EXTRAPOLATION BIAS AS A MANIFESTATION OF THE REPRESENTATIVENESS HEURISTIC: EVIDENCE FROM THE CONTENT ANALYSIS OF STOCK MESSAGE BOARD POSTINGS

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STATEMENT OF ORIGINALITY

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ABSTRACT

A large volume of literature identifies that investors are affected by behavioral biases. While most of these biases have been explained by referring to cognitive psychology, the emergence of market anomalies also appears to be due to biased investor behavior. A substantial behavioral bias is extrapolation bias, which constitutes a manifestation of the representativeness heuristic. This study provides a novel examination of extrapolation bias by using the message board postings of a sample of German bank stocks. An innovative methodology that involves qualitative content analysis (QCA) is employed to code the postings and extract private investor sentiment. This thesis tests whether after-hours private investor sentiment is positively predicted by preceding daily stock returns. The impact of extrapolation bias by private investors on the market prices of stocks is examined by testing whether contemporary daily stock returns depend on prior-day daily stock returns; that is, whether daily stock returns are positively autocorrelated. The results reported in this thesis show that daily stock returns are a significant positive factor in explaining after-hours private investor sentiment. This implies that private investors simplistically extrapolate past stock returns for forming expectations with respect to future stock returns. Nevertheless, daily stock returns have not been found to be autocorrelated, which means that extrapolation bias among private investors is not reflected in the market prices of stocks. When prices move sufficiently away from rationality, market participants may enter arbitrage positions which ultimately drive prices back to more rational levels. As the pricing of stocks remains efficient, the random walk hypothesis cannot be rejected. This thesis illuminates the ongoing controversy between neoclassical finance and behavioral finance, demonstrating that private investor behavior is inconsistent with the dominant neoclassical paradigm. Private investor education appears necessary for raising the awareness of extrapolation bias and promoting rational investment behavior. Future research should focus on a different sample and investigate whether the findings in this study are robust to noncrisis periods.