Journal of Financial Markets 19 (2014) 219–246

Contents lists available at ScienceDirect

Journal of Financial Markets

journal homepage: www.elsevier.com/locate/finmar

Small investor sentiment, differences of opinion and stock overvaluation ☆

Xiaolin Qian *

Faculty of Business Administration, University of Macau, Macau, Special Administrative Region

ARTICLE INFO

Article history:
Received 13 March 2013
Received in revised form
16 March 2014
Accepted 17 March 2014
Available online 25 March 2014

JEL classification:
G11
G14

Keywords:
Small trade imbalances
Mispricing
Noise trader risk

ABSTRACT

Recent research shows that small trade imbalances are negatively associated with future stock returns. I find that this negative association only exists when stocks have initially been mispriced. In addition, mispricing occurs before the sentimental trading of small investors. In stocks with high opinion divergence, buying pressure from small investors deters the realization of negative information. Therefore, trades from retail investors do not directly cause mispricing, but they prevent price discovery and facilitate mispricing.

1. Introduction

Researches are showing a growing interest in the systematic trading behavior of retail investors and the effects of their trades on prices. Sub-rational small traders form herds whose systematic trading directions are negatively associated with future stock returns (Hvidkjaer, 2008; Barber, Odean, and Zhu, 2009a). I find that sentimental retail investors may not actively push prices away from fundamentals with their trades, while they do deter price discovery for stocks that are mispriced. This

☆ I thank Tarun Chordia (the editor), an anonymous referee, participants at the 2012 European Financial Management Association Annual Meeting, participants at the 2012 Asian Finance Association Annual Meeting, and especially Chuan-Yang Hwang for useful comments and suggestions.

* Tel.: +853 8397 4750.
E-mail address: xiaolinqian@umac.mo

http://dx.doi.org/10.1016/j.finmar.2014.03.005
1386-4181/

finding differentiates the alternative mechanisms proposed by Hvidkjaer (2008) and Barber, Odean, and Zhu (2009a), which can cause the negative correlation between small trade imbalances and future returns. In addition, the sentimental trading of retail investors deters price discovery, so small trade imbalances may capture noise trader risk that limits arbitrage.

Odean (1999) and Barber and Odean (2000) demonstrate using data from a discount brokerage firm that the stocks that retail investors purchase underperform the stocks they sell. Contrary to traditional theories, recent studies show that such sub-rational investor trades do not cancel out. Kumar and Lee (2006) and Barber, Odean, and Zhu (2009b) find that trades from retail investors are systematically correlated. Kumar and Lee (2006) find that the systematic trading of retail investors explains some return comovements. Using small-sized trades as proxies for individual investor trades, Barber, Odean, and Zhu (2009a) discover that individual investors herd and that the small trade order imbalance is negatively associated with future returns. Further, Hvidkjaer (2008) shows that the negative association between small trade imbalances and returns persists for at least two years after portfolio formation.

There has been no reported explanation for why the systematic trading of retail investors can be used to forecast cross-sectional future stock returns. Hvidkjaer (2008) proposes two mechanisms that might be causing the relation between small trade imbalances and future returns, but does not disentangle them. Under the first mechanism, retail investor trading pushes prices away from fundamentals, which causes mispricing. The negative stock returns then reflect the later reversal in stock prices. Under the second mechanism, retail investors under-react to information and delay price discovery. For example, informed investors start selling stocks that they know are overvalued, while the falling prices attract retail investors to buy the stocks at prices (still) higher than intrinsic values. Barber, Odean, and Zhu (2009a) argue that sentimental small investors create mispricing, such that imbalances in buyer- and seller-initiated small trades move prices. However, they acknowledge that their results are also consistent with the alternative explanation that individual investors buy overvalued stocks from institutional investors and because the latter cannot immediately correct the mispricing, market inefficiencies exist.

These two mechanisms relating small investor trading imbalances and future stock returns are essentially different. Under the first mechanism, less-rational investors initially cause the mispricing, so the aforementioned observations can be explained by the behavioral finance theories, namely, investors' biased beliefs (Barberis, Shleifer, and Vishny, 1998; Daniel, Hirshleifer, and Subrahmanyam, 1998) or unconventional preferences (Barberis and Huang, 2001) cause mispricing. Although retail investor underperformance can be attributed to investor overconfidence, limited attention, and the disposition effect (Barber and Odean, 2000; Barber, Odean, and Zhu, 2009b), the question remains, “Are retail investors powerful enough to move the market?” Under the second mechanism, however, retail investors do not directly drive the mispricing. Their under-reaction to changed fundamentals makes them trade in the “wrong” direction. The negative future returns reflect the delayed arbitrage, possibly because the sentimental trading of small investors exacerbates arbitrage limits and facilitates mispricing.

It is difficult to differentiate between these two mechanisms because the manifestations for both are that stocks over-bought (sold) by retail investors under- (over-)perform. Thus, this study deploys portfolios that are either unlikely to be systematically mispriced, or whose mispricing is uncorrelated with the systematic trading of retail investors. Along with psychological biases and prospect theory, heterogeneous agent models are one of the most competitive approaches to explaining what initially causes mispricing (e.g., Miller, 1977; Harrison and Kreps, 1978; Morris, 1996; Chen, Hong, and Stein, 2002; Hong and Stein, 2007). Under heterogeneous expectations and short-sale constraints, optimists hold stocks because they have the highest valuations and stock prices are more likely to reflect the valuation of optimistic market participants when short-sale constraints and other trading frictions prevent rational or pessimistic investors from trading against them. In this study, I use portfolios sorted by the level of investors' disagreement to determine why retail investors' trade imbalances are negatively related to future stock returns.

According to the price-optimism models of Miller (1977) and others, stocks with a high opinion divergence tend to be overvalued, whereas stocks with a low opinion divergence are not necessarily undervalued. Therefore, if high retail investor sentiment originally creates overvaluation, it is unlikely