ABSTRACT

Stock market data analysis has attracted the interests of many researchers from different fields due to the possible high returns over time in stock market investments. One of the most popular ways for stock market prediction is technical analysis, which assumes that the stock market moves in trends and these trends can be captured and used for forecasting.

In this study, I apply two nonparametric techniques, Artificial Neural Network and Support Vector Machine in stock index technical analysis and trading so as to examine the feasibility of applying these two models to financial time-series forecasting. The results showed that there is no strong evidence that the SVM can outperform the ANN and it does not provide a promising technique in financial time series forecasting. The bootstrap simulation results also indicate that the trading strategy based on the SVM and ANN model prediction cannot always outperform the benchmark Buy-and-Hold trading strategy, which supports the claim of the efficient markets hypothesis.