Executive Summary

The dividend signaling hypothesis states that dividends signal a firm's profit prospects (Miller and Modigliani (1961)). This hypothesis implicates that the announcement of dividend changes is accompanied by abnormal stock returns of the same sign, i.e., increases in dividends lead to positive abnormal returns, whereas dividend cuts lead to negative abnormal returns. The impact of the announcement of dividend changes on the stock price behavior has been investigated by various studies. Most studies are able to identify a positive correlation between dividend changes and abnormal returns. Thus, they are in support of the signaling hypothesis. It is probable that there are firm specific characteristics which influence the signaling effect of dividends on stock prices. Lang and Litzenberger (1989) investigated how the abnormal returns related to dividend announcements of value firms[1] differ from those of growth firms. Their findings suggest that when a dividend increase is announced, value stocks have significantly larger abnormal returns than growth stocks. This is in support of the so-called overinvestment hypothesis, which argues that dividend increases of value firms prohibits them from investing in negative NPV projects, which is in the interest of shareholders. Apart from dividend announcement events, Fama and French (1993) show that value firms have higher returns than growth stocks when controlling for the market risk, giving rise to the so-called value premium. Furthermore, they observe that the Book-to-Market ratio is able to explain a lot of the variation in the cross-section of stock returns. It is evident that a firm's Book-to-Market ratio impacts its stock price behavior.

The goal of this master thesis is (1) to analyze abnormal returns of value stocks in the days surrounding the announcement of dividend changes, (2) to compare these abnormal returns with those of growth stocks, and (3) to assess whether it is possible to identify a value premium for the data sample chosen.

The empirical analysis covers the time period from 1990 to 2012 and involves the members of the S&P 500 index. Previous research concerning the value premium and that of abnormal returns of value and growth stocks surrounding dividend announcements are used to formulate adequate hypotheses, which can be empirically tested on the data sample. The two hypotheses related to the stock price behavior when dividends are announced state that (1) value stocks have either positive abnormal returns when dividends are increased or negative abnormal returns when dividends are cut, and (2) there are differences between abnormal

[1] Lang and Litzenberger (1989) distinguish between firms which are overinvesting (Tobin's Q lower than 1), and firms which are underinvesting (Tobin's Q higher than 1).

returns of value and growth stocks in dependence to a particular dividend change. The empirical tests on the first and second hypotheses involve an event study on the whole data sample as well as robustness checks and event studies conducted on subperiods to check the consistency of results over time. The third hypothesis, which concerns the value premium, states that the abnormal returns of value stocks are higher than those of growth stocks. To verify the existence of a value premium for the data sample chosen, the returns of a value and a growth portfolio are regressed using the CAPM. The regression's intercepts – the so called Jensen's alphas – indicate whether the value portfolio has higher returns than the growth portfolio when controlling for the market risk. The evaluation of the value premium is accompanied by a regression of returns with a two-factor model[2] which involves, besides the market factor, a factor for the Book-to-Market ratio. This may help to explain the variation in the cross-section of returns.

The results of the event study allow to confirm the first hypothesis and therefore support the dividend signaling hypothesis, which suggests that stock returns correlate positively with the change in dividends. Dividend cuts of value firms lead to overproportionally high negative abnormal returns, which may be attributable to a stronger signaling effect due to the fact that value firms tend to be in financial distress (Chen and Zhang (1998)). The results on the second hypothesis suggest that there are indeed statistically significant differences between value and growth stocks in the way their stock prices react to changes in dividends. Nevertheless, there is no support of the overinvestment hypothesis for the data sample analyzed. The comparison of the abnormal returns of value and growth stocks does not indicate the existence of a value premium. Hereby, the large size of the stocks analyzed probably plays an important role. The test results are in line with the findings of Loughran (1998) on post-1963 data, which suggest that the value premium appears only in small size stocks. The regressions of returns of value and growth stocks with application of the two-factor model show that the Book-to-Market factor is able to explain variation in the cross-section of returns which are not captured by the market factor. In particular, the variance in the returns of value stocks is, to a high degree, captured by the Book-to-Market factor.

The most remarkable – but probably not the most surprising – findings of this thesis are the negative and highly heterogeneous impact of dividend cuts on the returns of value firms: Shareholders and managers are confronted with an overproportionally high variance of abnormal returns with many extreme values.

[2] The two-factor model applied in this thesis shares the main properties of the Fama-French three-factor model (1993), which additionally accounts for the size factor.