5 Objectives, Data and Methodology

5.1 Objectives

It is now widely recognized in the literature that equity mutual fund performance net of costs does not persist in the long run among both winner (recent outperformers) and loser funds (recent underperformers), once survivorship bias and stock return momentum are taken into account.\textsuperscript{421} For outperformers, the traditional explanation for this phenomenon is the absence of genuine management skill, apart from slight cross-sectional differences in fee levels. Rather, winner-fund managers happened by luck to hold the last year’s winner stocks benefiting from stock return momentum but cannot successfully pick this year’s winner stocks. Although the majority of loser funds continue to significantly underperform their benchmarks, indicating that any persistence is clustered around loser funds, their performance over time still improves significantly the following year and is also dominated by a strong tendency to revert to the mean (Brown and Goetzmann, 1995; Carhart, 1997).\textsuperscript{422} This can be interpreted as evidence that loser-fund managers ended up in a low ranking in the previous year mainly due to bad luck and only to a smaller degree due to bad skills. These findings are consistent with the view that the dominant determinant of fund performance is luck, which per se is not persistent, rather than skill.

Recent studies, however, point toward the persistence and predictability of short-term fund performance (Bollen and Busse, 2005; Busse and Irvine, 2006; Huij and Verbeek, 2007). These studies challenge the traditional explanations for a lack of performance persistence. If the lack of long-term performance persistence is explained by a lack of managerial skill then there should not be any persistence in the short run either. Furthermore, fees are fairly stable and cannot explain why persistence exists in the short run, but vanishes over longer horizons. The objective of this empirical part is to further investigate potential explanations to

\textsuperscript{421} Hendricks, Patel, and Zeckhauser (1993), Carhart (1997), Elton, Gruber, and Blake (1996a), and Elton, Gruber, and Blake (1996b), and section 4.1.

\textsuperscript{422} This is especially evident in Figures 6.1 and 6.4. See also Figure 2 of Carhart (1997).
reconcile these findings, which at first glance appear to be contradicting. In finding explanations for the empirical results on short-term versus long-term performance persistence, two separate routes are taken: (1) it is analyzed whether differences in the methodologies applied in short-term and long-term studies are responsible for the different conclusions; (2) economic explanations for these empirical findings are investigated.

In chapter 6, this study provides new empirical results that contribute to the performance-persistence debate. These effects are analyzed for a comprehensive sample of all 3,946 actively managed U.S. equity mutual funds that existed for at least 12 months at any point in time period from 1992 to 2007. Compared to existing studies such as Carhart (1997) or Huij and Verbeek (2007), one innovation of this data set is that individual share classes of the same fund are aggregated to one observation which could otherwise potentially bias the conclusions and is especially relevant for recent periods during which a lot of investment management companies initiated the offering of several share classes on the same underlying fund portfolio. The performance of decile portfolios formed on the basis of past performance is evaluated, concentrating on the winner (top-decile) and loser (bottom-decile) portfolios. Different performance measures as well as estimation techniques are used for portfolio formation and evaluation and the impact of the length of the formation and evaluation periods is analyzed. Furthermore, winner and loser portfolios are split into subgroups based on fund flows and manager changes, and the individual and joint contributions of these alternative equilibrium mechanisms on performance are examined.\footnote{For details on the data and methodology see below.}

The innovations with respect to the methodology are the use of the Bayesian approach to enhance the efficiency of parameter estimates, which is especially relevant for persistence studies that rely on short subperiods of return data to estimate performance. Moreover, two new specifications of the multifactor models used as benchmarks are introduced. The first model is augmented by a stock-return mean-reversion factor that allows a differentiation between mean reversion of managerial skill and mean reversion in the underlying stock returns. The second model is augmented by a liquidity factor in order to take into account recent empirical findings that illiquid securities seem to pay an illiquidity premium, yielding a higher return than liquid securities that are otherwise identical. Moreover, the analysis in chapter 6 focuses on the methodological explanation for the con-