THE ECONOMIC IMPACT OF MUTUAL FUND INVESTOR BEHAVIORS

by

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The first essay analyzes how the determinants of mutual fund investor cash flows have changed over time and the associated impact on investor returns. Using data from 1992-2016 we find that investor return-chasing behavior essentially disappeared starting in 2011; investor flows have become more sensitive to expenses and past risk; and that alpha sensitivity has been increasing throughout the period. Investors are paying more attention to fund characteristics that matter (e.g. risk, alpha, and expenses), and less attention to characteristics that don't (e.g. past returns). Nevertheless, the average investor dollar-weighted return is about 1.2% below the average buy-and-hold return in their underlying mutual fund throughout the time period, suggesting consistently poor timing ability over the entire period. We decompose the economic impact of investor behaviors on investor returns and find that investors' focus on alpha is actually more detrimental than their previous focus on past returns. Investors do benefit from choosing high-alpha funds (smart money), but poorly time their cash flows by investing in those funds after periods with the highest realized alphas (dumb money). The dumb money effect dominates the smart money effect for the simple reason that at the fund level, past alphas are strongly and negatively correlated with future alphas. Although past alphas are positively correlated to future alphas in the pooled cross-section of mutual fund data, this result does not hold at the individual fund level, which is the level where most mutual

fund customers invest. Overall, our results suggest that mutual fund investors know that alpha is important but have not yet learned how to effectively integrate this knowledge into their investment decisions.

In the second essay, using a Bayesian approach with an objective (uniform) prior with Hierarchical Random Coefficients models, we model equity and mutual fund (security) excess returns, considering these models as the missing pieces in the transition between fixed-effects models to Bayesian models. In these models, we can still employ the Frequentist approach to estimate the solutions. The estimated coefficients, betas and alphas, are calculated simultaneously for all securities, i.e. utilizing “learning across funds” documented in Jones and Shanken (2005) but with objective priors. Using information from each security as well as information from other securities, these models produce significantly different results than the traditional fixed-effects models found in the current literature. While these models specify that different securities should have different/unique alphas, our results show there are periods where these securities share the pooled overall/market alpha and do not have unique alphas. This finding is robust across different asset pricing models. To support the pooled alpha finding, we perform out-of-sample (OOS) validations of future excess returns using the new random coefficients models and compare the results against the traditional fixed-effects models. In OOS validations, we find that both alpha and beta estimates from the random coefficients models improve the future excess return predictability (lower mean absolute errors) compared to the traditional fixed-effects models.