

An Application Of An Artificial Neural Network Investment System To Predict Takeover Targets

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Abstract

Artificial neural networks are a robust, effective complement to traditional statistical methods in financial applications. They can incorporate qualitative and quantitative information, and recognize underlying patterns and trends in large, complex data sets. This paper applies a neural network model to identify potential acquisition targets. The model incorporates various factors based on acquisition theories suggested in the literature. The resulting neural network model exhibits a highly successful prediction rate and a portfolio of predicted target stocks identified by the network substantially outperformed the market.