Lipper Leaders from Refinitiv

An Introduction to the Lipper Leaders Rating System

International Methodology

Overview

The Lipper Leaders Rating System is a toolkit that helps guide investors and their advisors in selecting funds that suit individual investment styles and goals. The Lipper Leaders Rating System uses investor-centered criteria to deliver a simple, clear description of a fund's success in meeting certain goals, such as preserving capital or building wealth through consistent, strong returns. The strength of Lipper Ratings are their use in conjunction with one another. They can be used together to identify funds that meet the particular characteristics of the investor.

The Lipper ratings are derived from highly sophisticated formulas that analyze funds against clearly defined criteria. Funds are compared to similar funds, and only those that truly stand out are awarded Lipper Leader status. Each fund is ranked against its peers based on the metric used (such as Total Return or Expense), and the highest 20% of funds in each peer group are named Lipper Leaders, the next 20% receive a rating of 4, the middle 20% are rated 3, the next 20% are rated 2 and the lowest 20% are rated 1.

While Lipper Leader ratings are not predictive of future performance, they do provide context and perspective for making knowledgeable fund investment decisions.

The ratings are subject to change every month and are calculated for the following periods: three-year, five-year, ten-year, and overall.* The overall calculation is based on an equal-weighted average of percentile ranks for each measure over three-, five-, and ten-year periods (if applicable).

Lipper Ratings for Total Return

Lipper Ratings for Total Return reflect funds' historical total return performance relative to peers.

A Lipper Leader for Total Return may be the best fit for investors who want the best return, without looking at risk. This measure alone may not be suitable for investors who want to avoid downside risk. For more risk-averse investors, Total Return ratings can be combined with Preservation and/or Consistent Return ratings to make a risk-return trade-off decision.

Lipper Ratings for Consistent Return

Lipper Ratings for Consistent Return reflect funds' historical risk-adjusted returns, relative to peers. A Lipper Leader for Consistent Return may be the best fit for investors who value a fund's year-to-year consistency relative to other funds in a particular group. Investors are cautioned that some peer groups are inherently more volatile than others, and even a Lipper Leader for Consistent Return in a volatile group may not be well-suited to shorter-term goals or less risk-tolerant investors.

Lipper Ratings for Preservation

Lipper Ratings for Preservation reflect funds' historical loss avoidance relative to other funds within the same asset class. Investors are cautioned that equity funds have historically been more volatile than mixed equity or fixed-income funds and that even a Lipper Leader for Preservation in a more volatile asset class may not be well-suited to shorter-term goals or less risk-tolerant investors.

Lipper Ratings for Tax Efficiency

Lipper Ratings for Tax Efficiency reflect funds' historical success in postponing taxable distributions relative to peers. A Lipper Leader for Tax Efficiency may be the best fit for tax-conscious investors who hold investments that are not in a defined benefit or retirement plan account.

Lipper Ratings for Expense

Lipper Ratings for Expense reflect funds' expense minimization relative to peers with similar load structures. A Lipper Leader for Expense may be the best fit for investors who want to minimize their total cost and can be used in conjunction with Total Return or Consistent Return ratings to identify funds with above-average performance and lower-than-average cost.

TYPES OF RATINGS

REFINITIV™

DATA IS JUST THE BEGINNING

*If applicable, based on data available. Newer markets with insufficient data may be calculated over one- and two-year periods.

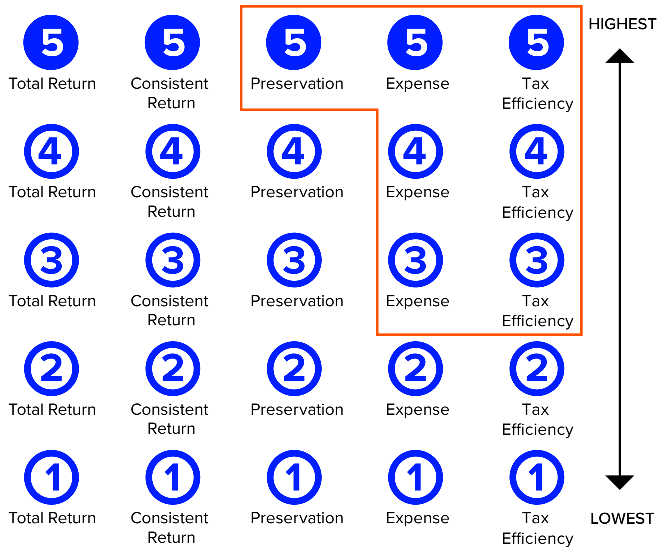
Examples of use

The following examples are for demonstration purposes only. They are not exhaustive and do not represent every type of short-, medium-, or long-term investment horizon. The strength of the Lipper Leaders suite of tools is that it can be used with varying degrees of relevance to arrive at a level that suits individual goals.

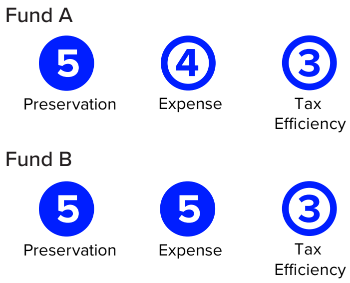
Many investors with short-term horizons list preservation of capital as their primary concern. These investors might wish to consider funds with a Lipper Leader for Preservation rating. These investors may also be concerned with tax efficiency and expenses and choose to combine the Preservation rating with the Lipper Leader for Expense and Lipper Leader for Tax Efficiency.

These Lipper Ratings could be included in an investor's screen with varying degrees of importance. For instance, Investor A, an investor with a short-term horizon who is primarily interested in preservation of capital and, to a lesser degree, taxes and expenses, might screen for funds with a Lipper Leader for Preservation distinction and for funds listed as 3 or better for Tax Efficiency and Expense.

Investor A: Selection Criteria



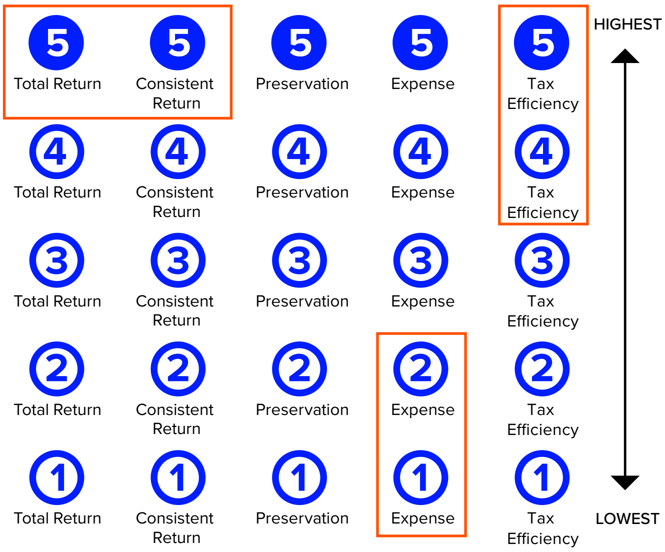
Sample Funds that Meet Investor A's Selection Criteria



Examples of use

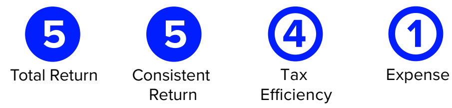
Or consider a long-term investor (Investor B) in a taxable account who believes “you get what you pay for” and doesn’t mind paying relatively more for fund management. In this case, screening for funds with an Expense rating of 1 or 2 would be acceptable. This investor likely places higher emphasis on measures of performance, thus selecting funds that are Lipper Leaders for Total Return and Consistent Return. Since Investor B is tax conscious, top-ranking funds in the Tax Efficiency area are also screened.

Investor B: Selection Criteria

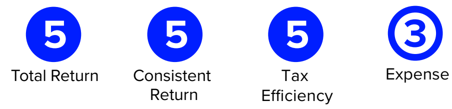


Sample Funds that Meet Investor B’s Selection Criteria

Fund A



Fund B



Lipper Ratings for Total Return

Introduction

The Total Return measure is primarily a decision-making tool for advisors and individual investors.

Total return is defined as the return after (net of) expenses and includes reinvested dividends. Total return is commonly used to evaluate performance and is part of the risk-return trade-off in Modern Portfolio Theory (MPT). Individuals who engage in momentum investing frequently use Total Return as their primary screen.

Lipper Ratings for Total Return can be used as a stand-alone tool or in conjunction with other Lipper Ratings.

Calculation and Rating

Lipper ratings for Total Return reflect funds' historical total return performance relative to peers. Ratings for Total Return are computed for all Lipper classifications with five or more distinct portfolios and span both equity and fixed-income funds (e.g. large-cap core, general U.S. Treasury, etc.). The ratings are subject to change every month and are calculated for the following periods: three-year, five-year, ten-year and overall. The overall calculation is based on an equal-weighted average of percentile rankings for the Total Return metrics over three-, five-, and ten-year periods (if applicable). The highest 20% of funds in each classification are named Lipper Leaders for Total Return, the next 20% receive a rating of 4, the middle 20% are rated 3, the next 20% are rated 2 and the lowest 20% are rated 1.

Lipper Ratings for Consistent Return

Introduction

The Consistent Return measure is a richer risk-adjusted performance measure than others currently available in the marketplace. It takes into account both short- and long-term risk-adjusted performance relative to fund classification. The measure is based on the Effective Return computation. Effective Return is a risk-adjusted return measure that looks back over a variety of holding periods (measured in days, weeks, months, and/or years).

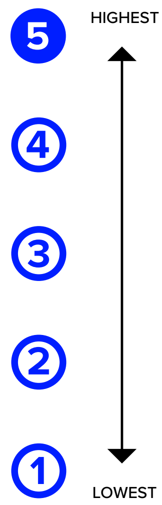
Calculation and Rating

Lipper ratings for Consistent Return reflects funds' historical risk-adjusted returns, relative to peers. Ratings for Consistent Return are computed for all Lipper classifications with five or more distinct portfolios and span both equity and fixed-income funds (e.g., large-cap core, General U.S. Treasury, etc.). The ratings are subject to change every month and are calculated for the following periods: three-year, five-year, ten-year, and overall. The overall calculation is based on an equal-weighted average of percentile rankings of the Consistent Return metrics over three-, five-, and ten-year periods (if applicable). The highest 20% of funds in each classification are named Lipper Leaders for Consistent Return, the next 20% receive a rating of 4, the middle 20% are rated 3, the next 20% are rated 2 and the lowest 20% are rated 1.

Lipper Ratings for Preservation

Introduction

The utility of popular tools such as the Sharpe ratio may not be high for investors whose investment decisions are a function of absolute loss avoidance. The Preservation measure aims to help investors at various levels of risk-averseness by providing a distinctive one-parameter measure of downside risk.



Preserving Capital

The Preservation model is defined as the sum of negative monthly returns over three-, five- and ten-year performance periods.

Because many investors think of 'risk' as the chance of losing money, the Preservation model assumes that the investor is more concerned about negative performance than below-target returns.

Unlike the other Lipper measures, the Preservation measure is calculated from three broad asset classes (equity funds, mixed-asset funds, and bond funds) instead of from the investment classification level.

Calculation and Rating

Lipper Ratings for Preservation reflect funds' historical loss avoidance relative to other funds within the same asset class. Ratings for Preservation are computed from three broad asset classes – equity funds, mixed-asset funds, and bond funds (e.g., equity includes U.S. diversified, sector and world equity funds). The ratings are subject to change every month and are calculated for all the following periods: three-year, five-year, ten-year and overall. The overall calculation is based on an equal-weighted average of percentile rankings for the Preservation metrics over three-, five-, and ten-year periods (if applicable). The highest 20% of funds in each classification are named Lipper Leaders for Preservation, the next 20% receive a rating of 4, the middle 20% are rated 3, the next 20% are rated 2, and the lowest 20% are rated 1

Lipper Ratings for Tax Efficiency

Introduction

The Tax Efficiency measure is primarily a decision-making tool for advisors and individual investors. Its purpose is to rate mutual funds based on their relative tax efficiency vs. their peers.

The impact of taxes on mutual fund returns has received increasing attention over the past few years, so much so that the Securities and Exchange Commission (SEC) and the CFA Institute have issued papers outlining the preferred ways of computing tax efficiency.

Relative Wealth

Lipper has chosen one of these preferred methodologies – relative wealth – as the measure to compute tax efficiency. Lipper calculates relative wealth over three-, five-, and ten-year periods. Relative wealth is defined as:

$$\text{Relative Wealth} = \left[\frac{1+R_{at}}{1+R_{bt}} - 1\right] * 1{,}000$$

R_{at} = pre-liquidation after-tax return

R_{bt} = load-adjusted or SEC standardized return

Relative wealth is a way of looking at both before- and after-tax returns in an intuitive and powerful manner. The actual numerical result of the relative wealth calculation explains how much value, as a percentage of change, is lost because of taxes as compared to pretax value (net of all expenses and loads). The relative wealth measure is really a modified percentage-change calculation and, as such, if divided by 10 would be presented in a standard percentage format.

As an example, if a fund returned minus 9.69% over a three-year period and, after taxes, the fund returned minus 11.09% over the same period, then we can interpret the pre-liquidation result of negative 1.55% as the loss in value due to interim taxes compared to our pretax value. Conversely, the fund kept 98.45% of its pretax value.

As a side note, relative wealth can be computed on a pre-liquidation or a post-liquidation basis. From an investor's standpoint, pre-liquidation relative wealth is a computation of the percentage lost to taxes prior to liquidating or cashing out the fund. Post-liquidation calculates the percentage lost to taxes including the gain (or losses) realized at liquidation. Lipper uses pre-liquidation relative wealth as the methodology for computing Lipper Ratings for Tax Efficiency, since we believe most investors are long-term investors by nature and are not interested primarily in cashing out their fund holdings at a particular time.

Calculation and Rating

Lipper Ratings for Tax Efficiency reflect the funds' historical success in postponing taxable distributions relative to peers. Ratings for Tax Efficiency are computed for all Lipper classifications with five or more distinct portfolios and span both equity and fixed-income funds (e.g., large-cap core, General U.S. Treasury, etc.).

The ratings are subject to change every month and are calculated for the following periods: three-year, five-year, ten-year and overall. The overall calculation is based on an equal-weighted average of percentile rankings for the Tax Efficiency metrics over three-, five-, and ten-year periods (if applicable). The highest 20% of funds in each classification are named Lipper Leaders for Tax Efficiency, the next 20% receive a rating of 4, the middle 20% are rated 3, the next 20% are rated 2, and the lowest 20% are rated 1.

Lipper Ratings for Expense

Introduction

The Expense measure is primarily a decision-making tool for advisors and individual investors. Its purpose is to rate mutual funds in terms of their level of expenses relative to peers with similar load structures.

Investors often use expenses as a criterion to choose or sort funds. One of the reasons given for looking at expenses (in conjunction with other measures such as total return, risk-adjusted return, etc.) is that higher costs could lead to lower net returns and hence poorer performance, unless they are more than offset by higher gross performance.

Lipper Ratings for Expense, then, differentiate funds that have minimized expenses compared to competing funds. These costs are subtracted directly from a fund's return, so if two funds have equal returns before expenses, the lower-cost fund will deliver higher net returns to an investor.

Methodology

To rate an individual fund, Lipper first looks at the classification the fund is in and then at the load structure (funds within a classification are grouped into one of three load classifications – no-load/front-end load, back-end load/level load, and institutional load). The fund is then ranked against its peers (similar classification, similar load structure) so a fund that has the lowest expense levels within a given classification and time period is designated as a Lipper Leader for Expense.

Calculation and Rating

Lipper Ratings for Expense reflect the funds' expense minimization relative to peers with similar load structures. Ratings for Expense are computed for all Lipper Global Classifications with five or more distinct portfolios and span both equity and fixed-income funds (e.g. large-cap core, General U.S. Treasury, etc.). The ratings are subject to change every month and are calculated for the following periods: three-year, five-year, ten-year and overall. The overall calculation is based on an equal-weighted average of percentile rankings for Expense metrics over three-, five-, and ten-year periods (if applicable). The highest 20% of funds in each classification are named Lipper Leaders for Expense, the next 20% receive a rating of 4, the middle 20% are rated 3, the next 20% are rated 2 and the lowest 20% are rated 1.

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