

The Buffet Bet - Basket of Funds vs. All Passive

Stats 107 Project Proposal

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Abstract

Ten years ago, Warren Buffett made a famous bet: the ultimate passive investment, the Vanguard S&P 500 Index Fund Admiral (VFIAX), vs. a basket of funds determined by a team of hedge fund experts. Whoever had a lower return after ten years would donate \$1 million to the charity of choice of the winner. After eight years, it looks increasingly likely that Buffett will win the bet.

Type: Simulating a trading strategy.

Can a basket of funds beat the market in long term?

Our project aims to create a Mutual Fund selector for semi-passive investor. A typical Vanguard customer may have to choose from over one hundred mutual funds without any guidance. We will create a portfolio to maximize returns over the long term using several common trading strategies, such as maximizing the Sharpe ratio. In order to make this more realistic, we will take into account fees and transaction costs. Since this is aimed at a typical Vanguard retail customer, no shorting will be allowed.

We will not account for taxes on the assumption that the funds are in a tax deferred account such as 401(k) or IRA. For this reason, we will not evaluate ETFs which are at a disadvantage in a tax deferred account.

The portfolio will start with \$100,000, which is the current average 401(k) balance ([source](#)).

The overall time period will be evaluated on a twenty year history, or the maximum history of the security, whichever is shorter.

The baseline or benchmark will be investing the same amount in VFIAX and leaving it there for the duration. The starting fund in the basket will be VTHR, which is one of the typical Vanguard Age-Adjusted balanced funds and a common default fund for many retirement plans.

We will simulate whether rebalancing on a monthly, quarterly, semi-annual or annual basis is the best strategy.

References and Data Sources

- List of Vanguard funds, including fees and transaction costs, supplied by Vanguard <https://investor.vanguard.com/mutual-funds/list#/mutual-funds/asset-class/month-end-returns>
- The Buffet Bet, <http://longbets.org/362/>
- Fortune, The Buffett Bet <http://fortune.com/2016/05/11/warren-buffett-hedge-fund-bet/>

Note: This is a solo project, with Dr. Parzen's approval given via email on 11/14