

Abstract

This thesis aims to apply methods of value investing into developing field of algorithmic trading. Firstly, we investigate the effect of several fundamental variables on stock returns using the fixed effects model and portfolio approach. The results confirm that size and book-to-market ratio explain some variation in stock returns that market alone do not capture. Moreover, we observe a significant positive effect of book-to-market ratio and negative effect of size on future stock returns. Secondly, we try to utilize those variables in a trading algorithm. Using the common performance evaluation tools we test several fundamentally based strategies and discover that investing into small stocks with high book-to-market ratio beats the market in the tested period between 2009 and 2015. Although we have to be careful with conclusions as our dataset has some limitations, we believe that there is a market anomaly in the testing period which may be caused by preference of technical strategies over value investing by market participants.