Volatile market condition and investor clientele effects on mutual fund flow performance relationship ☆

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ABSTRACT

We analyze mutual fund flow–performance relationship using a novel sample of Chinese mutual funds that trade in a volatile market environment. Consistent with existing literature, we find that the net flow to a fund is positively related to past fund performance. However, the positive flow–performance relationship weakens when the stock market is divided into high and low volatile periods or when funds are divided into good and poor performers. Contrary to previous studies using samples in the U.S. and other countries, our results do not exhibit an asymmetric flow–performance relationship, nor do we find any significant Morningstar rating effect or smart money effect. Furthermore, we find that the overall stock market performance is the primary driving force of flow–performance relationship and the positive relationship is more pronounced in bull markets. Consistent with Thaler and Johnson's (1990) house money effect and the overconfidence hypothesis proposed by Gervais and Odean (2001), this suggests that Chinese mutual fund investors are vulnerable to market conditions. The overall results imply that market conditions and investor clientele differences play an important role in fund investments and flow–performance relationships.

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1. Introduction

Prior studies find that mutual fund investors chase past performance by rewarding "winners" but failing to punish "losers." As a result, the past top-performing funds attract disproportionately large inflows in subsequent periods, whereas past poor performers suffer minimal outflows (Ippolito, 1992; Goetzmann and Peles, 1997; Chevalier and Ellison, 1997; Sirri and Tufano, 1998; Fant and O'Neal, 2000; Del Guercio and Tkac, 2002). The conventional explanations for this asymmetric flow–performance relationship include: (1) transaction fees and switching costs (Ippolito, 1992); (2) marketing efforts and media attention (Sirri and Tufano, 1998); (3) investor participation costs (Huang et al., 2007); (4) strategy replacement (Lynch and Musto, 2003); (5) the disposition effect (Shefrin and Statman, 1985); (6) cognitive dissonance (Goetzmann and Peles, 1997); and (7) the investor clientele effect (Del Guercio and Tkac, 2002; Sawicki, 2001; Christoffersen and Musto, 2002).

In the current paper, we further explore the flow–performance relationship with a focus on stock market condition and clientele effect. The theoretical models of Berk and Green (2004), Kim (2011a), and Huang et al. (2012) suggest that as the noise in the observed fund return increases, investors learn less from past fund performance. Xie (2011) and Kim (2011b) find time-varying flow–performance sensitivity.

However, it is unclear whether the time-varying flow–performance is due to changes in market volatility or due to the evolution of other factors. For example, the U.S. investors trade more frequently after decimalization. Factors such as trading frequency, holding period, and expected risk & return have significant effects on flow–performance relationships (e.g., see Barberis and Xiong, 2009). To disentangle the effect of market volatility on flow performance from other compounding factors, we use a Chinese mutual fund sample because Chinese markets have been extremely volatile since the first open-ended fund started trading in 2001 and the magnitude of volatility is far more severe compared with the volatility in other markets. Thus, the results based on Chinese mutual funds enhance our understanding of the impact of market volatility on the flow–performance relationship.

The second issue we address is the effect of Morningstar rating on net flows. Researchers find that funds rated as star funds by Morningstar attract disproportionate inflows due to quality certification and search cost reduction (Nanda et al., 2004; Del Guercio and Tkac, 2008). We conjecture that the star funds rated by Morningstar could have two contrary effects on the Chinese mutual fund market. If search cost reduction is the driving force, we expect the search cost effect to be marginal since the Chinese mutual markets are much smaller than the U.S. markets in both the number of funds and the assets under management. In contrast, if quality certification plays a key role, we expect that this effect is strong in the Chinese markets since Chinese mutual funds have a shorter history which makes it harder for investors to assess fund quality, especially under the volatile Chinese stock market environment. Similarly, the asymmetric information between Chinese mutual fund investors and fund management companies could be high because of the less transparent market environment. In this case, the quality certification effect associated with Star rating is expected to be strong for Chinese mutual funds.

The third issue we investigate is the effect of stock market return and investor overconfidence on the flow–performance relationship. Olivier and Tay (2009) use GDP as a measure of economic condition and show that agents invest in funds when the economy is booming and divest when the economy is slowing down. They attribute this effect to consumption smoothing.

Differing from Olivier and Tay, we explore the impact of investor overconfidence on the flow–performance relationship. We posit that the flow–performance relationship is more pronounced during bull markets than during bear markets because investors tend to be overconfident during bull markets. This hypothesis is a joint implication of Thaler and Johnson's (1990) house money effect and the overconfidence theory of Gervais and Odean (2001).[1] Public investors are more likely to experience capital

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[1] Thaler and Johnson (1990) show that a prior gain serves as a loss reduction cushion, which mitigates the influence of loss aversion and increases the willingness of investors to take greater risks. Using gambling jargon, Thaler and Johnson call this "the house money effect." They show that gamblers who have a prior win (i.e., they now have "house money") tend to take larger risks by betting more because they treat subsequent losses as reductions in their prior gain; losing the "house money" is less distressing than losing their own money. In contrast, prior losses can increase risk aversion and decrease the willingness to take a risk. Gervais and Odean (2001) indicate that people have an attribution bias toward learning and tend to overestimate the degree to which they are responsible for their own successes. Gervais and Odean's (2001) overconfidence model predicts that traders become more overconfident and trade more actively after the market increases because traders attribute returns from the overall market increases to their own acumen when assessing their trading ability.