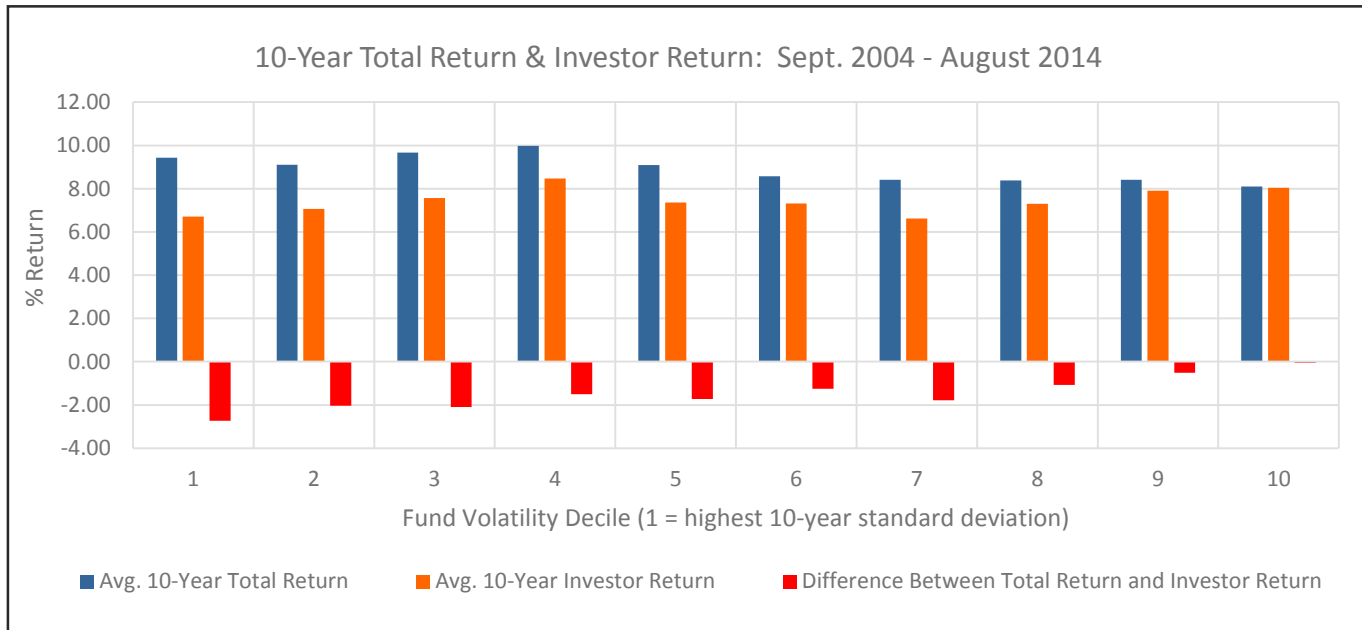


# MARKET MICROSCOPE: Investors Make Poor Decisions with High Volatility Funds

Morningstar's "Investor Return" measures the return experienced by the average investor in a fund using "dollar weighted" returns. A fund's investor return is often lower than their reported return, as investors have a tendency to "chase performance," i.e. make poorly-timed buy and sell decisions.

This graph compares the average total return and average investor return. The funds are divided into deciles based on volatility\*:



The higher volatility funds tended to produce higher total returns. However, they also tended to have the largest gaps between reported return and investor return. This means investors were capturing much less of the total return in higher volatility funds.

There is a clear pattern of a decreasing gap between total return and investor return as portfolio volatility decreases (red bars). We suspect this effect is partially due to the fact that lower volatility funds gave their investors a "smoother ride," so their investors felt less pressure to make damaging "buy high, sell low" decisions.

\*We used Morningstar Advisor Workstation to create a universe of all distinct US stock funds with a 10-year Investor Return value (912 funds in all), and then we ranked them by their 10-year standard deviation and divided the universe into deciles.

\*Mutual fund return data from Morningstar Advisor Workstation as of 8/31/14