Executive Summary

Problem

According to the fundamental principle of market egalitarianism and fairness, corporate insiders are not allowed to trade shares of their own company unrestrictedly. The regulatory provisions of insider trading in Switzerland prohibit management transactions which are based on confidential and price-sensitive information that has substantial impact on the security price. Additionally, insiders are required to disclose their trades to the SIX Exchange Regulation within a reasonable short period of time following the trade. The information regarding management transactions is contemporary provided to the public and, thus, critically analyzed by outside investors perceiving that corporate insiders trade on private information. Even though insider trading is regulated in most countries, a number of studies (see for example Finnerty (1976) and Hillier and Marshall (2002)) illustrate that insiders exploit privileged knowledge by trading securities of their own firm. Due to limitations of insiders' wealth, it is likely that only parts of the private information will be discounted in the stock price by the trade itself. Therefore, outsiders might profitably use the publicly accessible information about insider trading as a reliable indicator for future price changes. This would represent a violation of the semi-strong form of efficiency, which states that no excess returns can be realized based on public information (Malkiel and Fama (1970)).

Even though the market reactions surrounding insider trading activities are thoroughly examined in the United States, the literature concentrating on the Swiss stock exchange is limited. Therefore, this study evaluates the profitability and the informational content of management transactions in the Swiss stock market. Furthermore, investment strategies mimicking insiders' trades in the days following the transaction are assessed.

Method

The data sample consists of 7'014 management transactions that are executed by 180 firms which are, or were, primarily listed on the SIX Swiss exchange between October 2012 and September 2017. In order to measure abnormal returns around the trades of corporate insiders, the event study methodology described by Brown and Warner (1985) and MacKinlay (1997) is applied. This empirical approach is a well-established technique to gauge the impact of particular events on the market value of a company. To mitigate complications arising from violations of statistical assumptions (non-normal distribution, event-induced volatility and cross-sectional correlation), several modifications with respect to the event study setup are adopted in this study.

In order to evaluate the profitability and the informational content of insider trading in the Swiss stock market, the event study is separately conducted for purchase and sale transactions. Several variations of the empirical analysis are implemented to check the robustness of excess returns realized by insiders. To identify the determinants of corporate insiders' abnormal returns, the purchase and sale transaction sample is additionally divided into sub-samples by firm size, relative transaction value, book-to-market ratio, clustered trades and industry. Moreover, investment strategies mimicking trades of insiders are examined by incorporating "institutional" and spread-induced transaction costs. Furthermore, the time lag of the insider trading signal to outsiders is considered by adjusting the event date.

Results

The empirical results of this study substantiate the frequently documented contrarian investment behavior of corporate insiders. They are able to successfully time the market by purchasing or selling shares after a drop or an increase in the stock price, respectively, that is followed by a reversed price development. In contrast to the study of Zingg, Lang, and Wyttenbach (2007), insiders realize highly significant abnormal profits by trading shares of their own company, regardless of the type of order. This finding indicates that purchase as well as sale trades are based on valuable information. Due to the evidence for profitable investment strategies of insiders, the strong form of efficiency for the Swiss stock market can be rejected. The robustness of the empirical results is corroborated by various checks containing modifications of the event study design, adjustments of the underlying data and the creation of time-dependent samples. The analysis of time-dependent samples shows that the magnitude of excess returns has declined in the last years, implying an increased market efficiency and reflecting the impact of the tightened insider trading regulation. Even though the regulation seems to not fully cease insider trading, the realized gross excess returns are low and should not cause any regulatory concerns.

In order to investigate the determinants of insiders' abnormal returns in detail, the sample is divided according to trade- and firm-specific attributes. The results illustrate that the predictive ability of insiders is not uniform across company size. In terms of insiders' purchase transactions, excess returns are primarily concentrated in small firms. This finding corroborates that informational asymmetries among investors are more pronounced in small companies and, hence, offer insiders greater opportunities to exploit their superior knowledge. However, a negative relation between firm size and excess profits is not found for sale trades. Regardless of firm size, insiders earn highly significant abnormal returns by selling shares of their own firm, indicating that sale trades are not primarily driven by diversification and liquidity considerations, but rather by intentions to exploit private information. Furthermore, the findings illustrate that small to medium size trades contain more valuable information than large transactions - as postulated by the "stealth trading" hypothesis of Barclay and Warner (1993). A potential explanation of this finding is that insiders try to minimize the market's attraction by dividing their information-driven trades into several smaller transactions. Following Seyhun (2000), insiders are likely to buy stocks with high and sell shares with low book-to-market ratios, since these constellations indicate an under- and overvaluation of a stock, respectively. In consistency with this argument, insiders executing sale trades of low book-to-market firms earn the highest abnormal returns and, thus, serve as a reliable indicator for future share price changes. However, no clear relation between book-to-market ratios and excess returns is identified in case of purchase trades. Further, the analysis of this study indicates that single trades convey in general more valuable information than clustered trades. Thus, insiders in the Swiss stock market might try to conceal their information-driven trades by allocating them to several single trades over multiple days.

Since insiders trade - according to this study - on private information, outsiders might try to benefit from their superior knowledge about the firm's prospects by following insider trading activities. However, the results of this study indicate that outsiders are generally not able to earn abnormal profits because the incorporation of transaction costs, i.e., "institutional" and spread-induced costs, wipe out the gross abnormal returns. Even though some excess profits associated with selected mimicking strategies are detected, they are either economically irrelevant or not statistically significant. Thus, no evidence can be found to reject the hypothesis of semi-strong efficiency for the Swiss stock market. An implication of this finding is that private investors are well advised to invest passively, since they are unable to outperform the market in the long-term.

Evaluation

This study presents interesting findings regarding insider trading in the Swiss stock market. However, several shortfalls and limitations have to be considered when analyzing and interpreting the reported outcomes. Besides that, it remains an open question whether corporate insiders are able to generate abnormal profits by trading shares of their own company in future. An increased market efficiency, reflecting technical advancements to gather and process information, and a tightened insider trading regulation environment in Switzerland might impede the exploitation of privileged corporate-specific knowledge. Therefore, further research in the field of insider trading is required to track changes with respect to the profitability of management transactions in the Swiss stock market.