BEACON POINTE

ADVISORS

BEACON POINTE RESEARCH
WHITE PAPER

PERFORMANCE ANALYTICS
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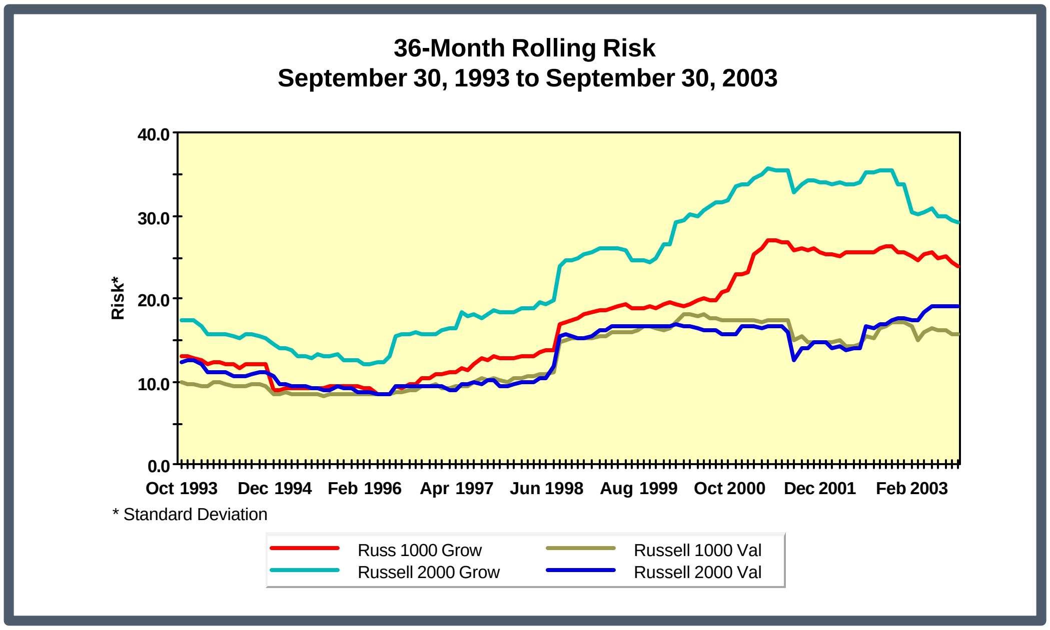
Introduction

- The public capital markets have become increasingly volatile in recent periods. Investors experienced the Internet and tech bubble in the late 90s and the market downfall over the subsequent three years. Through the end of the third quarter in 2003 the equity markets again rose to unexpected levels. The S&P 500 Index Year-to-Date performance as of September 30, 2003 was +14.72%. The NASDAQ's YTD performance as of the third quarter end was +34.36%.

- Exhibit 1 below identifies the increased volatility (as measured by rolling 3-years annualized standard deviation) in today's equity markets.

Exhibit 1



- The performance of investment managers has also become more volatile as investment managers today are evaluated relative to industry standard benchmarks.

- Beacon Pointe believes that consultants need to spend even greater time and resources in the manager search area.

- Beacon Pointe has implemented a manager evaluation process that evaluates both qualitative and quantitative factors—giving our clients and us greater insight into an investment managers' investment capabilities.

- The purpose of this writeup is to present to our clients a brief summary of some of the performance analytics used by Beacon Pointe in evaluating an investment manager. The following analysis includes a snapshot of a wide array of analytics used by our manager research group and by our consultants.

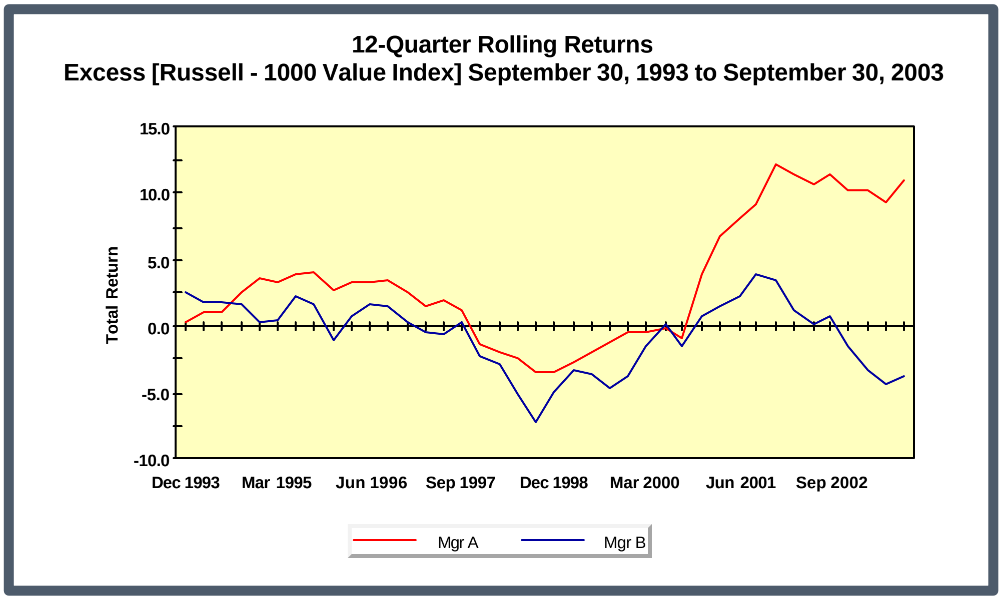
Performance Analytics

- Beacon Pointe evaluates the performance of an investment manager over rolling periods. Rolling periods help eliminate time-period sensitivity, as is common in the standard performance report.

- *Rolling Returns*: Beacon Pointe normally evaluates performance over rolling 3-year periods, as is identified in Exhibit 2 below. The exhibit plots the rolling 3-year excess returns relative to the index (Russell 1000 Value index).

- Manager A has consistently outperformed the index and Manager B over rolling 3-year periods.

<u>Exhibit 2</u>



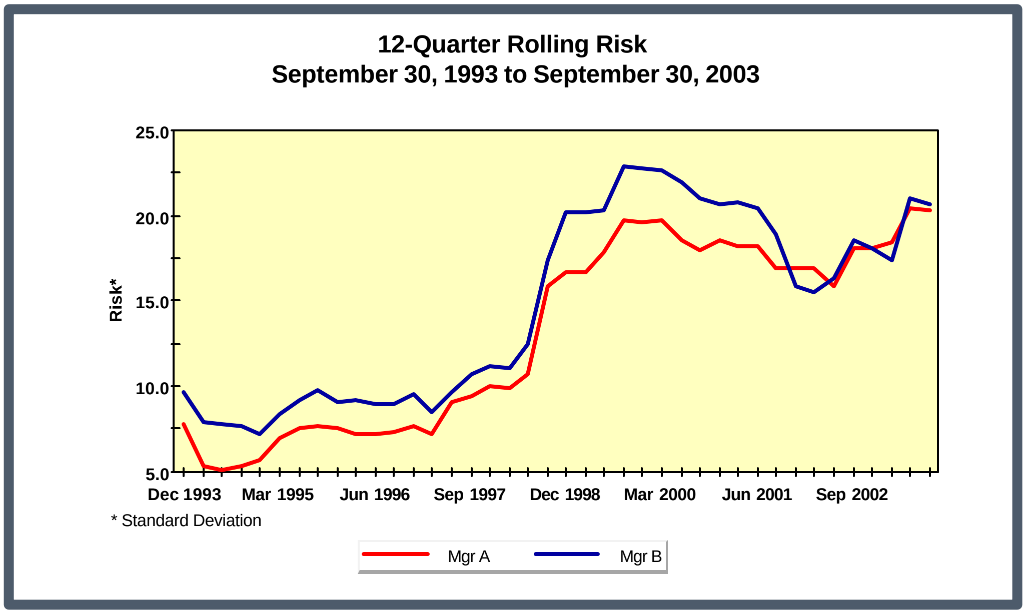
- Managers normally outperform the index and other investment managers by assuming greater risk levels. Beacon Pointe places as much emphasis on risk as it does return.

- *Rolling Risk:* Exhibit 3 on the following page, which is a rolling risk analysis, identifies that although Manager B has historically had a higher risk level relative to Manager A, it has not resulted in a greater rolling performance, which is identified in Exhibit 2.

- The higher risk level accepted by Manager B has not produced higher levels of alpha relative to the index or to Manager A.

Performance Analytics

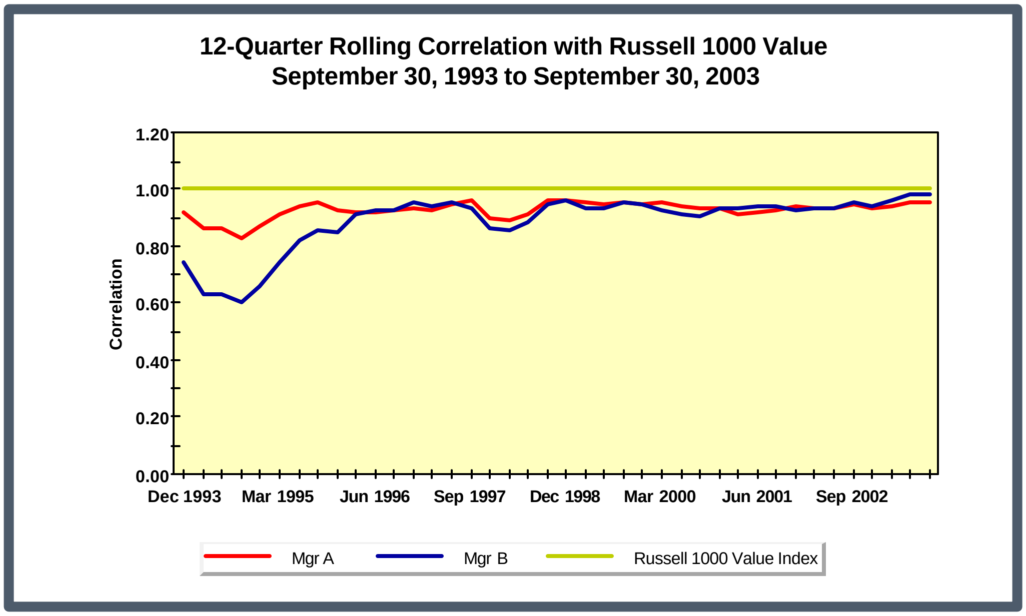
Exhibit 3



➢ *Rolling Correlation:* Although Manager A seems to have offered a higher return and a lower risk profile relative to Manager B, Beacon Pointe will also use rolling correlation analysis to verify investment style consistency.

➢ Exhibit 4 plots rolling 3-year correlations of Manager A's and Manager's B's performance relative to the Russell 1000 Value Index. The analysis identifies that both Manager A and B have correlated highly with the large cap value index.

Exhibit 4



Performance Analytics

- *Tracking Error* and *Information Ratio* have become common measures to evaluate an investment managers' risk and risk-adjusted return relative to an index.

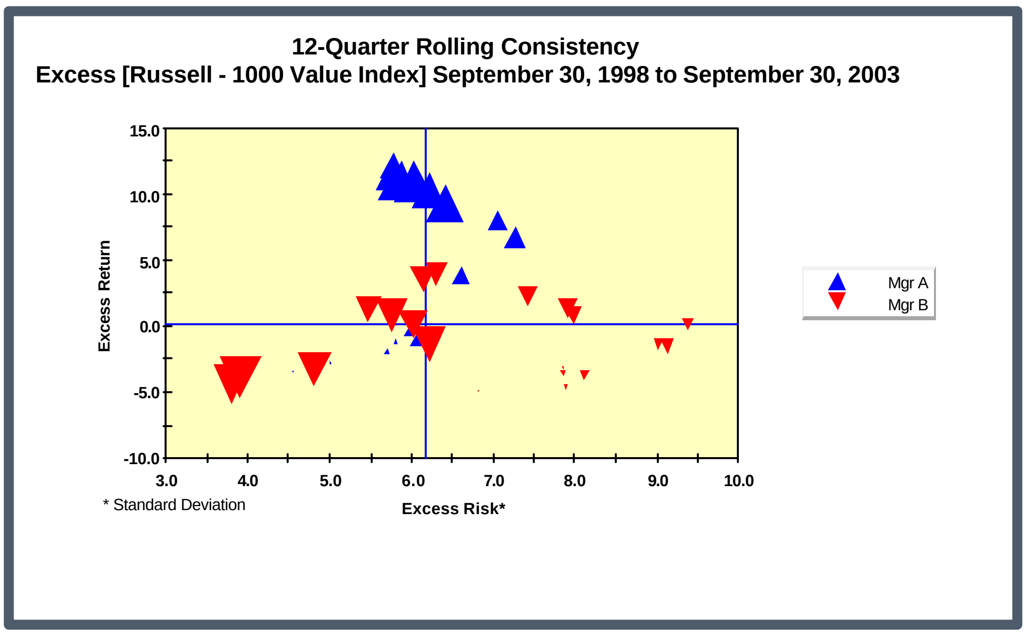
- Tracking Error is defined as the standard deviation of an investment manager's excess returns relative to an index.

- Information Ratio is the ratio of excess return to excess risk (or tracking error).

- Beacon Pointe does not focus on Tracking Error as a measure in itself. An investment manager cannot outperform an index or the market if it does not take extra risk away from the benchmark. Thus, a low tracking error investment manager will have performance similar to an index.

- *Rolling Consistency:* Beacon Pointe is comfortable with higher Tracking Errors if the investment manager is being compensated for assuming a higher level of risk. Exhibit 5 below further explains this philosophy.

<u>Exhibit 5</u>



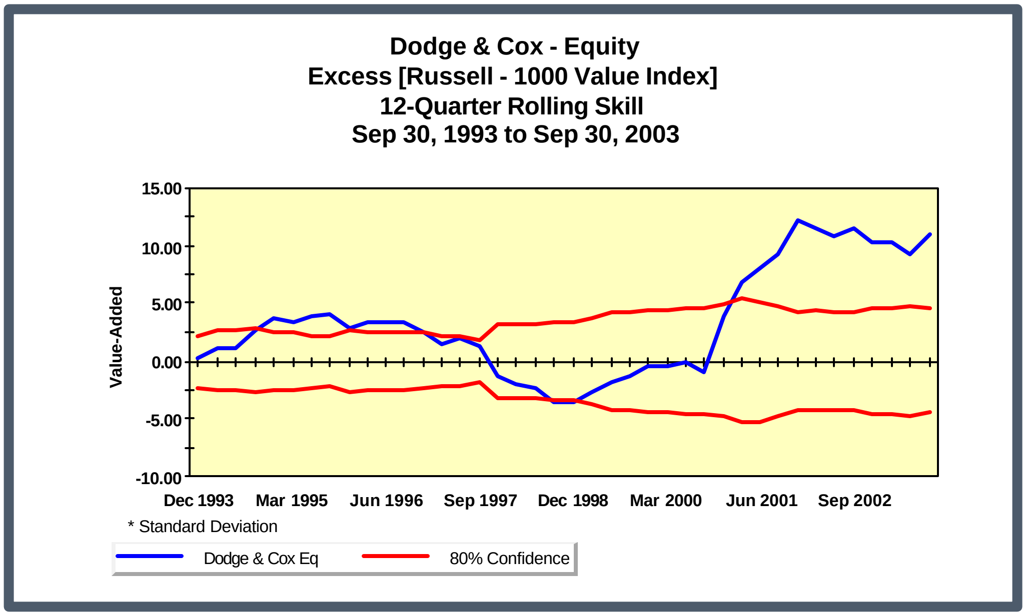
- Exhibit 5 presents the Excess Risk (Tracking Error) on the horizontal x-axis. Excess Return (Alpha) is represented on the vertical y-axis.

- Using rolling periods, Beacon Pointe's "*Rolling Consistency*" analysis identifies that Manager A has maintained a consistent level of tracking error, yet has also consistently increased alpha relative to the Russell 1000 Value index (larger symbols represent more recent time periods). Manager B, however, has decreased its tracking error, yet alpha has fallen as well.

Performance Analytics

- Beacon Pointe believes that investment managers with greater levels of tracking error should be compensated with greater levels of excess return.
- Beacon Pointe's "*Skill Analysis*" analytic is shown in Exhibit 6 below. The analysis plots Manager A's value-add over rolling 3-year periods relative to the Russell 1000 Value index.
- If the manager's value-add falls above the red lines (confidence bands), we can say that we are 80% certain that the Manager A's value-add is a function of skill and not luck.
- Should Manager A fall below the 80% confidence band, we can say that we are 80% confident that the underperformance is due to "lack of skill".

Exhibit 6



- One of the most important analytic used by Beacon Pointe is the *Upside/Downside Ratio* analysis tool. This analytic allows us to dissect risk into more detail rather than simply using standard deviation.
- The *Upside Ratio Capture* identifies how well an investment manager performs in up markets (as defined by an appropriate index).
- The *Downside Ratio Capture* is simply the flip-side of the Upside Ratio Capture, as it identifies how well an investment manager performs in down markets.

Performance Analytics

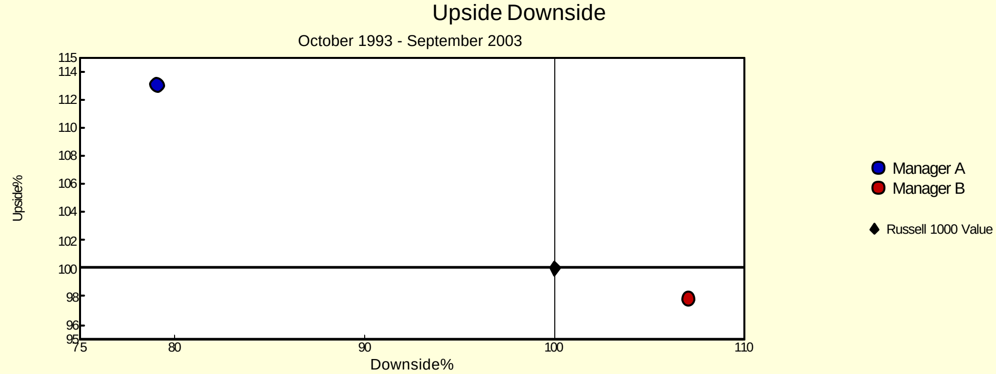
- Exhibit 7 below shows that for when the market goes up $1, Manager A goes up $1.13. Manager B, however, only goes up $0.98. On the downside, when the market falls $1, Manager A only falls $0.79. Manager B, however, falls more than the market to $1.07.

- Upside/Downside Ratio Analysis adds another layer to standard deviation and risk. This type of risk analysis gives us a detailed perspective of how an investment manager will perform in different market environments.

Exhibit 7

Risk Analysis

Upside Downside



Single Computation

	# of Quarters		Average Return (%)		Average Return (%) vs. Market		Quarter (%)		1-Year (%)		Market Benchmark (%)		
	Up	Down	Up	Down	Up Market	Down Market	Best	Worst	Best	Worst	Up Capture	Down Capture	R-Squared
Manager A	29	11	7.61	-6.03	7.43	-5.55	17.08	-15.74	45.63	-19.15	113.0	79.0	88.09
Manager B	28	12	7.19	-8.05	6.57	-7.79	20.66	-19.48	44.28	-29.93	97.8	107.0	89.22
Russell 1000 Value	29	11	6.65	-7.31	6.65	-7.31	17.28	-18.78	47.17	-22.79	100.0	100.0	100.00

- The past few pages cover some of the returns-based analytics Beacon Pointe uses to evaluate an investment manager. The main points our firm focuses on are:

  - Performance analysis should be run over rolling periods of time. Rolling periods helps eliminate time period sensitivity and gives a better representation of performance consistency

  - Return and risk should both be carefully evaluated in detail. Although most investors do not mind outperformance of a benchmark, Beacon Pointe will place an investment manager that significantly outperforms a benchmark on watchlist. An investment manager may outperform the benchmark by taking significant risks—risks that we are not comfortable taking.

- Beacon Pointe, however, does recognize that alpha cannot be generated without taking risk away from the benchmark, thus we do not focus on tracking error by itself. Beacon Pointe does evaluate an investment managers' information ratio over rolling periods, as information ratio identifies excess return per unit of excess risk.

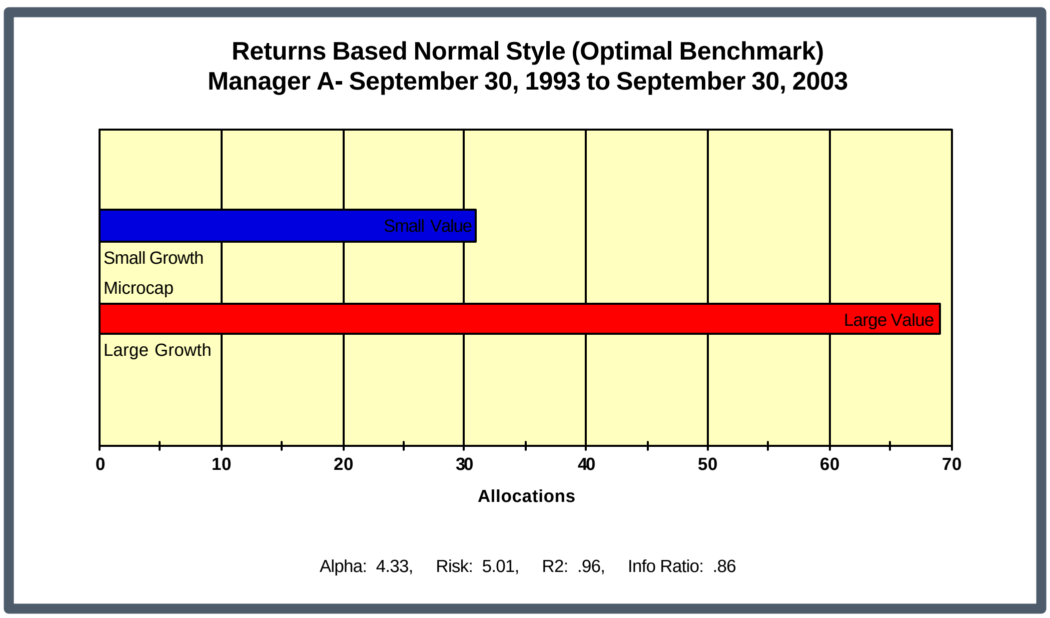
Style Analysis

- Over the past few years—including the tech bubble and subsequent market correction, many investment managers did not maintain investment style consistency. For example, conservative growth managers may have bought positions in Internet and dotcom companies as they faced performance pressures from their clients. Relative value managers, on the other hand, might have purchased more defensive and deeper value names when the market corrected.

- Beacon Pointe believes that investment managers must be analyzed using both returns- and holdings-based style analyses. For more information on returns-and holdings-based style analysis, please refer to Beacon Pointe's *Returns- Versus Holdings-Based Style Analysis, September 2002* White Paper.

- A *Normal Style Analysis (Optimal Benchmark)* is presented in Exhibit 8 below. An investment managers' normal style is a returns-based style analysis that identifies the average style over a period of time.

Exhibit 8

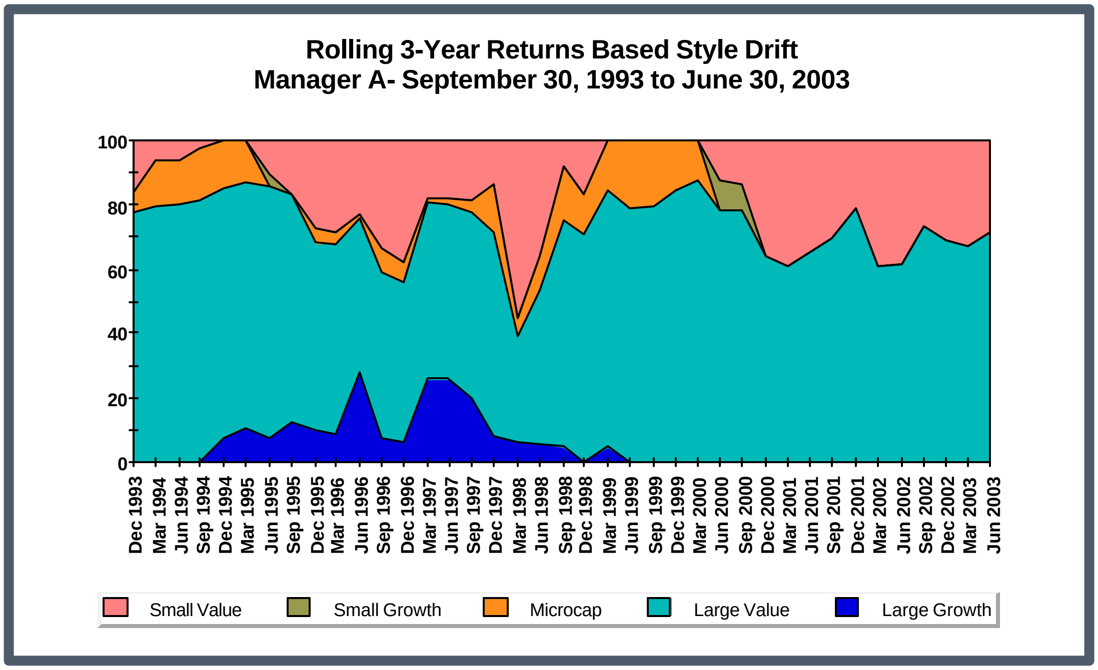


- The analysis identifies that over the past 10 years, 69.11% of Manager A's return variability can be explained by the return variability in large cap value stocks. 30.89% of the manager's return variability can be explained by the return variability in small cap value stocks.

- Therefore, the "normal", or optimal benchmark for Manager A over the past 10 years is a 69% Russell 1000 Value/31% Russell 2000 Value customized index.

- *Returns-based Style Analysis:* Similar to an investment managers' performance, an investment managers' style can also be evaluated over rolling periods.

Exhibit 9



- Exhibit 9 above identifies that Manager A, over rolling 3-year periods, has consistently had a large cap value emphasis with a slight small cap value orientation.

- By reviewing and analyzing the actual portfolio, you would notice that Manager A's portfolio has a definite large/midcap value orientation.

- *Holdings-based style analysis:* Exhibit 10 on the following page is a holdings-based style analysis. Holdings-based analysis determines a manager's investment style by examining the actual holdings within the portfolio.

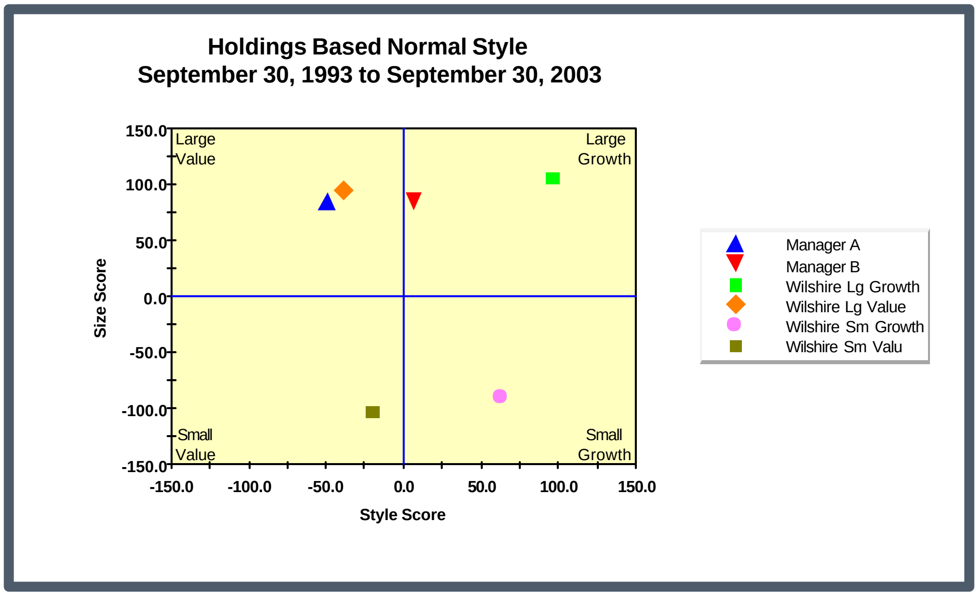
- Holdings-based style metrics assign a style and a size score to individual stocks within a portfolio. The *size* score reflects the relative market capitalization of a particular security, while the *style* score indicates a stock's orientation towards value or growth investment strategies based on certain financial characteristics (price/earnings ratio, price-to-book ratio, dividend yield, five-year sales growth, five-year earnings growth, and five-year average return on equity).

- The overall portfolio style and size scores are calculated by weighting individual security scores by their appropriate portfolio weights.

Style Analysis

- Exhibit 10 identifies the "*Normal*" Style of Manager A and Manager B.

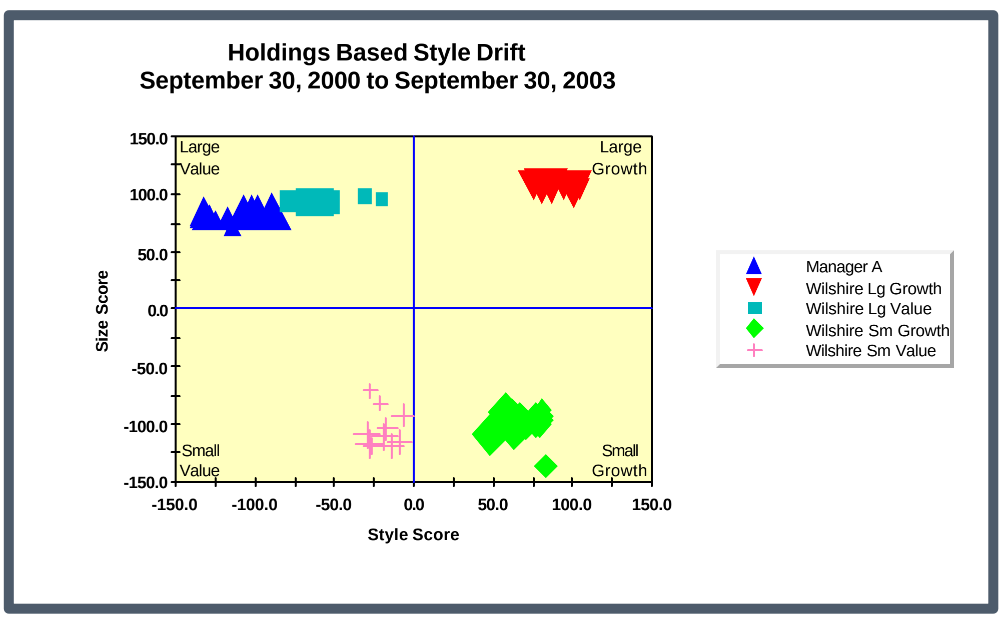
Exhibit 10



- Over the past 10 years, Manager A has had an average style similar to the Wilshire Large Cap Value Index. Manager B, however, has had a more large cap core investment style over the past 10 years, falling between the Wilshire Large Cap Value and Wilshire Large Cap Growth indices.

- The *Holdings-Based Style Drift Map* below plots the historical quarter-end style plots of each investment manager over a period of time. Manager A has not had significant style drift relative to the Wilshire Large Cap Value Index. The other major Wilshire indices have not drifted in investment style either over the past three years.

Exhibit 11



Portfolio Characteristics Comparison

- Beacon Pointe also looks at fundamental and structural portfolio characteristics of the investment manager and the appropriate index.

- As Exhibit 12 identifies, Manager A has a similar Debt/Equity, Earnings/Price, Dividend Yield, and Price/Book ratio. Supporting the returns-based style analysis, it is apparent that Manager A has a smaller weighted average market capitalization relative to the index.

Exhibit 12

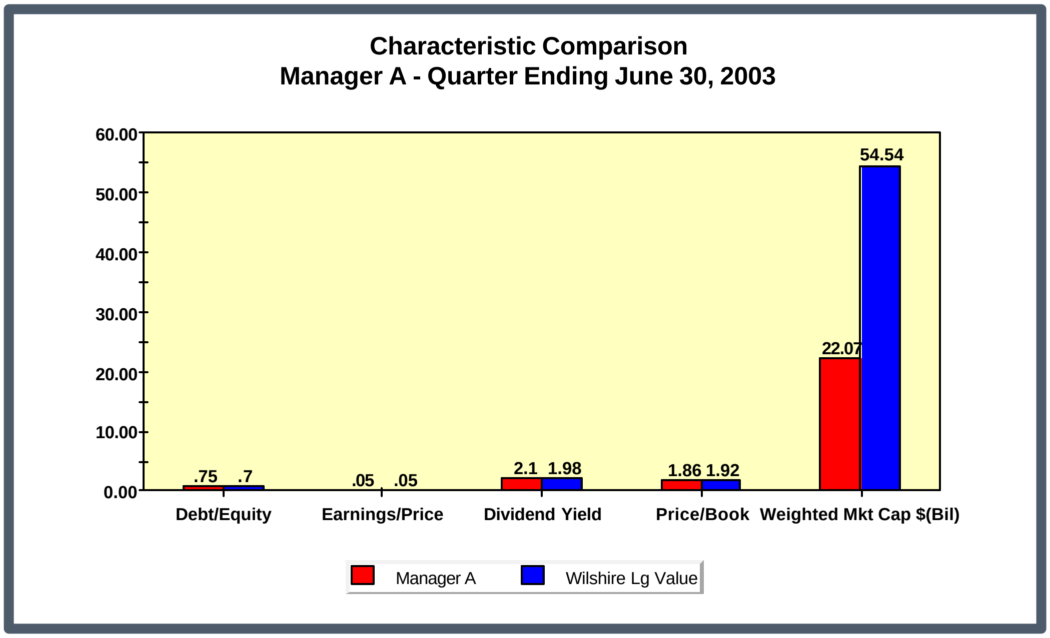
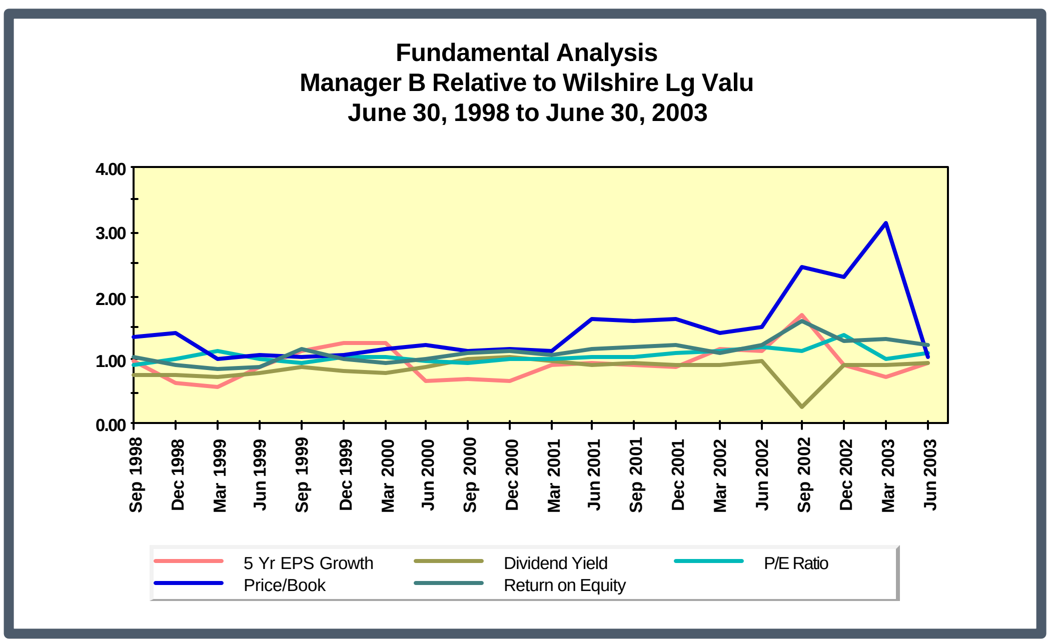


Exhibit 13



Portfolio Characteristics Comparison

- Exhibit 13 on the previous page identifies Manager B's fundamental portfolio characteristics relative to the Wilshire Large Cap Value Index.

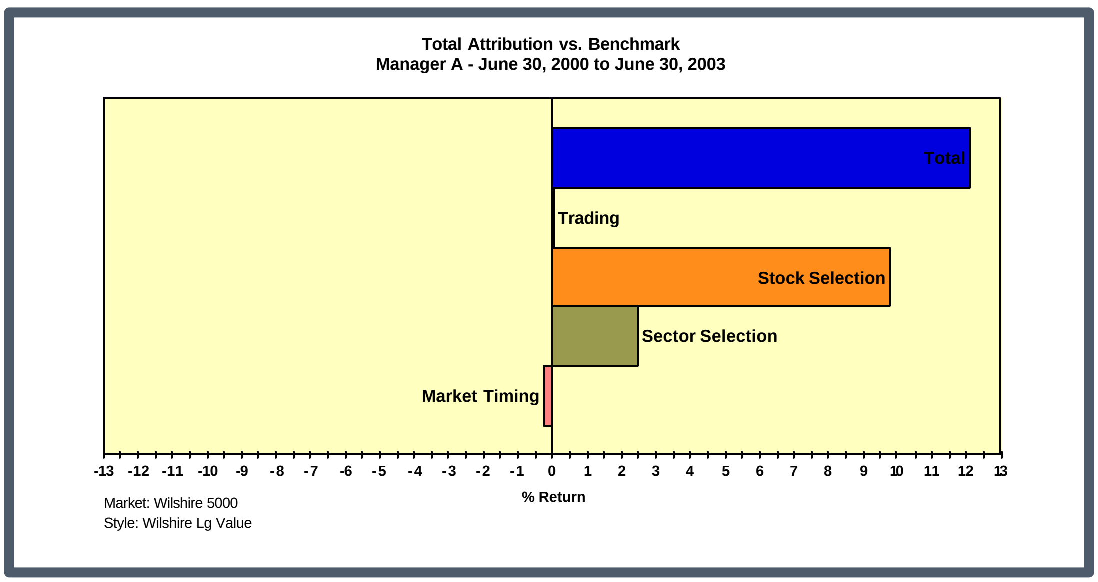
- Beacon Pointe utilizes this analytic to evaluate whether there is an apparent trend or potential style drift. Interesting to note is Manager B's relative Price/Book ratio. Manager B, back in 2000 had a Price/Book ratio 1.12x the index Price/Book ratio. Manager B's Price/Book ratio, however, consistently increased to 3.13x the index Price/Book ratio by March 2003.

Holdings-Based Attribution

- Beacon Pointe places significant importance on holdings-based attribution models. We believe that understanding the factors behind an investment managers' performance is just as important as the performance figures. Holdings-Based Attribution allows Beacon Pointe to determine if an investment manager has been able to add-value (or detract value) from stock selection, sector selection, or market timing (cash position).

- Manager A's 3-year annualized return as of June 30, 2003 was +9.12%. The Wilshire Large Cap Value Index had a 3-year annualized return of –2.98%. Manager A outperformed the index by +12.10% over the 3-year period.

<u>Exhibit 14</u>



- The attribution analysis shows that the factors behind Manager A's outperformance of +12.10% are:

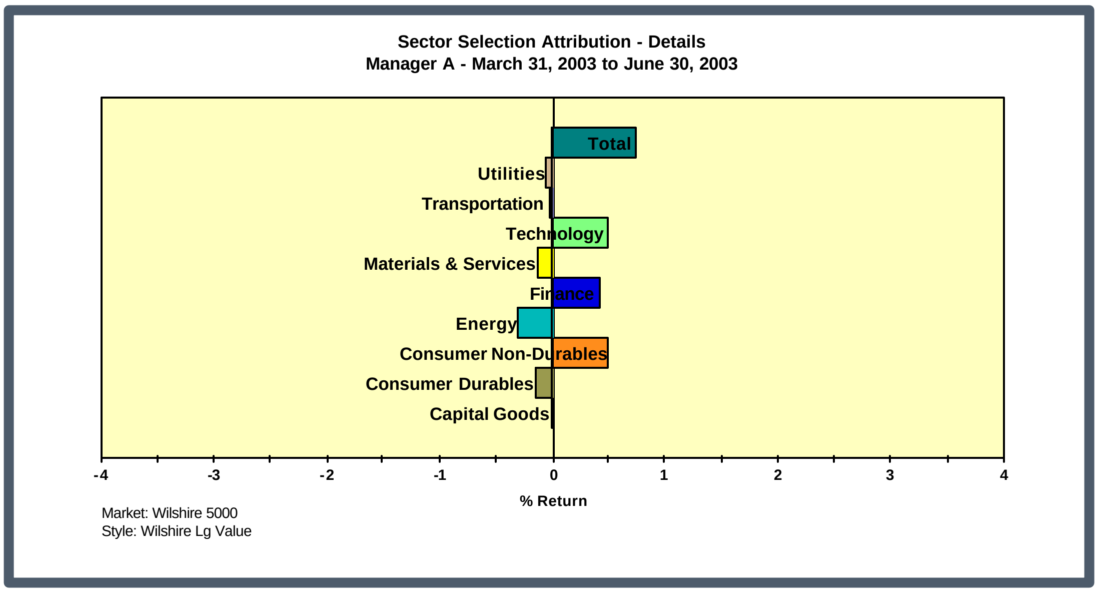
  - Sector selection: +2.48%
  - Stock selection: +9.81%
  - Trading: +0.03%
  - Market Timing (Cash): -0.21%

Holdings-Based Attribution

- After determining whether an investment manager has added or detracted value through stock, sector, market timing, or trading, Beacon Pointe further evaluates the investment managers' stock and sector selection.

- Exhibits 15 and 16 are examples of how Beacon Pointe evaluates stock and sector selection on a quarterly basis.

Exhibit 15



- The *sector selection attribution* above identifies that Manager A was had positive sector selection in the Technology, Finance, and Consumer Non-Durables sectors.

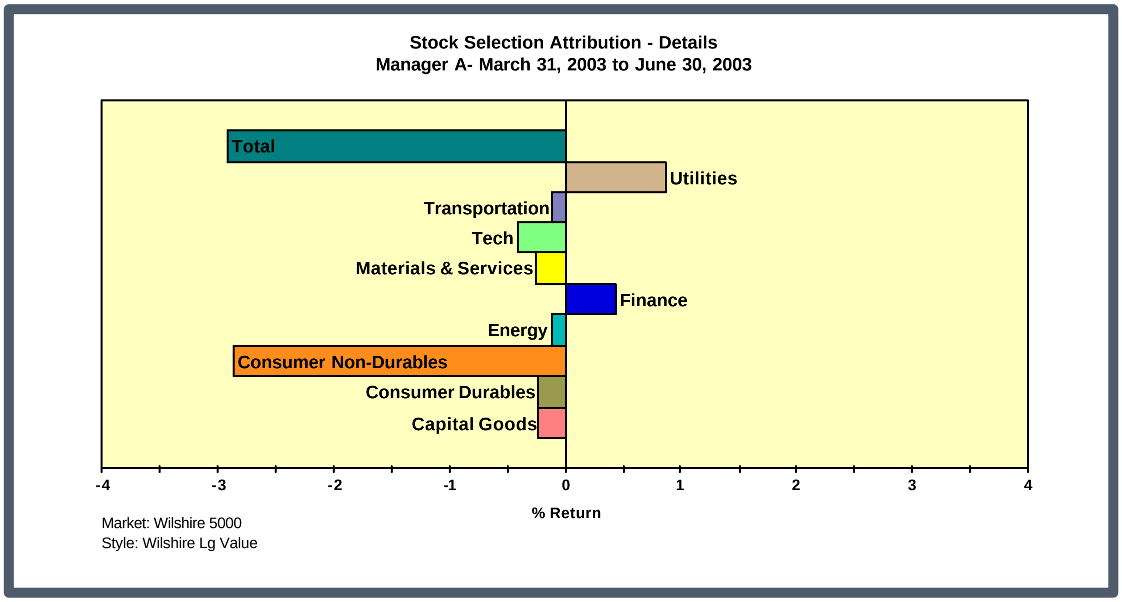
- Positive sector selection occurs when an investment manager overweights sectors that outperform the broad index return or underweight sectors that underperformed the broad index return.

- Manager A, for example, held an overweight position in Technology (12.41% weight versus 8.39% index sector weight). The technology sector within the Wilshire Large Value index had a 2^{nd} quarter return of +32.05%. The Wilshire Large Value Index had a 2^{nd} quarter return of +19.79%.

- Manager A overweighted the technology sector, which outperformed the broad Wilshire Large Value Index. This results in positive sector selection.

Holdings-Based Attribution

Exhibit 16



- Although Manager A has had positive stock selection over the past 3-years (Exhibit 14), the 2nd quarter was difficult in terms of stock selection in the 2nd quarter.

- Positive stock selection occurs when an investment managers' specific sector return outperform the index sector return. Thus, the managers' stock positions within that specific sector have outperformed the stock positions within the index sector.

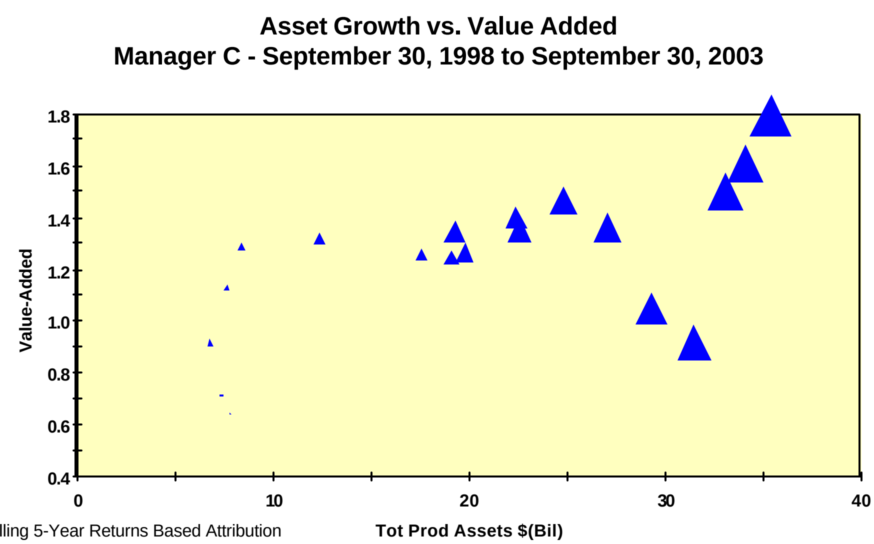
- The *Stock Selection Attribution* Model shown in Exhibit 16 identifies that Manager A had positive stock selection in the Utilities and Finance sectors only.

- For example, Manager A had a sector return of +39.19% within the Utilities sector. The index sector return for the quarter was +20.51%. This outperformance is defined as positive stock selection.

Asset Growth Versus Value-Added

- A common question today is whether a firm's assets under management have added to or detracted from relative performance. Many investors believe that a greater asset base is beneficial for fixed income managers as economies of scale gives fixed income managers an advantage. Yet this issue is debated frequently as it relates to the equity investment market.

Exhibit 17



* Rolling 5-Year Returns Based Attribution

- Exhibit 17 above identifies that Fixed Income Manager C, has consistently added to its assets under management (larger symbols represent recent time periods).

- Consistent with investment logic, as the product's assets under management have grown, the manager has continued to maintain and increase its "value-add" relative to the manager's normal (optimal) benchmark.

Summary

- The previous pages were presented to give our clients a glimpse into the number of different analytics Beacon Pointe utilizes to evaluate and monitor investment managers.

- Beacon Pointe believes that both returns- and holdings-based analysis is necessary to fully evaluate the performance of an investment manager.

- In addition to monitoring the performance, Beacon Pointe uses the analytics to detect possible investment issues or problems. For example, Beacon Pointe uses the holdings-based attribution analysis to gauge if there is any specific sector that consistently detracts from relative performance. If so, Beacon Pointe's manager research team will focus its attention into that specific sector for more information and evaluation.

- Beacon Pointe's core competency is manager research and selection. To continue to support out research efforts, Beacon Pointe has continued to re-invest our resources into manager research. We believe that having the appropriate investment analytics is of the utmost importance in today's investment environment.

- Please feel free to call your Beacon Pointe consultant if you have any questions.