



Morningstar Awards Methodology, United States

Morningstar Methodology Paper
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Contents

Statement of Purpose	3
Morningstar ETF Category Winners	4
Eligible Universe	4
Ranking Algorithm	5
Categories Eligible for Awards	6
Morningstar ETF Sponsor Awards	7



2013 Morningstar Awards Methodology

Statement of Purpose

The objective of the quantitatively driven Morningstar Awards program is to recognize those ETFs and ETF sponsors that have best met the expectations of various ETF investors within the context of a relevant peer group during both the last year and the longer term. As primarily exchange-traded index investments, other factors aside from return are of concern to ETF investors. These factors include the ability of the ETF to track its index and the market impact cost associated with trading the ETF. The awards emphasize these factors while placing less emphasis on return, whereas the Morningstar Ratings are based entirely on historical risk-adjusted return within category.

The awards are annual, so we believe it is appropriate to emphasize an ETF's one-year performance. However, we do not wish to be in the position of giving awards to ETFs that have posted a strong one-year return but have otherwise not delivered good results for investors. We also recognize that investors often use awards as a "buy" signal, and we do not wish to steer them to offerings that may not be good longer-term investments. The awards methodology therefore emphasizes the one-year period, but also incorporates three-year returns after adjusting for risk within the category.

The awards also recognize that different users of ETFs may have different priorities in terms of their need for liquidity and their investment holding period. Whereas an average buy-and-hold investor is likely to invest a smaller dollar amount over a longer time period, a trader may invest a larger dollar amount with a greater need for liquidity. Therefore, two sets of category awards are given, with each placing emphasis on the needs of these different classes of investors.



Morningstar ETF Category Winners

There are two classes of Morningstar Category Winners: Morningstar Category Winner-Investor and Morningstar Category Winner-Trader.

Morningstar Category Winners-Investor:

These awards are given to the ETFs with the best rank based on an algorithm that takes into consideration funds' total cost of ownership and their Morningstar Risk-Adjusted Return within their respective Morningstar Categories. The ranking algorithm is described later in the paper.

Morningstar Category Winners-Trader:

These awards follow the same methodology as the Morningstar Category Winners-Investor except the total cost of ownership is based on assumptions more appropriate for a regular trader.

Universe

The comparison universe of ETFs is limited by several criteria: Only ETFs with a stated primary prospectus benchmark are considered (active ETFs are excluded). The ETF must have at least three years of performance data by June 30, 2013. The ETF must have tracked the same benchmark and Morningstar must have performance data on that benchmark for at least 13 months. The ETF must have traded on at least 240 out of the last 250 trading days. Exchange-Traded Notes and ETFs from the trading categories (such as Trading-Inverse Equity or Trading-Leveraged Debt) were eliminated from consideration.

Eligible ETFs

If there are less than five ETFs with the required data in a Morningstar Category, all ETFs from the category were considered ineligible. Any ETF with less than \$100 million in assets at June, 30, 2012, was considered ineligible.



Morningstar ETF Category Winners Ranking Algorithm

Each ETF in a relevant Morningstar Category will be ranked as follows:

Total Cost of Ownership Rank

All ETFs are ranked by total cost within the Morningstar Category with lower total costs receiving better ranks. The ETF Total Cost of Ownership is based on an ETF's estimated holding cost (EHC), tracking volatility (TV), and market impact cost (MI). For the retail awards, an investment amount of \$150,000 is invested for a holding period of three years.

Algorithm for Retail Awards:

$$\begin{aligned}\text{Market Impact Cost Component} &= 2 * 150,000 * \text{SQRT}(150,000/100,000) * (\text{MIC}/100) \\ \text{Holding Cost Component} &= 150,000 * 3 * ((\text{EHC} + \text{TV}/\text{SQRT}(250)) * 1.96)/100\end{aligned}$$

$$\text{Total Cost of Ownership} = \text{Market Impact Cost Component} + \text{Holding Cost Component}$$

For the institutional awards, an investment amount of \$1,000,000 is invested for a holding period of three weeks, expressed as a fraction of a year.

Algorithm for Institutional Awards:

$$\begin{aligned}\text{Market Impact Cost Component} &= 2 * 1,000,000 * \text{SQRT}(1,000,000/100,000) * (\text{MIC}/100) \\ \text{Holding Cost Component} &= 1,000,000 * 0.058 * ((\text{EHC} + \text{TV}/\text{SQRT}(250)) * 1.96)/100\end{aligned}$$

Blended Morningstar Risk-Adjusted Return Rank

The Blended Morningstar Risk-Adjusted Return rank is factored in equally for both the retail and institutional awards. The rank combines both the one-year and three-year Morningstar Risk-Adjusted Return by placing 25% of the weight on the one-year number and 75% on the three-year number. The weights are designed to place due emphasis on the most recent year given that the awards are annual in nature, but are also meant to reward those funds that have delivered risk-adjusted outperformance over the longer term. All ETFs are ranked by the Blended Morningstar Risk-Adjusted Return within the Morningstar Category with higher returns receiving better ranks.

$$\text{Total Score} = 75\% \text{ Total Cost of Ownership Rank} + 25\% \text{ Blended Morningstar Risk-Adjusted Return Rank}$$

ETFs are again ranked after combining the total cost rank and the Blended Morningstar Risk-Adjusted Return rank with the top-ranked ETF chosen as either the retail Morningstar Category winner or the institutional Morningstar Category winner. Ties are settled by choosing the ETF with the better Blended Morningstar Risk-Adjusted Return rank.



Categories Eligible for Category Awards

- ▶ US ETF Commodities Precious Metals
- ▶ US ETF China Region
- ▶ US ETF Diversified Emerging Markets
- ▶ US ETF Europe Stock
- ▶ US ETF Foreign Large Blend
- ▶ US ETF Foreign Large Value
- ▶ US ETF Foreign Small/Mid Blend
- ▶ US ETF Japan Stock
- ▶ US ETF Miscellaneous Region
- ▶ US ETF Muni National Short
- ▶ US ETF Pacific/Asia ex-Japan Stock
- ▶ US ETF World Stock
- ▶ US ETF Communications
- ▶ US ETF Consumer Cyclical
- ▶ US ETF Consumer Defensive
- ▶ US ETF Equity Energy
- ▶ US ETF Financial
- ▶ US ETF Global Real Estate
- ▶ US ETF Health
- ▶ US ETF Industrials
- ▶ US ETF Miscellaneous Sector
- ▶ US ETF Natural Res
- ▶ US ETF Real Estate
- ▶ US ETF Technology
- ▶ US ETF Utilities
- ▶ US ETF Inflation-Protected Bond
- ▶ US ETF Intermediate-Term Bond
- ▶ US ETF Long Government
- ▶ US ETF Long-Term Bond
- ▶ US ETF Short-Term Bond
- ▶ US ETF World Bond
- ▶ US ETF Large Blend
- ▶ US ETF Large Growth
- ▶ US ETF Large Value
- ▶ US ETF Mid-Cap Blend
- ▶ US ETF Mid-Cap Growth
- ▶ US ETF Mid-Cap Value
- ▶ US ETF Small Blend
- ▶ US ETF Small Growth
- ▶ US ETF Small Value



Morningstar ETF Sponsor Awards

These awards are given to the ETF investment firms with the most Morningstar Category Awards within any U.S. category group with at least 2 Morningstar Category winners.

U.S. Category Groups Eligible for Morningstar Sponsor Awards

- ▶ International Stock
- ▶ Sector Stock
- ▶ Taxable Bond
- ▶ U.S. Stock

