Effectiveness of Active Management in Equity REIT Portfolios

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1 Background

The ASRS strategic asset allocation and the real estate strategic plan provide guidance for the ASRS real estate program. Under these plans, ASRS has allocated eight percent of total assets to real estate. The plans permit, but do not require, investment in REITs as part of the real estate portfolio. ASRS currently holds nearly $300 million of its real estate program in publicly traded REITs in two concentrated positions in formerly private REITs that have since gone public.

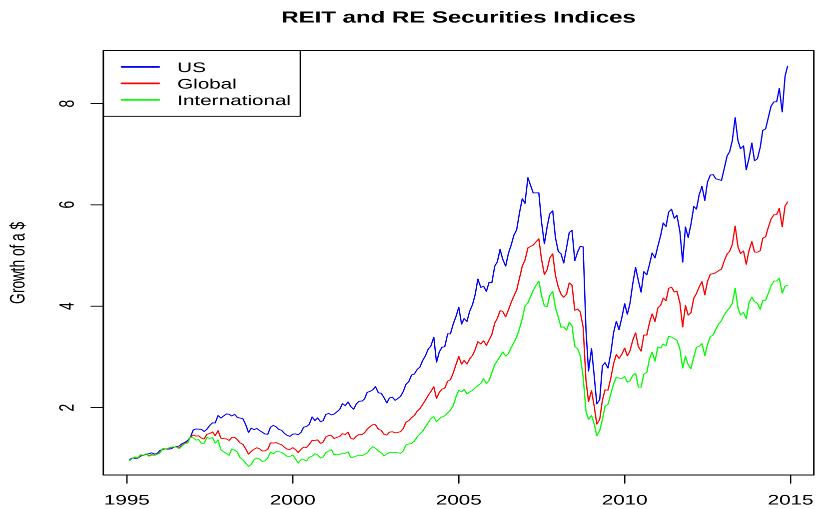
This is part of a series of papers to consider whether REITs should play a different role in our portfolio. In this paper we consider the efficacy of active management of REIT portfolios. We previously considered the characteristics of the NAREIT index compared to private real estate and whether a passive implementation of REITs would be beneficial to the ASRS real estate program and total portfolio. In a subsequent writing we will consider tactical approaches to REITs.

2 Performance

In order to consider the efficacy of active management of an equity REIT portfolio, we considered the performance of mutual funds specializing in this space. Based on a screening of equity funds from a Bloomberg terminal, there are currently 130 U.S. based mutual funds investing in equity REITs. We have eliminated from the analysis two long/short mutual funds.

In order to perform calculations, we have downloaded monthly total net returns (i.e. net of all fees with dividends reinvested) for all of these mutual funds and compare those returns to a relevant REIT total return index. We have used the NAREIT index for U.S. funds and the Dow Jones indices for global and international funds. We then compare the performance of each mutual fund to a relevant index depending on the strategy. A plot of the relative performance of the three indices is shown in figure 1.

Figure 1: Comparison of Total Return Indices



There is a long history of studies that proceed from analysis of mutual fund data. In structuring the tests described herein, we referred to an article by Baks, Metrick and Wachter. [1] In figure 2, we present the results of this analysis showing the excess return on the y axis and information ratio of that excess return on x axis.

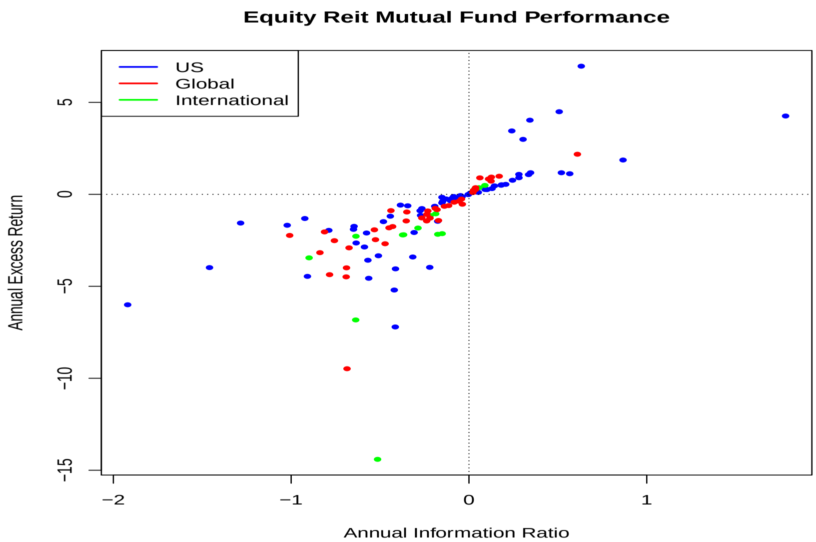
Among the 128 funds presented, there are 39 that earned enough excess return to overcome their management fees and return a positive net excess return. Among those with a positive return, the highest information ratio was 1.78, but that fund has only been existence for 8 months. The next highest information ratio was .87. In addition to these 39 firms, there were 32 additional firms whose annual excess return was *minus* 1% or better. So, if you estimate average management fees at around 1% per year there were 71 firms out of 128 that earned positive excess gross returns. This is a ratio of 55%, but it suffers from survivor bias and therefore is likely to overestimate the percentage of funds beating the market. The probability of producing excess gross returns does not appear to be meaningfully better than coin toss odds.

The prospects for active management might be slightly better in the U.S. Among the 71 firms with estimated gross excess return above zero, 47 of them are U.S. funds, a ratio of 65% of among all the U.S. funds.

We then consider the statistical significance of the results. We perform a standard “t test” to assess the statistical significance of the excess return. The

[1] Klaas Baks, Andrew Metrick, and Jessica Wachter, 2001, Should Investors Avoid All Actively Managed Mutual Funds? A study in Bayesian Performance Evaluation, Journal of Finance, Vol LVI, No.1, 45-86

Figure 2: Performance of Equity REIT Mutual Funds



results of the t test for these managers are shown in figure 3. As you can see, among managers with positive performance the highest t values are less than 1 and the lowest p values are around 60%. None are remotely close to statistical significance.

3 Persistence

Now we consider the persistence of performance. We do this by considering only the 58 funds in business for at least 10 years and split the performance periods to the last five years and the five years prior to that. We then calculate the information ratios for both performance periods. The results of that analysis are presented in figure 4. In this graph, the red dashed line is a regression line of the last five year information ratio as a function of the prior five year period.

As you can see from the more or less random character of the chart, prior performance has low predictive value of future performance. Among the 58 firms, only 4 had positive information ratios in both periods

Let's suppose that based on the first five years you made investments with the nine firms that had information ratios greater than .5. Your outcome for the next five years would have been that 7 of the 9 managers you chose would have underperformed their benchmark.

Figure 3: Statistical Significance of Performance

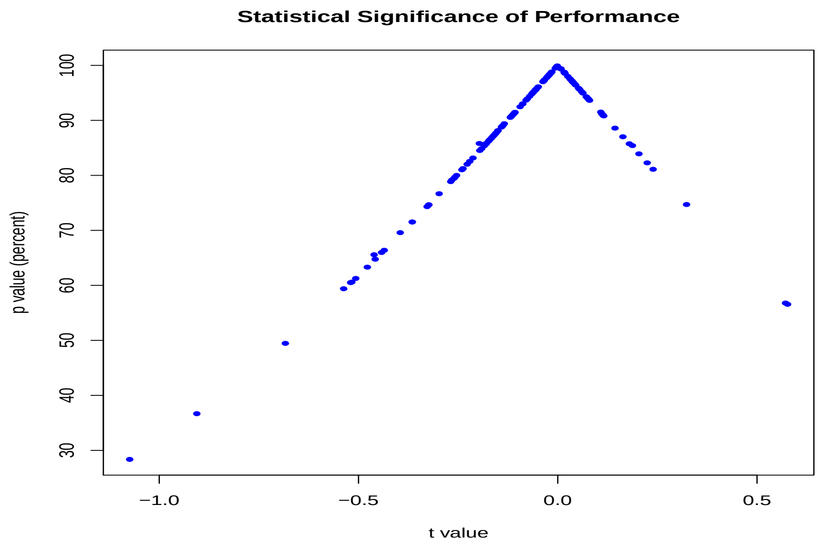
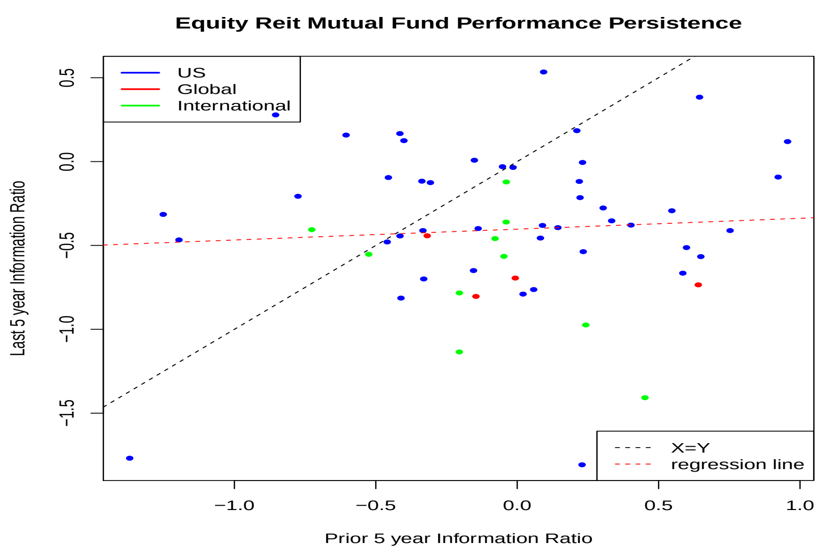


Figure 4: Persistence of Performance in Equity REIT Mutual Funds



4 Conclusions

The results here do not make a case for active management. We looked at the entire universe of active mutual fund managers. Among those managers, only 30% produced positive net excess returns. We found scant evidence of persistence with only 4 out 58 managers outperforming the index on a net basis in two successive five year periods.