Measuring the relationship between herd behavior and the valuation of stocks with the reverse DCF model and the cross-sectional absolute deviation

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ABSTRACT

Theoretical papers on herd behavior in stock markets suggest that herding pushes prices away from their fundamental values. However, it is still an open question whether this phenomenon can be proved empirically. So far, papers attempting to examine the relationship between herd behavior and valuation of stocks have yielded contradicting results. Therefore, this paper aims to provide an empirical examination of the relationship between herd behavior and the valuation of stocks using a novel approach. We use cross-sectional deviation of stock price returns (CSAD) to assess the presence of herd behavior in stock markets, as well as the Reverse Discounted Cash Flow Model (RDCF) to determine whether a stock is overvalued or undervalued. For this study, we analyzed stocks that were the components of the Nasdaq 100 index in each of the years studied, from 2015 through 2020. By analyzing this sample of US stocks, we present empirical results as to whether herd behavior Granger-causes overvaluation or undervaluation of stocks.

Keywords: herd behavior; company valuation; cross-sectional absolute deviation; pricing error; reverse discounted cash flow model