the economic policies of a country and for the decision-making process. The pandemic situation was highly affected by the economic growth globally. The Southeast Asian (SEA) region was highly infected by the COVID-19 pandemic. Therefore, it is useful to measure the future economic performances of SEA countries. As an initial step, this study was designed to examine the patterns of CPI of selected SEA countries. The objective of the study was to examine the patterns of CPI in Thailand, Singapore, and Indonesia. The CPI data obtained from the International Monetary Fund (IMF) database for the period of January 2000 to July 2020. Descriptive statistics were used for data representation. Auto-Correlation Functions (ACF) and time series plots were used to examine the behavior. One-way Analysis of Variance (ANOVA) was used for the mean comparison of CPI among selected countries. The mean CPI of Indonesia, Singapore, and Thailand were 99, 100.4, and 98 respectively. ANOVA confirmed that there is no significant difference in CPI between these three countries. ACF confirmed the data series of CPI of Indonesia, Singapore, and Thailand did not have a constant mean or constant variance. All three data series were not normally distributed. The statistical pattern shows the upward trend of Indonesian CPI throughout. Whereas Singapore and Thailand also equivalent up to 2013 and 2014 respectively. It is concluded that the pandemic situation is not highly affected to the CPI in Singapore and Thailand. The pattern of all three series seems to be captured by one of these or any of those models namely; Exponential Smoothing, linear and nonlinear trend models, Decomposition Techniques, and Sama Circular Model. Further, it is recommended to examine the behavior of other SEA countries.

Keywords: Consumer Price Index, COVID-19, Pattern