## PREDICTION OF RETAIL PRICES OF ROASTED COFFEE BY TIME SERIES ANALYSIS

## **Burak GÜLMEZ**

Research Assistant Doctor, Industrial Engineering Department of Erciyes University, burakgulmez@erciyes.edu.tr (Corresponding Author)

## **ABSTRACT**

The coffee is the type of beverage obtained by the preparation of the seeds of various operations as a result of various operations from the fruits of coffee. The seeds of these fruits are consumed by brewing in water after various transactions. Although every country has its unique drinks in which the cultural palate habits, the coffee has succeeded in the life of most people in the earth differently. Each society has loaded its meaning to the coffee; has been roasted, brewed, and presented. Since the day it emerged, it has been a livelihood of the people and held to the economy of the region. Nowadays, it continues to achieve people's liking and to stand in every corner of the world. Therefore, it still maintains the property of being the most trading substance after oil in the world. The coffee is in about 80 countries, such as Africa, South, Central America, the Caribbean, and Asia. When we look at the area of growth, it can be considered a variety of coffee. Each type of coffee has its own unique characteristics, taste, smell. But all are the variations of four main types. Arabica, Robusta, Liberica and Excelsa are the main types of coffee. These four different types of seeds are sold in various parts of the world and people have coffee. Because coffee production and consumption are very common, and the coffee industry is very large, coffee prices are important and changeable. Time series analysis is used to analyse the changing values depending on the time. Statistical analyses are made on the sorted data, and the results are made, and the future estimates are made. In this study, coffee prices in different countries in the world are organized annually. The resulting data were analysed with the time series and the future price estimates were performed.

**Keywords**: Coffee Prices, Time Series Analysis, Prediction