



FORECASTING EMPLOYMENT OF TOURISM INDUSTRY IN SRI LANKA

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The tourism industry in Sri Lanka is growing over the recent past; increasing arrivals from various destinations. As a result, the employment in the industry also shows a rapid growth, but there were very few attempts in forecasting employment in the tourism industry in Sri Lanka. Hence, the objective of the study was to find out the suitable forecasting techniques for total employment of tourism industry in Sri Lanka. Annual employment data for the period of 1970 to 2015 were obtained from the Sri Lanka Tourism Development Authority (SLTDA). Karl Pearson's correlation used to test the correlation between total employment and tourist arrivals. Time series plots used for pattern identification. Simple Regression Model (SRM) and Auto Distributed Lag Model (ADLM) tested for forecasting. The Anderson-Darling test used to test the normality of data and residuals. Ljung-Box Q test, Auto-Correlation Functions (ACF) and Durbin-Watson (DW) test used to test the independence of residuals. Augmented Dickey-Fuller (ADF) test used to test the stationary of the series. Forecasting ability of the models was assessed by both relative and absolute measurements of errors. The SRM was not successful, but the ADLM satisfied the validation criterion. Both relative and absolute measurements of ADLM were very low. Hence, the ADLM is recommended for forecasting total employment of tourism industry in Sri Lanka. The results of this study will be facilitating for decision making and various strategy development related to overcome the surplus and shortfall of employment. It will be useful for workforce planning in both public and the private sector in the tourism industry. It is useful for developing various training programs such as workshops, academic and professional courses related to hospitality management. Further, the finding of the study can be used to assess the economic benefits to the host community in various tourism areas in Sri Lanka.

Keywords: *Simple Regression Model, Auto Distributed Lag Model, Measurements of Errors.*