

## First Trust Advisors L.P. (Model Portfolio Provider)

120 East Liberty Drive, Suite 400  
Wheaton, Illinois 60187

Style: Short Term Fixed Income  
Sub-Style: Multi Sector  
Firm AUM: \$84.6 billion  
Firm Strategy AUM: \$162.4 million

Year Founded: 1991  
GIMA Status: Approved  
Firm Ownership: First Trust Advisors L.P.  
Professional-Staff: 79

### PRODUCT OVERVIEW

**Morgan Stanley Smith Barney LLC ("Morgan Stanley") is the Manager of this strategy. The First Trust Diversified Low Duration Fixed Income (MAPS) is a Separately Managed Account ("SMA") investment product where (a) First Trust Advisors L.P. (the "Model Portfolio Provider") delivers a model portfolio (the "Third Party Model Portfolio") to Morgan Stanley; (b) Morgan Stanley, as investment adviser to the client, serves as portfolio manager for the SMA investment product; and (c) the SMA investment product is based on the Third Party Model Portfolio. These SMA investment products are referred to as "MAPS Third Party Strategies". Although Morgan Stanley generally intends to follow the Third Party Model Portfolios as portfolio manager of the MAPS Third Party Strategies, it has the discretion to deviate from the Third Party Model Portfolios. The Third Party Model Portfolios will include mutual funds and exchange traded products that are affiliated with the Model Portfolio Provider and which pay fees and other compensation to the Third Party Model Provider and its affiliates. The Third Party Model Portfolios may also include mutual funds and exchange traded products that are not affiliated with the Model Portfolio Provider. The Model Portfolio Providers for the MAPS Third Party Strategies are not acting as a "fiduciary" to the client as defined in Section 3(21)(A) of ERISA, with respect to the assets in a MAPS Third Party Strategy. The First Trust Diversified Low Duration Fixed Income Model is designed to complement a core fixed income strategy by targeting income as a primary objective with a secondary objective of preservation of capital. The model will target a duration of no more than three years. The model seeks to accomplish these objectives by allocating among First Trust fixed income exchange-traded funds (ETFs) aimed to achieve diversification benefits and less interest rate sensitivity when compared to traditional core fixed income benchmarks over time. The ETFs included in the model have been selected by the First Trust Advisors Investment Committee through a dynamic approach. The model is designed to provide financial advisors with a core ETF foundation on which to potentially build asset allocation solutions for their clients.**

### TARGET PORTFOLIO CHARACTERISTICS

Number of bond holdings:	7
Average maturity:	3.7 to 4.9 years
Average duration:	1.5 to 2.0 years
Average coupon:	3.8 to 4.0%
Average turnover rate:	10 to 25%

### PORTFOLIO STATISTICS

	-----09/19-----	03/19	
	First Trust	Index***	First Trust
Number of bond holdings	7	—	—
Yield	2.7	—	—
Distribution Rate	—	—	—
Avg maturity	4.02 yrs.	—	—
Avg duration	2.03 yrs.	—	—
Avg coupon	2.7%	—	—

### FIXED INCOME SECTOR DISTRIBUTION (%)<sup>+</sup>

	09/19	06/19	03/19	12/18
Other	37.10	37.10	0.00	36.50
U.S. Agencies	22.33	26.20		17.02
Collateralized Mortgage Obligations	18.63	17.30		14.88
U.S. Treasury	5.59	4.00		7.58
Cash/Cash Equivalents	0.92	0.00		6.24
Financials <sup>1</sup>	6.63	7.00		4.90
High Yield Corporates	0.00	0.00		4.82
Asset-Backed Securities	2.57	2.80		2.43
Emerging Debt	0.00	0.00		2.20
Mortgage-Backed Securities	5.31	4.90		1.54
Foreign Bonds	0.00	0.00		0.78
Medium capitalization <sup>1</sup>				0.57
Industrials <sup>1</sup>	0.89	0.70		0.54

<sup>1</sup>High Grade Corporates

<sup>+</sup>Total may not equal 100% due to rounding.

\*\*\*Index : BC Gov/Cr 1-5 yr

Municipals	0.03	0.00	0.00	0.00
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<sup>1</sup>High Grade Corporates  
<sup>\*</sup>Total may not equal 100% due to rounding.  
<sup>\*\*\*</sup>Index : BC Gov/Cr 1-5 yr

### MANAGER'S INVESTMENT PROCESS

- The following Investment Process is that of the Model Portfolio Provider (rather than of the Money Manager (Morgan Stanley)).
- Interest Rate Outlook / Duration — The prices of fixed income securities are greatly influenced by changes in interest rates, with longer duration fixed income assets being the most impacted. Consequently, we believe the expected trajectory of rates is important for positioning within fixed income asset classes, with a preference for longer term securities over shorter term assets during periods of falling interest rates, and vice-versa during rising interest rate periods. Relative positioning by term is measured by a comparison of the strategy's overall duration to the duration of the fixed income benchmark. The interest rate outlook that informs this critical duration decision is based on modeled macroeconomic assumptions about growth and inflation, monetary and fiscal policy, risk appetites, and relative value based on yields in the context of historical and competing asset price levels.
- Asset Class Level Valuation — We evaluate the relative value offered by different fixed income assets such as treasuries, investment grade and high yield corporate bonds, mortgage-backed securities and international debt. To accomplish this, absolute yields and option-adjusted spreads to treasuries and other yield metrics are compared to historical averages and warranted levels given present conditions. In addition, consideration may be given to hybrid asset classes such as preferred securities and convertibles.
- Asset Class Level Fundamentals — Fundamental trends specifically relevant to each fixed income asset class are closely monitored and evaluated. For example, in the case of high yield bonds, we view default rate trends as a key driver of valuation, and currency trends are important determinants of international bond returns.

### RISK CONSIDERATIONS

Investing in securities entails risks, including: Fixed Income securities may be sensitive to changes in prevailing interest rates. When rates rise the value generally declines. There is no assurance that the private guarantors or insurers will meet their obligations. U.S. Treasuries are guaranteed by the U.S. government and, if held to maturity, offer a fixed rate of return and fixed principal value. Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations. Value investing does not guarantee a profit or eliminate risk. Not all companies whose stocks are considered to be value stocks are able to turn their business around or successfully employ corrective strategies which would result in stock prices that do not rise as initially expected. Bonds rated below investment grade may have speculative characteristics and present significant risks beyond those of other securities, including greater credit risk and price volatility in the secondary market. Investors should be careful to consider these risks alongside their individual circumstances, objectives and risk tolerance before investing in high-yield bonds. If a strategy expects to hold a concentrated portfolio of a limited number of securities, it should be noted that a decline in the value of these investments would cause the portfolio's overall value to decline to a greater degree than that of a less concentrated portfolio.

### PORTFOLIO'S MATURITY STRUCTURE (%) \*

	09/19	06/19	03/19	12/18
0 to 2 Years	31.49	29.90	0.00	17.21
2 to 4 Years	15.30	18.55	0.00	18.31
4 to 6 Years	28.59	30.18	0.00	21.00
6 to 8 Years	10.08	9.89	0.00	28.21
8 to 12 Years	3.94	1.31	0.00	7.13
12 to 17 Years	1.43	1.06	0.00	2.51
Over 17 Years	1.82	1.02	0.00	0.00
Cash/Cash Equivalents	7.35	8.09	0.00	5.64

### PORTFOLIO'S CREDIT QUALITY STRUCTURE (%) \*

#### Investment Grade

	09/19	06/19	03/19	12/18
AAA	53.07	51.62	0.00	45.53
AA	2.66	2.16	0.00	1.88
A	10.83	11.39	0.00	11.43
BBB	11.97	10.34	0.00	9.93

#### Below Investment Grade

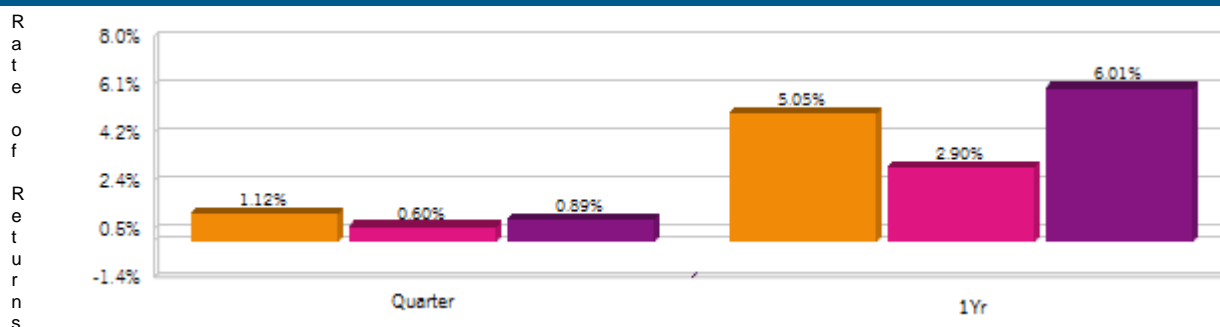
BB	6.94	7.46	0.00	10.85
B	10.70	12.03	0.00	17.74
Below B	0.00	0.75	0.00	0.82
Not Rated	1.96	1.93	0.00	1.82
Cash/Cash Equivalents	0.70	2.32	0.00	0.00

See important notes and disclosures pages for a discussion of the sources of the performance data used to calculate the performance results and related analyses shown above.

## RISK/RETURN ANALYSIS - 3 YEARS ENDING 09/30/19

Unable to produce graph. Insufficient track record

## AVERAGE ANNUAL TOTAL RETURN (%) - PERIODS ENDING 09/30/19



	STD	ROR
First Trust (Gross)		
First Trust (Net)		
BC Gov/Cr 1-5 yr		
90-Day T-Bills		

## INVESTMENT RESULTS

## Annual Rates of Return (%)

## 1 Year - Ending 09/30/19

	2018*	Annual	Std. Dev.
First Trust (Gross)	0.00	5.05	0.00
First Trust (Net)	-0.52	2.90	0.00
BC Gov/Cr 1-5 yr	1.46	6.01	0.00

\*12/01/2018-12/31/2018

## RISK VOLATILITY (%)



\*12/01/2018-12/31/2018 \*\*01/01/19-09/30/19

	Number Of	Up Qtrs.	Down
First Trust (Gross)	3	1	
First Trust (Net)	3	1	
BC Gov/Cr 1-5 yr	4	0	

## PORTFOLIO'S QUARTERLY RETURNS (%)

	Quarter1		Quarter2		Quarter3		Quarter4	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
2018							0.00	-0.52
2019	2.47	1.94	1.39	0.86	1.12	0.60		

Related

Select UMA

PORTFOLIO'S RISK STATISTICS - PERIODS ENDING 09/30/19 <sup>1 2</sup>

	3 Year	5 Year
Standard Deviation	N/A	N/A
Standard Deviation of Primary Benchmark	N/A	N/A
Sharpe Ratio	N/A	N/A
Sharpe Ratio of Primary Benchmark	N/A	N/A
Alpha	N/A	N/A
Beta	N/A	N/A
Downside Risk	N/A	N/A
R-Squared	N/A	N/A
Tracking Error	N/A	N/A
Information Ratio	N/A	N/A

PORTFOLIO DIVERSIFICATION - R<sup>2</sup>(INCEPTION THROUGH 12/14)+

	R <sup>2</sup>
First Trust vs. BC Gov/Cr 1-5 yr	N/A

+Statistics are calculated using gross of fee performance only.

- Statistics are calculated using gross of fee performance only.
- BC Gov/Cr 1-5 yr was used as the primary benchmark and the 90-Day T-Bills Index as the risk-free benchmark.

**IMPORTANT NOTES AND DISCLOSURES****COMPOSITE DISCLOSURES**

**The disclosures provided below apply to performance information in this profile, if any. Past performance is not a guarantee of future results. Actual individual account results may differ from the performance shown in this profile. There is no guarantee that this investment strategy will achieve its intended results under all market conditions. Do not rely upon this profile as the sole basis for your investment decisions.**

Performance results in this profile are calculated assuming reinvestment of dividends and income. Returns for more than one calendar year are annualized and based on quarterly data. Returns for periods of less than a calendar year show the total return for the period and are not annualized. No representation is being made that any portfolio will or is likely to achieve profits or losses similar to those shown. Returns will fluctuate and an investment upon redemption may be worth more or less than its original value. Performance shown does not reflect the impact of fees and expenses of the underlying mutual fund and ETFs, as applicable.

**Sources of Performance Results and Other Data:** The performance data and certain other information for this strategy (including the data on page 1 of this profile) may include one or more of the following: (i) the performance results of a composite of Morgan Stanley accounts managed by the third party investment manager, (ii) the performance results for accounts and investment products managed by the third party investment manager, in the same or a substantially similar investment strategy outside of the applicable Morgan Stanley program, and/or (iii) in the case of Model Portfolio Strategies, the Model Portfolio Provider's results in managing accounts outside of the Morgan Stanley Select UMA program prior to Model Portfolio Strategy's inception in the Morgan Stanley Select UMA program. For periods through June 2012, the Fiduciary Services program operated through two channels – the Morgan Stanley channel and the Smith Barney channel and any performance and other data relating to Fiduciary Services accounts shown here for these periods is calculated using accounts in only one of the these channels.) Please note that the Fiduciary Services program was closed on January 2, 2018. Although the Fiduciary Services and Select UMA programs are both Morgan Stanley managed account programs, the performance results and other features of similar investment strategies in the two programs may differ due to investment and operational differences. Performance in one program is not indicative of potential performance in the other. For example, the individual investment strategies in Select UMA program accounts may contain fewer securities, which would lead to a more concentrated portfolio. The automatic rebalancing, wash sale loss and tax harvesting features of the Select UMA program, which are not available in Fiduciary Services, also could cause differences in performance. In addition, any performance results included in this profile that are based on a third party investment manager's accounts that are not part of the Morgan Stanley program accounts or institutional accounts that are part of the Model Portfolio strategy may differ due to investment and operational differences as well. As such, performance results of the third party investment manager's composites and the third party Model Portfolio Strategies may differ from those of Select UMA accounts managed in the same or a substantially similar investment strategy. For example, in the case of Model Portfolio Strategies, Morgan Stanley, as the investment manager, may deviate from the Third Party Model Portfolios.

**Related Performance:**

For periods prior to the inception of the strategy in the Morgan Stanley Select UMA program, the performance shown reflects the performance of accounts managed by the Model Portfolio Provider outside of the program ("Related Performance"). Such Related Performance is provided for illustrative purposes to show the basis on which sponsor has engaged the Model Portfolio Provider. Related Performance is provided in connection with "MAPS Third Party Strategies," which is an SMA investment product where (a) the Model Portfolio Provider delivers a model portfolio (the "Third Party Model Portfolio") to Morgan Stanley; (b) Morgan Stanley, as investment adviser to the client, serves as portfolio manager for the SMA investment product; and (c) the SMA investment product is based on the Third Party Model Portfolio. Although Morgan Stanley generally intends to follow the Third Party Model Portfolios, as portfolio manager of the MAPS Third Party Strategies, it has the discretion to deviate from the Third Party Model Portfolios. In addition, Morgan Stanley, not the Model Portfolio Provider, is responsible for trading program accounts. As a result, the performance of Morgan Stanley in managing program accounts will differ from the Related Performance of the Model Portfolio Provider. The Third Party Model Portfolios may include mutual funds and/or exchange traded products that are affiliated with the Model Portfolio Provider, which pay fees and other compensation to the Third Party Model Provider and its affiliates, as well as mutual funds and exchange traded products that are not affiliated with the Model Portfolio Provider.

Depending upon the particular MAPS Third Party Strategy displayed, Related Performance may consist of either (i) the performance results of a composite of accounts managed by the Model Portfolio Provider prior to the inception of the Morgan Stanley Select UMA Program, (ii) the performance results for a hypothetical model portfolio ("Hypothetical Model Performance") managed by the Model Portfolio Provider according to the strategy on which the Third Party Model Portfolios are based, and (iii) the performance results of a mutual fund that is invested in a similar strategy ("Fund Performance"). Mutual funds are subject to extensive regulation, including diversification, restrictions on fees and expenses, tax, governance, liquidity and a number of other legal requirements that are not applicable to program accounts in the Morgan Stanley Select UMA Program. Consequently, the Fund Performance for a given investment strategy will differ from, and will not necessarily be representative of, the performance of that strategy as a Third Party Model Portfolio in the Morgan Stanley Select UMA Program. Further, the Hypothetical Model Performance results shown are not actual, but are simulated results. Such simulated performance results have inherent limitations since they are hypothetical and do not represent actual trading or any actual account, and thus may not reflect material economic and market factors, such as liquidity constraints or client imposed restrictions, which may have had an impact on the Model Portfolio Provider's decision making.

Related Performance is calculated by and obtained from the Model Portfolio Provider, is not reviewed or guaranteed by Morgan Stanley, and reflects the performance of accounts managed by Model Portfolio Provider outside of the Morgan Stanley Select UMA program prior to the applicable MAPS Third Party Strategy's inception in the Morgan Stanley Select UMA program. Related Performance does not include or reflect the performance of any actual Morgan Stanley program accounts. No representation is being made that any program account will or has achieved results similar to the Related Performance, and the performance of program accounts will differ from the Related Performance due to differences in account size and characteristics of the program accounts, timing and execution of transactions and market conditions prevailing at the time of investment, among other things. The Model Portfolio Providers for the MAPS Third Party Strategies are not acting as a "fiduciary" to the client as defined in Section 3(21)(A) of ERISA, with respect to the assets in a MAPS Third Party Strategy.

**Morgan Stanley Performance:**

**Gross Performance:** First Trust's gross performance results do not reflect the deduction of any investment advisory fees or program fees charged by the First Trust or Morgan Stanley. In the case of Fund Performance, the gross results also do not reflect the deduction of any fees and expenses internal to the mutual fund responsible for generating the performance, commissions charged on securities transactions, and other expenses attributable to such mutual funds. The deduction of such fees and expenses, and the compounding effect of such fees over time, will reduce returns over time.

**Net Performance for all Periods:** Net performance results reflect a deduction of 0.5175% quarterly. This consists of three components: 0.5% maximum quarterly MS Advisory Fee and 0.0175% maximum quarterly Program Overlay Fee (which, together cover the services provided by Morgan Stanley), plus 0.00% quarterly SMA Manager Fees (being the fee currently charged by First Trust to new clients for managing their assets in the Select UMA program). The Model Portfolio Provider does not charge a fee for delivering the Third Party Model Portfolio to Morgan Stanley. The SMA Manager Fees may differ from manager to manager, and managers may change their fee to new clients from time to time. If you select this manager for your account, check the SMA Manager Fees specified in the written client agreement, in case these have changed since you received this profile. Historical net fees reflect the Advisory Fee Schedule as of October 1, 2018.

Morgan Stanley program fees are usually deducted quarterly, and have a compounding effect on performance. The Morgan Stanley program fee, which differs among programs and clients, is described in the applicable Morgan Stanley ADV brochure, which is available at [www.morganstanley.com/ADV](http://www.morganstanley.com/ADV) or on request from your Financial Advisor or Private Wealth Advisor.

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## Focus List, Approved List, and Watch Status:

Global Investment Manager Analysis ("GIMA") uses two methods to evaluate investment products in applicable advisory programs. In general, strategies that have passed a more thorough evaluation may be placed on the "Focus List", while strategies that have passed through a different and less comprehensive evaluation process may be placed on the "Approved List". Sometimes an investment product may be evaluated using the Focus List process but then placed on the Approved List instead of the Focus List.

Investment products may move from the Focus List to the Approved List, or vice versa. GIMA may also determine that an investment product no longer meets the criteria under either evaluation process and will no longer be recommended in investment advisory programs (in which case the investment product is given a "Not Approved" status).

GIMA has a "Watch" policy and may describe a Focus List or Approved List investment product as being on "Watch" if GIMA identifies specific areas that (a) merit further evaluation by GIMA and (b) may, but are not certain to, result in the investment product becoming "Not Approved". The Watch period depends on the length of time needed for GIMA to conduct its evaluation and for the investment manager to address any concerns. GIMA may, but is not obligated to, note the Watch status in this report with a "W" or "Watch" on the cover page.

For more information on the Focus List, Approved List, and Watch processes, please see the applicable Morgan Stanley ADV brochure ([www.ms.com/adv](http://www.ms.com/adv)). Your Financial Advisor or Private Wealth Advisor can provide on request a copy of a paper entitled "GIMA: At A Glance".

## ADDITIONAL DISCLOSURES

The information about a representative account is for illustrative purposes only. Actual account holdings, performance and other data will vary depending on the size of an account, cash flows within an account, and restrictions on an account. Holdings are subject to change daily. The information in this profile is not a recommendation to buy, hold or sell securities.

Actual portfolio statistics may vary from target portfolio characteristics.

The Model Portfolio Provider or Investment Manager may use the same or substantially similar investment strategies, and may hold similar portfolios of investments, in other portfolios or products it manages (including mutual funds). These may be available at Morgan Stanley or elsewhere, and may cost an investor more or less than this strategy in Morgan Stanley's Select UMA program.

The portfolio may, at times, invest in exchange-traded funds (ETFs), which are a form of equity security in seeking to maintain continued full exposure to the broad equity market.

Morgan Stanley investment advisory programs may require a minimum asset level and, depending on your specific investment objectives and financial position, may not be suitable for you. Investment advisory program accounts are opened pursuant to a written client agreement.

The investment manager acts independently of, and is not an affiliate of, Morgan Stanley Smith Barney LLC.

Diversification does not guarantee a profit or protect against a loss.

## No obligation to notify

Morgan Stanley has no obligation to notify you when information in this profile changes.

## Sources of information

Material in this profile has been obtained from sources that we believe to be reliable, but we do not guarantee its accuracy, completeness or timeliness. Third party data providers make no warranties or representations relating to the accuracy, completeness or timeliness of the data they provide and are not liable for any damages relating to this data.

## No tax advice

Morgan Stanley and its affiliates do not render advice on legal, tax and/or tax accounting matters to clients. Each client should consult his/her personal tax and/or legal advisor to learn about any potential tax or other implications that may result from acting on a particular recommendation.

## Not an ERISA fiduciary

Morgan Stanley is not acting as a fiduciary under either the Employee Retirement Income Security Act of 1974, as amended, or under section 4975 of the Internal Revenue Code of 1986, as amended, in providing the information in this profile.

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## INDEX DESCRIPTIONS



**90-Day T-Bills**

The 90-Day Treasury Bill is a short-term obligation issued by the United States government. T-bills are purchased at a discount to the full face value, and the investor receives the full value when they mature. The difference of discount is the interest earned. T-bills are issued in denominations of \$10,000 auction and \$1,000 increments thereafter.

**BC Gov/Cr 1-5 yr**

The Government/Credit Index includes securities in the Government and Credit Indices. The Government Index includes treasuries (i.e., public obligations of the U.S. Treasury that have remaining maturities of more than one year) and agencies (i.e., publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government). The Credit Index includes publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements. This index is the 1-5 Yr component of the U.S. Government/Credit index.

**S&P 500**

The S&P 500 Total Return has been widely regarded as the best single gauge of the large cap U.S. equities market since the index was first published in 1957. The index has over \$5.58 trillion benchmarked, with index assets comprising approximately \$1.31 trillion of this total. The index includes 500 leading companies in leading industries of the U.S. economy, capturing 75% coverage of U.S. equities. This index includes dividend reinvestment.

**Indices are unmanaged and have no expenses. You cannot invest directly in an index.**

**GLOSSARY OF TERMS**

**Alpha** is a mathematical estimate of risk-adjusted return expected from a portfolio above and beyond the benchmark return at any point in time.

**American Depositary Receipts (ADRs)** are receipts for shares of a foreign-based corporation held in the vault of a U.S. bank.

**Average Portfolio Beta** is a measure of the sensitivity of a benchmark or portfolio's rates of return to changes against a market return. The market return is the S&P 500 Index. It is the coefficient measuring a stock or a portfolio's relative volatility.

**Beta** is a measure of the sensitivity of a portfolio's rates of return to changes in the market return. It is the coefficient measuring a stock or a portfolio's relative volatility.

**Bottom-Up Stock Selection** Emphasis primarily on individual stock selection. Considerations of economic and industry factors are of secondary importance in the investment decision-making process.

**Capitalization** is defined as the following: Mega (Above \$100 billion), Large (\$12 to \$100 billion), Medium (\$2.5 - \$12 billion), Small (\$.50 - \$2.5 billion) and Micro (below \$.50 billion).

**Distribution Rate** is defined as the most recent distribution paid, annualized, and then divided by the current market price. Distribution rate may consist of investment income, short-term capital gains, long-term capital gains, and /or returns of capital.

**Dividend** a portion of a company's profit paid to common and preferred shareholders.

**Dividend Yield** annual dividend per share divided by price per share. Dividend Yield for the portfolio is a weighted average of the results for the individual stocks in the portfolio.

**Downside Risk** is a measure of the risk associated with achieving a specific target return. This statistic separates portfolio volatility into downside risk and upside uncertainty. The downside considers all returns below the target return, while the upside considers all returns equal to or above the target return.

**Duration** is a measure of price sensitivity expressed in years.

**High Grade Corporate Bonds** corporate bonds from issuers with credit ratings of AA or AAA.

**Information Ratio** is a measure of the investment manager's skill to add active value against a given benchmark relative to how stable that active return has been. Essentially, the information ratio explains how significant a manager's alpha is. Therefore, the higher the information ratio, the more significant the alpha.

**Investment Grade Bonds** are those rated by Standard & Poor's AAA (highest rated), AA, A or BBB (or equivalent rating by other rating agencies or, in the case of securities not rated, by the investment manager).

**Price/Book Ratio (P/B)** weighted average of the stocks' price divided by book value per share. Book value per share is defined as common equity, including intangibles, divided by shares outstanding times the adjustment factor.

**Price/Cash Flow Ratio** a ratio used to compare a company's market value to its cash flow. It is calculated by dividing the company's market cap by the company's operating cash flow in the most recent fiscal year (or the most recent four fiscal quarters); or, equivalently, divide the per-share stock price by the per-share operating cash flow.

**Price/Earnings Ratio (P/E Ratio)** shows the multiple of earnings at which a stock sells. Determined by dividing current stock price by current earnings per share (adjusted for stock splits). Earnings per share for the P/E ratio are determined by dividing earnings for past 12 months by the number of common shares outstanding. The P/E ratio shown here is calculated by the harmonic mean.

**Price/Sales Ratio** determined by dividing current stock price by revenue per share (adjusted for stock splits). Revenue per share for the P/S ratio is determined by dividing revenue for past 12 months by number of shares outstanding.

**R2 (R-Squared)/Portfolio Diversification** indicates the proportion of a security's total variance that is benchmark-related or is explained by variations in the benchmark.

**Sharpe Ratio** measures the efficiency, or excess return per unit of volatility, of a manager's returns. It evaluates managers' performance on a volatility-adjusted basis.

**Standard Deviation** is a statistical measure of historical variability or spread of returns around a mathematical average return that was produced by the investment manager over a given measurement period. The higher the standard deviation, the greater the variability in the investment manager's returns relative to its average return.

**Top-Down/Economic Analysis** Emphasis primarily on macroeconomic trends as opposed to bottom-up stock selection.

**Tracking Error** represents the standard deviation of the difference between the performance of the investment strategy and the benchmark. This provides a historical measure of the variability of the investment strategy's returns relative to its benchmark.

**U.S. Treasury Bonds** a marketable, fixed interest U.S. government debt security with a maturity of more than 10 years. Treasury bonds make interest payments semi-annually and the income that holders receive is only taxed at the federal level.

**Volatility** a measure of risk based on the standard deviation of the asset return. Volatility is a variable that appears in option pricing formulas, where it denotes the volatility of the underlying asset return from now to the expiration of the option. There are volatility indexes. Such as a scale of 1-9; a higher rating means higher risk.