

# **Over- and Underreaction in the Swiss Market**

### and the Connection to

## Market Capitalization and Institutional Ownership

Bachelor thesis

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#### Abstract

This paper examines the existence of over- and underreaction in the Swiss and US market. Secondly, the research includes an examination of a possible link of over- and underreaction to the factors market capitalization and institutional ownership. The found evidence indicates that over- and underreaction exist in the Swiss market. Furthermore, evidence suggests that market capitalization and institutional ownership affect the occurrence of over- and underreaction. Within the Swiss market larger stocks expose momentum whilst return reversal dominates within smaller stocks. When sorting for institutional ownership within the US market higher institutional ownership results in more and stronger momentum within the particular stock group.

#### **Executive Summary**

This paper provides a thorough analysis of the occurrence of the behavioural phenomena over- and underreaction in the Swiss market. Furthermore, this paper investigates for a possible connection of over- and underreaction to the two factors market capitalization and institutional ownership. The same analysis is applied to data of the US market, mainly for comparison reasons and also for its special characteristics regarding institutional ownership.

The applied method involves constructing winner and loser portfolios within a set group of stocks at multiple points in time based on their bygone monthly returns. These portfolios are then held for several different time periods upon which their average monthly returns are calculated. This procedure is called the J-month/K-month strategy which was first introduced by Jegadeesh and Titman (1993). By applying this method one can calculate monthly return tables for the various winner and loser portfolio for each and every J-month/K-month strategy. These return tables deliver insight in the occurrence of over- and underreaction within the particular market and can also tell which effect dominates in the short term respectively in the long term. For the investigation of a possible link of over- and underreaction to market capitalization and institutional ownership the same approach is applied after ranking and assigning stocks to groups depending on their size or ratio of institutional ownership.

For the Swiss market, this paper finds clear evidence that over- and underreaction do exist within the observed set of stocks and the investigated time frame. Furthermore, the calculated return tables show that momentum prevails in the short term and that return reversal dominates in the long term which is in accordance with results of previous research such as the work of De Bondt and Thaler (1985, 1987) or Chopra, Lakonishok, and Ritter (1992). Within the data used for the US market no significant evidence is found for over- and underreaction which changes when sorting for institutional ownership.

In the second part, this paper finds evidence of a connection of over- and underreaction to market capitalization in the Swiss market. Momentum is more dominant within the group with high market capitalization than within the group with low market capitalization. Within the high market capitalization stock group out of 16 semi-annual strategies 15 expose momentum whilst return reversal seems to prevail within the smaller stock group. These findings are similar to results Jegadeesh and Titman (1993) and Chopra, Lakonishok, & Ritter (1992) find when sorting for size. Within the data of the US market, no clear evidence is found that size plays a role in the occurrence of momentum or return reversal.

The last problem this paper addresses is to find out whether the ratio of institutional ownership has an influence on the occurrence of momentum respectively return reversal. When sorting for institutional ownership within the US market the stock group with high institutional

ownership exposes a strong tendency for momentum and return reversal prevails within the stock group with lower institutional ownership. Within stocks with high institutional ownership momentum is very strong and out of 49 strategies 24 significantly expose momentum whilst not even a single strategy shows significant evidence of return reversal. Within the stocks with low institutional ownership on the other hand return reversal dominates strongly. When conducting the same research for the Swiss market opposite results are found. Still, these findings provide clear evidence that different ratios of institutional ownership do have an impact on the occurrence of over- and underreaction.

Some gaps regarding the research of over- and underreaction are filled by this paper which include a general investigation of over- and underreaction within the Swiss market and the research of a connection of market capitalization and institutional ownership to momentum and return reversal. Still, this paper also exposes some limitations. Stocks are grouped on the basis of their relative market capitalization respectively their ratio of institutional ownership in other words they are ranked. The limitation here is that in no part of this paper is the influence of these factors on over- and underreaction researched by grouping stocks into subgroups on the basis of absolute values of market capitalization or institutional ownership. Stocks within the US market generally tend to be larger and have a higher ratio of institutional ownership. This could also be an explanation as to why results vary for the Swiss and the US market