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A Study on the Prediction of Economic Indicators Using Mathematical and Computational Statistics.

Economic indicators are fluctuating up-and-down during periods of such as recession and expansion. Due to the complexity of the data that include trend and irregular components, general approximation of the cyclic factors for the long-term behavior of economic data were studied for the presented analysis.

The sum of squares total, the sum of squares regression, and the sum of squares error were employed for modeling and predicting which were performed in an iterative way using a linear exponential smoothing technique with sequential updating equations. Smoothing parameters were used to estimate the trend and level.

In this paper major goals such as predicting, modeling, and characterization were performed in order to get a better strategy of forecasting the model.

As the last step in the model building, Analysis of Variance technique was used to assess the overall errors using the R-statistics and the least squares criterion was used to minimize the sum of square of vertical deviations. (Received March 03, 2020)