Portfolio Analysis Tool: Methodologies and Assumptions

The Portfolio Analysis Tool provides a comparison between a user-defined portfolio versus a hypothetical target portfolio. Investment Consultants enter personal and portfolio information provided by the user to be analyzed. The hypothetical asset allocation model to be used for comparison is chosen by the user. The result is a snapshot comparative report of the user’s portfolio versus a target allocation and will change over time. The candor of the user’s answers enhances the accuracy and usefulness of this report.

The Portfolio Analysis Tool does not make specific asset allocation, asset class or security recommendations. TD Ameritrade Investment Consultants enter data, information and investment profile provided by the user including investment objective, risk tolerance, time frame and current asset holdings or general asset allocations the user wants to be analyzed. The tool provides an analysis of the user’s holdings versus a general asset allocation model which the user has selected for comparison. The general asset allocation models are one of several portfolio strategy/risk tolerance models created by TD Ameritrade. These models, combined with time horizon, determine the return and risk assumptions used in the calculations. The tool relies on data from Morningstar and a user’s information regarding holdings to generate the portfolio analysis report. Results may vary with each use and over time.

For complete details on criteria, methodology, limitations, and key assumptions, please see Methodologies & Assumptions information included in this document.

- IMPORTANT: The projections or other information generated by the Portfolio Analysis Tool regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results.
Investor Profile Results

General

The Investor Profile is a summary of the answers you provided to your Investment Consultant regarding your current financial situation, including your investment objective, time frame, and risk tolerance. These answers were objectively scored to identify a range of potential target allocations based on your answers and personal preferences. You then selected a specific target allocation that you believe is most appropriate for you, and against which you wish to compare your current portfolio. The target allocation is not a solicitation to purchase any security, and may not be appropriate for you depending on other pertinent information that was not collected in your investor profile.

INVESTMENT OBJECTIVE

The investment objective is a general attitude about the goal of the portfolio that has been captured in this report. Your investment objective is one of several measures that help to determine the overall riskiness of the target allocations shown. The investment objectives available include:

Capital Preservation
Objective – A capital preservation investment objective reflects your desire to avoid risk and minimize potential loss of principal. You may seek income from your investments while understanding that returns may not keep pace with inflation. It may also mean that you intend to invest over a short period of time.

Moderate
Objective – A moderate investment objective reflects your desire to seek lower risk and fluctuation in your portfolio, while striving to achieve more stable returns or income on your investments. It may also mean that you’re planning to invest over a short period of time.

Moderate Growth
Objective – A moderate growth investment objective reflects your desire to seek growth in your portfolio by typically using a balance of growth and conservative investment types. It may also mean that you are moderately tolerant of risk and are planning to invest for a medium to a long period of time.

Growth
Objective – A growth investment objective reflects your desire to seek the potential for investment growth as well as your tolerance for more significant market fluctuations and risk of loss. It may also mean that you are planning to invest over a long period of time.

Aggressive Growth
Objective – An aggressive growth investment objective reflects your desire for potentially substantial investment growth as well as your tolerance for large market fluctuations and increased risk of loss. It may also mean that you are planning to invest over a long period of time.

TIME HORIZON

The time horizon is the amount of time that a portfolio will be invested to achieve some financial goal. Knowing your time horizon, then, is important in understanding how risky your portfolio can be. Shorter time horizons will typically result in the presentation of lower risk target allocations, as compared to those presented for longer time horizons. The analysis assumes being invested for at least one year. The associated target allocations are not applicable for time frames of less than one year.

INCOME DESIRED

This question represents a desire to either make withdrawals from the portfolio prior to the end of the time horizon, a need to generate current income, or simply a desire to invest in an income-generating strategy. If you answer “Yes” you will typically be presented with target allocations designed specifically to produce income.

RISK TOLERANCE

Risk tolerance is an investor’s general ability to handle the risk inherent in investing. The risk tolerance displayed is a summary of the responses that you gave to the risk tolerance questionnaire. Using a proprietary algorithm, an overall risk tolerance score is generated based on your answers. This score is then mapped to one of the following risk-tolerance profiles, ranging from most risk averse to least: Low, Moderate/Low, Moderate, Moderate/High, and High.
Although the scoring is objective, subjectivity cannot be completely eliminated using such planning tools. There is no guarantee that the risk assessment accurately assessed your tolerance of risk. In addition, your risk tolerance is only one of the objective measures used to determine which target allocations are presented.

**Scoring**

**TARGET ALLOCATION MODELS**

The models highlighted are the ones that were mapped based on your investment profile. Selecting a model that is not highlighted may be inconsistent with your investment objective, time frame, risk tolerance, and income needs.

**SELECTED TARGET ALLOCATION MODEL**

The one model highlighted in color is the allocation you selected from the available ones. This portfolio may or may not be appropriate for you and is not an offer or recommendation to purchase securities.

**Detailed Portfolio Comparison Report Disclosure Statement**

This report summarizes the composition characteristics of your portfolio of securities and the Target Allocation Model, which is based on indexes. It considers regional exposures, security style, and sector exposure to provide a variety of ways to analyze the level of diversification within a portfolio, its potential riskiness, and its possible behavior in the future.

**Style Analysis**

The Morningstar Style Box reveals a fund’s investment style as of the date noted on this report.

For equity funds the vertical axis shows the market capitalization of the stocks owned and the horizontal axis shows investment style (value, blend, or growth).

For fixed-income funds, the vertical axis shows the credit quality of the bonds owned and the horizontal axis shows interest rate sensitivity as measured by a bond’s effective duration.

Morningstar seeks credit rating information from fund companies on a periodic basis (for example, quarterly). In compiling credit rating information, Morningstar accepts credit ratings reported by fund companies that have been issued by all Nationally Recognized Statistical Rating Organizations (NRSROs). For a list of all NRSROs, please visit [http://www.sec.gov/divisions/marketreg/ratingagency.htm](http://www.sec.gov/divisions/marketreg/ratingagency.htm). Additionally, Morningstar accepts foreign credit ratings from widely recognized or registered rating agencies. If two rating organizations/agencies have rated a security, fund companies are to report the lower rating; if three or more organizations/agencies have rated a security, fund companies are to report the median rating, and in cases where there are more than two organization/agency ratings and a median rating does not exist, fund companies are to use the lower of the two middle ratings. PLEASE NOTE: Morningstar, Inc. is not itself a NRSRO nor does it issue a credit rating on the fund. A NRSRO or rating agency ratings can change from time-to-time.

For credit quality, Morningstar combines the credit rating information provided by the fund companies with an average default rate calculation to come up with a weighted-average credit quality. The weighted-average credit quality is currently a letter that roughly corresponds to the scale used by a leading NRSRO. Bond funds are assigned a style box placement of “low”, “medium”, or “high” based on their average credit quality. Funds with a low credit quality are those whose weighted-average credit quality is determined to be less than “BBB-”; medium are those less than “AA-”, but greater or equal to “BBB-”; and high are those with a weighted-average credit quality of “AA-” or higher. When classifying a bond portfolio, Morningstar first maps the NRSRO credit ratings of the underlying holdings to their respective default rates (as determined by Morningstar’s analysis of actual historical default rates). Morningstar then averages these default rates to determine the average default rate for the entire bond fund. Finally, Morningstar maps this average default rate to its corresponding credit rating along a convex curve.
For interest-rate sensitivity, Morningstar obtains from fund companies the average effective duration. Generally, Morningstar classifies a fixed-income fund's interest-rate sensitivity based on the effective duration of the Morningstar Core Bond Index (MCBI), which is currently three years. The classification of Limited will be assigned to those funds whose average effective duration is between 25% to 75% of MCBI's average effective duration; funds whose average effective duration is between 75% to 125% of the MCBI will be classified as Moderate; and those that are at 125% or greater of the average effective duration of the MCBI will be classified as Extensive.

For municipal bond funds, Morningstar also obtains from fund companies the average effective duration. In these cases static breakpoints are utilized. These breakpoints are as follows: (i) Limited: 4.5 years or less; (ii) Moderate: more than 4.5 years but less than 7 years; and (iii) Extensive: more than 7 years. In addition, for non-US taxable and non-US domiciled fixed income funds static duration breakpoints are used: (i) Limited: less than or equal to 3.5 years; (ii) Moderate: greater than 3.5 and less than equal to 6 years; (iii) Extensive: greater than 6 years.

**Equity World Regions Exposure**

Regional exposure refers to a broad breakdown of a portfolio's geographical exposure, by region and by market maturity. Only non-cash equity assets are evaluated in determining the exposures. "Not Classified" indicates the percentage of the equity portion of the portfolio for which Morningstar is unable to assess region or origin.

<table>
<thead>
<tr>
<th>Domestic Equity</th>
<th>Russell 3000 Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Equity</td>
<td>MSCI EAFE Index</td>
</tr>
<tr>
<td>Domestic Fixed Income</td>
<td>Barclays Capital US Aggregate Bond Index</td>
</tr>
</tbody>
</table>

The **Russell 3000 Index** measures the performance of the largest 3,000 U.S. companies representing approximately 98% of the investable U.S. equity market. The Russell 3000 Index is constructed to provide a comprehensive, unbiased, and stable barometer of the broad market and is completely reconstituted annually to ensure new and growing equities are reflected.

The **MSCI EAFE Index** (Europe, Australasia, Far East) is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the U.S. and Canada.

The **Barclays Capital U.S. Aggregate Bond Index** is a broad-based benchmark that measures the investment grade, U.S. dollar-denominated, fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS (asset backed securities), and CMBS (collateralized mortgage backed securities).

The reason these indexes were selected is that they are recognized as a reasonable representation of a diversified portfolio across a broad set of asset allocations. Additionally, they represent a long time frame for a thorough analysis. Several asset classes that are used in the target allocations are not used in the historical performance section because they had an insufficient time period of values for analysis.
Nothing contained in the Historical Asset Allocation Performance report should be construed as investment recommendations or advice. In viewing this report, investors should note that the indexes selected as representative of asset class are unmanaged and cannot be invested in directly by investors. In addition, for this illustration, no sales charges, management expenses, or tax distributions were considered in the estimated returns identified in the illustration. Investors should note that if sales charges, expenses, or taxes were included (as would be the case if securities were used to implement the asset allocation), the performance of the asset mix would be reduced.

*Past performance is no guarantee of future results. Principal value and investment return will fluctuate, and may be worth more or less than the original investment.*

**Definitions**

**Asset Mix Return:** The percentage return represented in the report is the annualized geometric return for any period over one year, and cumulative for any period less than one year, based on the returns of the proxy indexes.

**Risk and Return: Efficient Frontier**

This graph shows an efficient frontier. An efficient frontier represents a combination of asset classes that attempts to maximize a portfolio's return at each level of risk, and minimize risk at each level of portfolio return. An efficient frontier is the line that connects all optimal portfolios across all levels of risk. An optimal portfolio is simply a mix of assets that maximizes portfolio return at a given risk level.

In this graph, the target asset allocation is shown on the efficient frontier, along with your current asset allocation.

Note that the calculation of an efficient frontier is significantly affected by subjectivity. Assumptions for producing the efficient frontier and placement of the current and target asset allocations are identified below in the [Asset Class Assumptions section](#).

The calculation also assumes reinvestment of all income and does not account for taxes or transaction costs.

Diversification does not eliminate the risk of experiencing investment losses.

Please note: Although prudent assumptions have been applied, the rate of return and risk for an investment cannot be predicted with certainty, nor can correlation coefficients between investments. There is no guarantee that income or gain realized will be repeated. Past performance is no guarantee of future results. Further, security implementation decisions may have a significant effect on risk and return results. The returns and risks identified in the illustration in no way represent a guarantee that the portfolio will produce a particular result.

There is no guarantee that the expected return, standard deviation, or Sharpe ratio indicated for either the current asset allocation or target asset allocation will be achieved over the investing horizon. Principal value and investment return will fluctuate, so that an investor’s investment, over time, may be worth more or less than the original investment.

**Asset Class Assumptions**

The calculation of the efficient frontier (shown in the Risk and Return graph) is dependent upon the estimated returns and variability of return of the asset classes, the correlation between their return behavior, and their weighting in the asset mix.

Morningstar Inc.’s research group determined the following assumptions for the expected return and standard deviation of detailed asset classes. This illustration uses forward-looking estimates of expected returns and historical estimates of standard deviations and correlation.
<table>
<thead>
<tr>
<th>SUB-ASSET CLASS</th>
<th>EXPECTED RETURN</th>
<th>ADJUSTED STAND_DEVIAISON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Cap Growth</td>
<td>5.94</td>
<td>18.64</td>
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<tr>
<td>Large Cap Value</td>
<td>5.36</td>
<td>14.78</td>
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<tr>
<td>Mid Cap Growth</td>
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<td>23.39</td>
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<tr>
<td>Mid Cap Value</td>
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<td>17.52</td>
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<tr>
<td>Small Cap Growth</td>
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<tr>
<td>Small Cap Value</td>
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<tr>
<td>Micro Cap</td>
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<td>22.12</td>
</tr>
<tr>
<td>Real Estate</td>
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<td>19.37</td>
</tr>
<tr>
<td>Developed Markets Large Cap</td>
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<tr>
<td>Developed Markets Mid/Small Cap</td>
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<td>Emerging Markets</td>
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<tr>
<td>Short Term</td>
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<td>Developed Fixed Income</td>
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<td>Emerging Fixed Income</td>
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<tr>
<td>Commodities</td>
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<td>19.06</td>
</tr>
<tr>
<td>Cash &amp; Cash Alternatives</td>
<td>0.25</td>
<td>1.28</td>
</tr>
</tbody>
</table>

Allocations to “Other” or “Not Classified” were distributed across known asset classes for the purposes of generating an efficient frontier as below:

- “Other Domestic Equity” = Large Cap Value
- “Other Inter Equity” = Developed Markets Large Cap
- “Other Specialty” = Micro Cap
- “Other Domestic FI” = Intermediate Term
- “Other International Fixed” = Developed Fixed Income
- “Other unclassified” = Micro Cap

Forward-looking forecasts of asset class returns are based on a building block approach. This approach uses current market statistics as its foundation and adds historical performance relationships to build expected return forecasts.

This approach separates the expected return of each asset class into three components: 1) The real risk-free rate, which is return that can be earned without incurring any default or inflation risk, 2) expected inflation, which produces additional reward to compensate investors for future price increases, and 3) risk premia, or additional reward for accepting uncertainty associated with a given asset class.

The intermediate treasury yield curve rate was applied to determine the real risk free rate. The risk premia are derived from the historical relationship between the returns of the asset class and the risk-free rate. In this way, past data is incorporated into the assumption of the future returns. Various premia are added to the current risk-free rate in order to forecast the expected return unique to each asset class.

**Limitations**

The accuracy of any analysis is contingent upon the appropriateness and accuracy of the assumptions. Not all potentially relevant details about your personal or financial situation were collected or considered in the analysis. Unexpected changes in your situation and in market conditions may change actual results.

The analysis applies projections of risk, return, and correlation at an asset-class level. Security implementation decisions may result in significantly different outcomes.

**Definitions**

**Asset Allocation:** decision about what asset classes to include in a portfolio, and how much to include of each.

**Asset Class:** A broad category of investments, such as Domestic Equity, International Equity, Specialty, Domestic Fixed Income, International Fixed Income, Cash and Equivalents.

**Domestic Equity**

**Large Cap Growth:** Common equity shares of companies domiciled in the United States that are among the largest 70% of market capitalizations in the U.S. equity market and that are deemed to be over-priced.
Large Cap Value: Common equity shares of companies domiciled in the United States that are among the 70% largest market capitalizations in the U.S. equity market and that are deemed to be under-priced.

Mid Cap Growth: Common equity shares of companies domiciled in the United States that are among the next 20% of market capitalizations in the U.S. equity market and that are deemed to be over-priced.

Mid Cap Value: Common equity shares of companies domiciled in the United States that are among the next 20% market capitalizations in the U.S. equity market and that are deemed to be under-priced.

Small Cap Growth: Common equity shares of companies domiciled in the United States that are among the next 7% of market capitalizations in the U.S. equity market and that are deemed to be over-priced.

Small Cap Value: Common equity shares of companies domiciled in the United States that are among the next 7% market capitalizations in the U.S. equity market and that are deemed to be under-priced.

Micro Cap: Common equity shares of companies domiciled in the United States that are among the remaining 3% of market capitalizations in the U.S. equity market. Funds in this group focus primarily on the very smallest stocks in the U.S. market and may seek either value or growth opportunities. Micro cap companies are typically very young or in extremely new industries and due to this, they may have unproven revenue streams. As a result, these funds may be subject to high return volatility. Micro cap funds may have a wide range of style scores but have the lowest size scores possible.

Other Domestic Equity: Not readily classified security types and/or the portion of the portfolio that Morningstar could not classify at all, due to missing data.

International Equity
Developed Markets Large Cap: Common equity shares of companies domiciled in developed countries excluding the United States that are among the largest 70% of market capitalizations in their style zone.

Developed Markets Mid/Small Cap: Common equity shares of companies domiciled in developed countries excluding the United States that are among the 70%-100% of market capitalizations in their style zone.

Emerging Markets: Common equity shares of companies domiciled in emerging countries across the world.

Other International Equity: Not readily classified security types and/or the portion of the portfolio that Morningstar could not classify at all, due to missing data.

Specialty
Real Estate: Common equity shares of companies domiciled in the United States with GICS (Global Industry Classification Standard) type prefixed 4040 (Real Estate) and Property/Real estate security types.

Commodities: Securities with GICS (Global Industry Classification Standard) industry class Commodity and Precious Metals.

Other Specialty: Not readily classified security types and/or the portion of the portfolio that Morningstar could not classify at all, due to missing data.

Domestic Fixed Income
Short Term: Securities with domestic bond investments assets domiciled in the United States with Morningstar Bond Sectors US Treasury or US Agency or Municipal and maturity less than 4 years; Credit Quality = Government, AAA or AA, A or BBB.

Intermediate Term: Securities with domestic bond investment’s assets domiciled in the United States with Maturity 4 - <7 years; Credit Quality = Government, AAA or AA, A or BBB and Morningstar Bond Sectors US Treasury or US Agency or Municipal.

Long Term: Securities with domestic bond investment’s assets domiciled in the United States with Maturity >= 7 years; Credit Quality
Government, AAA or AA, A or BBB and Morningstar Bond Sectors US Treasury or US Agency or Municipal.

**Mortgage-Backed Securities:** Securities issued by the Government National Mortgage Association (Ginnie Mae or GNMA).

**TIPS:** Securities with domestic bond investment’s assets domiciled in the United States with Morningstar Bond Sectors TIPS or Inflation Protected.

**High Yield:** Securities with domestic bond investment’s assets domiciled in the United States with Morningstar Bond Sectors Municipal and Credit Quality = BB, B, or Below B.

**Other Domestic Fixed Income:** Not readily classified security types and/or the portion of the portfolio that Morningstar could not classify at all, due to missing data.

**International Fixed Income**
- **Developed Fixed Income:** Securities with bond investment’s assets domiciled in developed countries excluding the United States.
- **Emerging Fixed Income:** Securities with bond investment’s assets domiciled in emerging countries.

**Cash & Cash Alternatives:** Cash can be held in a brokerage account or in a deposit account. Cash alternatives include certificates of deposit, currency, or money market holdings. Cash alternatives can also include fixed-income securities that mature in less than 12 months, commercial paper, and repurchase agreements held by a fund.

**Other/Unclassified** “Other” includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks. “Not classified” represents the portion of the portfolio that Morningstar could not classify at all, due to missing data.

**Correlation:** Considers the relatedness of return patterns between two investments or asset classes. It is measured using a correlation coefficient, which summarizes the relationship between two return series in a number between -1.0 and 1.0. If there is a perfect positive linear relationship between two investments, the correlation coefficient is 1.0. If there is a perfect negative linear relationship between two investments, the correlation coefficient is -1.0. A correlation coefficient of zero means that there is no linear relationship between the investments.

**Market Capitalization:** For a company, equals shares outstanding multiplied by share price.

**Standard Deviation:** A statistical measure of the volatility of an investment’s or portfolio’s returns. When an investment or asset mix has a high standard deviation, its range of performance has been very wide, indicating that there is greater future potential for large gains or losses.

**Sharpe Ratio:** A risk-adjusted measure calculated using expected return in excess of the risk free rate and the standard deviation to determine reward per unit of risk. Therefore the higher the Sharpe Ratio, the better the investment's or portfolio's risk-adjusted performance.

**Comparison to Target Allocation**

“Asset allocation” is the decision of how much to invest in each investment category, or “asset class.” Examples of broad asset classes include Domestic Equity, International Equity, Specialty, Domestic Fixed Income, International Fixed Income, Cash & Cash Alternatives, and Other/Unclassified. The Target Asset Allocation report is hypothetical and for illustrative/comparative purposes only. The target allocation does not represent actual securities or client performance information.

The target asset allocation in this report was developed by TD Ameritrade. You have selected one particular allocation model for comparison to your current portfolio.

There is no guarantee that the analysis employed to arrive at the target asset allocation presented in the report is an appropriate allocation for you. There is no guarantee that the target asset allocation is appropriate for your situation, or would be an effective means of achieving your financial goals. There is no guarantee that a particular return or dollar amount would be achieved from any target allocation.
While allocations to multiple asset classes can reduce overall portfolio risk, risk cannot be completely eliminated with diversification.

In the table, allocation to the asset classes is shown for long positions and certain short positions. The analysis excludes your actual short positions. It rescales short exposure you may have in funds to make total assets equal 100%. The analysis also excludes options, warrants, futures, foreign exchange, or other more esoteric securities. Since short positions are not captured/considered in these portfolio statistics, your current portfolio may actually be significantly more or less risky because of any positions not tracked.

The information contained in this report is from the most recent information available to Morningstar as of the release date, and may or may not be an accurate reflection of the current composition of the securities included in the portfolio. There is no assurance that the weightings, composition, and ratios will remain the same.

Security Types
The following security types are represented within the report: closed-end funds (CE), exchange-traded funds (ETF), holding company depository receipts (HOLDR), money market mutual funds (MM), open-end mutual funds (MF), and individual stocks (ST) and bonds (BD). Your analysis may also include margined securities.

We use indexes or ETFs to represent specific asset classes or sub-asset classes in the target-allocation analysis.

Current Portfolio Analysis

Portfolio Yield
The dividend yield produced for the most recent 12 months is presented.

Average Net Expense Ratio
The percentage of fund assets paid for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund’s NAV. Sales charges are not included in the expense ratio.

Average Gross Expense Ratio
Gross Expense Ratio represents the total gross expenses (net expenses with waivers added back in) divided by the fund’s average net assets. If it is not equal to the net expense ratio, the gross expense ratio portrays the fund’s expenses had the fund not waived a portion, or all, of its fees. Thus, to some degree, it is an indication of fee contracts. Some fee waivers have an expiration date; other waivers are in place indefinitely.

Current Portfolio Top 25 Underlying Holdings
This section reflects the top 25 underlying holdings in which the various portfolio statistics noted within this report are derived and their weighted average in terms of the overall portfolio. Price is as of previous business day as of the report date. It is the close price for stocks and ETFs and NAV for mutual funds, typically calculated around 4pm ET. The time period used in the report is YTD (year-to-date).

Total Return
Expressed in percentage terms, Morningstar’s calculation of total return is determined by taking the change in price, reinvesting, if applicable, all income and capital gains distributions during the period, and dividing by the starting price. The YTD Total Return (%) is the total return of the security as of the previous trading day as of the report date. Total Return is displayed only for Open-End Funds, Closed-End Funds, Stocks, ETFs, and Money Market Funds. Other security types are not reported.

Unless otherwise noted, Morningstar does not adjust total returns for sales charges (such as front-end loads, deferred loads, and redemption fees), preferring to give a clearer picture of performance. Total returns do account for the expense ratio, which includes management, administrative, 12b-1 fees, and other costs that are taken out of assets. Total returns for periods longer than one year are expressed in terms of compounded average annual returns (also known as geometric total returns), affording a more meaningful picture of fund performance than nonannualized figures.

Holding-Level Equity Style Analysis
The Morningstar Style Box combines the various
funds’ 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).

**Holding-Level Equity Sector Weightings**
This section provides a comparison of exposure to various industry sectors for the long stock positions in the portfolio.

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**Current Portfolio Analysis:**

**Stock Overlap**
The Stock Overlap report reviews the top 25 holdings in your portfolio to identify, at a glance, the portfolio’s overall weighting in a particular security or sector. This report only displays the top 25 holdings; your portfolio may hold substantially more. Note that while you do not own the securities held by an open-end fund, closed-end fund, or similar investment, the holdings are relevant in reviewing the overall asset allocation and diversification.

**Percent of Investments**
The Percent of Investments column indicates the percentage of net assets any given security (either as an individual holding or as an underlying stock) makes up as an overall position of the portfolio.

**Holding Portfolio Date**
The Holding Portfolio Date is the date that the fund’s portfolio was last updated. When making comparisons among funds, it is an important date to keep in mind. Although Morningstar tries to ensure that we receive timely information, we don’t always receive current information from fund companies. By law, funds need only report this information two times during the calendar year, and they have two months after the report date to release the shareholder report and portfolio. It is possible that a fund’s portfolio could be up to eight months old at the time of publication.

**Sector**
Morningstar breaks down all equities into the following sectors: Consumer Defensive, Healthcare, Utilities, Communication Services, Energy, Industrials, Technology, Basic Materials, Consumer Cyclical, Financial Services, and Real Estate.

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**Investment Risks**

**International/Emerging Market Equities:** Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

**Small Cap Equities:** Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and are not as well established as larger blue-chip companies. Historically, smaller company stocks have experienced a greater degree of market volatility than the overall market average.

**Mid Cap Equities:** Portfolios that invest in companies with market capitalization below $10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

**High-Yield Bonds:** Portfolios that invest in lower-rated debt securities (commonly referred as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

**Bonds:** Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio decline. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

**Mortgage-Backed Securities:** Mortgage-backed securities (MBS) are bonds that represent claims to the cash flows from pools of mortgage loans. These securities may decline in value due to changes in interest rates, issuer information availability, credit quality of the underlying assets, market perception of the issuer, availability of credit enhancement, and prepayment of principal.
**Real Estate:** Portfolios that invest in real estate face several forms of risk that are inherent in this sector. For instance, liquidity risk, market risk, and interest rate risk are just some of the factors that can influence gain or loss on investments in real estate. These are ultimately passed on to the investor in funds that invest in this sector.

**Commodities:** Assets invested in commodity related instruments are subject to the risk that the performance of the overall commodities market declines and that weather, disease, political, tax and other regulatory developments adversely impact the value of commodities, which may result in a loss of principal and interest. Commodity-linked investments face increased price volatility and liquidity, credit and issuer risks compared to their underlying measures.

**TIPS:** Unlike other fixed-income securities, the values of inflation-protected securities are not materially affected by inflation expectations because their interest rates are adjusted for inflation. Generally, the value of inflation protected securities will fall when real interest rates rise and rise when real interest rates fall.

### Benchmark Descriptions

<table>
<thead>
<tr>
<th>BENCHMARK</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Russell 1000 Growth TR USD</strong></td>
<td>The <strong>Russell 1000 Growth Index</strong> measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.</td>
</tr>
<tr>
<td><strong>Russell 1000 Value TR USD</strong></td>
<td>The <strong>Russell 1000 Value Index</strong> measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.</td>
</tr>
<tr>
<td><strong>Russell Mid Cap Growth TR USD</strong></td>
<td>The <strong>Russell Midcap Growth Index</strong> offers investors access to the mid-cap growth segment of the U.S. equity universe.</td>
</tr>
<tr>
<td><strong>MSCI EAFE NR USD</strong></td>
<td>The <strong>MSCI EAFE Index</strong> (Europe, Australasia, Far East) is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the U.S. and Canada.</td>
</tr>
<tr>
<td><strong>MSCI EAFE Small Cap NR USD</strong></td>
<td>The <strong>MSCI Global Small Cap Indices</strong> provide an exhaustive representation of the small cap size segment.</td>
</tr>
<tr>
<td><strong>MSCI EM NR USD</strong></td>
<td>The <strong>MSCI Emerging Markets Index</strong> is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets.</td>
</tr>
<tr>
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<td>---------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>S&amp;P Global REIT TR USD</td>
<td>The S&amp;P Global REIT includes REITs from both developed and emerging markets.</td>
</tr>
<tr>
<td>DJ UBS Commodity TR USD</td>
<td>The Dow Jones-UBS Commodity Index is a broadly diversified index that allows investors to track commodity futures through a single, simple measure.</td>
</tr>
<tr>
<td>BarCap US Govt/Credit 1-3 Yr TR USD</td>
<td>The U.S. Government/Credit Index 1-3 Yr is the nonsecuritized component of the U.S. Aggregate Index.</td>
</tr>
<tr>
<td>BarCap USGovt/Credit Interm TR USD</td>
<td>The U.S. Government/Credit Index Interm is the nonsecuritized component of the U.S. Aggregate Index.</td>
</tr>
<tr>
<td>BarCap US Govt/Credit Long TR USD</td>
<td>The U.S. Government/Credit Index Long is the nonsecuritized component of the U.S. Aggregate Index.</td>
</tr>
<tr>
<td>BarCap US MBS TR USD</td>
<td>The U.S. Mortgage Backed Securities (MBS) Index covers agency mortgage-backed pass through securities (both fixed-rate and hybrid ARM) issued by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC).</td>
</tr>
<tr>
<td>BarCap US Treasury US TIPS TR USD</td>
<td>The U.S. TIPS Index, a rules-based, market value-weighted index tracks inflation-protected securities issued by the U.S. Treasury. The U.S. TIPS Index is a subset of the Global Inflation-Linked Index, with a 36.0% market value weight in the index (as of December 2007), but is not eligible for other nominal treasury or aggregate indices. To prevent the erosion of purchasing power, TIPS are indexed to the non-seasonally adjusted Consumer Price Index for All Urban Consumers, or the CPI-U (CPI). The index was launched on March 1, 1997.</td>
</tr>
<tr>
<td>BarCap US Corporate High Yield TR USD</td>
<td>The U.S. Corporate High-Yield Index covers the USD denominated, non-investment grade, fixed-rate, taxable corporate bond market. Securities are classified as high yield if the middle rating of Moody’s, Fitch, and S&amp;P is Ba1/BB+/BB+ or below. The index excludes Emerging Markets debt. The index was created in 1986, with index history backfilled to January 1, 1983. The U.S. Corporate High-Yield Index is part of the U.S. Universal and Global High-Yield Indices.</td>
</tr>
<tr>
<td>BarCap Gbl Agg Ex USD TR USD</td>
<td>The Global Aggregate Index provides a broad-based measure of the global investment-grade fixed-rate debt markets.</td>
</tr>
<tr>
<td>BofAML US Treasury Bill 3 Mon</td>
<td>The 3-month US Treasury Bill Index is comprised of a single issue purchased at the beginning of the month and held for a full month. At the end of the month, that issue is sold and rolled into a newly selected issue.</td>
</tr>
</tbody>
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