Performance measurement with loss aversion

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Abstract This paper explains how prospect theory can be applied to fund performance, extending work by Darsinos and Satchell (Generalising Universal Performance Measures', *Risk*, 17(6), 80–84, 2004). It then uses data on closed-end funds in the UK to show that the resulting loss-averse performance measure (LAP) gives different rankings from those of conventional measures (such as the Sharpe ratio, Jensen's alpha, the Sortino ratio and the Higher Moment measure). Loss-averse performance has the desirable property of being negatively correlated with the volatility and kurtosis of tracking errors. It is not more closely related to discounts on funds than are conventional measures of performance, however, so no evidence is found that loss-aversion in the short-term is a factor in attracting investors to particular funds.

Keywords: *performance measurement, loss aversion, prospect theory, closed- end-fund puzzle*

Introduction

Measures of portfolio performance, which take account both of risk and return, have evolved over the years in parallel with asset pricing theory, with the main focus on what constitutes risk. Most of these measures assume that investors maximise expected utility, but this paradigm may be criticised for being inconsistent with experimental results. Two particular inconsistencies are: first, that when taking decisions, investors consider gains and losses separately rather than aggregating them into final wealth; and second, that the pleasure from a gain is not as great as the regret from a loss of the same size. This led Kahneman and Tversky (1979) to develop prospect theory, according to which investors maximise the weighted sum of a value

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