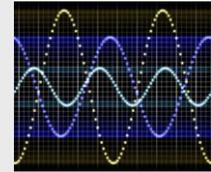




ETF INTELLIGENCE



research made relevant

sophistication made simple

intelligence made practical

June 2015

Kevin Hockert, CMT, MFTA

Director of Portfolio Strategies

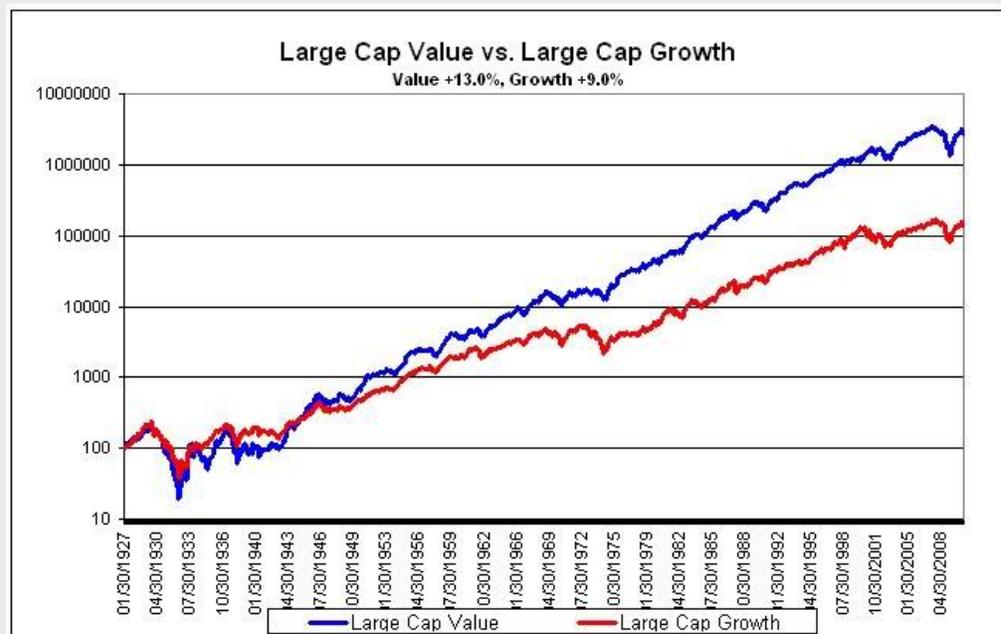
Prospero Institute

ETF Intelligence tackles the investment selection, asset allocation and portfolio construction processes from a scientific standpoint. Through rigorous testing ETF Intelligence has developed mathematical models which are designed to simplify. While the recent popularity of the term “robo advisor” by Schwab, Betterment and others appears to be a new approach it is new only from a language and marketing standpoint as Prospero began developing algorithmic or rules based portfolio strategies over a decade ago.

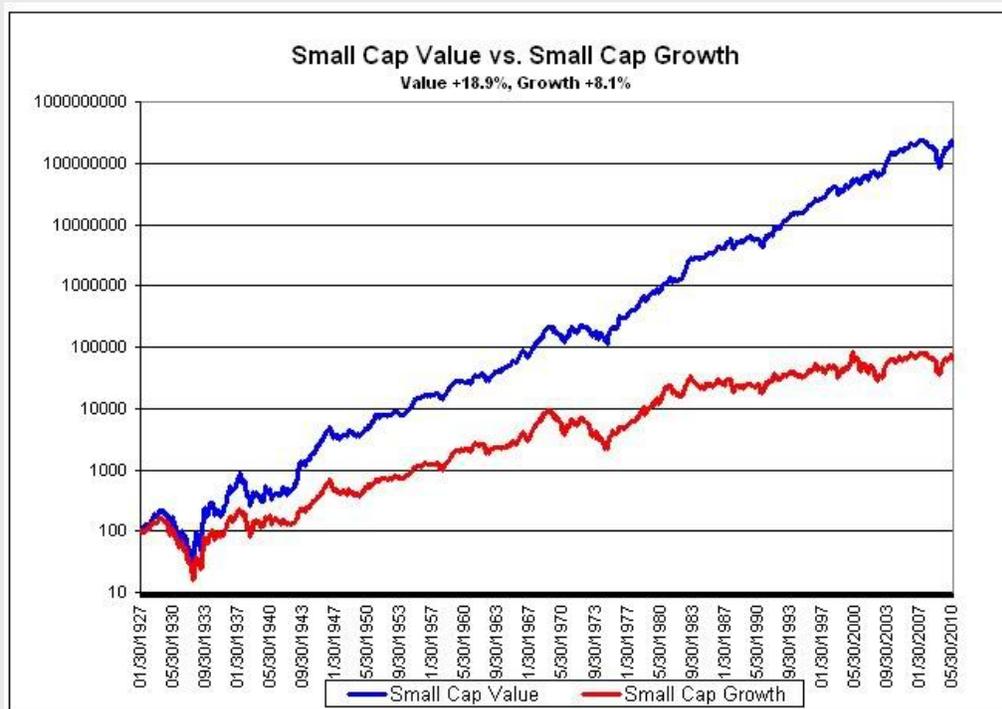
Relevant, timely, simple and practical ETF Intelligence provides you with insights into Prospero’s systematic ETF Portfolio strategies which are designed to save time, money and improve investment experiences reduce or eliminate subjectivity and emotion, and help advisors become more confident and certain about their client investment portfolios.

Is your style in style? Is there still value in value?

Over longer periods of time we know that value stocks have historically outperformed growth stocks over longer periods of time. In looking at the chart below (Ken French library), large cap value has delivered a 13.0% compounded return compared to 9.0% for large cap growth.



By a wider margin Small cap value (18.9%) has outperformed small growth (8.1%).



Yet in recent years just the opposite has occurred. **Returns of the Russell style ETFs show that value outperformed growth in the 2001-2006 time period while growth has outperformed over the past 8 ½ years... and in the case of large and small cap growth they have doubled the return of their value counterparts.**

IWD: iShares Russell 1000 Value IWS: iShares Russell Mid Value IWN: iShares Russell 2000 Value

IWF: iShares Russell 1000 Growth IWP: iShares Russell Mid Growth IWO: iShares Russell 2000 Growth

Period	IWD	IWF	IWS	IWP	IWN	IWO
8.2001-2006	59.34%	6.99%	105.77%	43.75%	107.93%	35.46%
2007-current	53.64%	104.56%	83.50%	106.91%	51.43%	110.69%

Are you a value or growth investor? If you are a value investor it is likely that you tend to put more weight on your ability to identify the extent to which a stock is mispriced in the market based on fundamental measures such as price to earnings and book value. You seek to buy stocks that are estimated to be undervalued.... You also likely realize perhaps that they may have to endure a period of difficulty in the company’s operations and stock price... yet confident that they will eventually sell the stock after conditions and the stock price has improved.

If you are a growth investor perhaps you subscribe to more of an efficient market hypothesis view that the current price of a stock is reasonable and/or accurately priced as it reflects all knowable information about the company. Growth investors believe that the company's growth will lead to growth in the stock price.

What if you are not completely sureTurns out, your bias towards one style or the other is somewhat predictable. According to research by Cronqvist, Siegel and Yu, certain factors can help explain your preference towards value or growth stocks. In their paper titled "Value versus growth Investing: Why do different investors have different investment styles?" the authors assert that "differences in investment style preferences stem from two non-mutually exclusive sources: a biological predisposition at birth and certain environmental factors." Apparently an investor's bias towards value or growth has a biological basis. For example if you happen have an identical twin it is more likely that the pair of you have similar preferences than would fraternal twins....OK well respectfully that is interesting... but do you have a twin? Additionally investors who are expected to take on more financial risk (men and wealthier individuals) have a preference for growth instead of value. This is surprising because value stocks have traded at a "value premium" meaning that they have outperformed growth stocks on a risk adjusted basis.... and according to Fama and French this premium reflects risk.. and is a reward that value investors realize as a result of higher expected returns for bearing the risk of financial distress or bankruptcy. Does this mean that risky investors are buying the wrong stocks....?

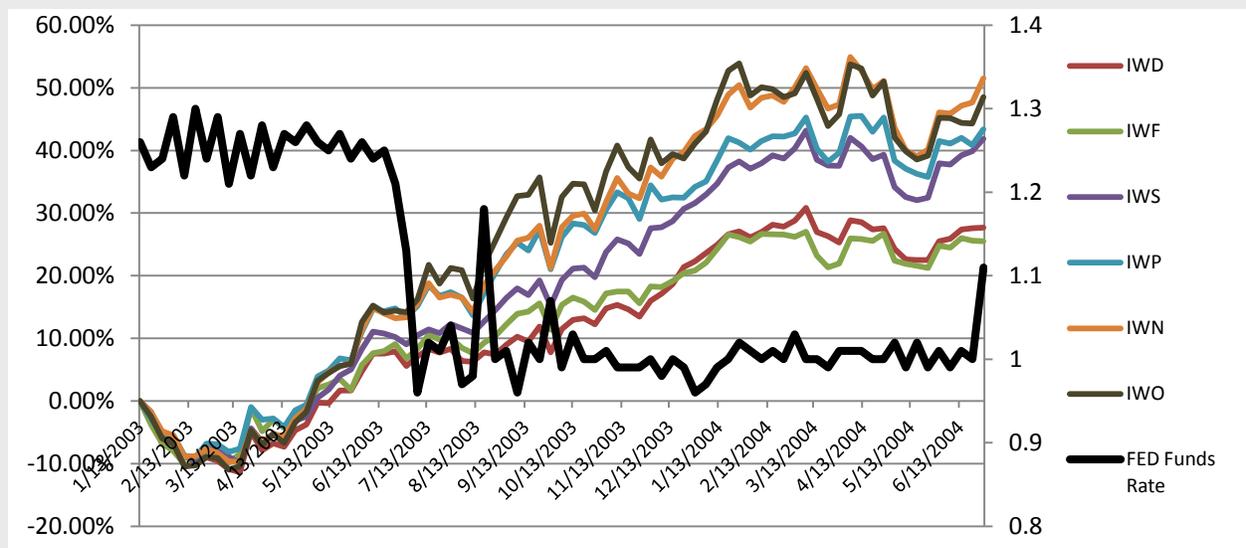
Lastly according to the authors an investor's preference to an investment style is explained by life courses in that experiences early and late in life are related to preference of investment style. For example if you grew up during the Depression, entered the job market during an economic downturn, or grew up in a lower status socioeconomic environment... you likely have a stronger orientation to value investing.

Their research also includes some colorful examples. For example, Ben Graham, commonly referred to as the "father of value investing" preferred to buy stocks with comparatively low valuations. On the other hand T. Rowe Price, often referred to as the "father of growth investing" preferred companies characterized by strong earnings growth, R&D investment and innovative technology. Graham grew up very poor, his father passed away when Ben was young, and his mother lost their life savings in stock market crash known as the Panic of 1907. As a youngster Graham was often tasked with bargain hunting at various grocery stores. Conversely Price had a privileged upbringing. His father was a medical doctor who had a lifelong career as a surgeon for a rapidly expanding railroad company. Stark contrasts in life experiences such as this can contribute to an investor's preference towards investment styles. While I have had some fun with this research I certainly have a high degree of respect for the authors' work and find it refreshing as it flies in the face of rational investor notions and speaks more of behavioral finance.

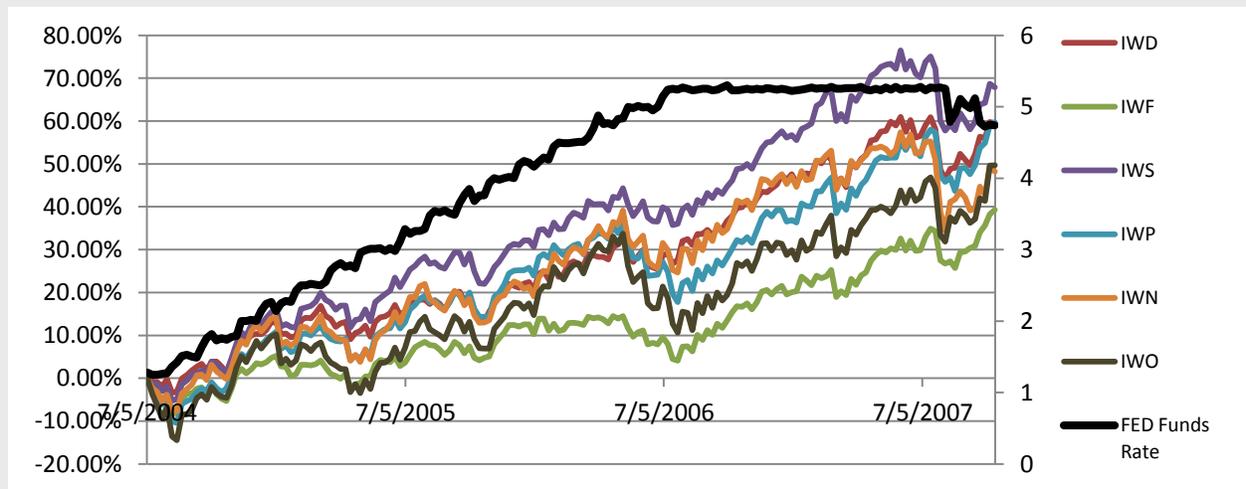
By the way where did the value premium go? Apparently value outperforms growth except when it does not.... Some have recorded the death of value investing while others are holding out.... hoping it is premature. Don't worry there is an explanation for this also. Perhaps more money has been chasing value as a result of the plethora of "value premium" research by practitioner and academics alike. And consequently the premium has narrowed. Another theory relating to value and growth stocks from Lakonishok, Schleifer, and Vishny (1994) argues that "investors incorrectly extrapolate past performance

of earnings growth of value and growth stocks, resulting in mispricing above and below fundamentals”. Basically what happens is that investors eventually come to realize that future earnings growth is weaker or stronger than expected and push stock prices back toward less extreme valuation multiples. The result is that there is a cycle of relative performance between value and growth stocks.

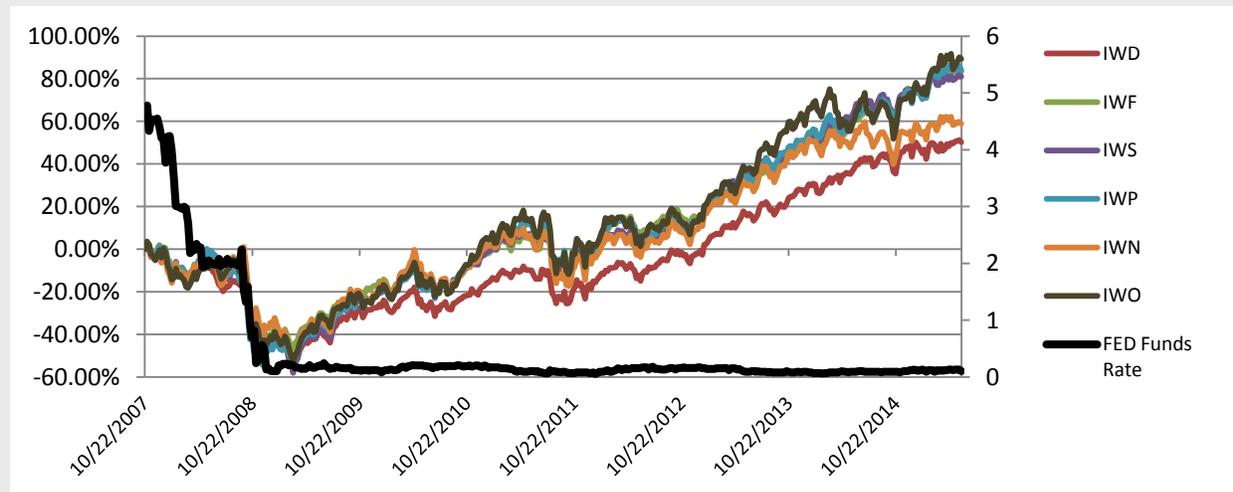
So what are we to do? We do know that the Fed is preparing to raise interest rates. How did value and growth stocks perform prior to, during and following the Fed's last rate hike cycle? In 2003 stocks bottomed in March prior to a dramatic decrease in the Fed funds rate. Stocks continued to rally in 2003 with **Small and Mid cap, (primarily growth styles) leading the way** while large value and growth lagged. Stocks continued to rally through early 2004 before entering a consolidation phase in anticipation perhaps of an impending rate hike in June of 2004. Additionally you can see that stocks bottomed prior to the initial Fed rate hike in June of 2004.



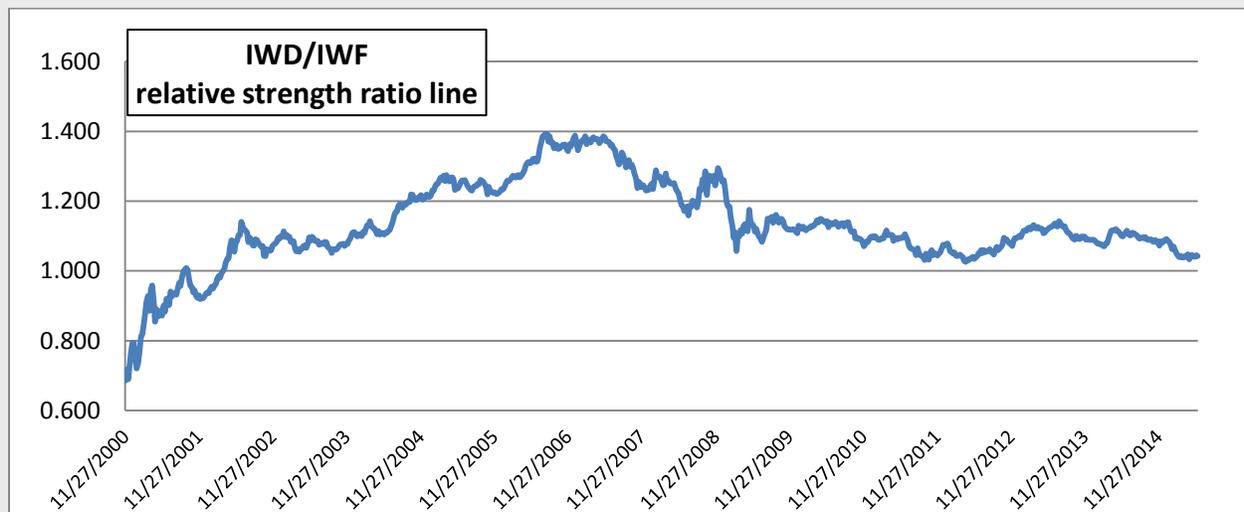
The June 2004 rate hike marked the first in a series over a 2 year period which saw the Fed Funds rate increase from 1% to 5.25%. As you can see by looking at the chart below **value stocks outperformed their growth counterparts during this time period.**



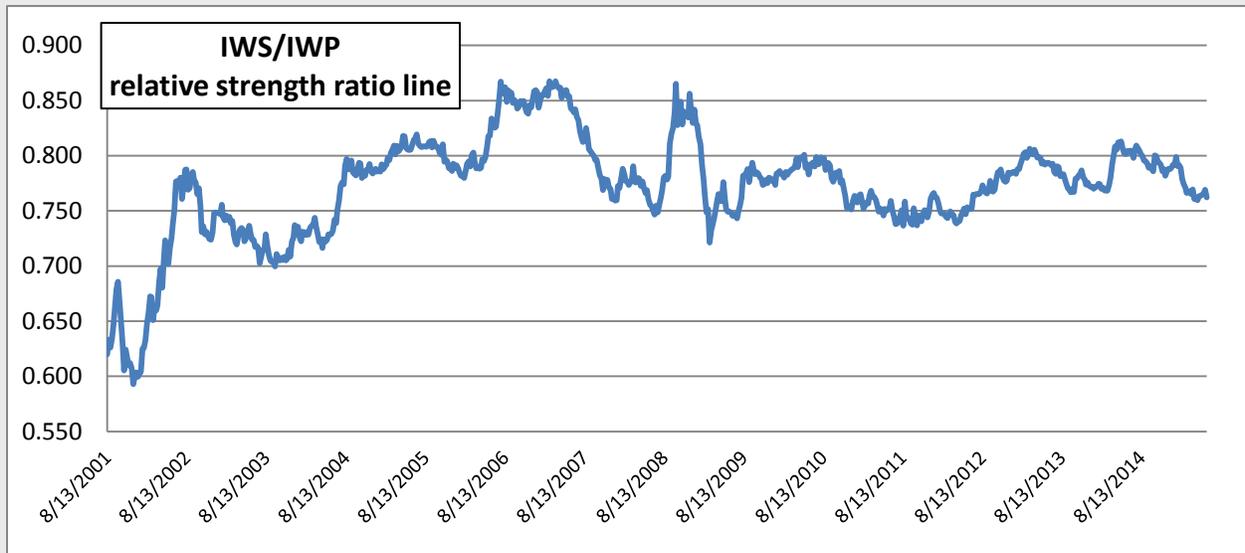
How have value and growth performed since October of 2007? As you can see just the opposite has occurred. As the Fed lowered rates in response to the economic slowdown and developing credit crises all equity classes suffered dramatically. As the Fed's actions approached a near zero interest rate policy stocks bottomed in March of 2009 and began to rally. Clearly Large, Mid and Small Cap **Growth** (IWF, IWP and IWO) along with Mid Value (IWS) have been the top performers while Large Value (IWD) and Small Value (IWN) have been the laggards.



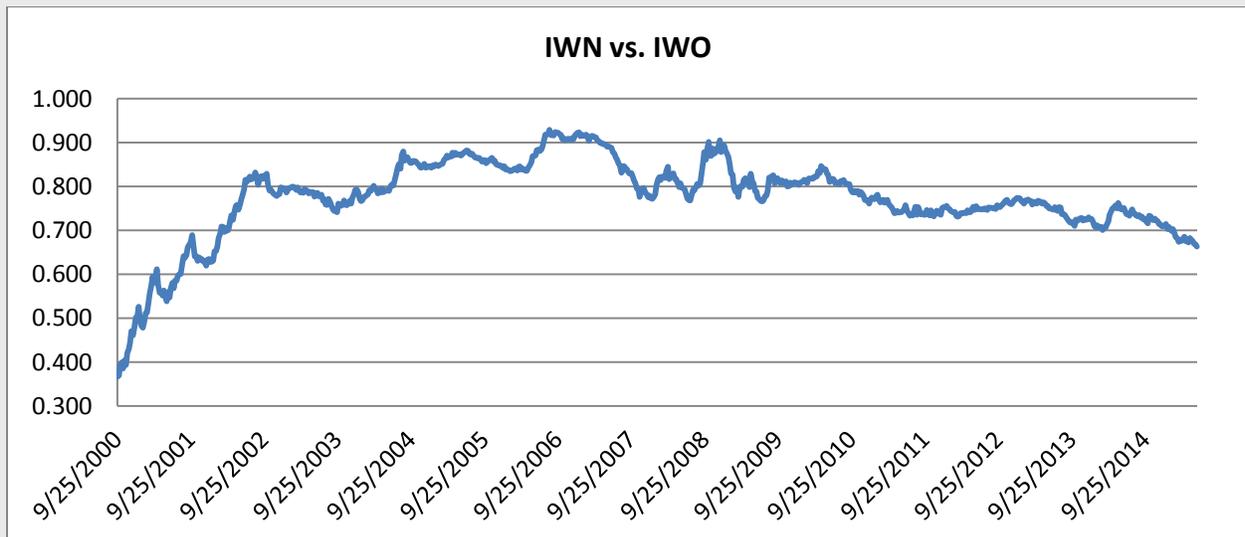
Viewing total return charts is a common and useful practice in obtaining a big picture view of absolute and relative returns. Yet a simple, clean and more informative way to view and analyze relative returns can be accomplished by producing what is called a relative strength ratio line which is the result of dividing the price of one security by another. By dividing the weekly price of IWD by IWF we now are viewing the performance relationship between large value and large growth on a one to one basis in a relevant and precise manner. When the line is trending upward large value (IWD) is outperforming large growth (IWF). Conversely when the line is trending downward growth is outperforming value. As you can see large value generally outperformed large growth in the 2001-2006 period. Since that time the relationship has reversed (large growth has outperformed) as the relative strength ratio line has generally declined since the peak in the indicator in 2007.



Similarly the relative strength ratio line of mid value (IWS) vs. mid growth (IWP) shows that value generally outperformed before peaking in early 2007 which was followed by a volatile yet generally declining RS line since that time (representing outperformance by mid growth).



Lastly we look at the relationship between small value and growth and again see a similar pattern. Value generally outperformed before peaking in late 2006 which since that time growth has generally outperformed.



Relative strength ratio lines are the starting point in analyzing the cycle of performance between value and growth. While this chart construct is more informative than looking at total return charts further utility can be garnered by applying moving averages to define the relative strength trend of a value versus growth relationship. Additionally creating an oscillator of the relative strength ratio line provides the opportunity to measure acceleration and deceleration of relative strength. Whether you are an investor, financial advisor or portfolio manager tools such as these can help you determine your value and growth portfolio allocations. When I have time, hopefully in a couple of weeks we will continue to explore this important topic in more depth.

Rather than relying on expert forecasts or spending hours sifting through and interpreting dozens of charts, ETF Intelligence develops and delivers technically based quantitative investment strategies that are designed to reduce or eliminate subjectivity and help investors and financial advisors become more confident and certain about their investment portfolios.

Prospero Institute
A Registered Investment Advisor
302 Kenwood Street, Suite 125
Alexandria, MN 56308
www.AskProspero.com
320.762.0175