SST BENEFITS CONSULTING

# FUND REVIEW AND ANALYSIS TUTORIAL

The Fund Review and Analysis presents a comprehensive overview of plan performance as well as a detailed examination of the performance of individual funds. Below is a brief description of each section:

1. **MARKET OVERVIEW:** A broad overview of the economy and its related impact on the investment market as a whole. Includes a review of domestic and international equity markets, fixed income markets, sector analysis and major indices, including category and asset class comparisons.
2. **EXECUTIVE SUMMARY:** A summary of the performance of the overall portfolio and brief evaluation of each individual fund. Examines the mutual fund family history to identify compliance related issues, management turnover, management's investments in their own funds and compensation structure.
3. **RATES OF RETURN**: Identifies individual fund performance over one, three and five year periods and compares to the appropriate benchmarks and peer groups as outlined in the Investment Policy Statement.
4. **PORTFOLIO STATISTICS:** Compares a customized portfolio benchmark and average categorical statistics to the individual investment option statistics.
5. **ASSET ALLOCATION:** Reveals the dollar amounts and percentage of assets in each investment option with a comparison to the previous reporting period.
6. **EXPENSE**: Identifies the administration fees, advisory services fees, 12b-1 marketing fees and other fees totaling the entire revenue structure generated to the various fund families and providers.
7. **SNAPSHOT:** Identifies risk characteristics of the portfolio and the individual investment options to determine the level of risk and appropriateness of the risk compared to performance.
8. **STOCK OVERLAY**: Illustrates the concentration of stock holdings in order to insure proper diversification.
9. **GLOSSARY OF TERMS:** Defines and explains commonly used financial terminology.
10. **FUND DETAIL:** Provides a detailed report on the performance of each individual fund.

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# GLOSSARY OF TERMS

## 1. MORNINGSTAR STAR RATING

The star rating is based on a risk-adjusted return measure. Risk is measured as the amount of variation in the fund's performance. Funds are rated for up to three periods, the trailing three, five and ten years. For a fund that does not change its style or category during any of the three periods the overall rating is calculated using the following weights:

| AGE OF FUND | OVERALL RATING |
|---|---|
| At least three years but less than five | 100% three year rating |
| At least five years but less than ten | 60% five year, 40% three year rating |
| At least ten years | 50% ten year, 30% five year and20% three year rating |

**STARS ARE ASSIGNED BASED ON THE FOLLOWING SCALE:**

| | | |
|---|---|---|
| Top 10% of the funds within a category/style | = ***** | 5 Star |
| Next 22.5% | = **** | 4 Star |
| Next 35% | = *** | 3 Star |
| Next 22.5% | = ** | 2 Star |
| Bottom 10% | = * | 1 Star |

## 2. MORNINGSTAR CATEGORY / INVESTMENT STYLE

The Morningstar Style Box combines the various investment strategies. For the equity style box, the vertical axis shows the market capitalization of the stocks owned and the horizontal axis shows investment style, (value, blend or growth). For the fixed-income style box, the vertical axis shows the average credit quality of the bonds owned and the horizontal axis shows the interest rate sensitivity as measured by a bond's duration, (short, intermediate or long).

### a. ASSET CATEGORIES

The asset category of equity mutual funds is based on **market capitalization**, (the average size of the publicly traded companies that the fund owns), and the **investment style** based on the **investment objective** and the fund manager's investment strategy. The asset category is not based on the name of the fund as the name can sometimes be misleading.

### b. MARKET CAPITALIZATION

Market capitalization is based on the number of shares of stock outstanding, multiplied by the price per share of the publicly traded company. The market capitalization boundaries are:

- SMALL CAP = less than $2 billion
- MID CAP = $2 billion to $10 billion
- LARGE CAP = over $10 billion

### c. INVESTMENT STYLE

- **Growth Funds**: Invests in companies whose earnings are expected to grow faster than average.
- **Value Funds**: Buys stocks from companies that are selling for low prices relative to earnings and are out of favor with stock analysts.
- **Blend / Core Funds**: Mix of growth and value strategies.

Over time both growth and value styles have comparable performance results, but during any particular period one style will outperform the other.

**3. TOTAL RETURN**

The average net return to the investor for one (1), three (3), five (5) and ten (10) year periods.

**4. % RANK WITHIN MORNINGSTAR CATEGORY**

The first number is a percentile based on a scale of one (1) to 100. One (1) is the best. In this example, this fund was in the 2nd percentile of its category, large value, for the rolling five (5) year period. The number in parentheses represents the number of funds in that category for that time period.

**5. STANDARD DEVIATION**

Standard deviation is a statistical measure of the volatility of a fund's short term return from the average long term return. The higher the standard deviation, the greater the range of actual returns, (higher & lower), compared to the average return.

**6. SHARPE RATIO**

The Sharpe ratio determines if the performance of a particular fund is worth the risk it assumes. Treasury bills have no risk and the Treasury bill rate is subtracted from the return earned by the fund. The difference is divided by the standard deviation. If the resulting quotient is positive, the fund is worth the risk.

**7. SORTINO RATIO**

A modification of the Sharpe ratio that differentiates harmful volatility from general volatility by taking into account the standard deviation of negative asset returns, called downside deviation. The Sortino ratio subtracts the risk free rate of return from the portfolio's return, and then divides that by the downside deviation. A large Sortino ratio indicates there is a low probability of a large loss.

**8. ALPHA**

Alpha measures the difference between fund's actual return and its expected return based on the fund's beta and the actual returns of the comparable index. Alpha is often viewed as a measurement of the value added or subtracted by the fund manager. A positive alpha indicates that the fund performed better than its beta predicted.

Using the above example, if the fund performed 8% better than the comparable benchmark index, the alpha would be positive.

**9. BETA**

Beta is a measure of the degree of change in value that can be expected given a change in value in the comparable index. A fund with a beta of one (1) indicates that the fund's value will with move with the market. A fund with a beta greater than 1.0 is more volatile than its index and beta of less than 1.0 is less volatile than the index. A beta of 1.05 indicates it should perform 5% better than its corresponding index in an up market and conversely, 5% worse in a down market.

**10. R-SQUARED**

R-squared reflects how closely the fund mirrors the comparable index and therefore reflects the percent of a fund's movement that can be explained by movements in its benchmark index. An index fund is usually 99% or 100% of the comparable index. R-squared is also helpful in assessing the significance of the beta and alpha. If the R-squared is low, then the beta is less relevant to the fund's performance.

**11. INVESTMENT OBJECTIVE**

Most investment objectives are clearly stated, however, the following asset classes sometimes need additional clarification:

- **Equity-Income**: Seeks income and growth by investing in stocks that pay dividends and/or invest in bonds as well as stocks.
- **Global/World:** Can invest in foreign and U.S. securities.
- **International/Foreign:** Can invest only in foreign securities.

**12. AVERAGE EFFECTIVE MATURITY**

This is a weighted average of all effective maturities of the bonds in a portfolio. Effective maturity takes into consideration mortgage prepayments, puts, and adjustable coupons. When duration is unavailable, this is used to determine the fixed-income style box. Generally speaking, the longer the maturity, the greater the interest rate risk.

**13. AVERAGE EFFECTIVE DURATION**

Duration is determined by a formula that includes coupon rates and bond maturities. A fund with a duration of 10 years is twice as volatile as a fund with a five (5) year duration.

**14. AVERAGE CREDIT QUALITY**

Average credit quality provides a snapshot of the bond portfolio's overall credit quality. It is an average of each bond's credit rating, adjusted for its relative weighting in the portfolio. A bond fund would be considered High Yield if the portfolio contains at least 65% or more of bond assets in bonds rated below BBB.

**15. INFORMATION RATIO**

The Information Ratio is not listed on the Morningstar individual fund summaries but we use it to evaluate differences between funds. It is a tool that helps determine the combination of value added, (excess returns), and the incremental risk taken to achieve those results. Because the Information Ratio captures excess returns and relates that to the excess risk, the ratio is a good method for evaluating more and less aggressive managers of competing funds within the same style category.