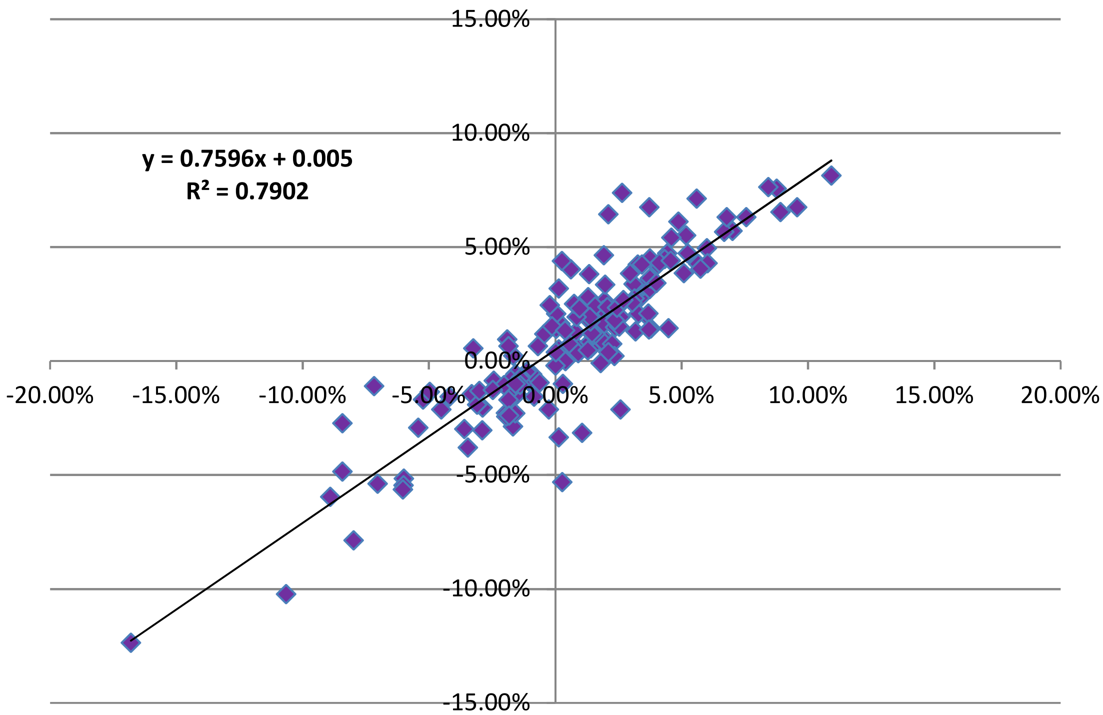
Equity Performance Analytics Sheet

Time Period	161 monthly observations (August 2003 through December 2016)
Annualized Return	12.94%
of S&P500	*8.49%*
Standard Deviation	+/-11.68%
of S&P500	*+/-13.66%*
Alpha	.0050 monthly, 6.17% annualized
Beta	.7596
Correlation Coefficient R	.8889
R Squared	.7902
Sharpe Ratio	1.0072
of S&P500	*0.5819*
Jensen's Alpha	.0633 or 6.33% annualized
Treynor Ratio	.1645 or 16.45
of S&P500	*.0826 or 8.26*

Monthly Alpha, Beta Equation, Linear Regression of Monthly Returns against S&P 500 Index

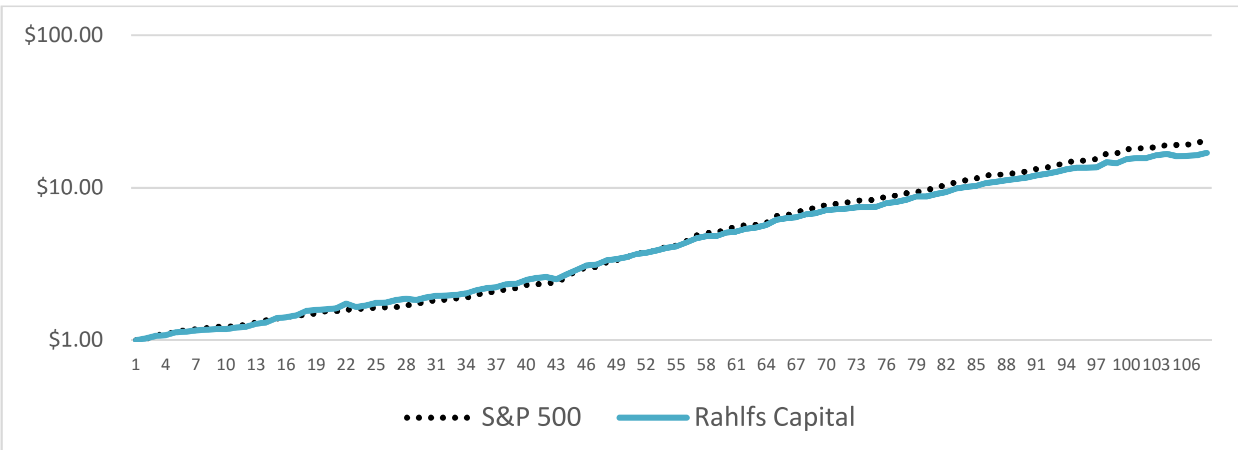


Upside / Downside Capture Ratio

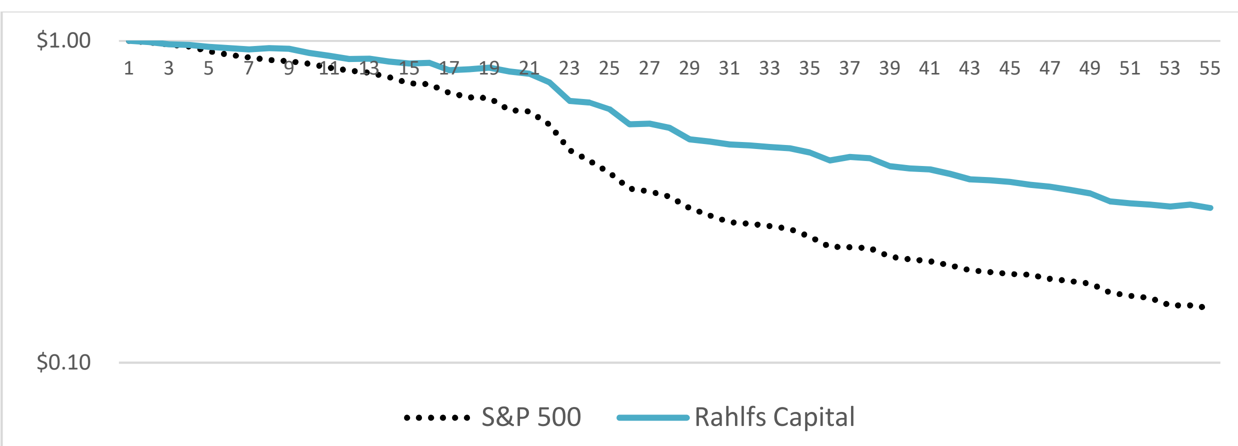
For this capture analysis, the dataset of 161 monthly observations was divided into up months and down months, determined by whether the S&P 500 was up or down each month. An analysis was performed comparing these equity returns with the S&P 500 returns during those two up/down subgroups:

Annualized Average Equity Returns		**Rahlfs Capital**	**S&P 500 Returns**	**Tracking or Capture Rate**
Only Up Months	107 Months (2/3 of time)	37.32%	40.06%	93% of Upside
Only Down Months	54 Months (1/3 of time)	-23.32%	-34.61%	67% of Downside

The historical analysis suggests that in a perpetual bull market, Rahlfs Capital could somewhat lag the S&P 500 Index, capturing only 93% of the upside during those periods,



but in a perpetual bear market, Rahlfs Capital could hold up better than the S&P 500 Index, capturing or participating in only 67% of the downside during those periods, as shown in these log-linear charts.



These results are interesting because …despite sometimes lagging the S&P 500 in up months which have been occurring 2/3^{rds} of the time… the equity returns have beaten the S&P 500 over the entire time period simply by losing less in the down months which have been occurring about 1/3rd of the time. It confirms the wisdom of trying to avoid large losses. For example, a 50% decline would require a subsequent 100% return to get back to even, while a 25% decline would only require a somewhat easier 33% return.

These returns are the result of conventional common stock investments. The analysis suggests these investments have been less volatile than the general stock market while producing a higher return.

All of the disclosures noted on the sheet detailing our aggregate performance results also apply to the data on this analytics sheet. The following discussion carefully describes the calculation process for these statistics, conveying the results as prescribed by the original authors.

Time Period – all calculations use monthly return data as a base time period, as is standard to the industry. When recommended by the author or academic studies for each statistic, the result may then be annualized to correspond to customary annual rates of return.

Annualized Return – often described as a compound annual return, this is the annualized geometric mean return which, if earned every year, would compound to equal the same cumulative ending value experienced by the actual investments. If k=annualized return and c=cumulative return, then (1+k)^(#months/12) = (1+c) and this is the standard method of conveying a compound annual return.

Standard Deviation – this is a widely used measurement of the variability or dispersion of data from its mean average. Larger numbers convey greater volatility, and in a normal distribution about 68% of the observations will occur in a range within one standard deviation from the mean. Our calculation is not based on a sample, the entire population of observations in the time period are included. The results suggest that the firm's equity investment returns are less volatile than the returns of the S&P 500 Index.

Beta – describes the relation between your returns and the overall stock market, and specifically is the covariance of your investment with the stock market as a fraction of the total variance of the stock market. At a beta of 1.00 your returns perfectly follow the market's returns, at a beta above 1.00 your returns have a greater variance than the market. In a linear regression comparing the returns on your portfolio with those of the S&P 500, beta is essentially the b coefficient in the linear equation y=bx + a and alpha is the residual "a" in the equation. This analysis stems from the work of Dr. Harry Markowitz in the mid-1950s, but was formalized by Dr. William Sharpe and Jack Treynor in the early 1960s. When applied to our historic monthly returns, the results suggest that the firm's equity investment returns have been less sensitive and less variable in relation to the general swings of the stock market.

Correlation Coefficient – is a measure of the linear dependence between two variables, in this case the actual equity portfolio monthly returns and the monthly returns of the S&P 500. A perfect correlation would have a coefficient of +1.00 and a perfect negative inverse correlation would be -1.00. This is often referred to as a Pearson product-moment correlation coefficient, defined as the covariance of the two variables divided by the product of their standard deviations. It is thought that the introduction of investments, having correlation coefficients which vary from a perfect +1.00, have a positive benefit on economic diversification.

R Squared, Coefficient of Determination – is the proportion of variability in data that is explained by a statistical model, specifically in this case a linear regression equating the monthly equity returns and the monthly returns of the S&P 500. It can convey how good the fit of a model is to the actual data, how well the regression line approximates the actual relationship. It is statistically the square of the Pearson r correlation coefficient and thus has a possible range from 0 to 100. Higher figures for R Squared lend more credibility to the calculations of alpha and beta resulting from the regression. Thus, we also include the scatter chart and regression line for visual inspection of the relationship as well.

Sharpe Ratio – is a reward-to-variability ratio measuring the extra return per unit of risk in an investment. The monthly equity returns are first reduced by the monthly return of a risk-free asset to determine the "excess return" over and above a riskless security. As is often the case, we identify the return of a riskless security to be the market yield on a 1-month constant maturity US Treasury security as published monthly by the Federal Reserve. The average of these monthly "excess returns" is then divided by the standard deviation of that same set of monthly excess returns. As noted in the online Stanford notepapers of Dr. Sharpe, the standard deviation is based on the entire population of data rather than a sample, and thus no correction is made for degrees of freedom. We also use a simple average rather than a compound geometric average, just as specified by Dr. Sharpe. Also, the calculation we use is that which was slightly revised by Dr. Sharpe in 1994 rather than his original 1966 paper. The result of the calculation is a monthly analysis which is then converted to an annualized figure by multiplying by the square root of 12. High ratios provide more reward relative to variability risk. Because this is a dimensionless ratio, the order ranking of investments is more important than the absolute measure itself, and thus we calculate the Sharpe ratio for the S&P 500 as well for the same defined time period. This is a widely used performance metric, even in the hedge fund community, and the results suggest that the equity returns have provided greater reward relative to a given level of risk. Again, this is a dimensionless ratio so investments must be ranked according to calculations over identical time periods in order for any meaningful comparison to be made.

Jensen's Alpha – is a statistic historically used in quantitative finance to determine the excess return of an investment over the theoretical expected return. Jensen's alpha = Portfolio Return – [Risk Free Return + Portfolio Beta * (Market Return – Risk Free Return)]. In terms of a previously discussed Markowitz linear regression comparing the returns on the portfolios with those of the S&P 500, alpha is essentially the resulting constant "a" in the linear equation y=bx + a. We calculate the metric using returns which are annualized from the monthly data encompassing the entire time period. A positive alpha suggests that the portfolio is producing returns over and above that which can be explained by the amount of risk which is being assumed. This is presumed to be important in distinguishing good risk-adjusted returns, as opposed to high returns resulting from an aggressive or risky investment style.

Treynor Ratio – is a statistic designed by Jack Treynor who, among other things, served for many years as editor of the CFA Institute's Financial Analysts Journal. It is sometimes called a reward-to-volatility ratio. The metric was designed to measure the excess return per unit of risk, where excess return is defined as the Portfolio Return – Risk Free Return, and that excess return is then divided by the portfolio Beta as a measure of risk. We calculate these returns on a monthly basis for the entire time period, and then annualize those average monthly returns. Our calculations are based on the entire time period, not a selective rolling time period. This is important because the measure is dimensionless -- the order ranking of investments is more important than the absolute measure itself. Thus, we calculate the ratio for the S&P 500 for the same defined time period as well. Indeed, different time periods can produce very different results, a 3 year ratio could be negative for the stock market while a 10 year ratio could be positive, perhaps simply reflecting a recent bear market in stocks. The Treynor calculation is sometimes expressed in decimal form, and sometimes in percentage rate form, so we show it both ways for clarity. A positive number, a higher statistical measure, in comparison to other portfolios or the S&P 500 over the same time period, suggests that the equity returns have provided greater reward relative to a defined level of risks associated with the broad market.