

The thesis takes on the question of profitability of algorithmic trading based on trend and momentum indicators and examines whether or not it is possible to acquire systematic profits. It reviews the development of relevant literature over the last 100 years to determine whether the inner workings of the market can be quantified and plausibly modelled. On three major U.S. stock indices are then tested several different strategies to determine whether in the long-term, passive investment can be outperformed by active trading. Merit of the work lies in backtesting several strategies and interpreting the results according to unique characteristics of the indices.