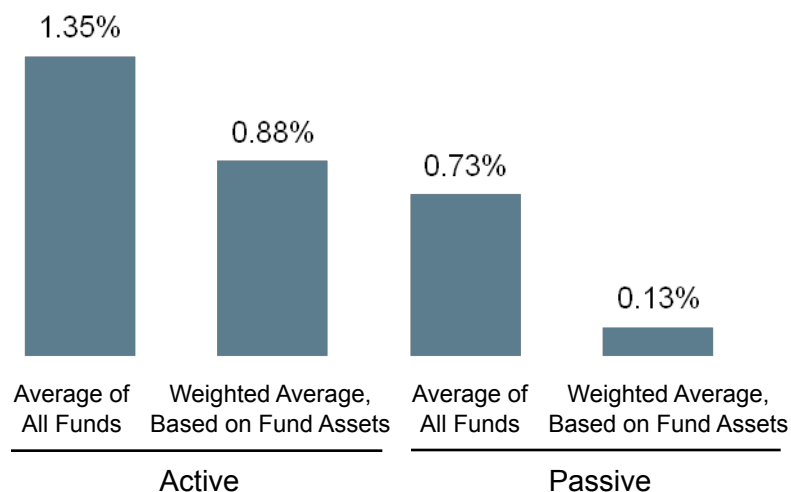


Mutual Fund Expenses

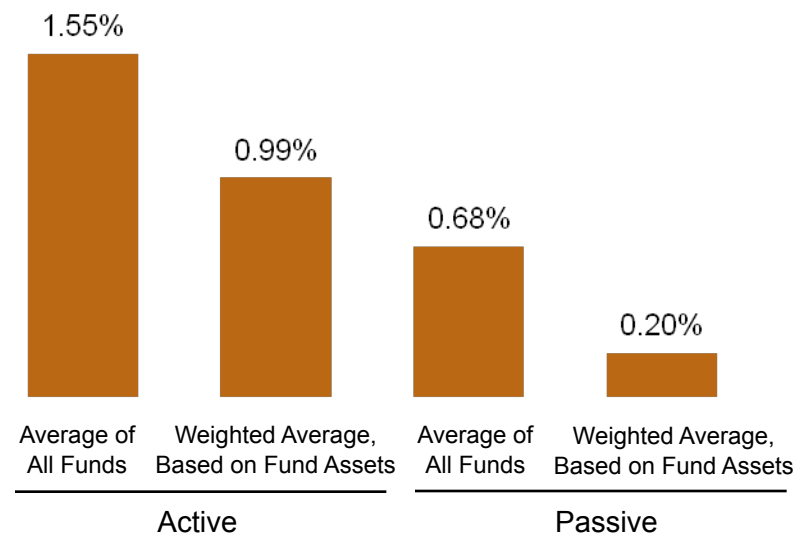
“After costs, the return on the average actively managed dollar will be less than the return on the average passively managed dollar for any time period.”

—William F. Sharpe, 1990 Nobel Laureate

Domestic Mutual Fund Expense Ratios



International Mutual Fund Expense Ratios



In both US and non-US strategies, the average actively managed mutual fund is considerably more expensive than the average passively managed fund.

The graph compares average expense ratios of actively managed funds to those of passive funds. The ratios are presented as simple averages and weighted averages. The weighted average calculation indicates that larger funds tend to have lower expenses than smaller funds.

Active managers, on average, charge much higher fees than passive managers. This is also true in the international fund universe, although the differences are not as large due to the higher costs of investing in non-US markets.

Nobel laureate William Sharpe has pointed out that active management in aggregate must underperform passive management, not due to controversial financial theories but by the simple laws of arithmetic.