

Intraday price reversals in the global equity markets

Asymmetrica Investment AG
Master Thesis - Remote!

Description

The reversal anomaly is one of the most popular and oldest academically described anomalies. However, is it easily exploitable? Several studies report that abnormal returns associated with short-term reversal investment strategies diminish once transaction costs are considered.

One popular theory is that a reversal in the price of an asset occurs due to investors' overreaction to asset-related news and the subsequent price correction. Stefan Nagel claims that returns of short-term reversal strategies in equity markets can be explained as a proxy for the returns from liquidity provision [1].

Some authors claim that not only theoretically but that in markets with abundant liquidity, reversal strategies do work. Frazzini, Israel and Moskowitz find that actual trading costs are less than a tenth as large as previous studies suggest and that strategies designed to reduce transactions costs can increase net returns and capacity substantially [2]. de Groot, Huij and Zhou, show that reversal strategies generate 30 to 50 basis points per week net of transaction costs. [3].

Other authors explore the reversal anomalies around earnings announcements [4], [5]. Herber, Horn and Oehler show that there is statistically significant, however economically insignificant Intraday reversal anomaly in the German blue chip stock market.

There is the need to test whether this statistically significant anomaly can be exploited in the global equity markets in a way that is economically significant.

Objectives

Find whether there are indications for Intraday reversals in Global Stock prices. Results should be adjusted regarding market adjustment, portfolio sizes and skipping periods between ranking and

holding periods. Test results and show if the returns of the reversal strategies are statistically significant. Show the size of the returns to test if the returns are economically significant. As a result, your research will test the efficiency on the stock markets.

Requirements

Be able to apply Out of Sample back-tests: The project combines rigorous mathematical aspects with practical research and would be an excellent experience for those wishing to join a proprietary trading firm, hedge fund or the research department of a Bank. A solid background in convex optimization is required. Any knowledge in optimal control is useful, however not required. The project is well suited for a student that enjoys trying out new ideas. By inspiration from the aforementioned problem, we promote knowledge transfer from theory to practice. The work loads are as follows: • Theoretical: 40% • Computational: 60%