

# 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, non-esoteric investment 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 simulate whether rebalancing on a bi-monthly, monthly, quarterly, semi-annual or annual basis is the best strategy.

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 starting point for the basket of funds will be a common default used by many organizations: a Vanguard Target Retirement Fund, such as VTHR, the 2030 Retirement Fund. The baseline or benchmark will be investing the same amount in VFIAX and leaving it there for the duration.

## 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 Buffett Bet <http://fortune.com/2016/05/11/warren-buffett-hedge-fund-bet/>