
An application of decision trees in the developing of decision model for investing in the stock exchange of Thailand

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Keywords

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Abstract

A lot of information for decision making in stock trading needs to be considered from both global and local aspects. To make trading decisions, there are several options for investors such as using their own guidelines or looking for models as a trading guideline. More importantly, trading at the suitable times are the key success factor for profit making. The objective of this study was to develop a decision model for trading stocks. A decision tree was developed by using tree-like model to make decision rules for trading stocks. Historical stock data of the Stock Exchange of Thailand (SET) in the past five years were used to construct a decision tree model. Price per earnings, price per book value, and dividend yield were applied in stock selection. Thereafter the selection process, technical indicators including Simple Moving Average (SMA), Moving Average Convergence Divergence (MACD), Momentum (MOM), Stochastic Oscillator (STO), Relative Strength Index (RSI), Money Flow Index (MFI), Buy-Sell Volume and NVDR Volume were applied to the stock data. The data were preprocessed to classify as buying, selling, and no-signal. The decision tree model indicated that the best performance for classification was "no-signal" followed by "selling" and "buying", respectively. The root node of decision trees, decision rules, recommendations, and further studies were also discussed in this study.
