

LITERATURE SURVEY

S. No.	Title	Year	Author	Publication	Remarks
1	The optimal forecast model for consumer price index of Puntland State, Somalia	2022	Abdullahi Osman Ali & Jama Mohamed	Springer	Different time series models, such as regression with ARIMA errors (ARIMAX), STL decomposition, robust exponential smoothing (ROBETS), single exponential smoothing (SES), and artificial neural network (ANN) models, were used in the study. The forecasting capabilities of these five models were evaluated using a variety of forecast accuracy metrics and information criteria, including the Akaike Information Criteria (AIC), Corrected Akaike Information Criteria (AICc), and Bayesian Information Criteria (BIC).
2	Forecasting consumer price index (cpi) using Time series models and Multi regression models (Albania case study)	2018	Eralda Gjika (Dhamo) ¹ , Llukan Puka ² , Oriana Zaçaj ³	10th International Scientific Conference "Business and Management 2018"	In the first method, the forecast was produced by applying time series models directly to the CPI time series index. The second method involved modelling and simulating forecasts for each

					subcomponent that had a substantial link to the CPI using time series models (SARIMA, ETS), followed by obtaining the CPI forecast using a multiple regression model.
3	Time Series Modeling and Forecasting of Somaliland Consumer Price Index: A Comparison of ARIMA and Regression with ARIMA Errors	2020	Jama Mohamed	American Journal of Theoretical and Applied Statistics	Both models were utilised by the study to generate the required forecasts. The predictive power of the model was further evaluated using the Akaike Information Criterion (AIC), Corrected Akaike Information Criterion (AICc), Bayesian Information Criterion (BIC), and other model accuracy criteria. These techniques lead to the conclusion that ARIMA (0, 1, 3) is the best model for predicting CPI in Somaliland. Additionally, the diagnostic tests demonstrate that the proposed model is accurate and dependable for anticipating Somaliland CPI data.
4	A forecasting the consumer price index using time series model	2021	Volodymyr Shinkarenko ¹ , Alexey Hostryk ¹ , Larysa	In <i>SHS Web of Conferences</i> , vol. 107	Two different types of models were employed to predict future consumer price

			Shynkarenko ² and Leonid Dolinskyi ³		index behaviour: the additive ARIMA*ARIMAS model, often known as the Box- Jenkins model, and the exponential smoothing model with the Holt- Winters seasonality estimate. The STATISTICA software was used to create the models that best reflect the monthly dynamics of the Ukrainian consumer price index. The Holt- Winters model, which has the least amount of error, was used to forecast inflation.
5	Prediction analysis of food crop farmer index price during covid-19 pandemic using arima and lstm.	2022	Oswari, Teddy; Yusnitasari, Tristyanti; Kusumawati, Reni Diah; Setiawan, Irvan	<i>Journal of Management Information & Decision Sciences . 2022 Special Issue, Vol. 25</i>	The Auto Regressive Integrated Moving Average (ARIMA) algorithm with parameters SARIMA(2, 1, 2) x (0, 1, 1, 1) and the Long Short Term Memory (LSTM) algorithm with parameters 100, dropout 0.2, 100 times will be used to predict or forecast in this study. Since the MSE value inside this LSTM model is less (0.1051) than the ARIMA model, the forecasting evaluation of the

					two models reveals that the LSTM model provides more accurate prediction outcomes than the ARIMA model (0.2692).
6	The Consumer Price Index Forecast Based on ARIMA Model	2010	Weng Dongdong	IEEE	The thesis first statistically identifies the correlation function as well as the partial correlation function of the consumer price index based on the monthly CPI data from January 2000 through December 2009, tests the stationarity of the ADF, uses the ARIMA model to test residual serial auto - correlation, and finally makes a short-term estimate of the monthly CPI of our nation in 2010.
7	Consumer price index prediction using Long Short Term Memory (LSTM) based cloud computing	2020	S Zahara1, Sugianto1 and M B Ilmiddaviq1	<i>Journal of Physics: Conference Series</i> (Vol. 1456, No. 1, p. 012022). IOP Publishing.	Gross Domestic Product (GDP). We conducted a CPI prediction model utilising the Long Short Term Memory Method because CPI data might be utilised as a direction for the upcoming move in inflation. The 34 variables that make up the Surabaya staple price are the input to the network model, and the CPI

					value is the output. Additionally notable as a component of machine learning networks, LSTM is a good option for time-series prediction.
8	Modelling Monthly Headline Consumer Price Index (HCPI) through Seasonal Box-Jenkins Methodology	2018	Emerson Abraham Jackson	International Journal of Sciences, Vol. 7(01)	With respect to a univariate model in particular, consideration has been given in this empirical work to provide an overview of the literature upon this seasonal Box-Jenkins modelling. Data were adjusted for seasonality, iteration, and adequate diagnostic test results to demonstrate that the prediction utilising the static method produced the best results, with Year-on-Year inflation across the three-month anticipated period. The generated series' correlogram showed very consistent results, and the forecast evaluation's MAPE showed only a little amount of error in the findings, showing how well the model fits the selected technique.
9	Implementation of the	2017	Ansari Saleh Ahmar1,	<i>Journal of Physics:</i>	The forecasting of the Indonesian

	ARIMA(p,d,q) method to forecasting CPI Data using forecast package in R Software		Achmad Daengs GS2, Tri Listyorini3, Castaka Agus Sugianto4, Y Yuniningsih5	<i>Conference Series</i> (Vol. 1028, No. 1, p. 012189)	consumer price index using the forecast package and R software was discussed in this work. Rob J. Hyndman and Yeasmin Khandakar made use of algorithms to forecast this data in 2008. This strategy yields a viable ARIMA model for predicting Indonesian CPI data. ARIMA is the model that fits time series the best (1,0,0).
10	A Hybrid Neural Network and Box-Jenkins Models for Time Series Forecasting	2021	Mohammad Hadwan1,2,3,*, Basheer M. Al-Maqaleh4, Fuad N. Al-Badani5, Rehan Ullah Khan1,3 and Mohammed A. Al-Hagery	CMC-COMPUTERS MATERIALS & CONTINUA, 70(3),	In order to satisfy the demand for forecasting the consumer price index, this study suggests a hybrid forecasting methodology. Three models are part of the suggested methodology. The first model is based on the autoregressive integrated moving average (ARIMA) statistical model, the second version is a back propagation neural network (BPNN) with adaptive slope and momentum parameters, and the third model is a hybrid of ARIMA and BPNN

					(ARIMA/BPNN) and artificial neural networks and ARIMA (ARIMA/ANN) to gain the advantages of linear and nonlinear modelling.
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