



# Merlin Focused Growth (MO25M)

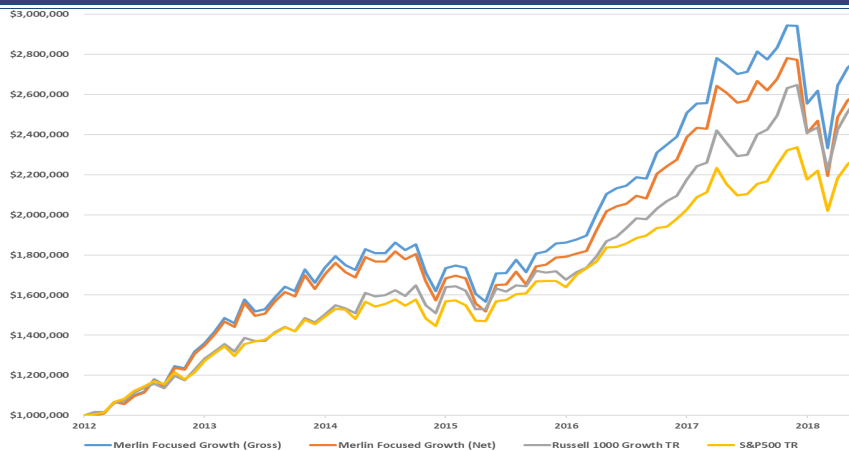
As of March 31, 2019

The Merlin Focused Growth investment strategy's goal is to select the 25 most attractive large cap growth firms regardless of the industry or sector they are in. Holdings are selected from the Merlin Large Cap Growth 50 stock portfolio using proprietary statistical analysis of multivariate historical correlation patterns. Typically, the 25 stocks with lowest historical multivariate correlations are selected for the portfolio. Companies that pass this selection process are characterized by high levels of profitability and earnings growth, high quality and predictable earnings and shares that trade at a reasonable valuation relative to their expected earnings growth rates. Merlin Focused Growth strategy is driven by individual stock selection and is typically over weighted towards the most attractive sectors and underweighted in (or has no exposure to) the least attractive sectors during any period of time. All holdings are initially equally weighted and are periodically rebalanced to equal weights.

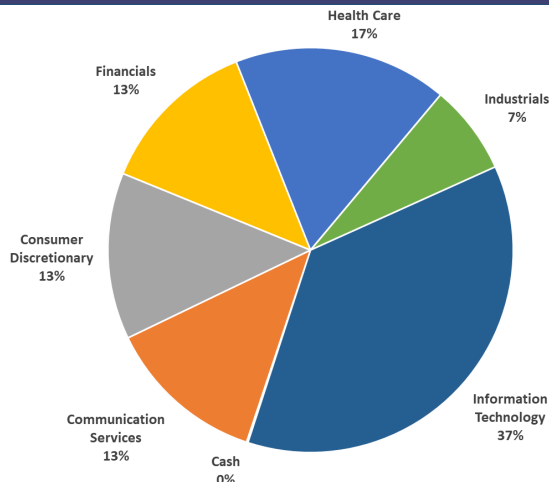
## Historical Performance (\*periods greater than one year are annualized)

	MRQ	1 YR	3 YRS*	5 YRS*	Inception*
MO25M (Gross)	19.08%	2.84%	17.62%	12.86%	17.51%
MO25M (Net)	18.79%	1.79%	16.43%	11.72%	16.32%
Russell 1000 Growth (RLG)	16.10%	12.75%	16.53%	13.50%	15.95%
Excess Return +/- Gross	2.98%	-9.91%	1.09%	-0.64%	1.64%

## Growth of \$1MM



## Sector Allocation



**Portfolio Manager**  
**Michael Obuchowski, Ph.D.**  
*Founder & CIO*  
*Merlin Asset Management*

## Key Facts

**Bloomberg Ticker:** MERFCGW

### Composite Inception Date

November 30th, 2012

### Primary Benchmark

Russell 1000 Growth Index

### Investment Process

Combined quantitative screen, bottom-up fundamental and top-down macro, multivariate correlations analysis

### Investment Objective

Long term capital appreciation through investment in US listed large cap securities

### Equity Universe

US listed firms with market capitalization above \$5 billion

### Holdings

Typically 25 stocks, initially equally weighted with periodic rebalancing

### Typical Active Share

75-80%

### Typical Portfolio Turnover

20-30% annualized

### Typical Tracking Error

5-7%

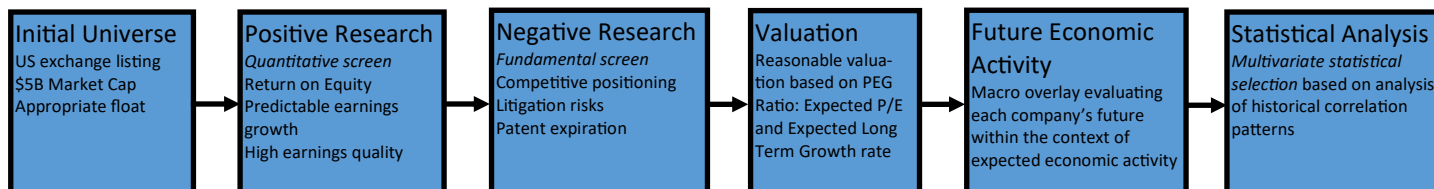
### Sector Limits

No benchmark derived limits on minimum or maximum sector exposure



## Investment Process

The Merlin Focused Growth (MO25M) strategy features a six step process



Market Cap Range (\$ Billions)	% of Equity	# of Holdings
\$5 - \$10	12	3
\$10 - \$50	36	9
\$50 - \$100	16	4
Over \$100	36	9

Portfolio Analytics**	Since Inception
Average Monthly Return	1.45%
Average Monthly Positive Return	3.61%
Average Monthly Negative Return	-3.23%

Portfolio Statistics*	MO25M	Russell 1000 Growth EW
Market Cap Mean	\$219,303M	\$35,930M
Market Cap Median	\$66,270M	\$11,838M
Return on Equity	33.10	27.94
P/E Next Year	19.65	23.76
LTG Estimate	19.31	13.53
PEG Ratio	1.17	4.40

MO25M vs. Russell 1000 Growth**	1 YR	3 YRS	5 YRS	Since Inception
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Risk & Regression Analysis				
Standard Deviation	23.91	15.78	15.54	15.15
Correlation Coefficient (r)	0.98	0.93	0.94	0.93
R-Squared (R <sup>2</sup> )	0.95	0.87	0.88	0.87
Annualized Alpha	-11.39	-1.90	-2.63	-1.29
Jensen Alpha	-10.85	-1.66	-2.50	-1.17
Beta	1.29	1.21	1.19	1.21

Efficiency Measures				
Sharpe Ratio	0.03	1.04	0.78	1.12
Treynor Ratio	0.56	13.61	10.21	14.05
Sortino Ratio	0.04	1.59	1.21	1.86
Calmar Ratio	0.14	0.85	0.62	0.84
Tracking Error	7.39	6.21	5.82	6.01
Information Ratio	-1.34	0.17	-0.11	0.27
Upside Market Capture	92.56	109.58	112.92	119.32
Batting Average	0.25	0.50	0.52	0.55
Downside Market Capture	117.63	109.10	123.48	121.05

### Contact Information

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\* Source: Bloomberg Professional. Averages for the MO25M composite and equally weighted Russell 1000 Growth index. This information is presented as supplemental to the GIPS Performance Disclosure. \*\* Source: eVestment Global Database. This information is presented as supplemental to the GIPS Performance Disclosure.



As of March 31, 2019

## Performance Disclosure

Year	Gross of Fees Return (%)	Net of Fees Return (%)	Benchmark Return (%)	Composite 3 Yr Standard Deviation	Benchmark 3 Yr Standard Deviation	Number of Portfolios	Composite Dispersion (%)	Total Composite Assets (\$US)	Total Firm Assets (\$US)
2019 Q1	19.08	18.79	16.10	15.81	12.19	3		481,661	19,386,621
2018	-8.72	-9.67	-1.51	15.76	12.30	3		405,581	16,652,574
2017	34.80	33.46	30.21	12.70	10.54	4	0.67	461,255	24,473,125
2016	9.17	8.09	7.08	13.98	11.15	4	0.44	412,088	13,224,315
2015	-0.78	-1.79	5.67	13.60	10.7	4	0.46	295,302	11,872,022
2014	17.86	16.69	13.05			4	0.82	383,385	11,855,531
2013	46.69	45.27	33.48			3	n/a	265,212	10,470,618
12/2012	1.26	1.09	-0.03			1	n/a	11,123	7,513,071

### Compliance Statement

Merlin Asset Management claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards.

### Definition of the Firm

Merlin Asset Management (MAM) is an independent investment advisor registered with the U.S. Securities & Exchange Commission under the Investment Advisers Act of 1940. MAM specializes in institutional style investment strategies. Merlin Asset Management manages a variety of assets, including but not limited to equity and fixed income investments, and offers personalized investment services to individual and institutional clients.

### Definition of Investment Strategy

The Merlin Focused Growth strategy utilizes a structured investment process consisting of quantitative screening, bottom-up fundamental analysis, top-down evaluation of future economic activity and multivariate statistical selection of 25 stocks from the Merlin Large Cap Growth (MO50) investment strategy. The resulting portfolio holdings are characterized by a high level of profitability, growth rates and quality of earnings and trade at a reasonable valuation relative to their expected earnings growth rates.

### Benchmark

The benchmark is the Russell 1000 Growth Index. The Russell 1000 Growth Index is an unmanaged index that follows the large-cap growth segment of the U.S. equity universe and is constructed to provide a comprehensive and unbiased barometer of the large-cap growth market. It includes those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values. It includes the reinvestment of dividends and income, but does not reflect fees, brokerage commissions, withholding taxes, or other expenses of investing. It is not possible to invest in this Index and the Merlin Focused Growth Composite is not restricted to the securities comprising the Index. The Merlin Focused Growth Composite may not be as diversified as the Index and may experience differing degrees of volatility.

### Fees

The standard management fee for existing Non-Bundled Fee accounts is 1% per annum payable quarterly in arrears. Fees may be negotiable based on the size of the account or other services that may be required by a particular client and may be subject to a minimum annual fee (which may be waived by Merlin Asset Management in its sole discretion). The standard management fee for accounts opened after 9/30/2012 is 1.35% per annum payable quarterly in arrears.

### Composites

The Merlin Focused Growth Composite, which was created on 11/18/2012, contains all fully discretionary accounts that are managed following the Merlin Focused Growth (MO25M) investment strategy. Accounts are included the first business day after they are fully invested in the Merlin Focused Growth strategy. Internal dispersion is calculated using asset-weighted standard deviation of all portfolios that were included in the composite for the entire year. Gross returns for Non-Bundled Fees accounts are presented gross of management fees and net of all transaction costs. Net returns for Non-Bundled Fees accounts are presented net of actual management fees charged and net of all transaction costs. Gross returns for Bundled Fees accounts are presented gross of management fees and net of all other costs. Net returns for Bundled Fees accounts are presented net of actual management fees charged and net of all other costs. The U.S. Dollar is the currency used to express performance. Past performance is no guarantee of future results.

### Further Information

To receive a complete list and description of the firm's composites and or presentations that adhere to the GIPS® standards, contact Michael Obuchowski at 617-366-2650 or write Merlin Asset Management, One Boston Place, Suite 2600, Boston, MA 02108 or send an email to [info@merlinam.com](mailto:info@merlinam.com). Additional information regarding the firm's policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.



## Definitions

**Correlation Coefficient** - A statistical term which defines the percent of time an index(es) or a manager(s) move in the same direction. More specifically, correlation measures the extent of linear association of two variables. Correlation coefficients can range from -1 to +1. A coefficient that is -1 means that the manager is perfectly negatively correlated with the index or manager against which it is regressed (move same amount in opposite directions); a coefficient of 0 signifies zero or no correlation, and finally a coefficient of +1 means perfect positive correlation (move the same amount in the same direction).

**R-Squared** - Otherwise known as the Coefficient of Determination, this statistic, like beta, is a measure of a manager's movement in relation to the market. Generally, the R-Squared of a manager versus a benchmark is a measure of how closely related the variance of the manager returns and the variance of the benchmark returns are. In other words, the R-Squared measures the percent of a manager's return patterns that are "explained" by the market and ranges from 0 to 1. For example, an r-squared of 0.90 means that 90% of a portfolio's return can be explained by movement in the broad market (benchmark).

**Alpha** - The incremental return of a manager when the market is stationary. In other words, it is the extra return due to nonmarket factors. This risk-adjusted factor takes into account both the performance of the market as a whole and the volatility of the manager. A positive alpha indicates that a manager has produced returns above the expected level at that risk level, and vice versa for a negative alpha. Alpha is the Y intercept of the regression line.

**Jensen Alpha** - The incremental return of a manager over the risk-free rate when the market is stationary. In other words, it is the extra return over the risk-free rate due to non-market factors. This risk-adjusted factor takes into account both the performance of the market as a whole and the volatility of the manager. A positive Jensen Alpha indicates that a manager has produced returns above what would be expected at that risk level, and vice versa for a negative calculation. Jensen Alpha is the Y-intercept of the regression line between all manager and index returns after subtracting the risk-free rate.

**Beta** - This is a measure of a portfolio's volatility. Statistically, beta is the covariance of the portfolio in relation to the market. A beta of 1.00 implies perfect historical correlation of movement with the market. A higher beta manager will rise and fall more rapidly than the market, whereas a lower beta manager will rise and fall slower. For example, a 1.10 beta portfolio has historically been 10% more volatile than the market.

**Sharpe Ratio** - This statistic is computed by subtracting the return of the risk-free index (typically 91-day T-bill or some other cash benchmark) from the return of the manager to determine the risk-adjusted excess return. This excess return is then divided by the standard deviation of the manager. A manager taking on risk, as opposed to investing in cash, is expected to generate higher returns and Sharpe measures how well the manager generated returns with that risk. In other words, it is a measurement of efficiency utilizing the relationship between annualized risk-free return and standard deviation. The higher the Sharpe Ratio, the greater efficiency produced by this manager. For example, a Sharpe Ratio of 1 is better than a ratio of 0.5.

**Treynor Ratio** - Similar to the Sharpe Ratio, this statistic is computed by subtracting the return of the risk-free index (typically 91-day T-bill or some other cash benchmark) from the return of the manager to determine the risk-adjusted return. This excess return is then divided by the Beta of the portfolio. This is another efficiency ratio that evaluates whether the manager is being rewarded with additional return for each additional unit of risk being taken with risk being defined by Beta, a measure of systematic risk, not Total Risk (standard deviation).

**Sortino Ratio** - This measure is very similar to the Sharpe Ratio except that it is concerned only with downside volatility (unfavorable) versus total volatility (both favorable, upside volatility and unfavorable, downward volatility). This statistic is

computed by subtracting the return of the risk-free index (typically 91-day T-bill or other cash index) from the return of the manager to determine the risk-adjusted excess return. This excess return is then divided by the downside risk of the manager. A manager taking on risk, as opposed to investing in cash, is expected to generate higher returns and Sortino measures how well the manager "spends" that risk, while not penalizing them for upside volatility (outperformance). The higher the Sortino Ratio, the better; a Sortino Ratio of 1 is better than a ratio of 0.5 - higher excess return and/or lower downside risk.

**Calmar Ratio** - This ratio is calculated by dividing the annualized manager return by the max drawdown over a selected time period. This is a commonly used hedge fund measure since such funds often employ hedging strategies to protect returns in down markets; hence, the max drawdown is expected to be lower. Generally, a higher Calmar Ratio is better as it indicates the manager has higher returns and/or lower max drawdown.

**Tracking Error** - A measure of the amount of active risk that is being taken by a manager. This statistic is computed by subtracting the return of a specified benchmark or index from the manager's return for each period and then calculating the standard deviation of those differences. A higher tracking error indicates a higher level of risk - not necessarily a higher level of return - being taken relative to the specified benchmark. Tracking error only accounts for deviations away from the benchmark, but does not signal in which directions these deviations occur (positive or negative).

**Information Ratio** - This statistic is computed by subtracting the return of the market from the return of the manager to determine the excess return. The excess return is then divided by the standard deviation of the excess returns (or Tracking Error) to produce the information ratio. This ratio is a measure of the value added per unit of active risk by a manager over an index. Managers taking on higher levels of risk are expected to then generate higher levels of return, so a positive IR would indicate "efficient" use of risk by a manager. This is similar to the Sharpe Ratio, except this calculation is based on excess rates of return versus a benchmark instead of a risk-free rate.

**Upside Market Capture Ratio** - A measure of the manager's performance in up markets relative to the market itself. A value of 110 suggests the manager performs ten percent better than the market when the market is up during the selected time period. The return for the market for each quarter is considered an up market if it is greater than or equal to zero. The Upside Capture Ratio is calculated by dividing the return of the manager during the up market periods by the return of the market for the same period. Generally, the higher the UMC Ratio, the better (If the manager's UMC Ratio is negative, it means that during that specific time period, the manager's return for that period was actually negative). The number of up periods for a given series is the number of positive (and zero) returns in the series.

**Batting Average** - As the name would imply, batting average is a measure of the frequency of success. This ratio is calculated by taking the number of periods where the manager equals or outperforms the selected benchmark, divided by the total number of periods. This measure indicates a manager's frequency of success, without regard to degree of outperformance.

**Downside Market Capture Ratio** - A measure of the manager's performance in down markets relative to the market itself. A value of 90 suggests the manager's loss is only nine tenths of the market's loss during the selected time period. A market is considered down if the return for the benchmark is less than zero. The Downside Capture Ratio is calculated by dividing the return of the manager during the down market periods by the return of the market during the same periods. Generally, the lower the DMC Ratio, the better (If the manager's DMC Ratio is negative, it means that during that specific time period, the manager's return for that period was actually positive). The number of down periods for a given series is the number of negative returns in the series.