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SELECTING MACROECONOMIC INFLUENCERS ON STOCK MARKETS BY USING FEATURE SELECTION ALGORITHMS

Abstract:

Many studies in finance literature aims to find which macro-economic factors influence stock markets and by doing so to predict market returns. There hasn't been a common approach to find a mutual explanation about relationships between factors and stock markets. Results differ according to advantages- disadvantages of methods used on different markets. We tried to decide which factors has influence on predicting the movements of stock markets. We used sequential forward selection algorithm on Turkish stock market: Borsa Istanbul, and picked interest rate, exchange rate, industry production index, oil price, gold price as candidate indicators (including one and two month lagged values of each) along with stock market's one and two period lagged index values. Our results show that, one month lagged stock market indicator index values are enough to predict market indicator index's future values.

Keywords:

Stock Markets, Prediction, Macroeconomic Factors, Neural Networks, Feature Selection.

JEL Classification: G10, G17