

## Forecast Share Prices with Artificial Neural Network in Crisis Periods

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### Abstract

Crisis periods present quite a significant moment for financial markets. Considering not losing and changing the crisis periods into opportunities, forecasts of share prices during these periods have an importance for the investors. In this study, daily closing prices of Borsa Istanbul National 100 index during the three big crisis periods, as 1994, 2001, and 2008, have been tried to be forecasted, by using artificial neural networks. As a result of this study, it is determined that in the forecasts of Borsa Istanbul, artificial neural networks show high performance. This result was proved by both comparing the values that occurred and forecasted on the graphics, and Mean Absolute Percentage Error (MAPE) calculations.

**Keywords:** Artificial Neural Networks, Borsa Istanbul, Forecasting, Crisis Periods