Analysis of the MAX Effect in Borsa Istanbul

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Abstract:

The aim of this study is to investigate the existence of the MAX effect to analyze the lottery-like stock preference in Borsa Istanbul (BIST). The models constructed at the stock and portfolio levels are analyzed following the methodology of Bali et al. (2011). The dataset used in the study consists of stocks traded on BIST over the period January 2000 to August 2025. The existence of the MAX effect is further examined under different market conditions. This study contributes to the literature by offering evidence from an emerging market, where market imperfections and investor behavior may amplify lottery-like preferences and differentiate the MAX effect from those observed in developed markets. The results of the stock- and portfolio-level analyses indicate that investors exhibit a preference for lottery-like stocks, driven by expectations of extremely high returns. Accordingly, the findings provide robust evidence for the existence of the MAX effect in BIST. The analyses show that the MAX effect persists even after controlling for traditional risk factors such as market beta, size, book-to-market ratio, momentum, reversal, and liquidity, as well as idiosyncratic volatility and skewness. To test the existence of the MAX effect under different market conditions, the analysis is also conducted for up and down markets by following Pettengill et al. (1995). The results indicate that the MAX effect is statistically significant in both market conditions. Furthermore, it is found that lottery-like stocks tend to have low market capitalization and high idiosyncratic volatility. In addition, these characteristics persist over time.

Keywords:

MAX effect, investor behavior, lottery-like stocks.