



## ANALYTICS INVESTMENT ADVISORS, LLC

### Performance Summary<sup>1</sup>

|                            | 2012-23 Avg. | YTD <sup>2</sup><br>03/28/24 | Risk Statistics <sup>3</sup> |                |       |                 |                   |
|----------------------------|--------------|------------------------------|------------------------------|----------------|-------|-----------------|-------------------|
| S&P500 (\$SPX)             | 12.87%       | 10.16%                       |                              |                |       |                 |                   |
| US Bond Index <sup>4</sup> | 1.60%        | -.69%                        |                              |                |       |                 |                   |
|                            |              |                              | Beta                         | R <sup>2</sup> | SD    | Sharpe<br>Ratio | MPRS <sup>5</sup> |
| Moderate                   | 12.69%       | 7.71%                        | 1.09                         | 95             | 19.67 | .46             | 60                |
| Assertive 1                | 14.85%       | 7.31%                        | 1.13                         | 90             | 21.02 | .45             | 64                |
| Assertive 2                | 24.72%       | 12.99%                       | 1.59                         | 97             | 28.25 | .48             | 77                |
| Aggressive                 | 30.90%       | 21.91%                       | 1.80                         | 99             | 31.58 | .49             | 88                |



<sup>1</sup> Moderate: Prudent investors desiring portfolios designed to accomplish medium long-term return. Calculated risk is acceptable to achieve good returns. Assertive 1 & 2: Investors with sufficient income to invest mostly in capital growth. Higher volatility and more aggressive investments are acceptable to accumulate wealth in the long run. Aggressive: Investors intending to compromise portfolio balance in pursuit of higher long-term returns. Security of capital is secondary to potential wealth accumulation.

<sup>2</sup> Net Average Return, Portfolio Center, Schwab Portfolio Technologies. Fees are negotiable and range between .5% to 1.0% per year for assets under management.

<sup>3</sup> Risk Statistics, Morningstar Advisor Workstation; most recent 3 years, computed semi-annually.

Beta Expected change in portfolio return per 1% change in market index return.

R<sup>2</sup> Percent of variation in regression equation explained by the independent variable (S&P500).

SD Standard deviation of the dependent variable (Net Return).

Sharpe Reward-to-Variability Ratio, i.e., portfolio return above risk free rate of return divided by standard deviation.

<sup>4</sup> Vanguard Total Bond BND.

<sup>5</sup> Morningstar Portfolio Current Risk Scores for Target Allocation Indices: Moderate (25-49), Aggressive (50-81), and Extremely Aggressive (82-100).



ANALYTICS INVESTMENT ADVISORS, LLC

Historical Stock, Bond, Bill Returns & Inflation 1994-2023 <sup>1</sup>

|                 | Year | SPX    | CPI     | 10 Year | 3 Month |       |
|-----------------|------|--------|---------|---------|---------|-------|
| 1               | 30   | 1994   | -1.54%  | 2.61%   | -8.04%  | 5.00% |
| 2               | 29   | 1995   | 34.11%  | 2.81%   | 23.48%  | 3.50% |
| 3               | 28   | 1996   | 20.26%  | 2.93%   | 1.43%   | 5.00% |
| 4               | 27   | 1997   | 31.01%  | 2.34%   | 9.94%   | 5.35% |
| 5               | 26   | 1998   | 26.67%  | 1.55%   | 14.92%  | 4.33% |
| 6               | 25   | 1999   | 19.53%  | 2.19%   | -8.25%  | 5.37% |
| 7               | 24   | 2000   | -10.14% | 3.38%   | 16.66%  | 5.73% |
| 8               | 23   | 2001   | -13.04% | 2.83%   | 5.57%   | 1.80% |
| 9               | 22   | 2002   | -23.37% | 1.59%   | 15.12%  | 1.20% |
| 10              | 21   | 2003   | 26.38%  | 2.27%   | 0.38%   | 1.00% |
| 11              | 20   | 2004   | 8.99%   | 2.68%   | 4.49%   | 2.18% |
| 12              | 19   | 2005   | 3.00%   | 3.39%   | 2.87%   | 4.31% |
| 13              | 18   | 2006   | 13.62%  | 3.23%   | 1.96%   | 4.88% |
| 14              | 17   | 2007   | 3.53%   | 2.85%   | 10.21%  | 3.31% |
| 15              | 16   | 2008   | -38.49% | 3.84%   | 20.10%  | 1.59% |
| 16              | 15   | 2009   | 23.45%  | -0.36%  | -11.12% | 0.14% |
| 17              | 14   | 2010   | 12.78%  | 1.64%   | 8.46%   | 0.13% |
| 18              | 13   | 2011   | 0.00%   | 3.16%   | 16.04%  | 0.03% |
| 19              | 12   | 2012   | 13.41%  | 2.07%   | 2.97%   | 0.05% |
| 20              | 11   | 2013   | 29.60%  | 1.46%   | -9.10%  | 0.07% |
| 21              | 10   | 2014   | 11.39%  | 1.62%   | 10.75%  | 0.05% |
| 22              | 9    | 2015   | -0.73%  | 0.12%   | 1.28%   | 0.21% |
| 23              | 8    | 2016   | 9.54%   | 1.26%   | 0.69%   | 0.51% |
| 24              | 7    | 2017   | 19.42%  | 2.13%   | 2.80%   | 1.39% |
| 25              | 6    | 2018   | -6.24%  | 2.44%   | -0.02%  | 2.37% |
| 26              | 5    | 2019   | 28.80%  | 1.81%   | 7.18%   | 1.55% |
| 27              | 4    | 2020   | 16.26%  | 1.23%   | 10.01%  | 0.09% |
| 28              | 3    | 2021   | 26.89%  | 4.70%   | 1.52%   | 0.06% |
| 29              | 2    | 2022   | -19.44% | 8.38%   | -12.75% | 3.92% |
| 30              | 1    | 2023   | 24.23%  | 3.40%   | 3.88%   | 5.07% |
| Arithmetic Mean |      | 5 Yrs  | 15.35%  | 3.90%   | 1.97%   | 2.14% |
| Arithmetic Mean |      | 10 Yrs | 11.01%  | 2.71%   | 2.53%   | 1.52% |
| Arithmetic Mean |      | 20 Yrs | 9.00%   | 2.55%   | 3.61%   | 1.60% |
| Arithmetic Mean |      | 30 Yrs | 9.66%   | 2.52%   | 4.78%   | 2.34% |
| Geometric Mean  |      | 5 Yrs  | 13.80%  | 3.68%   | 0.87%   | 1.59% |
| Geometric Mean  |      | 10 Yrs | 9.89%   | 2.49%   | 0.98%   | 1.01% |
| Geometric Mean  |      | 20 Yrs | 8.36%   | 2.48%   | 3.12%   | 1.38% |
| Geometric Mean  |      | 30 Yrs | 8.10%   | 2.39%   | 4.26%   | 2.42% |

<sup>1</sup> <http://pages.stern.nyu.edu>; Federal Reserve St. Louis; and, InflationData.com

