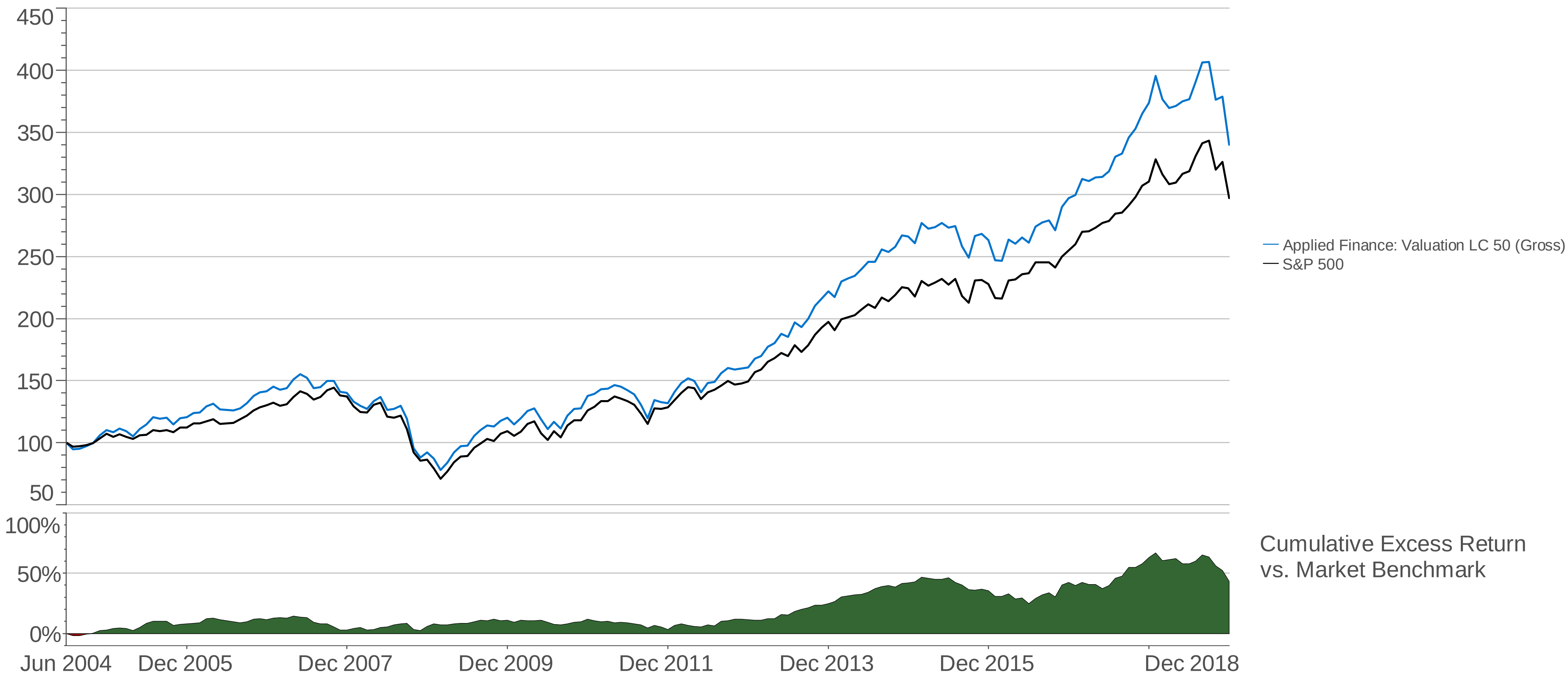
# Manager Performance

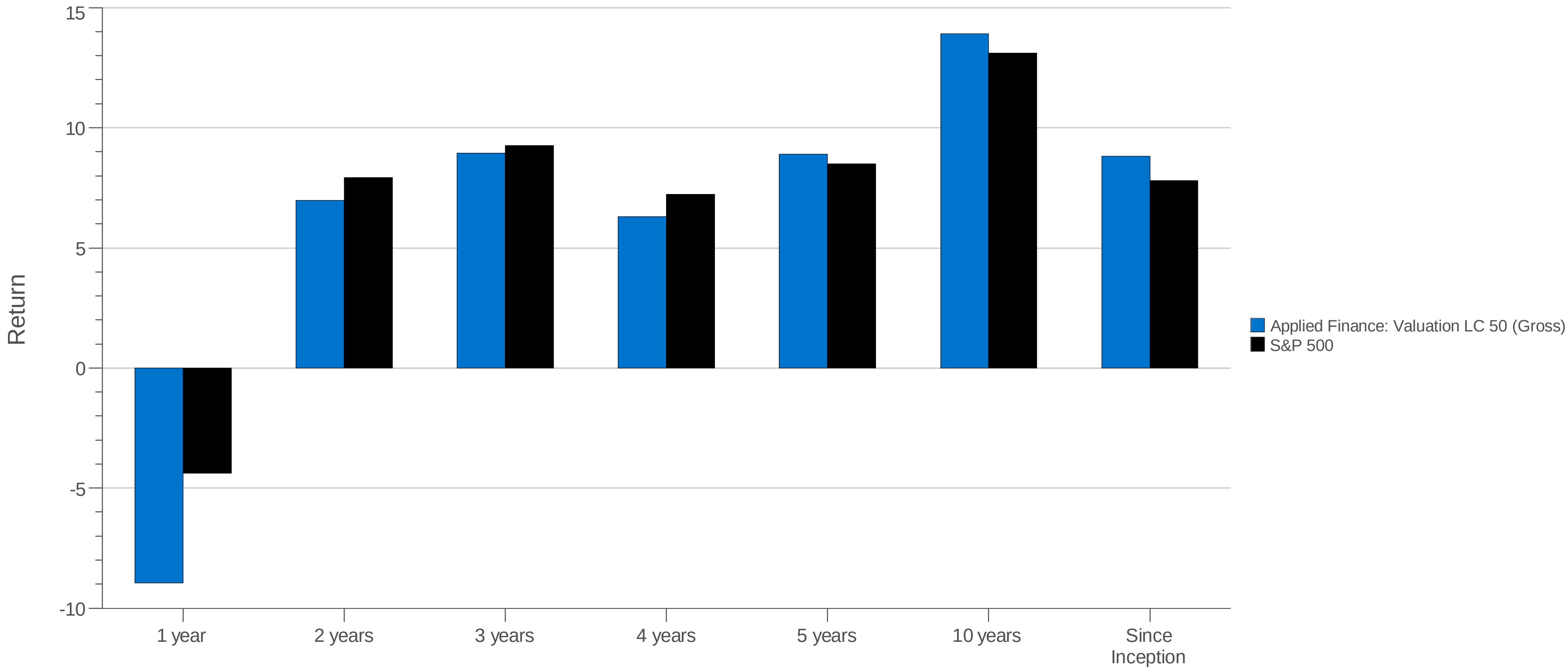
July 2004 - December 2018 (Single Computation)




| | Portfolio Performance | | | vs. S&P 500 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Annualized Return (%) | Cumulative Return (%) | Std Dev (%) | Annualized Excess Return (%) | Cumulative Excess Return (%) | Info Ratio | Significance Level (%) | Explained Variance (%) | Tracking Error (%) |
| Applied Finance: Valuation LC 50 (Gross) | 8.81 | 240.07 | 14.82 | 1.01 | 43.18 | 0.26 | 83.21 | 93.33 | 3.88 |

# Manager vs Benchmark: Return

July 2004 - December 2018 (not annualized if less than 1 year)



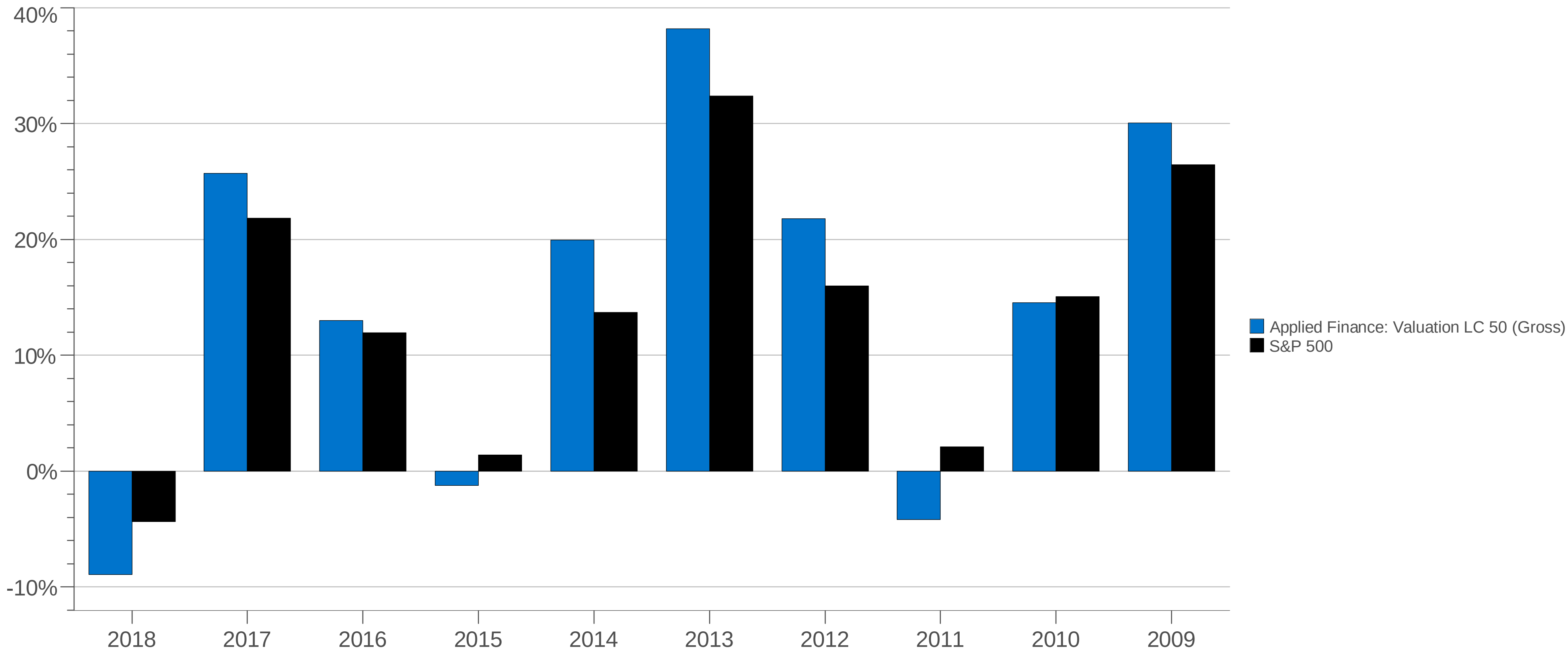

## Manager vs Benchmark: Return

July 2004 - December 2018 (not annualized if less than 1 year)

| | 1 year | 2 years | 3 years | 4 years | 5 years | 10 years | Since Inception |
|---|---|---|---|---|---|---|---|
| Applied Finance: Valuation LC 50 (Gross) | -8.95% | 6.98% | 8.94% | 6.30% | 8.90% | 13.91% | 8.81% |
| S&P 500 | -4.38% | 7.93% | 9.26% | 7.23% | 8.49% | 13.12% | 7.79% |

# Calendar Year Return

As of December 2018

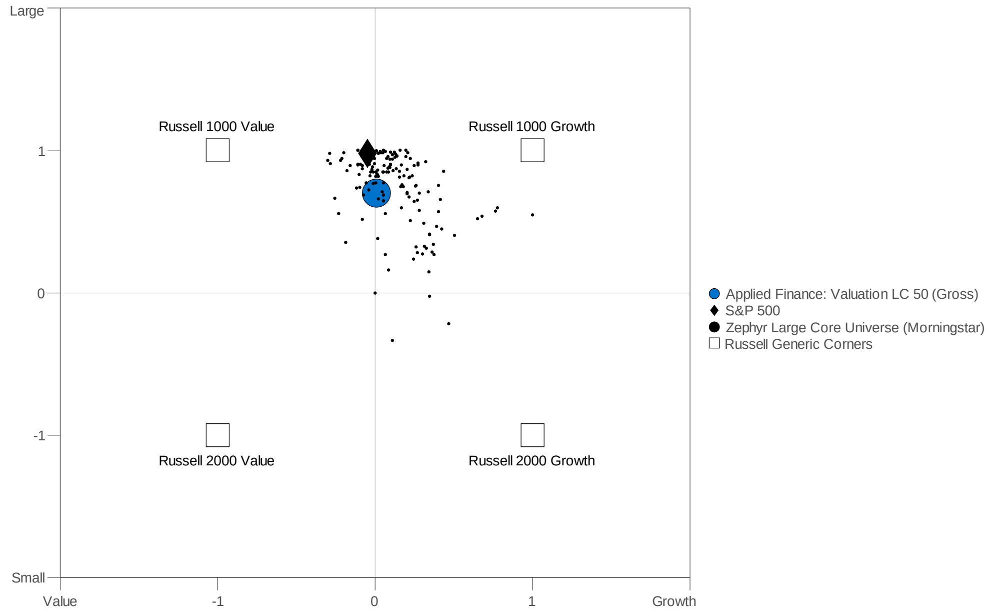



| | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|
| Applied Finance: Valuation LC 50 (Gross) | -8.95% | 25.69% | 12.98% | -1.24% | 19.95% | 38.18% | 21.78% | -4.17% | 14.53% | 30.06% |
| S&P 500 | -4.38% | 21.83% | 11.96% | 1.38% | 13.69% | 32.39% | 16.00% | 2.11% | 15.06% | 26.46% |

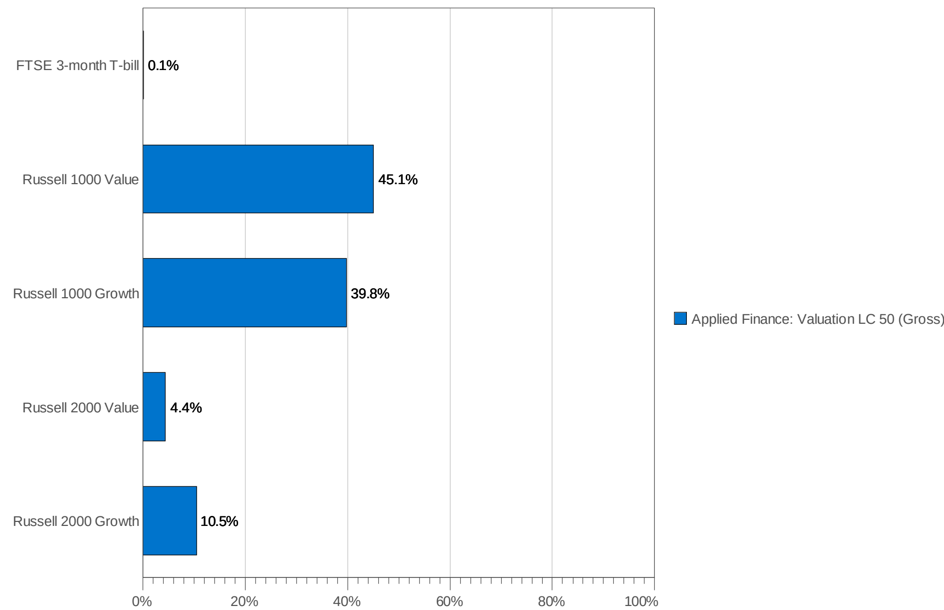
# Zephyr StyleADVISOR



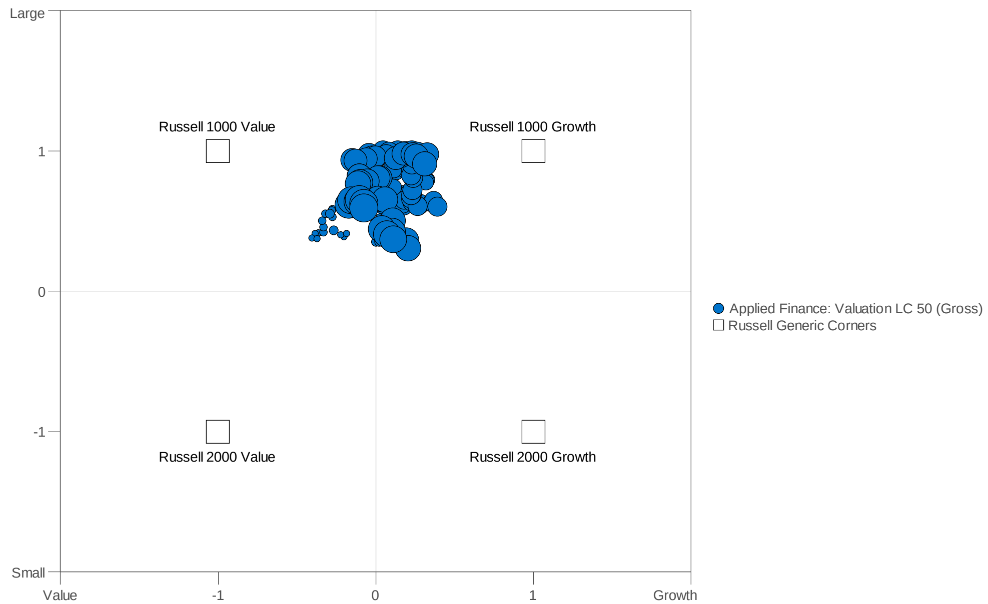
## Manager Style
July 2004 - December 2018 (Single Computation)



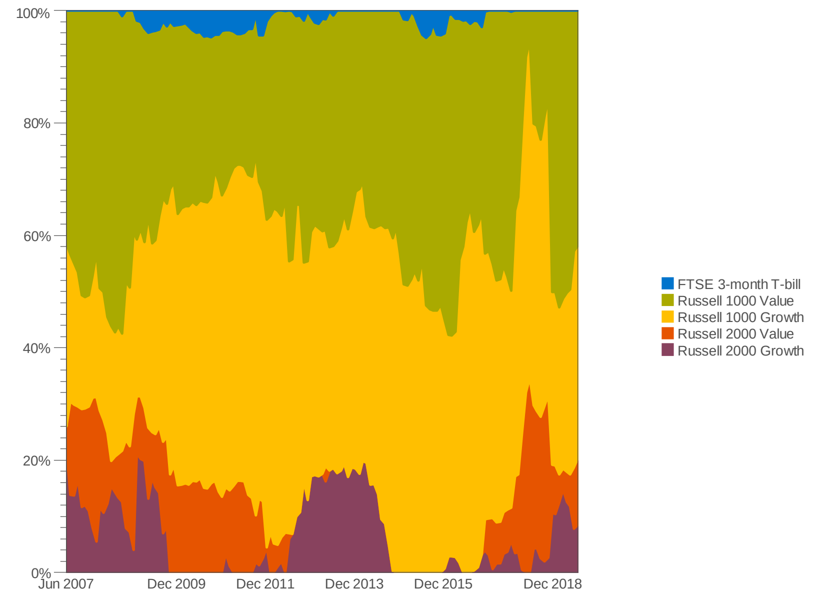

## Asset Allocation Applied Finance: Valuation LC 50 (Gross)
July 2004 - December 2018 (Single Computation)




## Manager Style
July 2004 - December 2018 (36-Month Moving Windows, Computed Monthly)



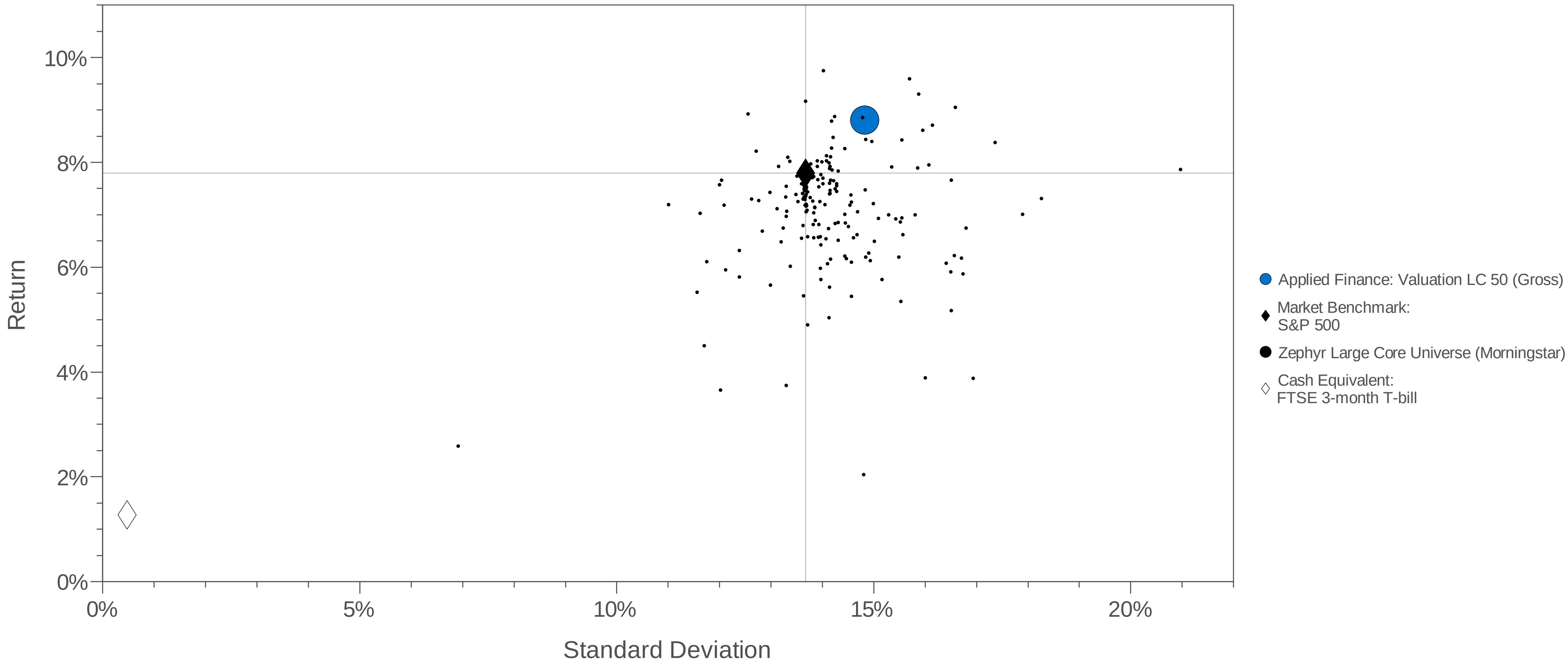

## Asset Allocation Applied Finance: Valuation LC 50 (Gross)
July 2004 - December 2018 (36-Month Moving Windows, Computed Monthly)




Created with Zephyr StyleADVISOR. Manager returns supplied by: Morningstar, Inc., Informa Investment Solutions, Inc.(PSN)

# Risk / Return

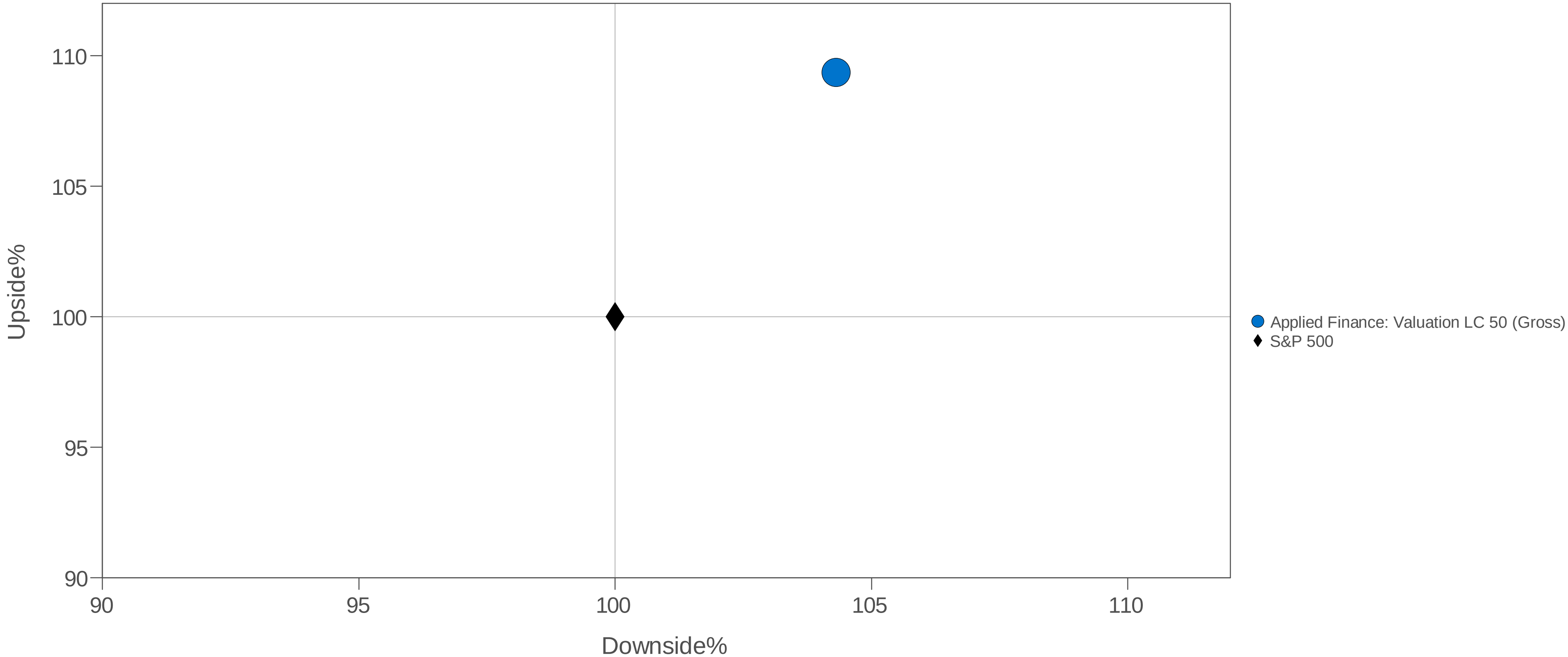
July 2004 - December 2018 (Single Computation)




| | Return (%) | Std Dev (%) | Downside Risk (%) | Beta vs. Market | Alpha vs. Market (%) | R-Squared vs. Market (%) | R-Squared vs. Style (%) | Sharpe Ratio | Tracking Error vs. Market (%) | Observs. |
|---|---|---|---|---|---|---|---|---|---|---|
| Applied Finance: Valuation LC 50 (Gross) | 8.81 | 14.82 | 11.43 | 1.0472 | 0.72 | 93.33 | 95.17 | 0.5088 | 3.8796 | 174 |
| S&P 500 | 7.79 | 13.67 | 10.58 | 1.0000 | 0.00 | 100.00 | 99.80 | 0.4772 | 0.0000 | 174 |

# Upside / Downside

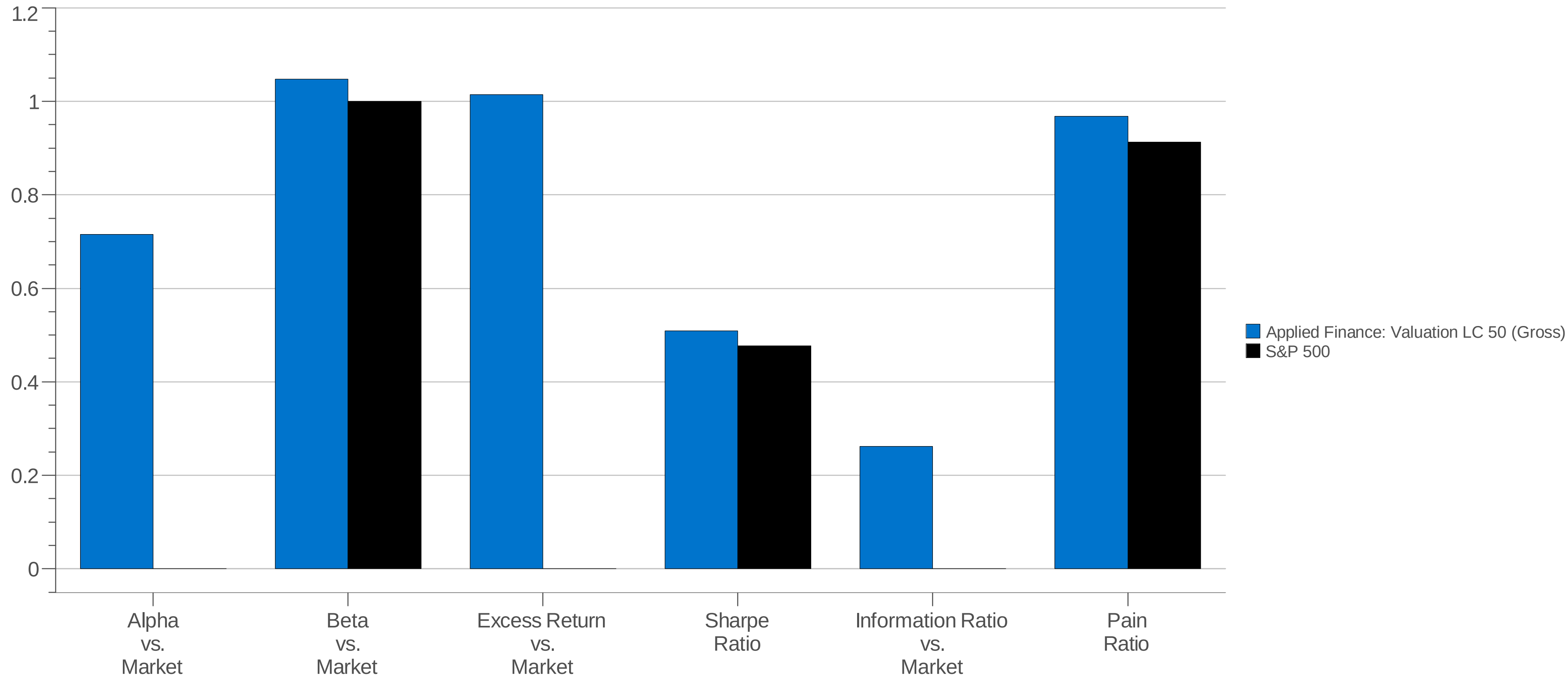
July 2004 - December 2018 (Single Computation)




| | # of Months | | Average Return (%) vs. Market | | Month (%) | | 1-Year (%) | | Market Benchmark (%) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Up | Down | Up Market | Down Market | Best | Worst | Best | Worst | Up Capture | Down Capture | R-Squared |
| Applied Finance: Valuation LC 50 (Gross) | 113 | 61 | 2.96 | -3.88 | 12.29 | -19.90 | 53.37 | -39.85 | 109.4 | 104.3 | 93.33 |
| S&P 500 | 119 | 55 | 2.74 | -3.69 | 10.93 | -16.79 | 53.62 | -43.32 | 100.0 | 100.0 | 100.00 |

# Multi-Statistic

July 2004 - December 2018



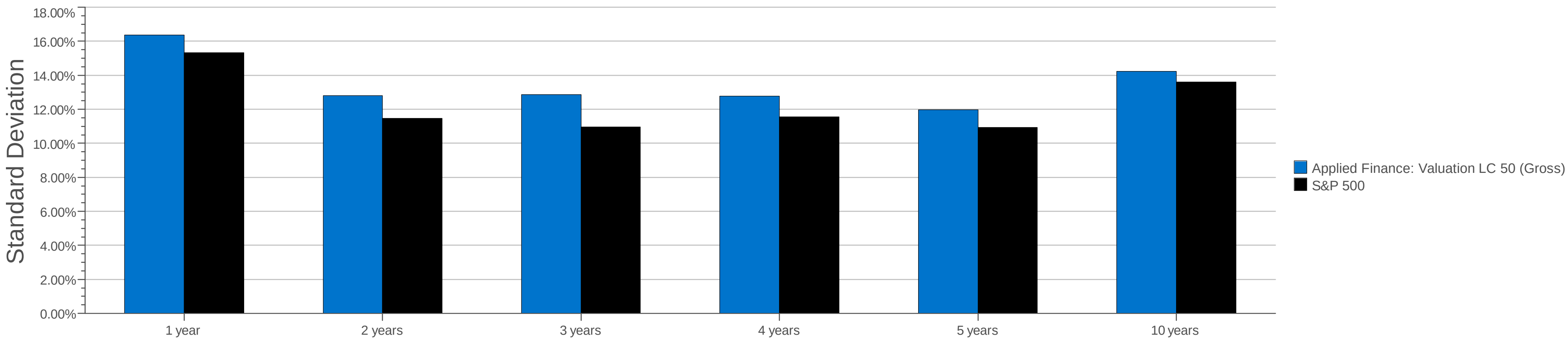

## Multi-Statistic (Custom Table)

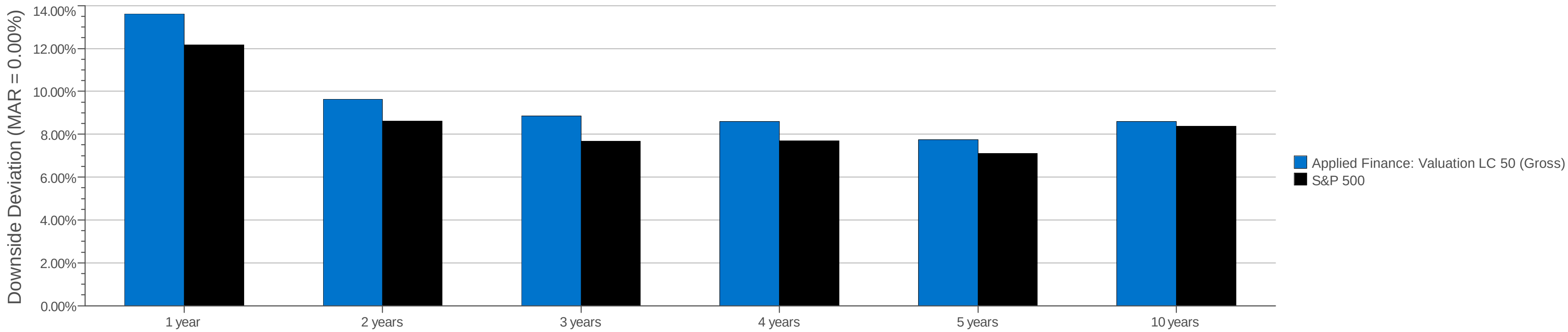
July 2004 - December 2018: Summary Statistics

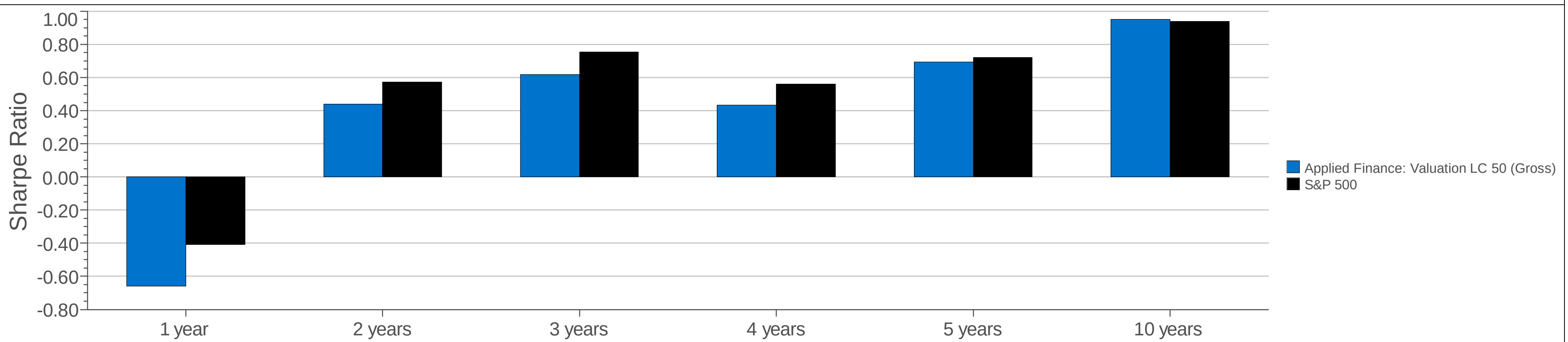
| | Alpha vs. Market | Beta vs. Market | Excess Return vs. Market | Sharpe Ratio | Information Ratio vs. Market | Pain Ratio |
|---|---|---|---|---|---|---|
| Applied Finance: Valuation LC 50 (Gross) | 0.72% | 1.05 | 1.01% | 0.51 | 0.26 | 0.97 |
| S&P 500 | 0.00% | 1.00 | 0.00% | 0.48 | 0.00 | 0.91 |

# Manager vs Benchmark: Multi-Statistic

July 2004 - December 2018 (not annualized if less than 1 year)

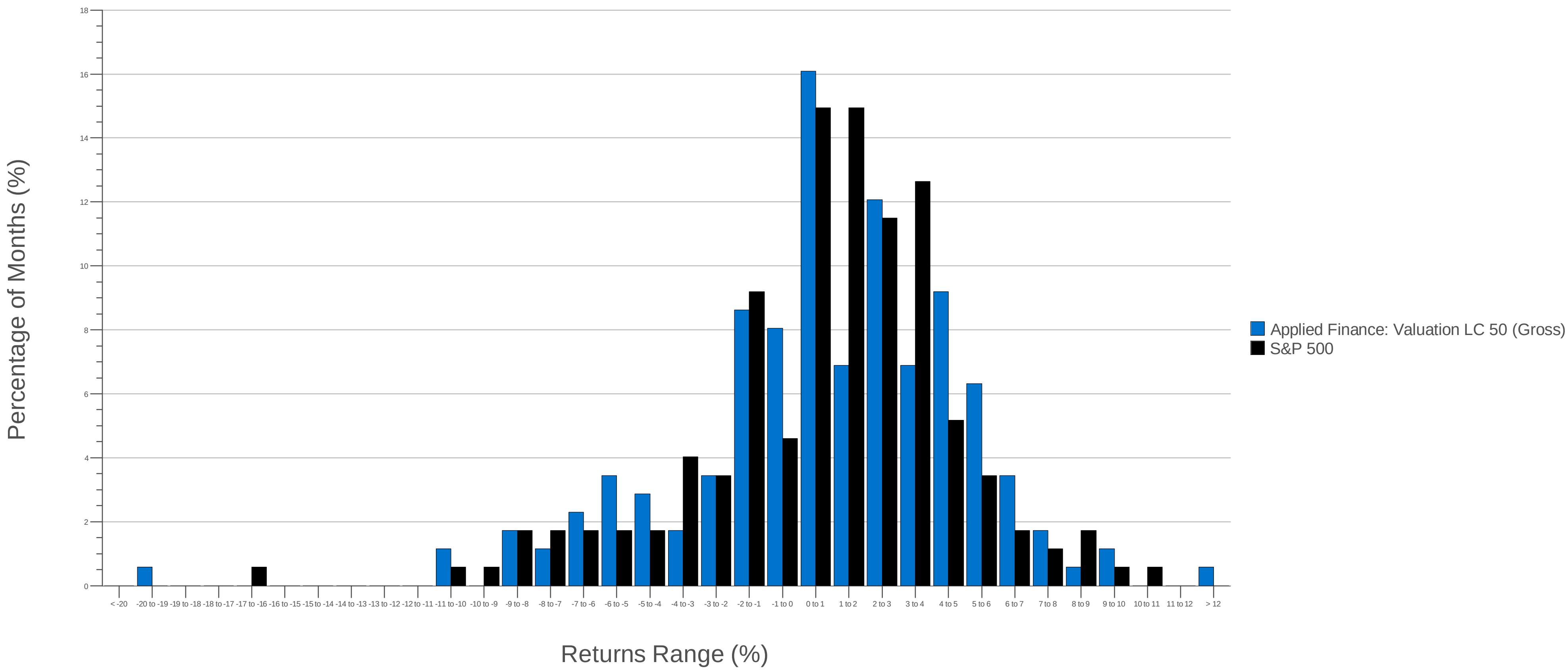


# Histogram of Returns

July 2004 - December 2018



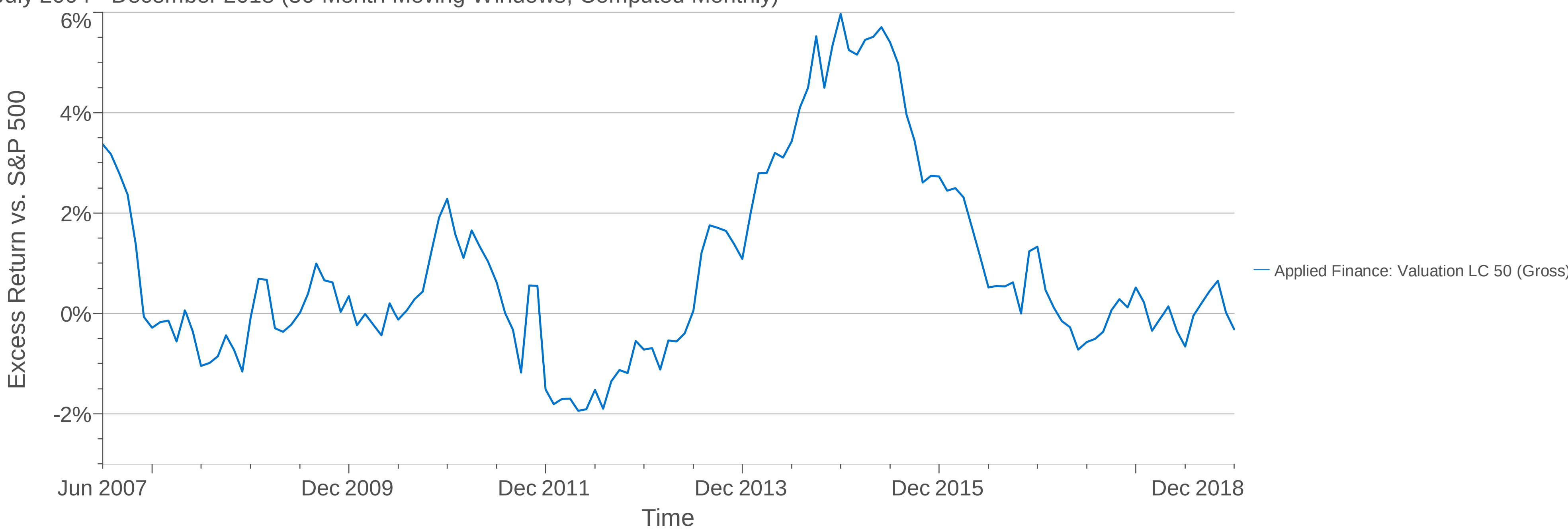

## Histogram of Returns (Custom Table)

July 2004 - December 2018:  Summary Statistics

| | Skewness | Kurtosis | Standard Deviation | # of Down Periods | Average Down Return | Downside Deviation (MAR = 0.00%) | # of Up Periods | Average Up Return | Upside Deviation (MAR = 0.00%) | Omega (MAR = 0.00%) | Sortino Ratio (MAR = 0.00%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Applied Finance: Valuation LC 50 (Gross) | -0.90 | 2.76 | 14.82% | 61 | -3.58% | 10.19% | 113 | 3.16% | 11.05% | 1.64 | 0.86 |
| S&P 500 | -0.83 | 2.27 | 13.67% | 55 | -3.69% | 9.48% | 119 | 2.74% | 10.10% | 1.61 | 0.82 |

## Excess Return vs. Market Benchmark / Time

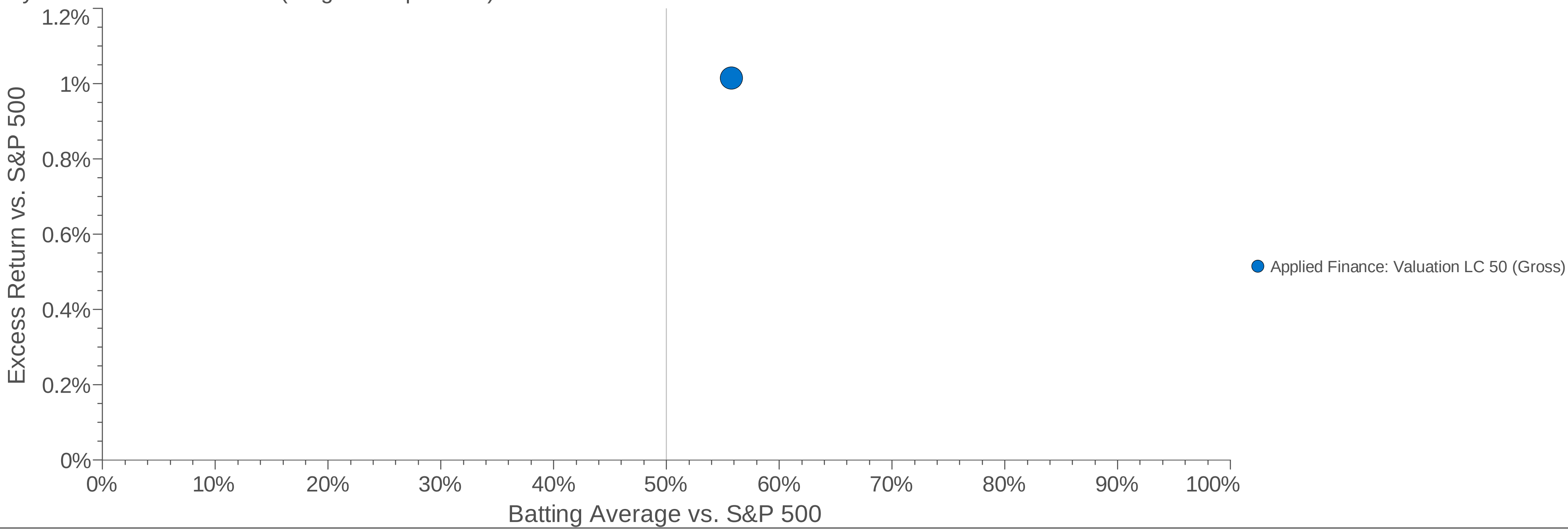
July 2004 - December 2018 (36-Month Moving Windows, Computed Monthly)



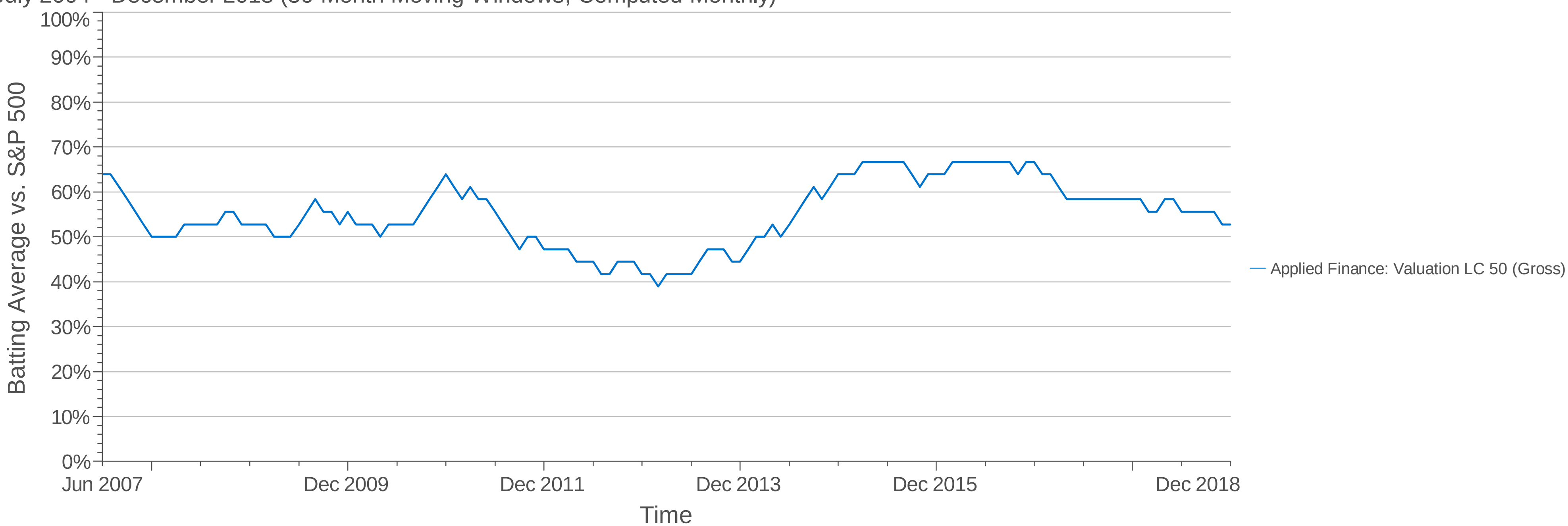

## Std Dev of Excess Return vs. Market Benchmark / Time

July 2004 - December 2018 (36-Month Moving Windows, Computed Monthly)

Excess Return vs. Market Benchmark / Batting Average vs. Market Benchmark
July 2004 - December 2018 (Single Computation)

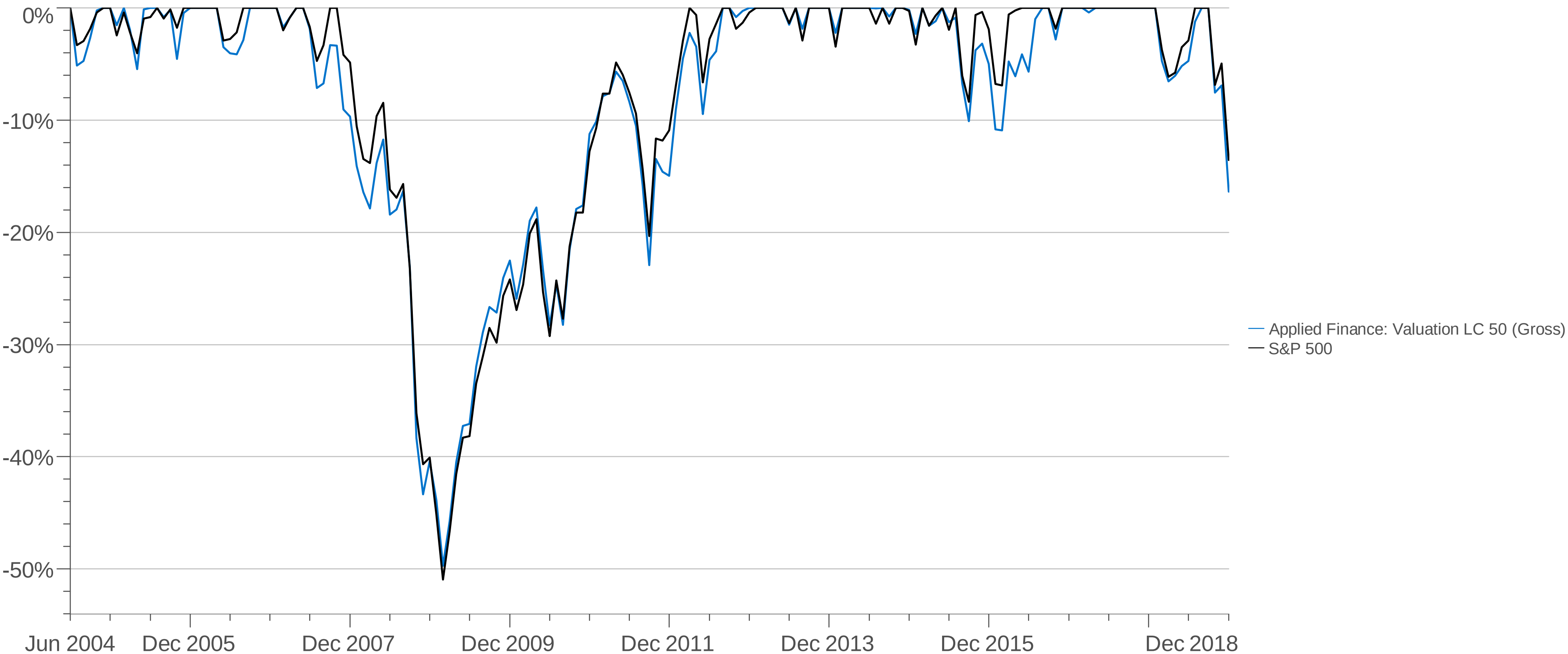



Batting Average vs. Market Benchmark / Time
July 2004 - December 2018 (36-Month Moving Windows, Computed Monthly)



# Drawdown

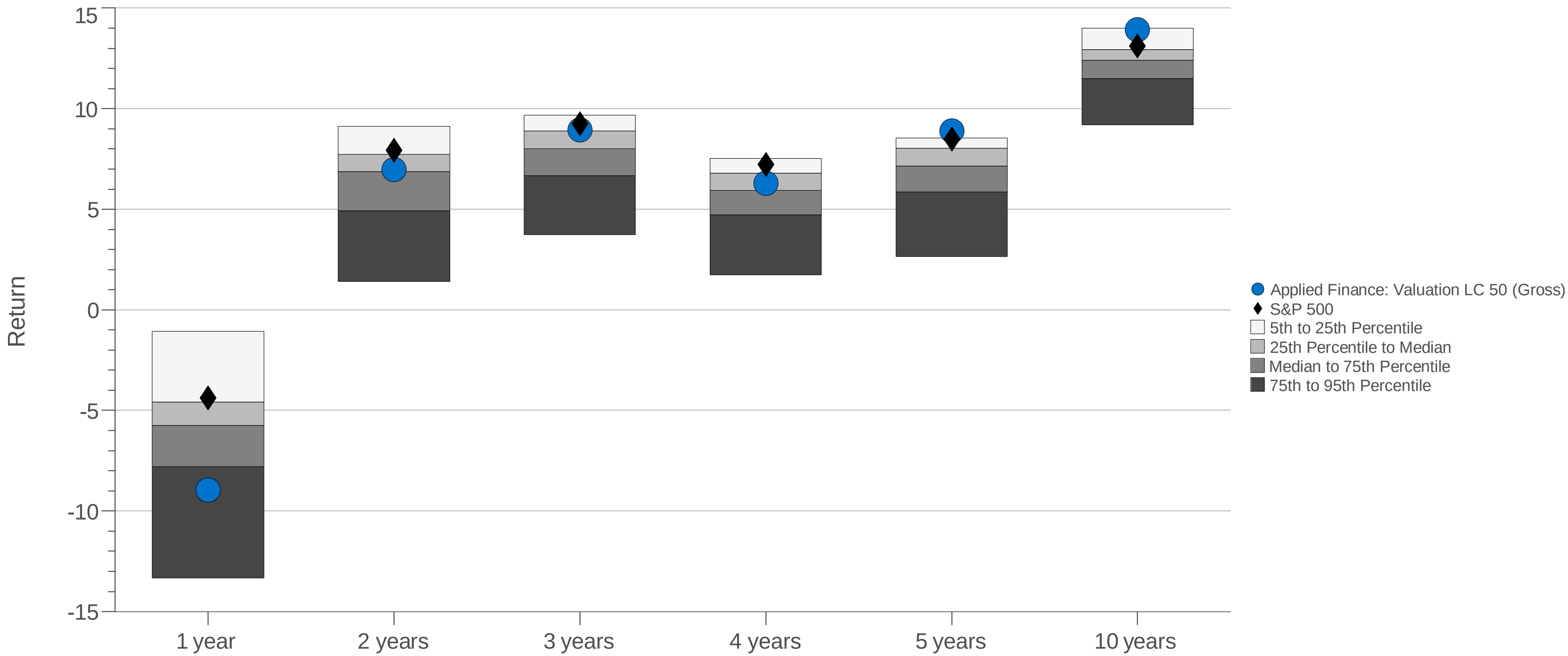
July 2004 - December 2018




| | Max Drawdown | Max Drawdown Begin Date | Max Drawdown End Date | Max Drawdown Length | Max Drawdown Recovery Date | Pain Index | Pain Ratio | Omega (MAR = 0.00%) | Gain to Loss Ratio | High Water Mark Date | To High Water Mark |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Applied Finance: Valuation LC 50 (Gross) | -49.71% | Jun 2007 | Feb 2009 | 21 | Aug 2012 | 7.79% | 0.97 | 1.64 | 0.88 | Sep 2018 | 19.57% |
| S&P 500 | -50.95% | Nov 2007 | Feb 2009 | 16 | Mar 2012 | 7.14% | 0.91 | 1.61 | 0.74 | Sep 2018 | 15.63% |

# Manager vs Zephyr Large Core Universe (Morningstar): Return

July 2004 - December 2018 (not annualized if less than 1 year)



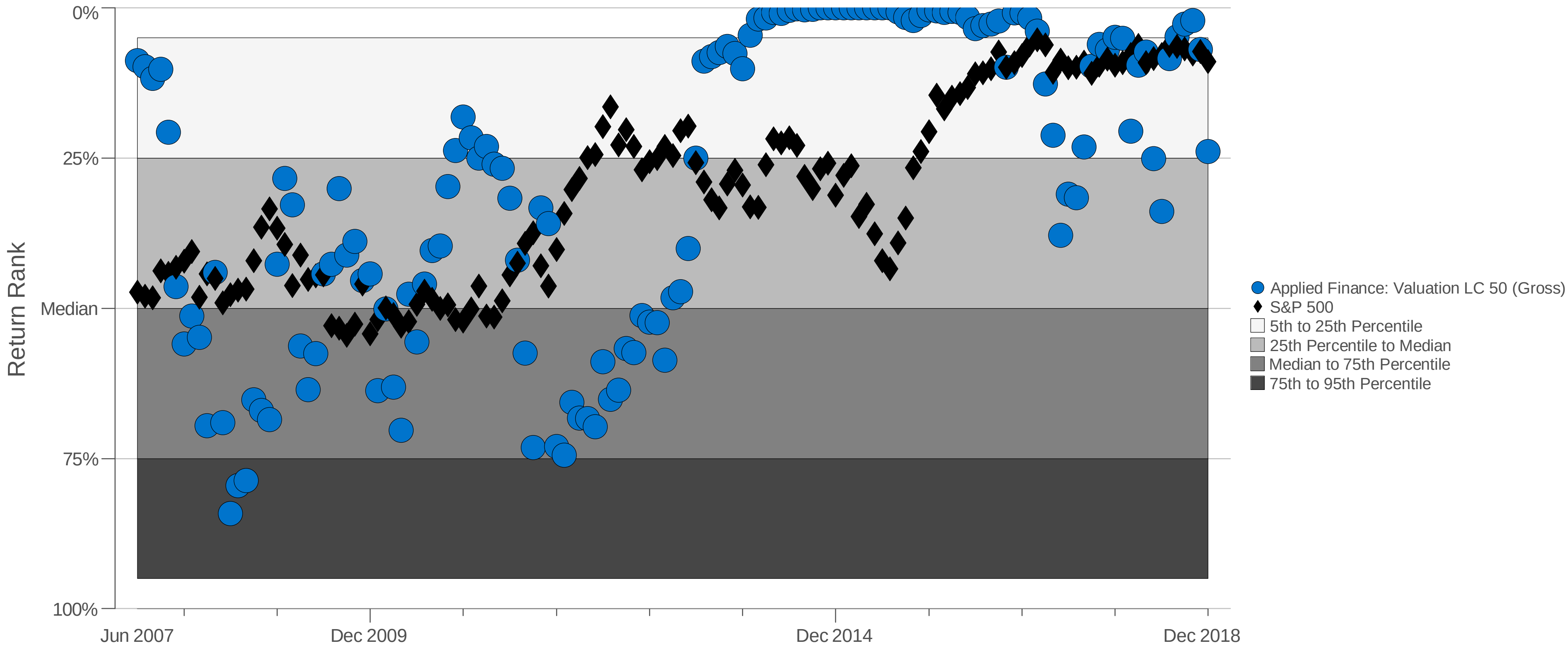

## Manager vs Zephyr Large Core Universe (Morningstar): Return

July 2004 - December 2018 (not annualized if less than 1 year)

| | 1 year<br>336 mng | 2 years<br>317 mng | 3 years<br>302 mng | 4 years<br>293 mng | 5 years<br>286 mng | 10 years<br>239 mng |
|---|---|---|---|---|---|---|
| Median | -5.74% | 6.87% | 8.01% | 5.94% | 7.16% | 12.41% |
| Applied Finance: Valuation LC 50 (Gross) | -8.95% | 6.98% | 8.94% | 6.30% | 8.90% | 13.91% |
| S&P 500 | -4.38% | 7.93% | 9.26% | 7.23% | 8.49% | 13.12% |

## Manager vs Zephyr Large Core Universe (Morningstar): Return Rank

July 2004 - December 2018 (36-Month Moving Windows, Computed Monthly)



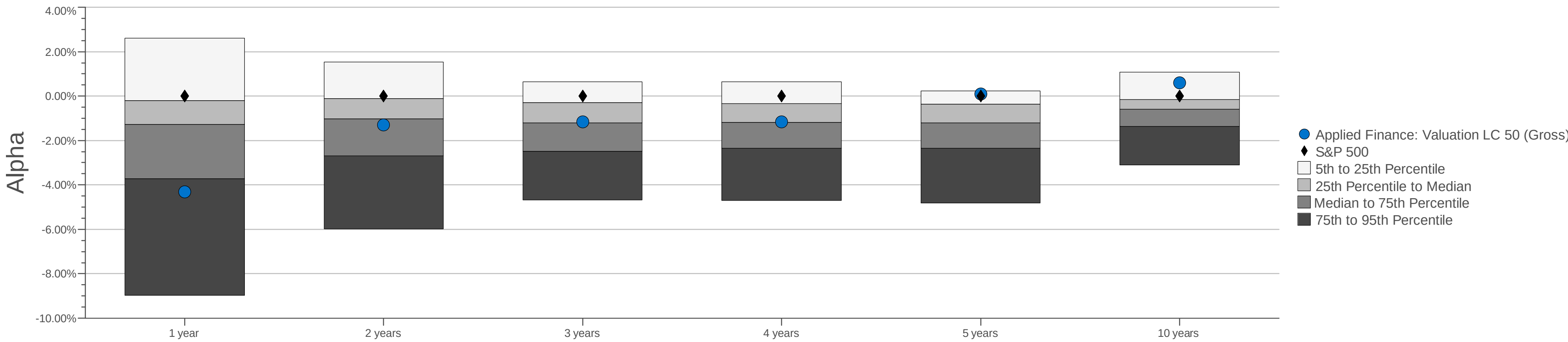

## Manager vs Zephyr Large Core Universe (Morningstar): Return Rank

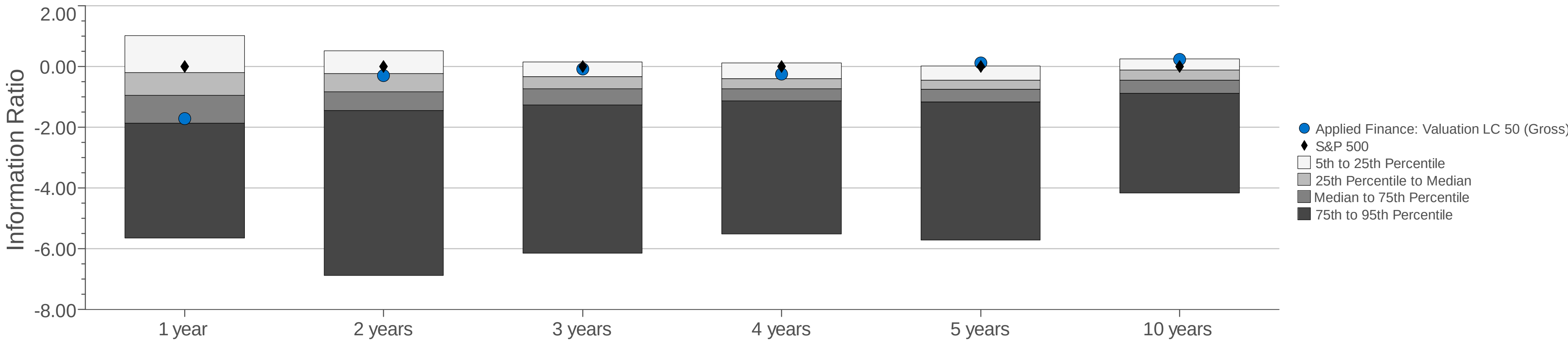
July 2004 - December 2018 (36-Month Moving Windows, Computed Monthly)

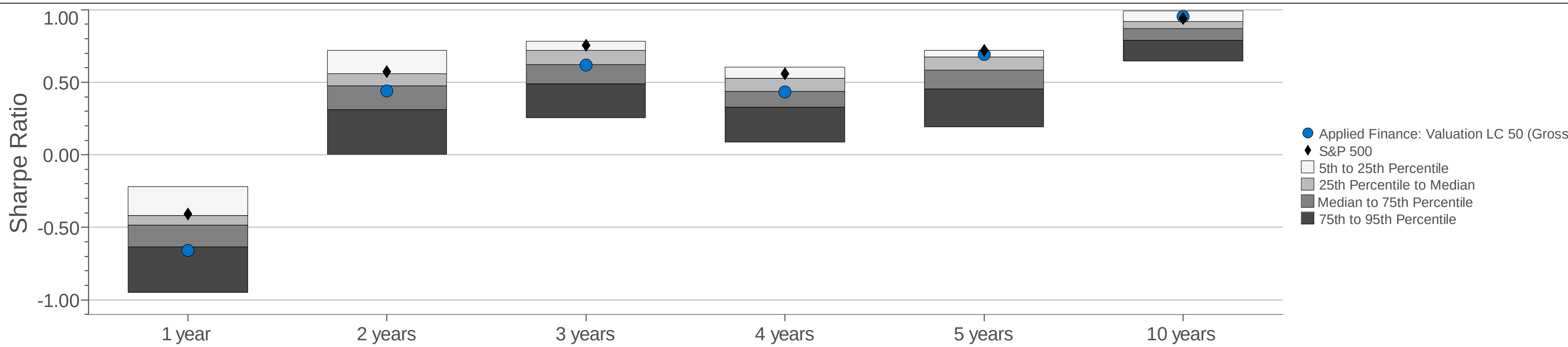
| | May 2008<br>206 mng | May 2009<br>215 mng | Apr 2010<br>221 mng | Apr 2011<br>234 mng | Mar 2012<br>240 mng | Mar 2013<br>252 mng | Mar 2014<br>260 mng | Feb 2015<br>268 mng | Feb 2016<br>279 mng | Jan 2017<br>287 mng | Jan 2018<br>293 mng | Dec 2018<br>302 mng |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Applied Finance: Valuation LC 50 (Gross) | 69.04% | 57.56% | 70.34% | 26.02% | 68.29% | 48.25% | 1.69% | 0.00% | 0.76% | 1.69% | 5.10% | 23.93% |
| S&P 500 | 49.07% | 44.63% | 52.97% | 51.47% | 28.44% | 24.57% | 26.12% | 26.29% | 16.78% | 6.14% | 9.16% | 8.94% |

# Manager vs Zephyr Large Core Universe (Morningstar): Multi-Statistic

## July 2004 - December 2018 (not annualized if less than 1 year)

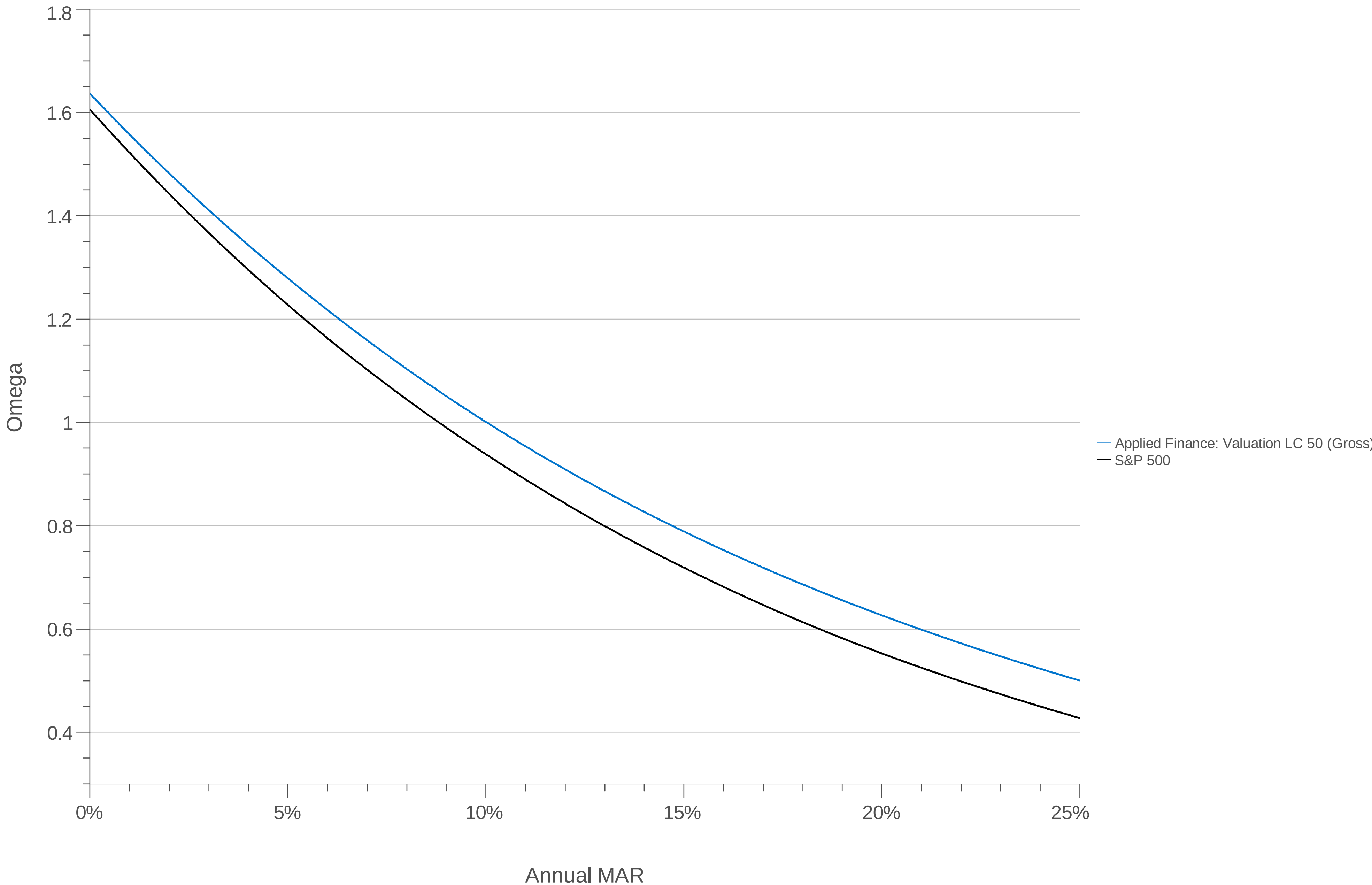


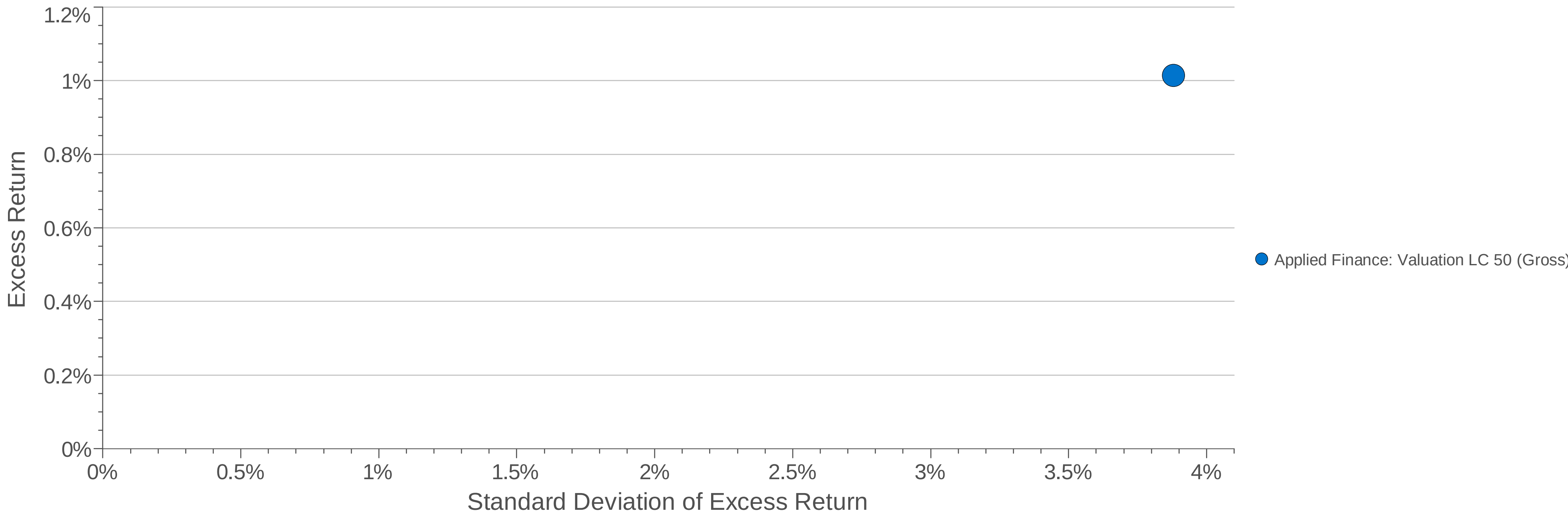



# Omega

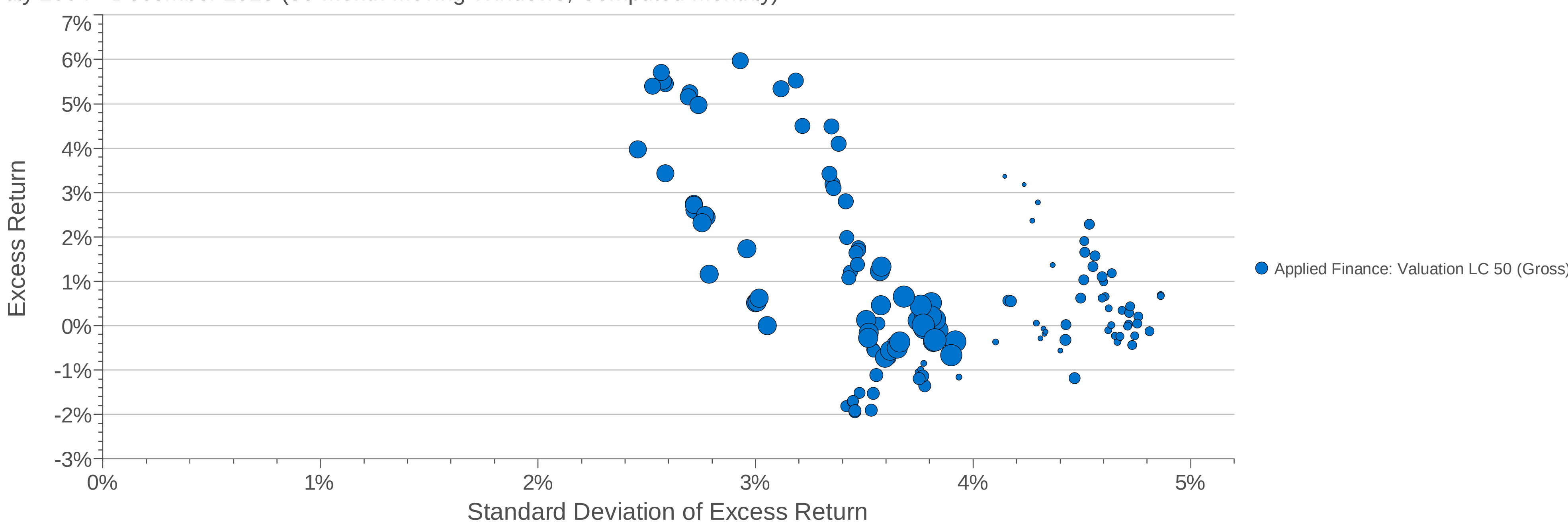
July 2004 - December 2018



Annualized Excess Return / Standard Deviation of Excess Return (vs. S&P 500)
July 2004 - December 2018 (Single Computation)




Annualized Excess Return / Standard Deviation of Excess Return (vs. S&P 500)
July 2004 - December 2018 (36-Month Moving Windows, Computed Monthly)



# Correlation Matrix: Returns vs. S&P 500

July 2004 - December 2018

| | (1) | (2) |
|---|---|---|
| 1) Applied Finance: Valuation LC 50 (Gross) | 1.00 | |
| 2) S&P 500 | 0.97 | 1.00 |

# Periodic Returns
January 2014 - December 2018

| | | Jan | Feb | Mar | Q1 | Apr | May | Jun | Q2 | Jul | Aug | Sep | Q3 | Oct | Nov | Dec | Q4 | Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Applied Finance: Valuation LC 50 (Gross) | 2018 | 5.80 | -4.73 | -1.89 | -1.11 | 0.52 | 0.94 | 0.46 | 1.93 | 3.71 | 4.09 | 0.04 | 7.99 | -7.51 | 0.65 | -10.16 | -16.37 | -8.95 |
| | 2017 | 0.79 | 4.25 | -0.41 | 4.64 | 0.93 | 0.11 | 1.41 | 2.46 | 3.65 | 0.77 | 3.93 | 8.56 | 2.05 | 3.44 | 2.31 | 7.99 | 25.69 |
| | 2016 | -6.12 | -0.11 | 6.89 | 0.24 | -1.35 | 2.05 | -1.58 | -0.92 | 4.94 | 1.20 | 0.58 | 6.82 | -2.82 | 6.94 | 2.48 | 6.50 | 12.98 |
| | 2015 | -2.14 | 6.22 | -1.58 | 2.30 | 0.43 | 1.18 | -1.27 | 0.32 | 0.42 | -5.91 | -3.59 | -8.91 | 7.00 | 0.64 | -1.91 | 5.63 | -1.24 |
| | 2014 | -2.19 | 5.82 | 1.07 | 4.61 | 0.96 | 2.30 | 2.42 | 5.78 | -0.02 | 4.11 | -0.77 | 3.29 | 1.54 | 3.52 | -0.16 | 4.95 | 19.95 |
| S&P 500 | 2018 | 5.73 | -3.69 | -2.54 | -0.76 | 0.38 | 2.41 | 0.62 | 3.43 | 3.72 | 3.26 | 0.57 | 7.71 | -6.84 | 2.04 | -9.03 | -13.52 | -4.38 |
| | 2017 | 1.90 | 3.97 | 0.12 | 6.07 | 1.03 | 1.41 | 0.62 | 3.09 | 2.06 | 0.31 | 2.06 | 4.48 | 2.33 | 3.07 | 1.11 | 6.64 | 21.83 |
| | 2016 | -4.96 | -0.13 | 6.78 | 1.35 | 0.39 | 1.80 | 0.26 | 2.46 | 3.69 | 0.14 | 0.02 | 3.85 | -1.82 | 3.70 | 1.98 | 3.82 | 11.96 |
| | 2015 | -3.00 | 5.75 | -1.58 | 0.95 | 0.96 | 1.29 | -1.94 | 0.28 | 2.10 | -6.03 | -2.47 | -6.44 | 8.44 | 0.30 | -1.58 | 7.04 | 1.38 |
| | 2014 | -3.46 | 4.57 | 0.84 | 1.81 | 0.74 | 2.35 | 2.07 | 5.23 | -1.38 | 4.00 | -1.40 | 1.13 | 2.44 | 2.69 | -0.25 | 4.93 | 13.69 |