
Sample Reports for The Expert Performance Analyst

by Investment Technologies

Introduction

With The Expert Performance Analyst—today’s most advanced performance analysis, research, and reporting system—you can present exciting graphs of investment performance in just a few mouse clicks. The Analyst provides everything you need—power, flexibility, and ease-of-use—for indepth performance analytics of money managers, mutual funds, and market indices.

Power to research and analyze historical behavior of asset classes, market indices, and investment managers—a few at a time or an entire database—with more than 25 standard and downside risk performance measures.

Flexibility with the Analyst’s flexible layout, point-and-click design, and customizable charts.

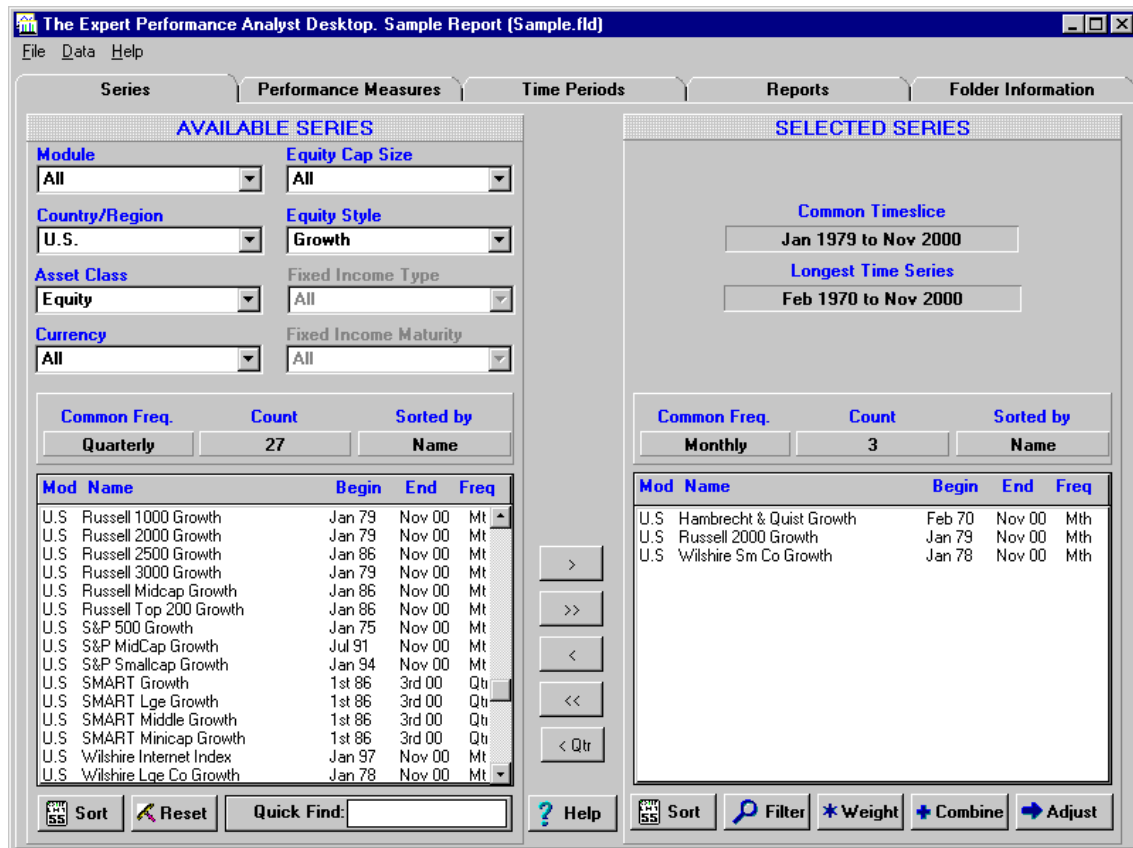
Ease-of-use with The Expert Performance Analyst’s intuitive Desktop that guides you through the simple steps for creating a chart or table to illustrate your analysis.

This booklet contains a sampling of the many charts and tables available in The Expert Performance Analyst. Use The Analyst’s ready-made charts or create your own. Charts can be customized in the Analyst or exported to other Windows applications such as Word, PowerPoint, and Harvard Graphics. Worksheet tables can be printed or exported to Excel or a text file.

Reporting is a Snap

With the Analyst's easy-to-use Desktop, reporting is a snap. Just point and click to pick portfolios, performance measures, time periods, and reports in four easy steps. Here's how...

Step 1: Pick your series.



Double-click on any available series (left panel) to include it in your report (right panel).



You can easily and quickly screen a database based on your criteria; for example, the left panel in the Desktop above shows the results of screening for domestic equity growth indices.

Step 2: Pick your performance measures.

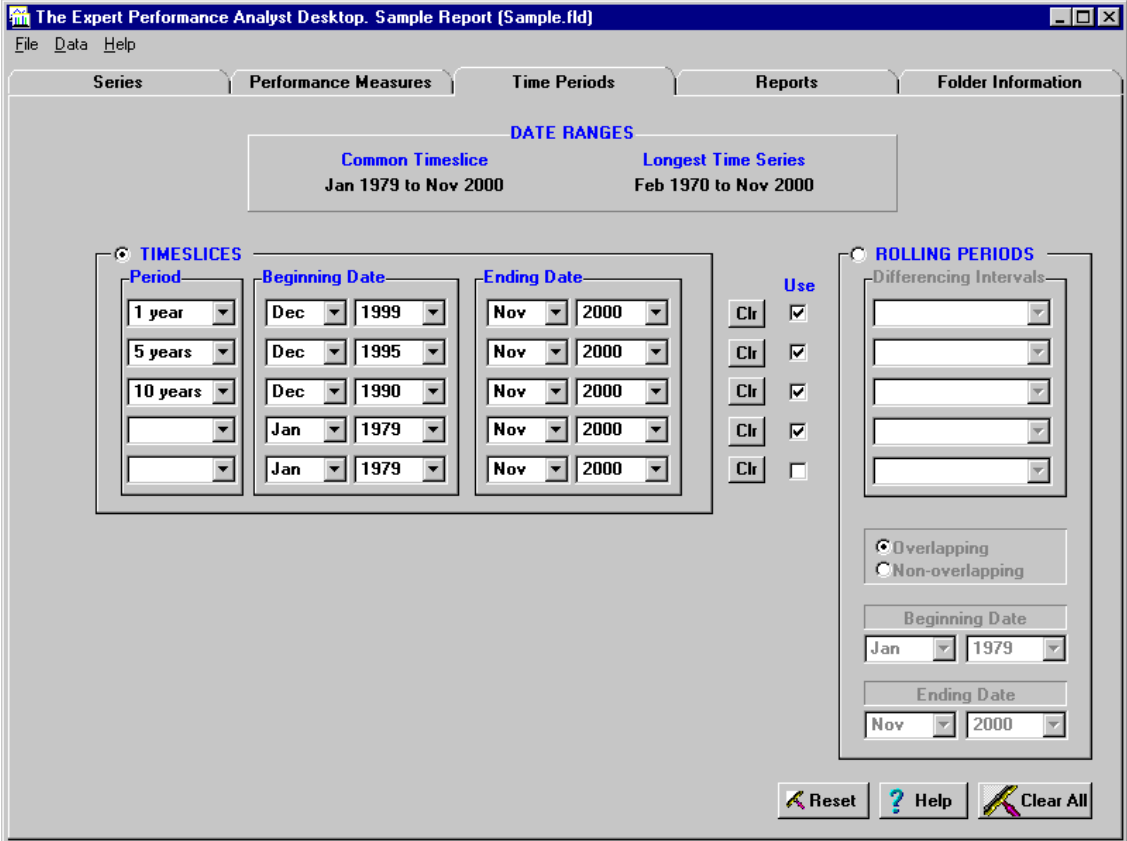
The screenshot shows the 'Performance Measures' tab in a software application. The interface is organized into several sections:

- RETURNS:** Includes checkboxes for Monthly, Quarterly, Annual, Annualized Compound Average (checked), and Annualized Arithmetic Average.
- DIVERSIFICATION:** Includes checkboxes for Correlation and R-Squared.
- GOAL:** Features a text input field with '10.00', and 'History' and 'Clear' buttons.
- RISK:** Includes checkboxes for Downside Deviation (checked), Standard Deviation (checked), Variance, Percent Upside Volatility, Percent Downside Volatility, Downside Frequency, Average Downside Deviation, and Downside Magnitude.
- OTHER PARAMETERS:** Includes 'Downside Magnitude Pctile:' with a text input field containing '99' and 'Risk Tolerance:' with a text input field containing '1.00'.
- RISK-ADJUSTED PERFORMANCE:** Includes checkboxes for Sortino Ratio, Efficiency Ratio, Sharpe Ratio (with a 'Specify RFR' button), Fouse DD Index, Fouse SD Index, and Average Downside Return.
- SHAPE OF DATA:** Includes checkboxes for Statistical Skewness, 90/10th Percentile Skewness, Volatility Skewness, Frequency Skewness, and Kurtosis.

At the bottom right, there are 'Help' and 'Clear All' buttons.

Pick just the information you want to show. Choose from over 25 different performance measures. They're grouped into logical categories—Returns, Risk, Risk-adjusted Performance, Shape of Data—to make your analysis even easier.

Step 3: Pick your time periods.

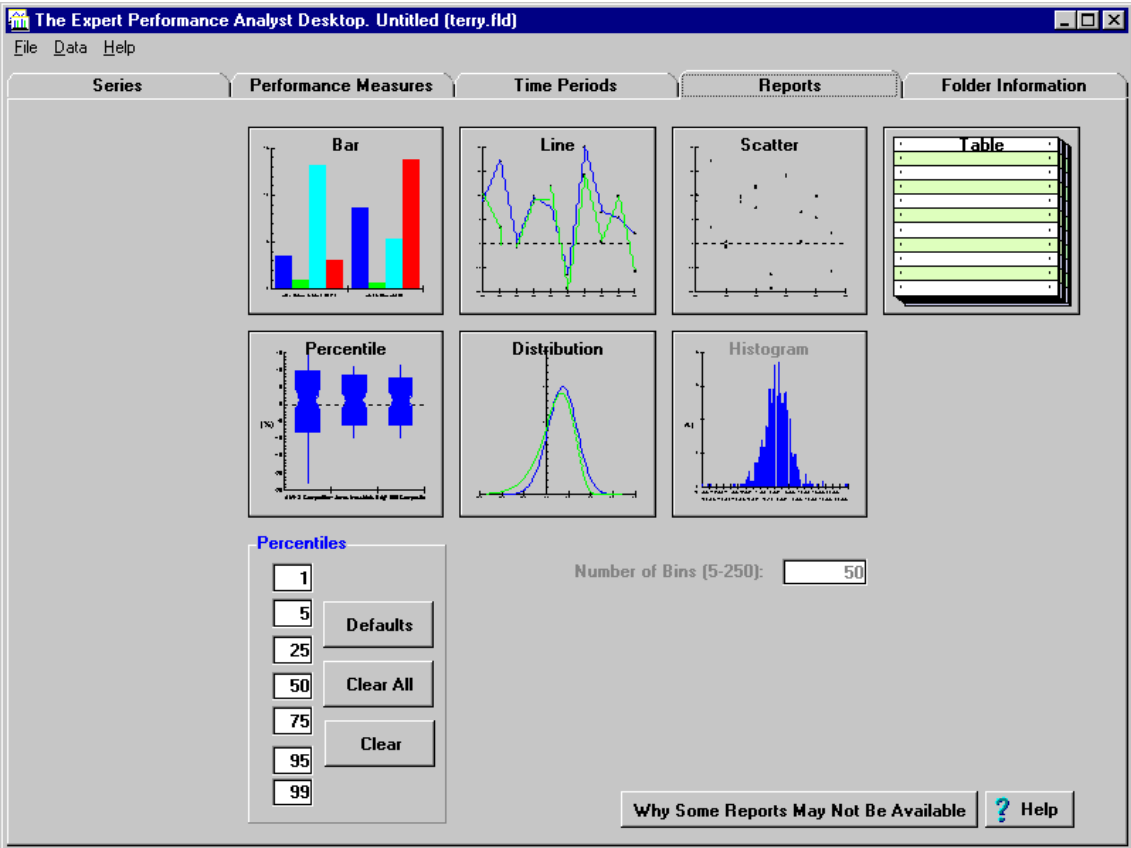


Next pick your time periods for reporting performance. Show performance over a single time slices or multiple time slices, or rolling periods, too.



Examples of standard time slices are 3 years ending December 31, 2000 or the period January, 1980 through June, 1999. Show up to five time slices at a time. An example of a rolling period is 3-year periods, rolled monthly, from January, 1990 through December, 2000.

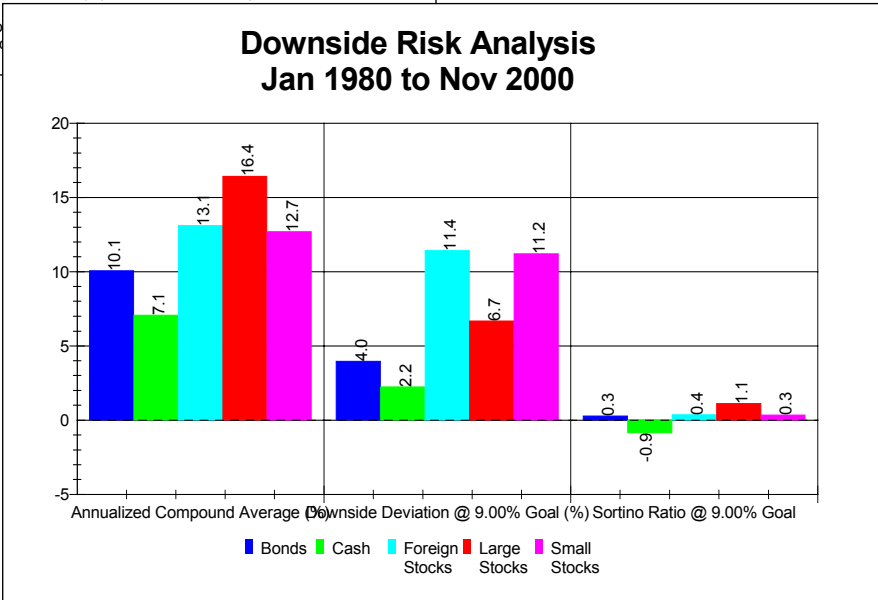
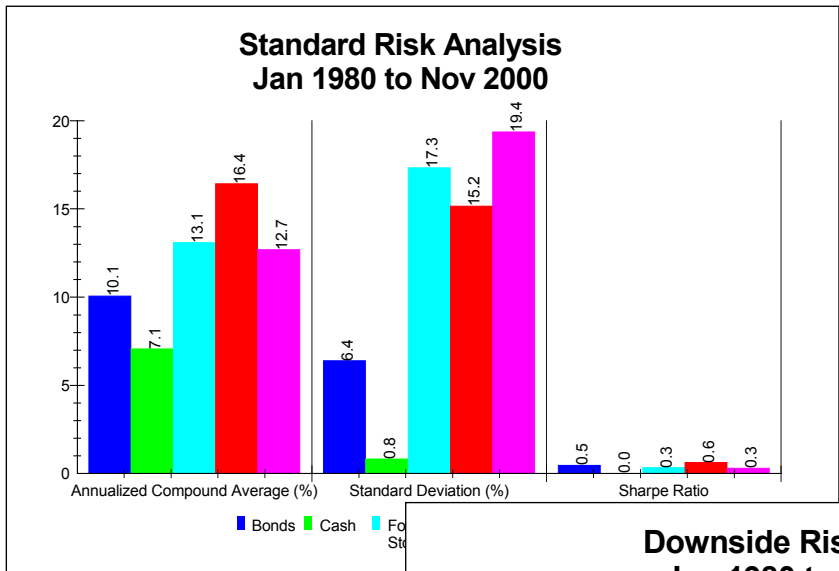
Step 4: Pick your report.



Show results graphically (bar and line charts, scatter charts, percentile, distribution, and histogram charts) or in tabular format.

Tailor your analysis

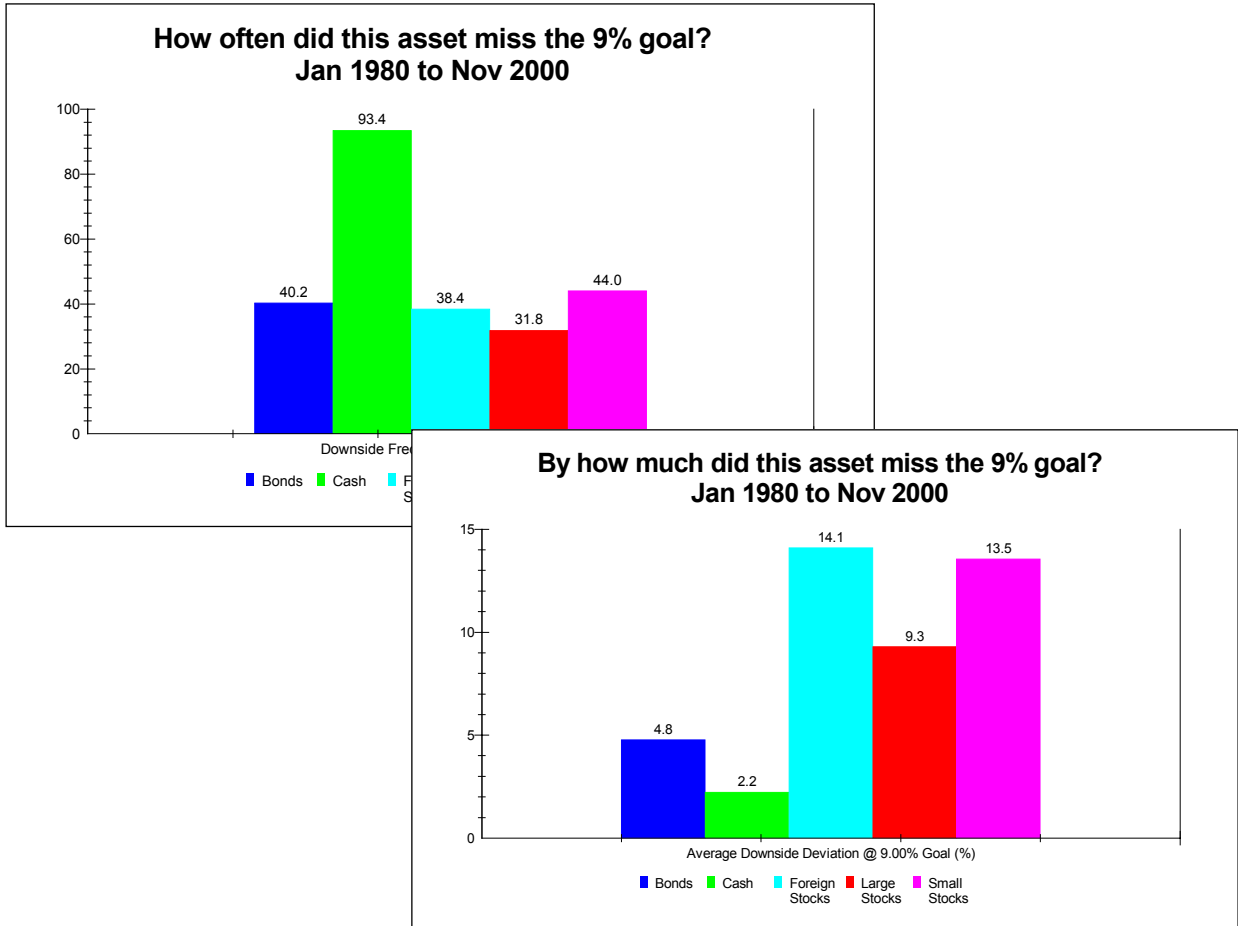
Tailor your analysis to your specifications using the Analyst's powerful analytics and flexible graphics. Here are some sample charts and tables...



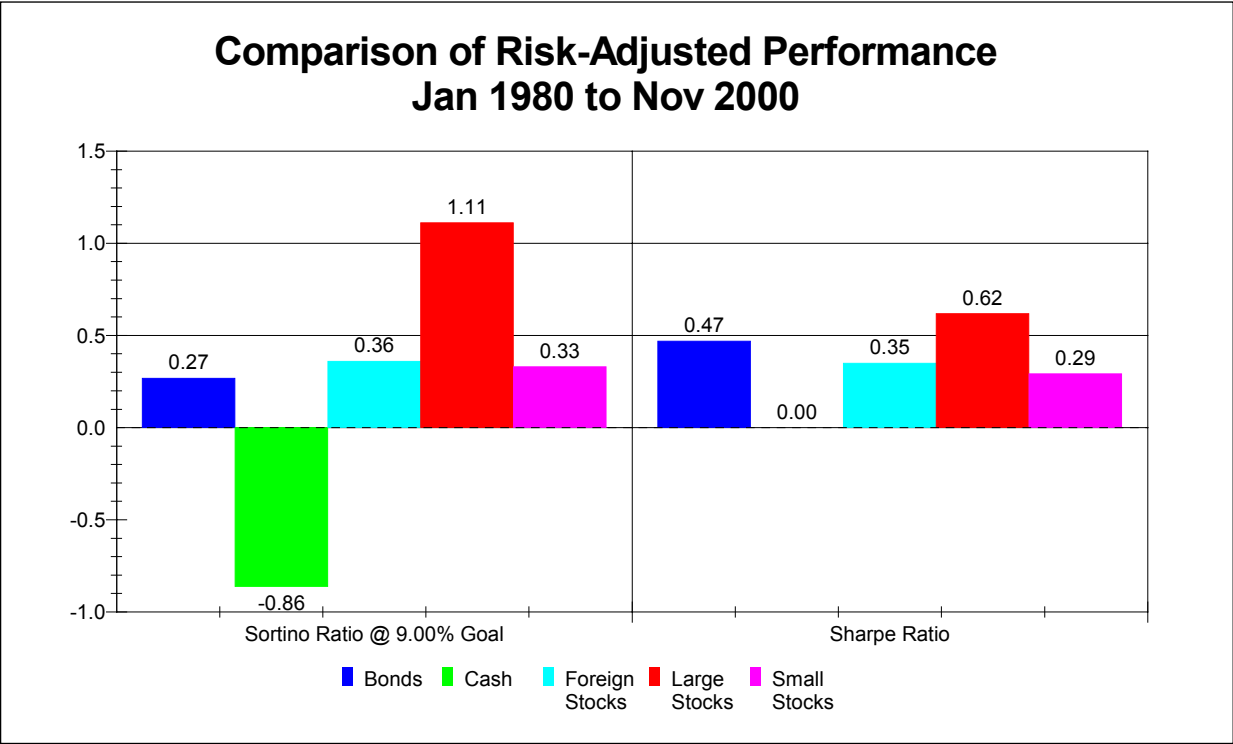
Present traditional mean-variance risk analysis (top chart) or downside risk analysis (bottom chart).



Downside deviation measures risk in the context of an investor’s goal—only returns below the goal are risky. Because risk is measured against the same reference point (i.e., the same goal), portfolio risk can be compared directly. Thus a portfolio with 4.0% downside deviation is twice as risky as one with 2.0% downside deviation.



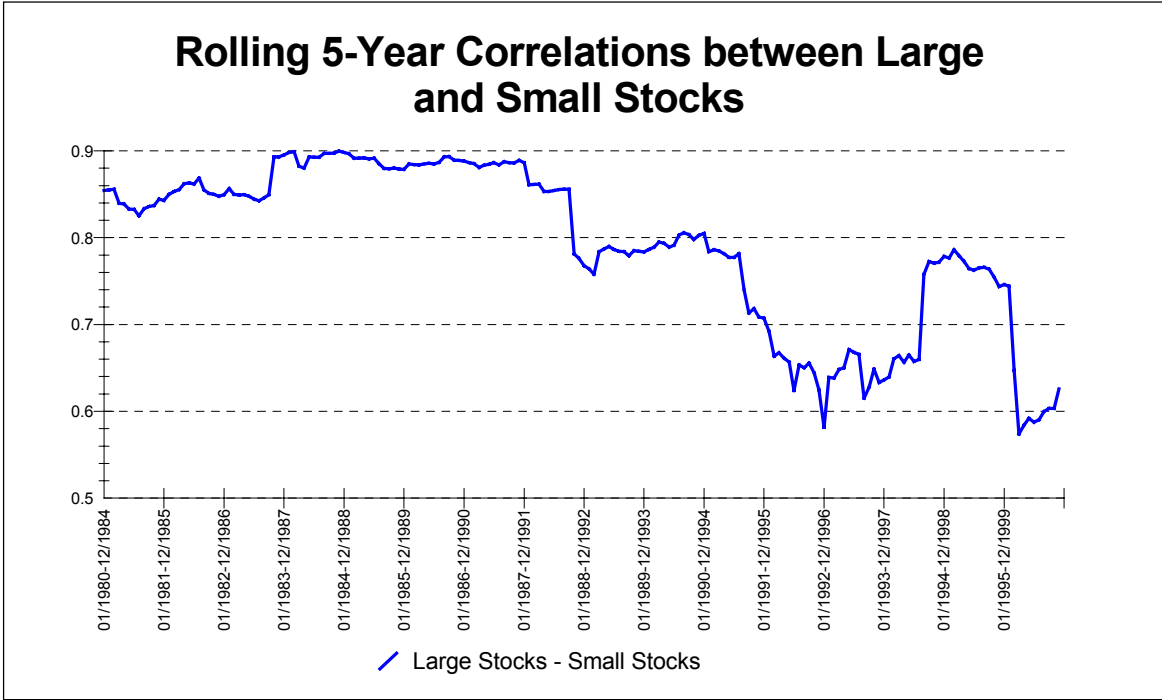
Show the two components of downside risk: how often (downside frequency) and by how much (average downside deviation) did my portfolio miss the goal?



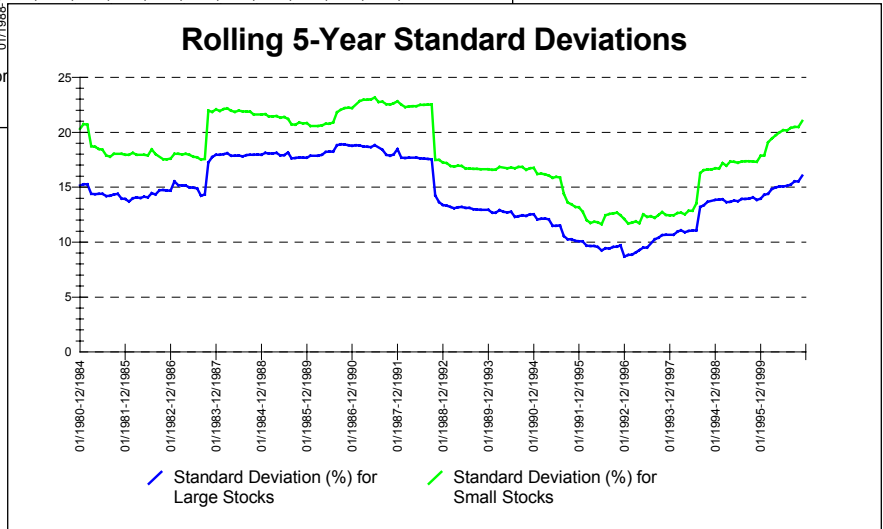
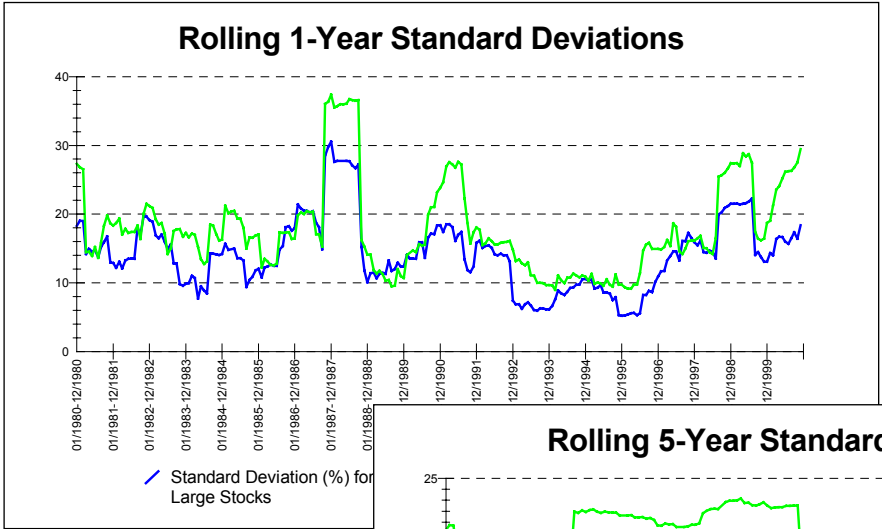
Show risk-adjusted performance using either downside risk relative to the investor’s goal (Sortino ratio) or standard deviation (Sharpe ratio).



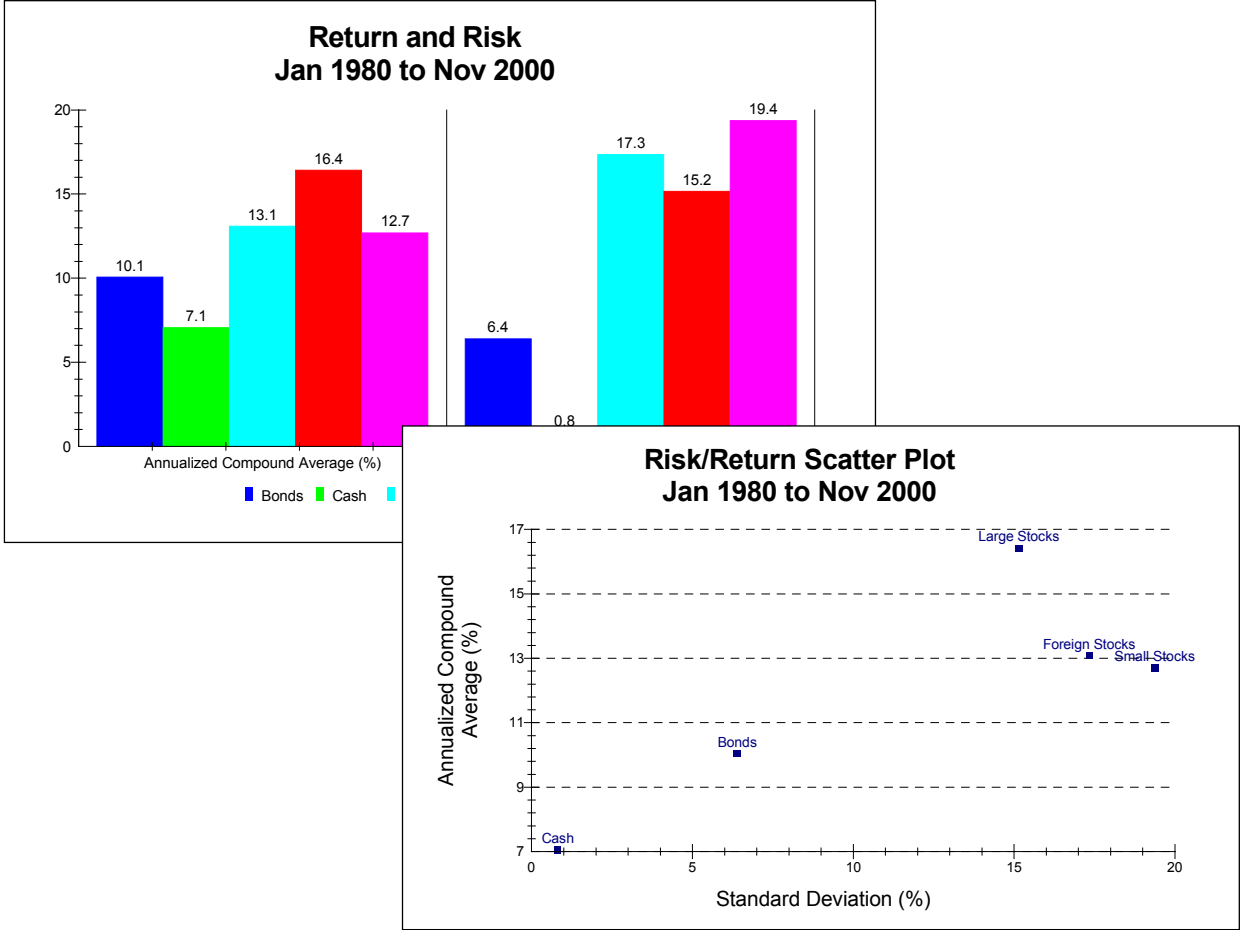
Both Sortino and Sharpe ratios measure excess return per unit of risk. Sortino ratio measures the return in excess of the investor’s goal divided by downside deviation whereas Sharpe ratio measures the return in excess of the risk-free rate divided by standard deviation.



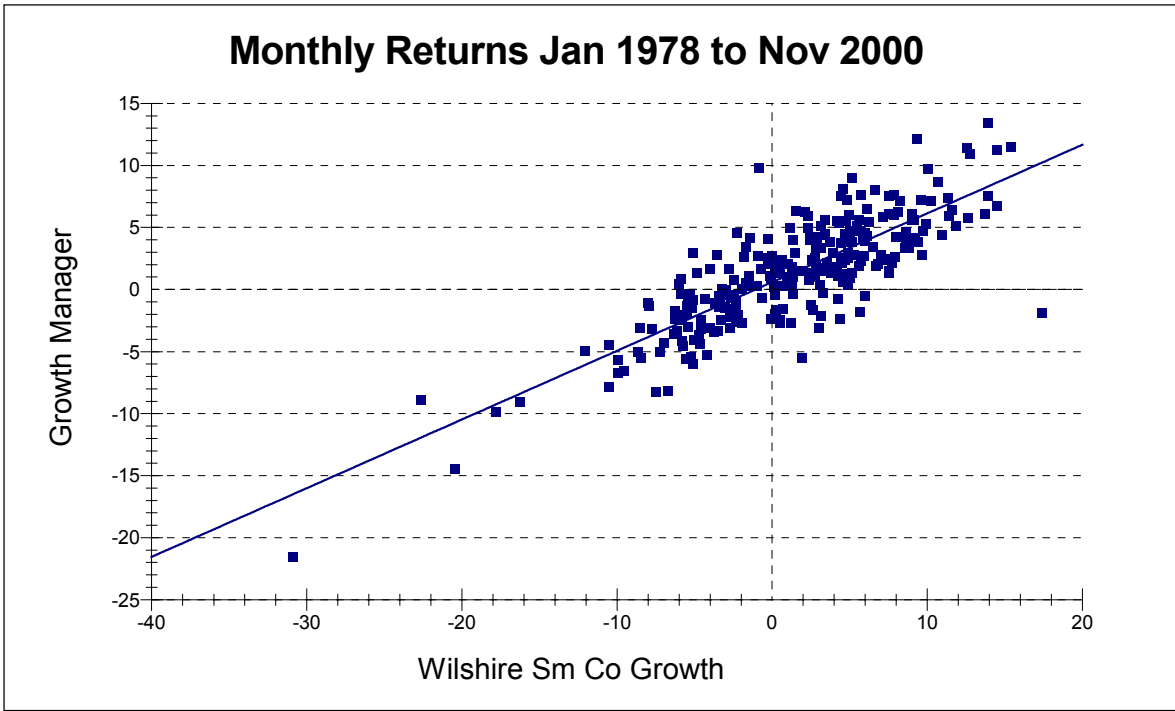
Use rolling periods to show trends in performance or....



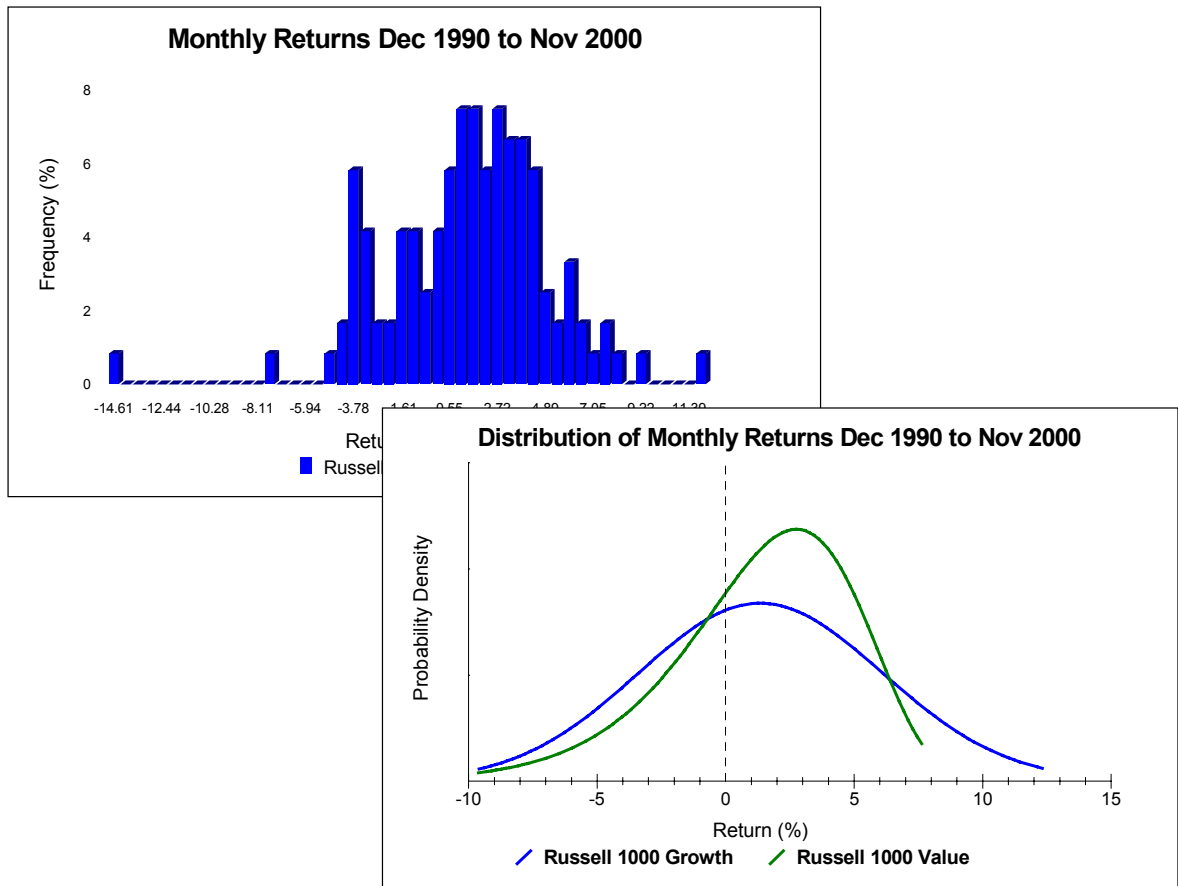
....to show the effect of taking a longer term view of performance.



Show the tradeoff between return and risk in different ways.



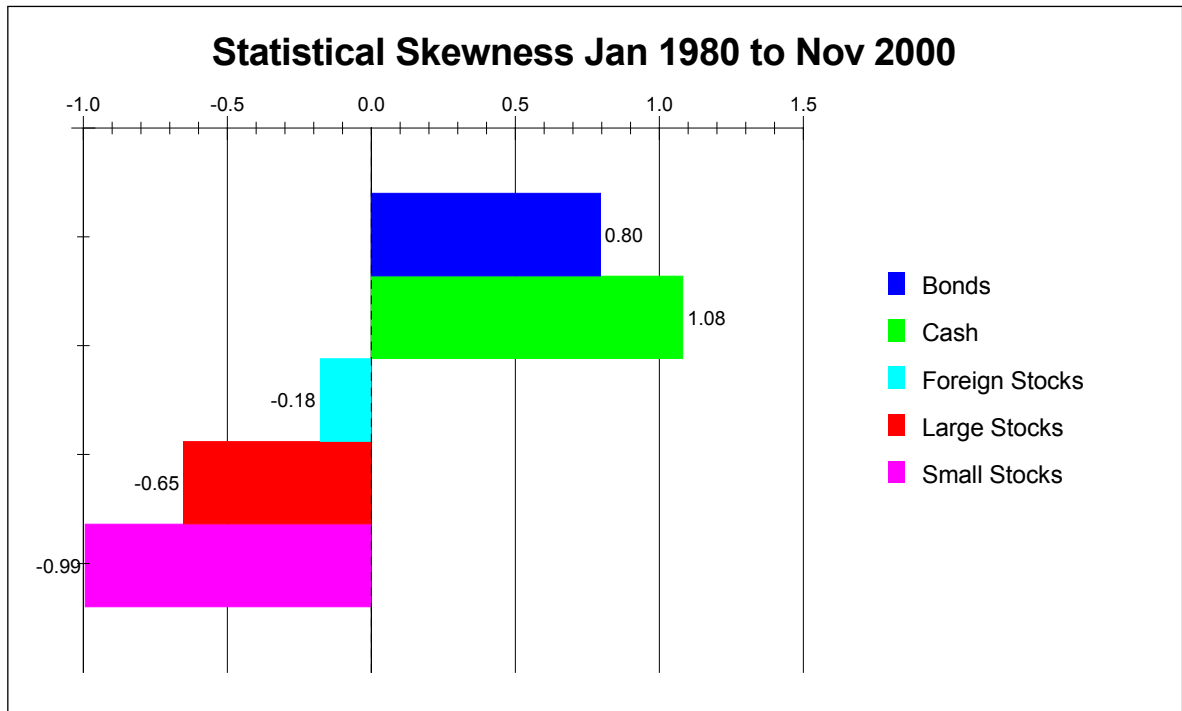
Show how closely correlated a portfolio's performance is to that of its benchmark.



Examine the shape of uncertainty with a histogram of portfolio returns (top chart) or distribution curves (bottom chart).



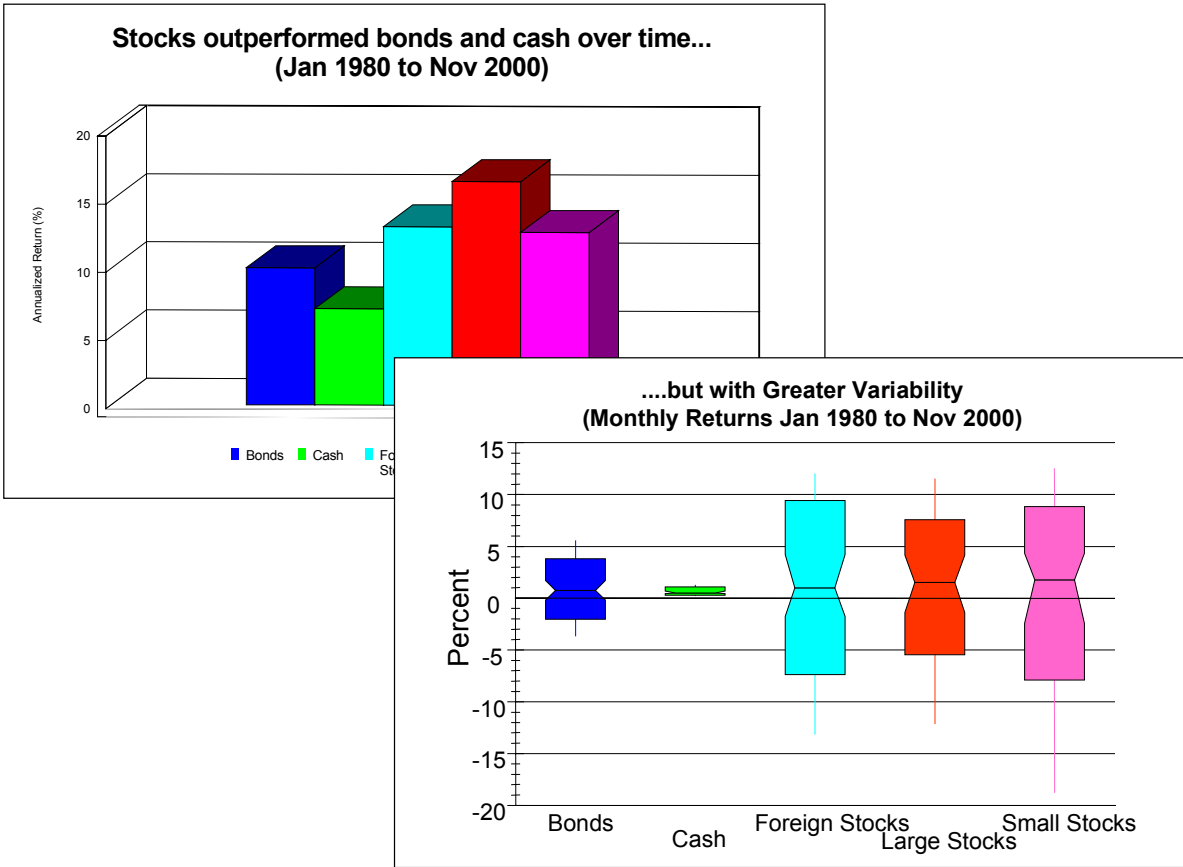
Return distributions that are normal have a bell-shape. Distributions that are skewed have a longer tail on the left (negative skewness) or right (positive skewness).



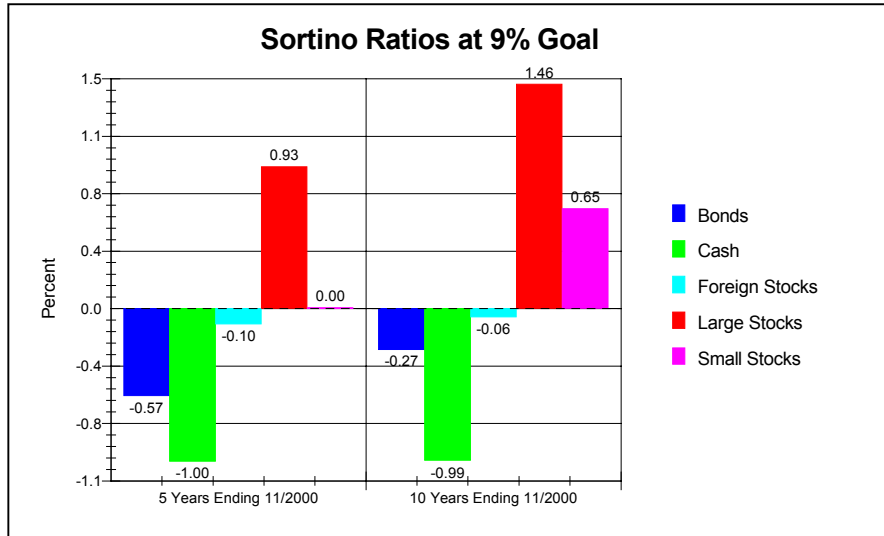
If performance is skewed (positively or negatively), traditional mean-variance analysis can result in misleading conclusions.



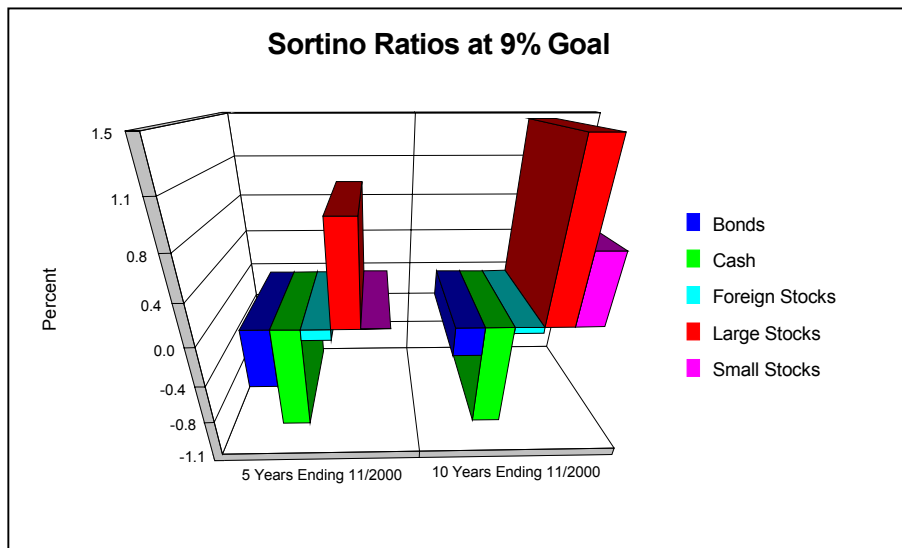
When there is positive skewness, performance was actually achieved with less risk than indicated by standard deviation. Conversely with negative skewness, where performance was actually achieved with more risk than standard deviation suggests. Thus standard deviation overstates risk for positively skewed return distributions and understates risk for negatively skewed return distributions.



Tell a story with two charts. For example, illustrate the tradeoff between return and variability.



With the Analyst, you have total control over the appearance of your charts. For example, change from 2D (above) to 3D...and then change its perspective (below). Change titles, fonts, and colors, too. Move the legend and add borders.



Risk/Return Analysis (Jan 1980 to Nov 2000)					
	Bonds	Cash	Foreign Stocks	Large Stocks	Small Stocks
Return:					
Annualized Compound Average (%)	10.06	7.06	13.09	16.42	12.69
MPT Risk Analysis:					
Standard Deviation (%)	6.39	0.82	17.34	15.15	19.37
Sharpe Ratio	0.47	0.00	0.35	0.62	0.29
PMPT Risk Analysis (at 9% Goal):					
Downside Deviation	3.96	2.25	11.42	6.67	11.20
Downside Frequency	40.25	93.38	38.41	31.78	44.02
Average Downside Deviation	4.78	2.23	14.09	9.29	13.54
Sortino Ratio	0.27	-0.86	0.36	1.11	0.33
Shape of Data:					
Statistical Skewness	0.80	1.08	-0.18	-0.65	-0.99

Correlations Jan 1980 to Nov 2000					
	Bonds	Cash	Foreign Stocks	Large Stocks	Small Stocks
Bonds	1.0000				
Cash	0.0982	1.0000			
Foreign Stocks	0.1932	-0.0687	1.0000		
Large Stocks	0.2873	-0.0536	0.5050	1.0000	
Small Stocks	0.1631	-0.0522	0.4500	0.7946	1.0000

All information is available in table form for exporting to Excel or text files.