
FI360 TOOLKIT

fi360 Fiduciary Score[®] methodology
Updated August 13, 2014

Table of Contents

2	What is the fi360 Fiduciary Score?
2	Calculating the fi360 Fiduciary Score
3	Calculation timeline
3	Calculating the fi360 Fiduciary Score Average
4	Calculation notes
5	The fi360 Fiduciary Score criteria
7	Interpreting the fi360 Fiduciary Score
8	Appendix

What is the fi360 Fiduciary Score?

The fi360 Fiduciary Score (“Score”) is an investment rating system born out of Practice 3.3 in the *Prudent Practices for Investment Fiduciaries* handbook series. It helps quickly identify a short list of investments that merit continued research in the selection process. It also facilitates the ongoing monitoring process by highlighting investments that exhibit potential deficiencies.

The Score evaluates investments on nine different criteria across a spectrum of quantitative data points to determine a minimum fiduciary standard of care is being met. The nine criteria include: regulatory oversight, track record, assets in the investment, stability of the organization, composition consistent with asset class, style consistency, expense ratio/fees relative to peers, risk-adjusted performance relative to peers, and performance relative to peers.

The Score is a flash-report on a selected investment. It is a useful tool for investment decision-makers to identify and monitor investments as a part of their due diligence process. **The fi360 Fiduciary Score represents an objective means of comparing investments according to set criteria and is not intended, nor should it be used as the sole source of information for reaching an investment decision.**

Calculating the fi360 Fiduciary Score

The fi360 Fiduciary Score is a peer percent ranking of an investment against a set of quantitative due diligence criteria selected to reflect prudent fiduciary management. The fi360 Fiduciary Score is calculated on a monthly basis for investments with at least a three year history. The Score is calculated for open end mutual funds, exchange-traded funds (“ETFs”), and group retirement plan annuities (“GRPAs”).

The Mutual Fund and ETF fi360 Fiduciary Score is calculated against a combined peer group including both databases. The GRPA fi360 Fiduciary Score is calculated against a combined peer group including mutual funds, ETFs and GRPAs. (All investment data is sourced from Morningstar).

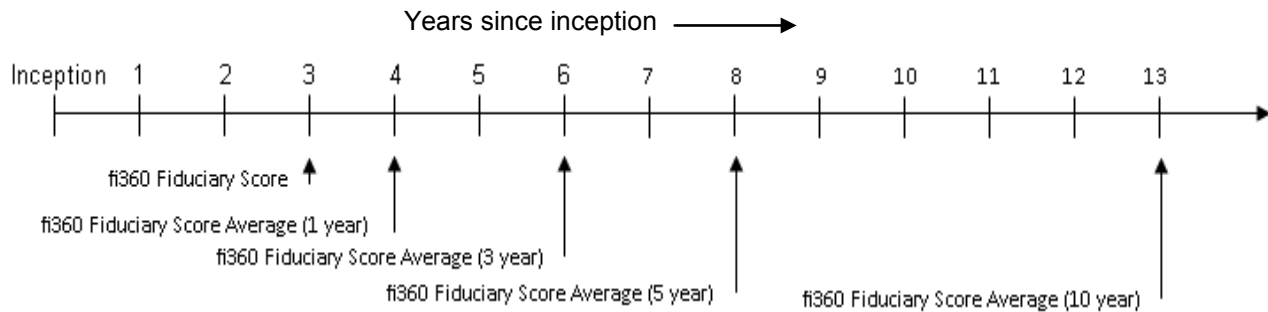
The GRPA database is limited in size and, because these investments are used interchangeably in the marketplace with mutual funds, the combined peer group provides a better analysis of the GRPA data.

Each investment is then evaluated against a set of factors and thresholds and allotted points as described in the Criteria section of this document. The points are totaled and compared to all other investments within the peer group. Investments with 0 points are automatically given an fi360 Fiduciary Score of 0. Every other investment is then given a Score of 1-100, representing their percent ranking based on its placement in the distribution of their peer group.

For example, an investment with an fi360 Fiduciary Score of 37 means it scores in the 37th percentile of its peers. An fi360 Fiduciary Score of 0 is most favorable. It represents that an investment meets or exceeds all of fi360’s recommended due diligence thresholds. A Score of 100 is least favorable.

Calculation timeline

The minimum track record criterion states that an investment must have three years of history before the fi360 Fiduciary Score can be calculated. Once that threshold has been passed, the fi360 Fiduciary Score will be available and the history required for the Average Score will also begin to accrue. After an investment accrues one year of Score history, the fi360 Fiduciary Score Average (1 year) will be available. That pattern extends to the other Average Score calculations, as shown below.



Calculating the fi360 Fiduciary Score Average

The fi360 Fiduciary Score Average (“Average Score”) is a one-, three-, five- or ten-year rolling average of an investment’s fi360 Fiduciary Score, calculated on a monthly basis.

Because the Average Score is a rolling average of the historical fi360 Fiduciary Score, an investment must have the requisite amount of history for each Average Score. If an investment does not have the required history, then the investment will not receive an Average Score for a given time period. This is first determined by examining the inception date of the investment’s parent share class. If the investment has been in existence for three years PLUS the number of historical years used for the average, then the investment will have an Average Score for that time period. For example if an investment has been in existence for six years, then the investment will have a fi360 Fiduciary Score Average for the one and three year time periods, but not for the five and ten year time periods.

Missing historical fi360 Fiduciary Score data

Because the averaging process utilizes consecutive, monthly data points, a missing period policy has been instituted to ensure that a missed data period will not prevent the calculation of an Average Score for an investment that otherwise has the requisite history.

fi360 Fiduciary Score Average	Missing periods allowed
1 year	1
3 year	2
5 year	3
10 year	4

Calculation Transition

On March 1, 2012, fi360 switched the calculation frequency of the fi360 Fiduciary Score and fi360 Fiduciary Score Average from quarterly to monthly. As a part of the transition, the calculation methodology of the Average Score will accommodate both historical quarterly and monthly Score calculations for a period of time. The transition is required so that the Average Score calculation can be continued without interruption. The calculation transition will occur until December 2020.

To manage the transition, a Factor is being used to weight all historical quarterly calculations as monthly calculations. That ensures that the averaging process always includes the same number of weighted score data points for a given period:

- 1 year – 12 weighted score data points required
- 3 year – 36 weighted score data points required
- 5 year – 60 weighted score data points required
- 10 year – 120 weighted score data points required

For monthly periods after the January 2011 data period, the Factor will always be 1. Prior to the January 2011 data period, each Score will have a Factor of 3, except for the following condition.

- If the current month end is the first month in a quarter (ex. Jan 31, 2012), the Factor for the oldest Score included will be a 2.
- If the current month end is the second month in a quarter (ex. Feb 29, 2012), the Factor for the oldest Score included will be a 1.

A period contribution is then calculated using the formula: $(\text{Factor} * \text{fi360 Fiduciary Score}) / \text{Sum of Factors}$.

Summing all the individual period contributions will calculate the average as of the most recent month end. A calculation of the fi360 Fiduciary Score Average (1 year) for a fictitious investment will help to illustrate the process:

Period	March 2011	June 2011	September 2011	December 2011	January 2012
fi360 Fiduciary Score	15	10	10	20	0
Factor	2	3	3	3	1
Period contribution	2.5	2.5	2.5	5	0

Summing all periods and rounding to the next highest value results in a fi360 Fiduciary Score Average (1 year) of 13. $(2.5 + 2.5 + 2.5 + 5 + 0)$

Calculation notes

- The fi360 Fiduciary Score process relies upon peer group comparison. Determining an investment's appropriate peer group or asset class is subjective. There is no uniform industry standard for determining a money manager's investment style or peer group, which makes it difficult to track some investments across different databases. fi360 utilizes Morningstar data in the calculation of the fi360 Fiduciary Score and therefore uses the Morningstar Category™ as the investment's peer group.

- To make the peer group analysis meaningful, the data set should be substantial enough to draw comparisons. With that in mind, fi360 requires that a peer group consists of at least five distinct investments, each with a minimum three year history, in order to calculate a Score for the investments in that peer group. Investments within peer groups that do not meet the requirement will not receive a Score.
- fi360 also utilizes Morningstar Extended Performance data in its calculations. Investment share classes that don't have the history to receive an fi360 Fiduciary Score will receive a Score using their parent share class data adjusted for expenses. Regardless of the length of existence, an investment will only receive an Average Score after the appropriate amount of Score calculations have been tracked. Extended performance data will not “back-date” an Average Score for a brand new fund share class. *Note: Extended performance data was introduced with the 12.31.2010 calculations.*

Score using extended performance data: 13

Score using actual share class data: 13

The fi360 Fiduciary Score Criteria

- **Regulatory oversight:** The investment should be managed by: (a) a bank, (b) an insurance company, (c) a registered investment company (mutual fund), or (d) a registered investment adviser.
 - *Unregistered investments are excluded from fi360's calculations.*
- **Minimum track record:** The investment should have at least three years of history so that performance statistics can be properly calculated.
 - *Investments without the requisite history are excluded from fi360's calculations.*
- **Stability of the organization:** The same portfolio management team should be in place for at least two years. In a management team setting, the most senior manager's tenure should be at least two years.
 - *5 points if there has been manager turnover in the past two years*
 - *10 points if there has been manager turnover in the past year*
- **Assets in the investment:** The investment should have at least \$75 million under management (across all share classes).
 - *5 points if the investment has less than \$75 million in assets*
 - *10 points if the investment has less than \$50 million in assets*
- **Composition consistent with asset class:** At least 80% of the investment's underlying securities should be consistent with the broad asset class. For example, a Large-Cap Growth investment should not hold more than 20% in cash, fixed income, and/or international securities. (Only applicable to certain peer groups – see the [Appendix](#) for more information.)
 - *10 points if more than 20% of the portfolio is inconsistent with the broad asset class*

Note: The broad asset classes used in the composition criterion include: U.S. Stocks, U.S. Bonds, and Non-U.S. Stocks. The Long-Short peer group is evaluated on the U.S. Stock and Cash composition.

- **Style consistency:** The investment should be highly correlated to the asset class of the investment option, i.e., the Morningstar Style Box™ for the current period must match the peer group of the investment. (Only applicable to certain peer groups – see the Appendix for more information.)
 - *10 points if the investment is not correlated to its peer group*

- **Expense ratios/fees relative to peers:** The investment's fees should not be in the bottom quartile (most expensive) of their peer group. The Prospectus Net Expense Ratio is used for the evaluation of mutual funds and ETFs. It includes all fund management costs, 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. If the investment is purchased within a group annuity product, any recordkeeping fees added to the underlying fund expense ratios by the group annuity provider are not included in the ratio. The management fee is used in the evaluation of GRPAs. It is the maximum percentage deducted from an investment's average net assets to pay an advisor or sub-advisor.
 - *10 points if the investment's expense ratio is in the bottom quartile*

- **Risk-adjusted performance relative to peers:** The investment's risk-adjusted performance (Alpha and Sharpe Ratio – see Appendix for more information) should be above the peer group median manager's risk-adjusted performance. (Alpha is not evaluated for Money Market and Money Market Taxable peer groups.)
 - *2.5 points if the risk-adjusted performance is in the third quartile*
 - *5.0 points if the risk-adjusted performance is in the fourth quartile*
 - *7.5 points if the risk-adjusted performance is in the bottom decile*
 - *7.5 points if not calculated*

- **Performance relative to peers:** The investments performance should be above the peer group's median manager return for 1-, 3-, and 5-year cumulative periods.
 - One-year performance relative to the median value for the peer group:
 - *2.5 points if in the third quartile*
 - *5.0 points if in the fourth quartile*
 - *7.5 points if in the bottom decile*
 - *7.5 points if not calculated*
 - Three-year performance relative to the median value for the peer group:
 - *5.0 points if in the third quartile*
 - *7.5 points if in the fourth quartile*
 - *10.0 points if in the bottom decile*
 - *10.0 points if not calculated*
 - Five-year performance relative to the median value for the peer group:
 - *7.5 points if in the third quartile*
 - *10.0 points if in the fourth quartile*
 - *12.5 points if in the bottom decile*
 - If the investment does not have a five-year performance history:
 - *7.5 points if the three-year performance is in the third quartile*
 - *10.0 points if the three-year performance is in the fourth quartile*
 - *12.5 points if the three-year performance is in the bottom decile*
 - *12.5 points if the three-year performance not calculated*

Interpreting the fi360 Fiduciary Score

The fi360 Fiduciary Score bar charts provide a visual representation of the investment's Score. The following thresholds provide the user with an easy-to-view assessment of the investment and a suggested course of action.

fi360 Fiduciary Score: 0

No fiduciary due diligence shortfalls.

fi360 Fiduciary Score: 1–25

The investment may be an appropriate choice for use in a fiduciary account.

fi360 Fiduciary Score: 26–50

The investment has noteworthy shortfalls. It may not be an appropriate choice if being considered in a search. However, if already in use, the investment may not need to be replaced if mitigating circumstances are present.

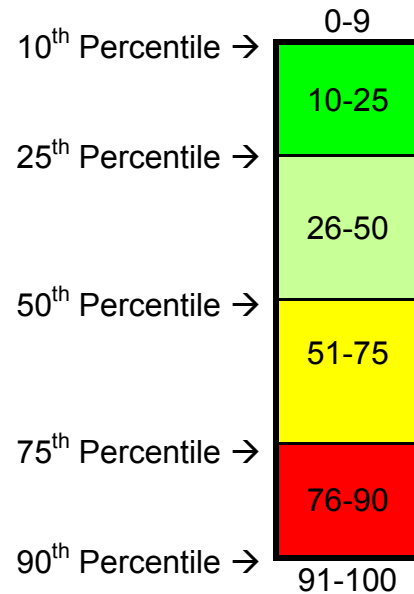
fi360 Fiduciary Score: 51–75

The investment has considerable shortfalls. It may not be an appropriate choice if being considered in a search. However, if already in use, the investment may not need to be replaced pending further investigation or if the Score improves in subsequent time periods.

fi360 Fiduciary Score: 76–100

The investment has significant shortfalls and may not be appropriate for use in a fiduciary account. Strongly consider replacing the investment if already in use.

Bar Chart Example:



Appendix

Composition consistent with asset class

This criterion is only applied to investments in the following peer groups: Large Value, Large Blend, Large Growth, Mid-Cap Value, Mid-Cap Blend, Mid-Cap Growth, Small Value, Small Blend, Small Growth, Long Government, Long-term Bond, Intermediate Government, Intermediate-term Bond, Muni National Long, Muni Single State Long, Muni National Interm, Diversified Emerging Mkts, Europe Stock, Diversified Pacific/Asia, Pacific/Asia ex-Japan Stk, Japan Stock, Latin America Stock, Foreign Large Value, Foreign Large Blend, Foreign Large Growth, Foreign Small/Mid Value, Foreign Small/Mid Growth, China Region, Muni California Long, Muni California Intermediate, Muni New York Intermediate, Muni New York Long, Muni New York Intermediate, Muni Single State Interm, Inflation-Protected Bond and Long-Short.

Style consistency

This criterion is only applied to investments in the following peer groups: Large Value, Large Blend, Large Growth, Foreign Large Value, Foreign Large Blend, Foreign Large Growth, Foreign Small/Mid Value, Foreign Small/Mid Growth, Mid-Cap Value, Mid-Cap Blend, Mid-Cap Growth, Small Value, Small Blend, Small Growth, Long Government, Intermediate Government, Short Government, Long-term Bond, Intermediate-term Bond, Short-term Bond, High Yield Bond, Muni California Long, Muni California Intermediate, Muni National Long, Muni National Interm, Muni Short, Muni New York Long, Muni New York Intermediate, Muni Single State Long, Muni Single State Interm, and Inflation-Protected Bond.

Risk-adjusted performance relative to peers

Morningstar calculates the Alpha and Sharpe Ratios used in the evaluation. Alpha is calculated using one of the nine broad asset class indexes shown below.

Broad Asset Class	Broad Asset Class Index
U.S. Equity	S&P 500 TR USD
International Equity	MSCI EAFE NR USD
Municipal Bond	BarCap Municipal TR USD
Allocation	Morningstar Moderate Target Risk
Taxable Bond	BarCap US Agg Bond TR USD
Commodities	Morningstar Long-Only Commodity TR
Money Market	USTREAS T-Bill Auction Ave 3 Mon
Sector Equity	MSCI World NR USD

The broad asset classes shown above correspond to the peer groups in the following manner:

U.S. Equity	International Equity	Municipal Bond	Allocation
Large Blend	China Region	High Yield Muni	Aggressive Allocation
Large Growth	Diversified Emerging Mkts	Muni California Intermediate	Conservative Allocation
Large Value	Diversified Pacific/Asia	Muni California Long	Convertibles
Leveraged Net Long	Europe Stock	Muni Massachusetts	Moderate Allocation
Mid-Cap Blend	Foreign Large Blend	Muni Minnesota	Retirement Income
Mid-Cap Growth	Foreign Large Growth	Muni National Short	Target-Date 2000-2010
Mid-Cap Value	Foreign Large Value	Muni National Interm	Target-Date 2011-2015
Small Blend	Foreign Small/Mid Growth	Muni National Long	Target-Date 2016-2020
Small Growth	Foreign Small/Mid Blend	Muni New Jersey	Target-Date 2021-2025
Small Value	Foreign Small/Mid Value	Muni New York Intermediate	Target-Date 2026-2030
Bear Market	India Equity	Muni New York Long	Target-Date 2031-2035
Long/Short Equity	Miscellaneous Region	Muni Ohio	Target-Date 2036-2040
Market Neutral	Japan Stock	Muni Pennsylvania	Target-Date 2041-2045
Multialternative	Latin America Stock	Muni Single State Short	Target-Date 2046-2050
Managed Futures	Pacific/Asia ex-Japan Stk	Muni Single State Interm	Target-Date 2051+
Trading-Inverse Commodities	World Stock	Muni Single State Long	World Allocation
Trading-Leveraged Equity			
Volatility	Taxable Bond	Sector Equity	Commodities
Trading-Inverse Equity	Inflation-Protected Bond	Communications	Commodities Agriculture
Trading-Miscellaneous	Inflation-Protected Government	Consumer Cyclical	Commodities Broad Basket
Trading-Leveraged Commodities	Intermediate-Term Bond	Consumer Defensive	Commodities Energy
	Long Government	Equity Precious Metals	Commodities Industrial Metals
	Long-Term Bond	Equity Energy	Commodities Miscellaneous
	Short Government	Financial	Commodities Precious Metals
	Short-Term Bond	Global Real Estate	
	Bank Loan	Health	Money Market
	Emerging Markets Bond	Industrials	Taxable Money Market
	High Yield Bond	Miscellaneous Sector	Tax-Free Money Market
	Multisector Bond	Natural Resources	Single Currency
	Stable Value	Real Estate	Multicurrency
	Nontraditional Bond	Technology	
	Ultrashort Bond	Utilities	
	Trading-Leveraged Debt		
	Trading-Inverse Debt		
	World Bond		