LETTER FROM THE EDITOR

In this month’s issue we sadly note the passing of 2003 MTA Annual Award winner, Richard Russell. The story of his life was inseparable from his work and we present two examples of his work. There are many other examples available and young analysts would benefit from studying Richard’s approach to both work and life.

Young analysts would also benefit from studying the life of Ralph Acampora, CMT, who recently spoke to business students at the University of Denver. He began by talking about a bubble that developed in railroad stocks in the 1800’s. This bubble played out on the charts just like the internet bubble would almost 150 years later. As technical analysts know, history repeats. This time-tested idea is the subject of an article about the failure of a financial firm in 19th century Britain. Overend, Gurney & Co. is a company few traders remember but Dr. Bryan Taylor provides us with the details of one of the most dramatic events in the financial history of Victorian England. The collapse of Overend, Gurney and Co. had a more severe impact on the London financial market than the collapse of Bear Stearns had on U.S. markets over 140 years later. During the financial crisis of 1866, over 200 firms went bankrupt, including a number of banks. The similarities with 2008 are startling but few technical analysts will be surprised to see that history and human nature never seem to change.

This month’s issue also includes calls for papers from the sponsors of the Charles H. Dow Award and the Wagner Award. Research papers can be a valuable source of trading ideas as you can see in this issue’s Chart of the Month feature which shows the indicator highlighted in the 2015 Dow Award winning paper for several key markets around the world. In the next few months, we will be charting several other Dow Award-winning ideas.

Sincerely,

Michael Carr
Richard Lion Russell, 91, of La Jolla, California, passed away on November 21, 2015 from natural causes at his home, surrounded by his family. Russell was founder and publisher of *Dow Theory Letters*. To his last day he continued to write his daily opinions and analyses on the stock market. He never skipped his scheduled letter, and after moving to a digital format in 1991, he began writing every market day. His analysis was based on the Dow Theory, which he discovered in the stacks of the NY Public Library in 1958. Russell's *Dow Theory Letters* has been the oldest service continuously written by one person in the financial advisory business.

Russell gained wide recognition via a series of over 30 Dow Theory and technical articles that he wrote for *Barron’s* during the late 1950s through the 1990s. Through *Barron’s* and via word of mouth, he gained a wide international following. Russell was the first (in 1960) to recommend gold stocks. He called the top of the 1949-66 bull market. And almost to the day he called the bottom of the great 1972-74 bear market, and the beginning of the great bull market which started in December 1974. He was the first of the original “gold bugs” of the 1960s. It could be said that gold was Richard's armor, his protection against the world, and he always recommended that his subscribers have a solid position in the metal.

Russell was the recipient of the MTA’s Annual Award in 2003. He has been quoted in such publications as *Bloomberg Magazine, Barron’s, Time, Newsweek, Money, the Wall Street Journal, the New York Times, Reuters* and others. His subscribers hail from all 50 states and countries all over the world. In his 57 years of writing, he has absorbed several other advisory services, including Julian Snyder's *International Moneyline*, and the *Zweig Forecast*. From Peter Brimelow in *MarketWatch* (8/6/07): “According to the *Hulbert Financial Digest*, Russell is tied for top place as a market timer on a risk-adjusted basis since 1980.”

A native New Yorker, born in 1924, Russell has lived through depressions and booms, through war and peace. He was educated at Rutgers and received his BA at New York University. He flew as a combat bombardier on B-25 Mitchell Bombers with the 12th Air Force during World War II. His children say that the stock market was a living, breathing member of the family. It kept him obsessed and was his pulse, his reason for living. Russell and his family moved to San Diego in 1961 and in 1967 to La Jolla. He is survived by five children: Daria Russell Doering, Nicole Russell, Betsy Russell, Ryan Russell and Lauren Bedford Russell; five grandchildren: Nicholas Doering, Jake Doering, Nina Doering, Duke Van Patten, and Vincent Van Patten, Jr. Also three ex-wives, Constance Lerner Russell, Paula Bedford Hauer, and Faye Hunter. His sister Kate Russell Bobker of Greenwich, Ct. survives him as well.
Richard was a perpetual collector; he loved cacti as they were the only things that would grow year round in his New York home. They were one of the reasons he came to Southern California. He loved dogs, ranging from English Mastiffs to Standard French poodles. His never-ending quest for self-improvement and psychological understanding continued to his dying day.

Dow Theory Letters will continue to be written and published by Richard Russell’s team of analysts at www.dowtheoryletters.com. Please post tributes or reminisces on Richard’s memorial website at Richard-Lion-Russell.forevermissed.com. In lieu of flowers, Richard would ask that donations be made to the Autism Society (autism-society.org) and the National Multiple Sclerosis Society (nationalmssociety.org).
THE HISTORY OF THE DOW THEORY
BY RICHARD RUSSELL

Editor’s note: this was originally posted at DowTheoryLetters.com and is reprinted here with permission.

The following piece is for serious market students. What I wrote below is information that you will rarely see anywhere else. I hope it will dispel some of the misconceptions and utter nonsense that has circulated about Dow Theory. Read on.

DOW’S THEORY: From the very beginning (July 1958) I called my report Dow Theory Letters, and there are obvious reasons for that. The reasons are (1) I truly believe in the basic tenets of Dow Theory, and (2) I wanted to teach Dow Theory and I wanted to insure that the Dow Theory tenets, rules and observations were passed on to future generations.

Before I start this section let me say that there are hundreds of predictive and trend-following techniques that are now used (some very worthwhile, others less so) by market students. I follow dozens of these techniques and devices, but none of them will ever replace or negate the basic tenets of Dow Theory.

I’ve been writing these reports for 41 years and never a month goes by that someone doesn’t announce that the Dow Theory is antiquated and that it no longer works. The detractors, almost to a man, do not know their subject and have, in almost all cases, never studied Dow Theory. The Dow Theory (actually it is a set of observations) has basically to do with buying great values and selling those values when they become overpriced.

Value is the operative word in Dow Theory. All other Dow Theory considerations are secondary to the value thesis. Therefore, price action, support lines, resistance, confirmations, divergence --- all are of much less importance than value considerations, although critics of the Theory seem totally unaware of that fact.

I’ve spent two-thirds of my life studying and writing about the markets. And I’d say that without a shadow of a doubt the material which has served me best are the books and papers written by the great Dow Theorists -- Charles H. Dow, William P. Hamilton, Robert Rhea and E. George Schaefer.

First, let's talk about Charles Dow, a man who, by any reckoning, must be considered a brilliant market observer and theorist. Dow started his career as an investigative reporter, specializing in business and finance. In 1885 (and few people are aware of this), Dow became a member of the New York Stock Exchange, and this provided him with an intimate knowledge of how the market works. In 1889 Dow began publishing a little newspaper which he called The Wall Street Journal. Between 1899 and 1902 Dow wrote a series of editorials for his Journal, editorials that many consider among the finest ever to come out of Wall Street. Written almost 100 years ago, these editorials are as pertinent and valuable today as they were the day they were written.
Dow was a very modest man, and although his admirers begged him to write a book explaining his theories, Dow stubbornly refused. However, Dow’s good friend, S.A. Nelson, published 15 of Dow’s *Wall Street Journal* editorials in a little volume entitled, "The ABC of Stock Speculation." A footnote at the bottom of each chapter refers to the editorial as "Dow's Theory." But Dow himself never once used the term.

Following Dow's death, two other men took over editorship of the *Journal* for brief periods. They were followed by William P. Hamilton, who was the fourth editor of the *WSJ*. Hamilton wrote a brilliant series of 252 editorials. These pieces appeared in the Journal between 1903 and 1929, and in *Barron’s* (the Journal's sister publication) during 1922 to 1929. As time passed, Hamilton's writing attracted a wide and devoted following. In 1926 Hamilton wrote his landmark book entitled, "The Stock Market Barometer," in which he presented his own version of Dow Theory.

Hamilton had been Dow's understudy at the *Journal*, and in his book he included much of Dow's market observations and philosophy. But Hamilton also presented his own views on Dow Theory, and it was Hamilton who first defined the confirmation principle of the Averages. Hamilton died in 1930 soon after writing his most famous editorial, "The Turn of the Tide" (written on October 25, 1929). This fateful forecast served as the obituary for the amazing and hugely speculative 1921-'29 bull market.

The next great writer in the Dow Theory chain was Robert Rhea. Rhea was a devoted student of Hamilton's, and Rhea adhered closely to Hamilton's version of Dow Theory. Over a period of many years, Rhea codified and refined Dow Theory, always deferring to Hamilton in his explanations. I've studied every work and sentence that Rhea ever wrote, and in my opinion, Rhea was the greatest market trader of his time.

Rhea possessed a marvelous, instinctive gift for reading the Averages. He had an uncanny ability to identify and trade on the secondary as well as the primary trend of the market. Rhea was bed-ridden with TB, and he relied on his remarkable trading ability to support himself and pay his costly medical bills.

On November 12, 1932, Rhea started a stock market service which he titled, "Dow Theory Comment." The service was successful from the start. Rhea called the exact bottom of the bear market on July 8, 1932, a feat which I consider one of the most remarkable in the history of stock market analyses. Rhea's early letters were written during the depths of the greatest depression in American history, and you can imagine the skepticism with which his almost shocking bullish reports were greeted. Rhea also called the turn (to the downside) in the bear market of 1937, and this feat, even more than his 1932 bull market call, made Rhea a household name on Wall Street.

Sadly, Rhea's disease took its toll. Only seven years after he started his advisory service, Rhea died (1939). Following Rhea's death, the Dow Theory lay dormant for the many years during WWII and afterwards.
The next major figure in Dow Theory was E. George Schaefer of Indianapolis. Schaefer started his career as a stock broker with Goodbody & Co. He spent many years studying the writing of the great Dow Theorists who preceded him. But Schaefer concentrated his studies on the brilliant and seminal writings of Charles Dow. Schaefer was a firm believer in VALUES. One of Schaefer's favorite quotes from Dow was, "An investor who will study values and market conditions, and then exercise enough patience for six men will likely make money in stocks."

Another Dow quote used by Schaefer states, "It is always safer to assume that values determine prices in the long run. Values have nothing to do with current fluctuations. A worthless stock can go up 5 points just as easily as the best, but as a result of continuous fluctuations the good stock will gradually work up to its investment value."

Schaefer believed that both Hamilton and Rhea placed too much emphasis on the pattern of the Averages and not enough emphasis on the principle of buying great values and holding those values throughout the life of a bull market. Schaefer wrote, "It has always been of interest to me that Hamilton and Rhea . . . both steered away from Dow's thinking in many respects. Hamilton was very reluctant to give Dow the full credit he deserved. And Rhea, in turn, disregarded the works of Dow almost entirely and specialized in trying to improve the Hamilton version of Dow Theory."

In 1948 Schaefer started his own advisory service which he called, "Schaefer's Dow Theory Trader." Schaefer's timing was fortunate but more probably brilliant. On June 13, 1949, with the Dow at a multi-year low of 161.60, one of history's great bull markets began. Exactly five days from that low, on June 18, 1949, Schaefer wrote what I consider an advisory masterpiece (I still have that report). In that piece Schaefer stated his reasons for believing that a great buying area was at hand and that a major bull market had begun.

In that June 18, 1949 report Schaefer wrote, "The philosophy of Charles Dow always gave first consideration to values, then to economic conditions and third to the action of both the Industrial and Rail Averages. When the low point of a bear market is reached, values will be the first indication of a change in trend. In the past 17 years only three opportunities have presented themselves to buy stocks at great values. Now the fourth opportunity is making its appearance."

Schaefer's June '49 forecast turned out to be uncannily accurate. In June the Dow turned up from its 161.60 low, and a great bull market began. Schaefer stayed with the bull market through thick and thin until 1966. On February 9, 1966, 17 years later, the Dow topped out at a value of 995.15. Those who followed Schaefer's Dow Theory interpretations and investment procedures (i.e., those who held their stocks throughout the bull market as Schaefer repeatedly advised) made fortunes.

One of the reasons Schaefer started his advisory service was to present what he terms his "New Dow Theory," a set of principles which he insisted "could be applied profitably to present-day markets." Schaefer wrote in 1960, "A study of the Averages themselves can be highly rewarding. But in my opinion, a forecast based on past movements of the Averages
cannot be conclusive. Predictions of events to come are more reliable if they can be reinforced by analysis of other technical and more conclusive factors."

What were the "other factors" which Schaefer referred to? Some of them were values (and again I emphasize values), the 200-day moving average of the Dow, the short interest ratio, the advances and declines, Dow's 50% Principle, market sentiment, market phases, and the yield cycle. Remember, prior to Schaefer, orthodox Dow Theorists tended to avoid all "extraneous" items other than the pattern of the Averages and volume, claiming that other items only interfered with pure, basic, Dow Theory studies. Schaefer disagreed vehemently.

Schaefer possessed great market intuition, and he used his market instincts plus his new tools to ride the great 1949-'66 bull market all the way from the bottom in 1949 to the top in 1966. Through reactions, corrections, panics and dips, Schaefer insisted that his subscribers hold their shares and buy more during all periods of weakness.

That may sound easy, but believe me it is not. The number of people who hold stocks from the beginning to the end of a bull market can probably be counted in the hundreds. In early-1966, Schaefer turned bearish on the market (based on third phase considerations and overvaluation of stocks), and he advised his followers to "sell out." Schaefer remained bearish until the time of his tragic and untimely death (suicide) in 1974.

Although Hamilton and Rhea took careful note of the secondary reactions in bull and bear markets, Schaefer advised his subscribers to ignore these "temporary reactions," and to remain invested in harmony with the primary trend of the market. In his historic report of June 18, 1949, Schaefer wrote, "Once stocks are purchased, both the minor and secondary movements in the market should be completely disregarded. A new period of prosperity will follow, once the present recession has run its full course." We now know how prophetic those words were (words which were written during a time of extreme fear and gloom).

Later Schaefer wrote, "So far as I can ascertain from his original writings, Dow had an open mind, and there was a great deal of flexibility in his thinking regarding the price movements."

The following is extremely important, and subscribers should take careful note of this: Schaefer believed that mass emotions were changing the character of the stock market. He realized that Wall Street was gathering a much larger following year after year, and that the American public was becoming much more involved with investments (today, of course, Wall Street has gone both electronic and global). This relatively new phenomenon of mass emotions, Schaefer believed, had to be taken into consideration as far as classic Dow Theory was concerned.

Wrote Schaefer, "My new Dow Theory involves a broad, balanced manner of thinking about the market and your own emotions. It is a far cry from the narrow 'system' that places a complete reliance upon what the Averages do. Yes, we who
study the new Dow Theory watch the Averages. But along with any such observations we realize and understand that the market is composed of people of all types, and that all people are born emotional."

So what was the result of Schaefer's emphasis on the emotions of an enormous and growing investment public? It was this -- Schaefer allowed for secondary reactions to far overshoot the restrictions which were laid out by orthodox Dow Theory. Years earlier Rhea had written that in a bull market, secondary reactions tend to retrace one-third to two-thirds of the preceding uncorrected primary advance while tending to last three weeks to three months.

Schaefer dismissed Rhea's "out-dated concepts." Schaefer believed that mass psychology and the intense emotions of the public could take the Averages well beyond the "normal bounds" outlined by Hamilton and Rhea. Wrote Schaefer, "Today our new Dow Theory allows the crowd to get as emotional in its selling or buying as it will -- with no restrictions whatever on the duration or extent of the secondary or intermediate trend. In primary bull markets, when things get scary, we simply wait for the fearful to sell out, and then we assume that the main primary trend will resume as expected. In primary bear markets, just the opposite is true."
MAKING MONEY: The most popular piece I've published in 40 years of writing these Letters was entitled, "Rich Man, Poor Man." I have had dozens of requests to run this piece again or for permission to reprint it for various business organizations.

Making money entails a lot more than predicting which way the stock or bond markets are heading or trying to figure which stock or fund will double over the next few years. For the great majority of investors, making money requires a plan, self-discipline and desire. I say, "for the great majority of people" because if you're a Steven Spielberg or a Bill Gates you don't have to know about the Dow or the markets or about yields or price/earnings ratios. You're a phenomenon in your own field, and you're going to make big money as a by-product of your talent and ability. But this kind of genius is rare.

For the average investor, you and me, we're not geniuses so we have to have a financial plan. In view of this, I offer below a few items that we must be aware of if we are serious about making money.

Rule 1: Compounding: One of the most important lessons for living in the modern world is that to survive you've got to have money. But to live (survive) happily, you must have love, health (mental and physical), freedom, intellectual stimulation -- and money. When I taught my kids about money, the first thing I taught them was the use of the "money bible." What's the money bible? Simple, it's a volume of the compounding interest tables.

Compounding is the royal road to riches. Compounding is the safe road, the sure road, and fortunately, anybody can do it. To compound successfully you need the following: perseverance in order to keep you firmly on the savings path. You need intelligence in order to understand what you are doing and why. And you need a knowledge of the mathematics tables in order to comprehend the amazing rewards that will come to you if you faithfully follow the compounding road. And, of course, you need time, time to allow the power of compounding to work for you. Remember, compounding only works through time.
But there are two catches in the compounding process. The first is obvious -- compounding may involve sacrifice (you can't spend it and still save it). Second, compounding is boring -- b-o-r-i-n-g. Or I should say it's boring until (after seven or eight years) the money starts to pour in. Then, believe me, compounding becomes very interesting. In fact, it becomes downright fascinating!

In order to emphasize the power of compounding, I am including this extraordinary study, courtesy of Market Logic, of Ft. Lauderdale, FL 33306. In this study we assume that investor (B) opens an IRA at age 19. For seven consecutive periods he puts $2,000 in his IRA at an average growth rate of 10% (7% interest plus growth). After seven years this fellow makes NO MORE contributions -- he's finished.

A second investor (A) makes no contributions until age 26 (this is the age when investor B was finished with his contributions). Then A continues faithfully to contribute $2,000 every year until he's 65 (at the same theoretical 10% rate).

Now study the incredible results. B, who made his contributions earlier and who made only seven contributions, ends up with MORE money than A, who made 40 contributions but at a LATER TIME. The difference in the two is that B had seven more early years of compounding than A. Those seven early years were worth more than all of A's 33 additional contributions.

This is a study that I suggest you show to your kids. It's a study I've lived by, and I can tell you, "It works." You can work your compounding with muni-bonds, with a good money market fund, with T-bills or say with five-year T-notes.

Rule 2: DON'T LOSE MONEY: This may sound naive, but believe me it isn't. If you want to be wealthy, you must not lose money, or I should say must not lose BIG money. Absurd rule, silly rule? Maybe, but MOST PEOPLE LOSE MONEY in disastrous investments, gambling, rotten business deals, greed, poor timing. Yes, after almost five decades of investing and talking to investors, I can tell you that most people definitely DO lose money, lose big time -- in the stock market, in options and futures, in real estate, in bad loans, in mindless gambling, and in their own business.

RULE 3: RICH MAN, POOR MAN: In the investment world the wealthy investor has one major advantage over the little guy, the stock market amateur and the neophyte trader. The advantage that the wealthy investor enjoys is that HE DOESN'T NEED THE MARKETS. I can't begin to tell you what a difference that makes, both in one's mental attitude and in the way one actually handles one's money.

The wealthy investor doesn't need the markets, because he already has all the income he needs. He has money coming in via bonds, T-bills, money market funds, stocks and real estate. In other words, the wealthy investor never feels pressured to "make money" in the market.
The wealthy investor tends to be an expert on values. When bonds are cheap and bond yields are irresistibly high, he buys bonds. When stocks are on the bargain table and stock yields are attractive, he buys stocks. When real estate is a great value, he buys real estate. When great art or fine jewelry or gold is on the "give away" table, he buys art or diamonds or gold. In other words, the wealthy investor puts his money where the great values are.

And if no outstanding values are available, the wealthy investors waits. He can afford to wait. He has money coming in daily, weekly, monthly. The wealthy investor knows what he is looking for, and he doesn't mind waiting months or even years for his next investment (they call that patience).

But what about the little guy? This fellow always feels pressured to "make money." And in return he's always pressuring the market to "do something" for him. But sadly, the market isn't interested. When the little guy isn't buying stocks offering 1% or 2% yields, he's off to Las Vegas or Atlantic City trying to beat the house at roulette. Or he's spending 20 bucks a week on lottery tickets, or he's "investing" in some crackpot scheme that his neighbor told him about (in strictest confidence, of course).

And because the little guy is trying to force the market to do something for him, he's a guaranteed loser. The little guy doesn't understand values so he constantly overpays. He doesn't comprehend the power of compounding, and he doesn't understand money. He's never heard the adage, "He who understands interest -- earns it. He who doesn't understand interest -- pays it." The little guy is the typical American, and he's deeply in debt.

The little guy is in hock up to his ears. As a result, he's always sweating -- sweating to make payments on his house, his refrigerator, his car or his lawn mower. He's impatient, and he feels perpetually put upon. He tells himself that he has to make money -- fast. And he dreams of those "big, juicy mega-bucks." In the end, the little guy wastes his money in the market, or he loses his money gambling, or he dribbles it away on senseless schemes. In short, this "money-nerd" spends his life dashing up the financial down-escalator.

But here's the ironic part of it. If, from the beginning, the little guy had adopted a strict policy of never spending more than he made, if he had taken his extra savings and compounded it in intelligent, income-producing securities, then in due time he'd have money coming in daily, weekly, monthly, just like the rich man. The little guy would have become a financial winner, instead of a pathetic loser.

RULE 4: VALUES: The only time the average investor should stray outside the basic compounding system is when a given market offers outstanding value. I judge an investment to be a great value when it offers (a) safety; (b) an attractive return; and (c) a good chance of appreciating in price. At all other times, the compounding route is safer and probably a lot more profitable, at least in the long run.
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“Please excuse my language, but holy crap, MA continues to blow me away. Difficult time stringing words together but feature after feature astounds me... i.e., the ability to highlight numerous tools/lines/etc and make it a quick button up top is crazy. Multi-time frame analysis with different periods/averages on the same chart... multi-currency - wow. Flexibility to deal with multiple markets at the same time.”

DAVID COX, CFA, CMT - Portfolio Manager, CIBC Wood Grundy
Let’s talk about danger. Do you think you are safe? Right now as you read this? How about the next time you eat out at a restaurant? Obviously it depends on all the things that can go wrong and their associated probabilities; food poisoning, choking on a bone, etc.

How safe are your exchange traded investments or current positions? Once again it can depend on all the things that can go wrong and their probabilities. Obviously we are willing to take risks, otherwise we would not be trading, right? Do we really know how much we are risking?

We’re going to delve into this rather large question and relate it to some aspects of the ‘market microstructure’. We will then map that to opportunity - for making money of course.

So let’s carry forward the points of focus from my previous article. These concepts are important for quantifying current risk, future risk, and opportunity.
Market Microstructure

Honestly this can be a long, dry topic. Let’s cut through all that.

The market we see on publicly accessible exchanges consists of much more than is visible. An iceberg comparison would even be applicable here.

*Market Microstructure*: consists of all the components within that market that contribute to price discovery and value delivery. Current academic views are that these components are transaction costs, prices, quotes, volume, liquidity and trading behavior.

Yes . . . my eyes are glazing over already too.

In trading we mostly concern ourselves with value determination - the pieces that affect a security’s traded price. This is an important distinction because most technicians believe that a security’s price tells all.

I’m not convinced of that. There are more dimensions. I’m not talking about space-time or anything like that. But it would be cool if that had some significance here . . .

I believe that the volatility of related financial instruments is also important. Especially when we can express volatility on the price scale.

Implied volatility (IV) is an important piece of the microstructure. Specifically, will IV increase or decrease over the coming days or weeks? That’s an important question. If it increases then the price and demand for a stock’s option could likely go up.

Why is this important? You’re likely asking this right about now. I’ll answer this question with two questions.

1. Why does Volatility Based Support Resistance (VBSR) actually work?
2. Why is it statistically viable?

Bear with me and you’ll see why.

I sought these answers. The hypothesis I couldn’t disprove amazed me, and still does.

**VBSR has a cause and effect relationship with Implied Volatility.**
Pretty wild right? If you’re the "oh yeah, show me proof" type of person (like me!), then take a look at the quantitative study results here.

In this study we isolated the top five stock positions in the nine Select Sector SPDRs. We aligned all VBSR signals with 30 day Implied volatility data, in these 45 large cap stocks, from 2004 to 2013. The results showed us that VBSR signal conditions correlate directly with directional trend changes of Implied Volatility. The full details are in the two page fact sheet.

**Microstructure Advantage Example**

Let’s see how we can turn this technical phenomenon into opportunity. I’m about to get wordy here, but precision is important.

**Overview:** Apple (AAPL), using VBSR, within a short-term risk / long-term reward analysis framework. The decision time is NYSE market close on July 8, 2015. Assume no information known past that time. Below is the best practice interpretation of the VBSR tools.
1. The intraday chart shows us that the SR 7/8 support zone is between 121 and 122. This is our short-term risk. Going forward, if price closes below it for 3 bars or more than 3 ATRs, then consider support to be broken. This defines short-term risk.

2. On the daily chart, price closes inside the lower N band support zone and triggers an N band support signal (N). The current SR 5/6 and 7/8 zones are overlapping, with price closing near the SR 5 line. This all tells us that price is now firmly at support. Based on the performance characteristics of VBSR, the directional movement of price - once it enters this support zone - should change from down to sideways or up over the next 3 to 5 bars. We can also see overhead that the upper N band resistance zone is at approximately 130 to 132. This defines the potential long-term reward.

3. Implied volatility has been trending higher. The N band support signal (N) occurring at this point tells us (quantitatively) that 30 day Implied Volatility (IV) should cease trending higher, and likely begin to reverse or move sideways. Thus, if IV reverses then it means market participants believe that price will revert to its mean; short term reversal.

4. The Risk Reward Ratio (RRR) tool on 7/8/2015 shows a reading of .5 Risk and 5.5 Reward. That’s a good ratio. This tool interprets current support and resistance levels separately, then calculates the quantity of Average True Range units (ATR-14) to those levels.

**Aggregated View:** These VBSR technical measurements give weight to a forecast of price trading sideways or reversing higher, for the 3 to 5 trading days going forward. The potential reward is quantified. The potential risk is quantified. These are important pieces of information required for proper trade management.

Below is the resulting price action for July 9th forward:
Note: this is an illustrative example and obviously all instances are not this clean and perfect.

Several possible ways to trade the above are outright long position, buy calls, or sell covered puts.

Note that momentum and trend should also be inputs to a good technical decision. But we’ll save that fun for articles in the near future.

Implied Volatility is undeniably a highly important element of the market’s microstructure. I think it’s the most important element along with price.

As we discussed in previous articles:

- Implied Volatility is the most heavily weighted input to derivatives valuation models.
- Big Money is structurally mandated to act (buy and sell) on risk models - and thus derivatives valuations.
Directional movement (trending) of Implied Volatility determines supply and demand for derivatives - and thus the price of derivatives and the underlying securities.

**Implied Volatility** is not just a measurement. It’s a thing; a tangible part of the market. VBSR correlates to Implied Volatility directionality.

In our next article we will see a whole new method for identifying trends. I’ll reveal how VBSR can provide advantages in longer-term market directionality.

**Do you think your brokerage account holdings (investments) are safe? Do you think market volatility will continue or worsen?**

I think the safety of exchange-traded securities is getting less so every passing month; and I’m not the only one that thinks so. Why is this? Consider what follows.


Bookstaber’s thesis is that the financial industry continues to make more advanced and complex securities, and ways of interconnecting disparate parties. While it’s done in the name of efficiency and risk mitigation, the opposite effect is the outcome.

The question posed by this book, simply put, is: Why can’t the financial markets get their act together? Why are markets actually becoming more crisis-prone?

One answer can be found in the effects of innovation. It’s undeniable innovation has had some positive effects on the markets.

But the positive effects of innovation come at a price. Innovation increases complexity. Many innovative instruments are in the form of derivatives with conditional and nonlinear payoffs. When a market dislocation arises, it’s difficult to know how the prices of these instruments will react. Innovation and mechanical efficiency have also increased complexity by pushing markets to become more interconnected. Thanks to globalization, a problem in one market can affect another even when there is no economic relationship between the two, simply because investor portfolios or bank credit lines have exposures to each. Innovation has also led the markets to become tightly coupled. This tight coupling, and the resulting higher liquidity, makes it easier to take on levered positions, because more liquid and readily priced securities make for better collateral.
Here’s the amazing part. He published this in 2007; one year prior to the financial crisis of 2008. He was prophetic in his ability to identify how we are continually making financial markets more and more systemically risky. His work is a good read if you are interested in this topic.

Kirk Northington, CMT is a co-founder of Northington Dahlberg Research, LLC and is a quantitative technical analyst. Kirk is a frequently requested speaker on the topic of volatility trading and volatility based market analysis. He is the author of Volatility-Based Technical Analysis: Strategies for Trading the Invisible, Wiley Trading Series, John Wiley & Sons Publishers; in which he pioneered new concepts in technical and quantitative analysis. Kirk has a BS degree from Nicholls State University, in Thibodaux, Louisiana. He has extensive experience in institutional market risk, process control system design, and software engineering.

Please note, if you are using Market Analyst, these tools have been made available to you for free as a trial until the end of 2015. After that, ND Research has generously reduced the monthly fee for these tools from $200 to $49.
Launched in 2009, the NAAIM Wagner Award is designed to expand awareness of active investment management techniques and the results of active strategies through the solicitation and publication of research on active management. $10,000 is presented annually for the best paper submitted to the competition.

The competition is open to all investment practitioners, academic faculty and doctoral candidates who submit an innovative topic in the area of active investing. This can be either a documented and justified investing approach or an exploration into the validity of active investing. Active investing topics can involve making investment decisions using technical analysis, quantitative analysis, etc. Papers can also address related topics such as position sizing techniques, money management approaches, scaling into and out of trades, exit strategies, etc.

The NAAIM Website has a new feature that allows anyone to search for and download (up to 3 at a time) any of the previously-submitted white papers at http://www.naaim.org/resources/find-a-whitepaper/

Get your Intent to Submit form in before the end of the year to make sure you get all the necessary communications and reminders at http://www.naaim.org/resources/wagner-award-papers/. Deadline for the final paper is February 29, 2016.
Editor’s note: this was originally published at Alpha Architect on October 13, 2015 and is republished here with permission.

Here we highlight an interesting working paper titled “Absolute Strength: Exploring Momentum in Stock Returns” by Gulen and Petkova (2015).

The abstract is the following:

We document a new pattern in stock returns that we call absolute strength momentum. Stocks that have significantly increased in value in the recent past (absolute strength winners) continue to gain, and stocks that have significantly decreased in value (absolute strength losers) continue to lose in the near future. Absolute strength winner and loser portfolio breakpoints are recursively determined by the historical distribution of realized cumulative returns across time and across stocks. The historical distribution yields stable breakpoints that are always positive (negative) for the winner (loser) portfolios. As a result, winners are those that have experienced a significant upward trend, losers are those that have experienced a significant downward trend, and stocks with no momentum have cumulative returns that are not significantly different from zero. The absolute strength momentum strategy is related to, but different from, the relative strength momentum strategy of Jagadeesh and Titman (1993) and the time series momentum strategy of Moskowitz, Ooi, and Pedersen (2011). Time-series regressions show that the returns to the absolute strength momentum strategy completely explain the returns to the relative strength and the time series momentum strategies, but not vice versa. Absolute strength momentum does not expose investors to severe crashes during crisis periods, and its profits are remarkably consistent over time. For example, an 11-1-1 strategy that buys absolute strength winners and sells absolute strength losers delivers a risk-adjusted return of 2.42% per month from 1965-2014 and 1.55% per month from 2000-2014.

Our Summary of the Paper:

Momentum investing in the academic literature, is fairly standard — rank firms on their past 12 month momentum (or past 12-2 momentum — ignoring last month’s return), and buy the highest momentum firms and sell the lowest momentum firms. Most papers usually use the top and bottom decile, ie. the 10th and 90th percentiles. However, the classification of a “winner” stock and a “loser” stock changes over time. During the internet bubble, to be classified as a “winner” a firm needed to have a past momentum score of around 250% (near the peak). During the 2008/2009 credit crisis, a “winner” stock would be any stock with a return above -5%! (these cutoffs are according to the paper). Clearly this is a wide range across time to classify “winning” stocks. The same occurs for losing stocks — the range varies across time.
An alternative screening methodology would be to use an “absolute” strength score. The idea is to look back each month at the historical cutoffs for winners and losers, while using all available returns to create the cutoffs. An example describes the method. On 1/31/1965 examine all the momentum scores (past 12-2 momentum) for all stocks measured in January every year. This would be all the momentum scores on 1/31/1927, 1/31/1928, ... 1/31/1965. From this sample, pick the 10th and 90th percentiles to be the “absolute” momentum cutoffs. This is done each month, while adding in new observations (so the sample size for each month grows each year).

Below shows the cutoffs (both relative and absolute) across time from the paper:

The results are hypothetical results and are NOT an indicator of future results and do NOT represent returns that any investor actually attained. Indexes are unmanaged, do not reflect management or trading fees, and one cannot invest directly in an index. Additional information regarding the construction of these results is available upon request.

It becomes clear that the “absolute” momentum cutoffs are more consistent across time. The “winning” stock cutoff is near 60%, while the “losing” stock cutoff is around -35% to -40%. The idea is that each month, we would only include a stock in the winner (loser) portfolio if their past momentum is above (below) the more stable absolute momentum cutoff. However, this will lead to instances where there are not many stocks in the portfolio. Below is a figure from the paper showing the number of firms in the high and low absolute momentum portfolios across time.
The results are hypothetical results and are NOT an indicator of future results and do NOT represent returns that any investor actually attained. Indexes are unmanaged, do not reflect management or trading fees, and one cannot invest directly in an index. Additional information regarding the construction of these results is available upon request.

Clearly, the number of firms in the top and bottom decile based on absolute momentum rules varies wildly across time. In the recent 2008/2009 credit crisis, the number of winners drops to close to 0, while the number of losers goes above 1,500! A relative strength momentum rule on the other hand, will always buy the top 10% and sell the bottom 10%. So if there are 5,000 firms in the universe, the relative strength portfolio will always buy 500 stocks and sell 500 stocks.

Portfolio construction aside (we will come back to this later), how does the absolute strength momentum strategy perform compared to the more common relative strength momentum strategy?

Here are the results from 1965-2014 from the paper:
The results are hypothetical results and are NOT an indicator of future results and do NOT represent returns that any investor actually attained. Indexes are unmanaged, do not reflect management or trading fees, and one cannot invest directly in an index. Additional information regarding the construction of these results is available upon request.

And here are the results from 2000-2014 from the paper:
The results are hypothetical results and are NOT an indicator of future results and do NOT represent returns that any investor actually attained. Indexes are unmanaged, do not reflect management or trading fees, and one cannot invest directly in an index. Additional information regarding the construction of these results is available upon request.

Wow! Baseline results to the long/short portfolios are impressive! Both the Absolute Strength Momentum portfolio and the Relative Strength Momentum portfolio go long the winner stocks and short the loser stocks, using the cutoffs describes above.

However, we always like to examine new research and determine the feasibility of possibly trading on the idea.

An very important caveat to the figure and results above — this includes ALL domestic U.S. stocks above $1.00 (including microcaps stocks, which make up around 60% of the names in the CRSP universe, but only ~3% of the marketcap according to Fama and French 2008). Imagine trying to short hundreds of microcap stocks! Since there may be a size effect, we decided to bring the analysis in-house.

Our Analysis:

We decided to perform a similar analysis from 1965-2014, while only examining firms above the NYSE 40th percentile for marketcap. This allows us to focus the results on mid/large cap firms. We similarly create our own absolute momentum signal using only mid/large cap firms (we get similar breakpoints in the paper).
Here are the long/short returns to the equal-weighted monthly rebalanced portfolios from 1/1965-12/2014. All returns shown are total returns but are gross of any fees and transaction costs.

<table>
<thead>
<tr>
<th>Summary Statistics*</th>
<th>Abs. Str. L/S</th>
<th>Rel. Str. L/S</th>
<th>RF</th>
<th>SP500</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAGR</td>
<td>25.28%</td>
<td>17.97%</td>
<td>5.05%</td>
<td>10.01%</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>23.26%</td>
<td>24.02%</td>
<td>0.90%</td>
<td>15.04%</td>
</tr>
<tr>
<td>Downside Deviation (MAR=5%)</td>
<td>17.57%</td>
<td>20.58%</td>
<td>0.53%</td>
<td>10.64%</td>
</tr>
<tr>
<td>Sharpe Ratio</td>
<td>0.88</td>
<td>0.61</td>
<td>0.00</td>
<td>0.38</td>
</tr>
<tr>
<td>Sortino Ratio (MAR=5%)</td>
<td>1.17</td>
<td>0.71</td>
<td>-0.12</td>
<td>0.54</td>
</tr>
<tr>
<td>Worst Drawdown</td>
<td>-68.27%</td>
<td>-70.86%</td>
<td>-0.01%</td>
<td>-50.21%</td>
</tr>
<tr>
<td>Worst Month Return</td>
<td>-40.84%</td>
<td>-41.18%</td>
<td>-0.01%</td>
<td>-21.58%</td>
</tr>
<tr>
<td>Best Month Return</td>
<td>35.12%</td>
<td>47.41%</td>
<td>1.35%</td>
<td>16.81%</td>
</tr>
<tr>
<td>Profitable Months</td>
<td>67.83%</td>
<td>67.83%</td>
<td>98.50%</td>
<td>61.17%</td>
</tr>
<tr>
<td>Rolling 1-Year Win %</td>
<td>--</td>
<td>68.59%</td>
<td>81.03%</td>
<td>70.12%</td>
</tr>
<tr>
<td>Rolling 5-Year Win %</td>
<td>--</td>
<td>93.16%</td>
<td>90.20%</td>
<td>81.33%</td>
</tr>
<tr>
<td>Rolling 10-Year Win %</td>
<td>--</td>
<td>95.01%</td>
<td>100.00%</td>
<td>93.56%</td>
</tr>
<tr>
<td>Sum (5-Year Rolling MaxDD)</td>
<td>-15116.57%</td>
<td>-16514.54%</td>
<td>-0.36%</td>
<td>-14534.00%</td>
</tr>
</tbody>
</table>

*Returns start in 01/1965 for this strategy.

The results are hypothetical results and are NOT an indicator of future results and do NOT represent returns that any investor actually attained. Indexes are unmanaged, do not reflect management or trading fees, and one cannot invest directly in an index. Additional information regarding the construction of these results is available upon request.

Overall, the results are similar to the paper — the absolute strength long/short portfolio outperforms the relative strength portfolio when comparing CAGR, Sharpe and Sortino ratios. However, these are the long/short returns. Let’s examine the individual legs of the portfolios.

Below we show the results to the four portfolios (Absolute Strength Winners and Losers; Relative Strength Winners and Losers). Portfolios are equal-weighted and rebalanced monthly from 1/1965-12/2014. All returns shown are total returns but are gross of any fees and transaction costs.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAGR</td>
<td>18.91%</td>
<td>18.74%</td>
<td>-3.42%</td>
<td>2.40%</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>24.85%</td>
<td>25.11%</td>
<td>26.17%</td>
<td>26.20%</td>
</tr>
<tr>
<td>Downside Deviation (MAR=5%)</td>
<td>17.06%</td>
<td>17.41%</td>
<td>17.09%</td>
<td>17.39%</td>
</tr>
<tr>
<td>Sharpe Ratio</td>
<td>0.63</td>
<td>0.62</td>
<td>-0.19</td>
<td>0.03</td>
</tr>
<tr>
<td>Sortino Ratio (MAR=5%)</td>
<td>0.91</td>
<td>0.89</td>
<td>-0.29</td>
<td>0.04</td>
</tr>
<tr>
<td>Worst Drawdown</td>
<td>-65.09%</td>
<td>-58.40%</td>
<td>-94.10%</td>
<td>-82.01%</td>
</tr>
<tr>
<td>Worst Month Return</td>
<td>-29.72%</td>
<td>-30.74%</td>
<td>-27.36%</td>
<td>-27.98%</td>
</tr>
<tr>
<td>Best Month Return</td>
<td>29.53%</td>
<td>42.73%</td>
<td>25.25%</td>
<td>42.95%</td>
</tr>
<tr>
<td>Profitable Months</td>
<td>63.17%</td>
<td>62.67%</td>
<td>49.17%</td>
<td>53.17%</td>
</tr>
<tr>
<td>Rolling 1-Year Win %</td>
<td>--</td>
<td>54.16%</td>
<td>84.55%</td>
<td>86.65%</td>
</tr>
<tr>
<td>Rolling 5-Year Win %</td>
<td>--</td>
<td>60.53%</td>
<td>94.64%</td>
<td>90.20%</td>
</tr>
<tr>
<td>Rolling 10-Year Win %</td>
<td>--</td>
<td>68.61%</td>
<td>100.00%</td>
<td>99.58%</td>
</tr>
<tr>
<td>Sum (5-Year Rolling MaxDD)</td>
<td>-18922.04%</td>
<td>-18893.31%</td>
<td>-27684.55%</td>
<td>-25632.17%</td>
</tr>
</tbody>
</table>

*Returns start in 01/1965 for this strategy.
Examining the results, we see that the “winner” portfolios are very similar from a CAGR and risk-adjusted (Sharpe and Sortino ratios) analysis. However, the Absolute Strength Loser portfolio outperforms the Relative Strength Loser portfolio by around 5.8% annually! So it appears that the outperformance (on mid/large cap firms) of the Absolute Strength strategy is driven by the loser portfolio (short book).

Another potential issue (which we highlighted above) is that the absolute strength rule can create portfolios with varying N’s from month to month. Alternatively, the relative strength signal creates a highly consistent N in the portfolio from month to month. Below we show the N’s for the portfolio every month (as well as the Universe of stocks we are working with).

The results are hypothetical results and are NOT an indicator of future results and do NOT represent returns that any investor actually attained. Indexes are unmanaged, do not reflect management or trading fees, and one cannot invest directly in an index. Additional information regarding the construction of these results is available upon request.

One can see the benefits of running the relative strength portfolio from a risk-management standpoint. Every month, there is a consistent number of firms in the portfolio when using relative strength (the average from 1965-2014 is 116
stocks each month). Using the absolute strength rule, the number of firms in the portfolio varies. In 5.5% (12.17%) of the months, the number of firms in the winner (loser) portfolio is less than 10 stocks! In two months (one for the winner, one for the loser), there are no firms in the portfolio!

**Summary:**

Overall, the paper has a nice story. However, the varying N’s in the portfolio can cause an investor to take on the risk of very few firms across time. Another issue is that the added outperformance of the absolute strength rule (over the relative strength rule) is driven by the short book (for mid/large cap firms), which can have high costs to manage. An adept short-trader who can take on high amount of firm-specific risk may find this strategy worthwhile.

We prefer to focus on long-only strategies. As shown above, the absolute strength rule does not add much value over the relative strength rule — so we still prefer to use the relative strength rule as the N’s in the portfolio are consistent over time. As we show [here](#), momentum investing has historically been a good strategy, and can be combined with value investing as shown [here](#) and [here](#).

Jack Vogel, Ph.D. is CFO/CIO of Alpha Architect. Jack conducts research in empirical asset pricing and behavioral finance, and has collaborated with Dr. Wesley Gray, CEO/CIO of Alpha Architect, on multiple projects. His dissertation investigates how behavioral biases affect the value anomaly. His academic experience involves being an instructor and research assistant at Drexel University in both the Finance and Mathematics department. Jack Vogel is currently a Managing Member of Alpha Architect, LLC, an SEC-Registered Investment Advisor, where he heads the research department and serves as the comptroller. Jack has a PhD in Finance and a MS in Mathematics from Drexel University, and graduated summa cum laude with a BS in Mathematics and Education from The University of Scranton.
Technical analysts and the academic community have not always had a close relationship. This situation could be changing and it is likely students are pushing the change.

Ralph Acampora, CMT, recently spoke at the University of Denver. Ralph was part of a panel discussion on the history of technical analysis at the school’s Daniels Finance Forum. Louis Llanes, CMT, CFA, joined Ralph on stage at the event which was attended by approximately 100 students, faculty members and local investment professionals.

While the speakers addressed the history of technical analysis, it was apparent to most attendees they were also talking about the present. Railroad bubbles that occurred in the late 1800’s, as Ralph pointed out, are very similar to bubbles in internet stocks or real estate that occurred in more recent times.

Comments also highlighted the important role technical analysis can hold in risk management and the complementary nature of technical analysis and fundamental analysis. Technicals can be used to time the buy and sell of stocks identified with fundamental analysis.

Questions from students demonstrated their interest in the subject. A few of the questions were simple – “where should we start to learn more about technical analysis?” and “how can we learn more about the CMT exams?” Some of the questions focused on the future as students wondered if technical analysis could survive the introduction of high frequency trading and algorithms in the markets. Ralph pointed out these developments are just faster versions of ideas we’ve seen in the markets since railroad stocks were in a bubble. Technical analysis remained relevant as markets changed in the past and will always be applicable to markets where fear and greed operate.

Dr. Andrew J. Sherbo, Ph.D., CFP, summed up the event:

“We were fortunate to have both Ralph Acampora and Louis Llanes visit the University of Denver on October 30 for the Semiannual Finance Forum. They both did an outstanding job in giving the history of Technical Analysis and the future of this valuable research tool to improve investment performance."
Editor’s note: this was originally published at Crestmont Research on August 11, 2015 and is reposted here with permission.

Many investors and advisors are unsure about the current financial market environment. They have been wrestling with how to weight equities and whether to include alternative investments. Although equities have performed well in recent years, many alternatives have lagged expectations. This should not be surprising: the financial world is operating just as the Fed has intended.

Over the past few years, analysts have pondered whether and when the Fed will start to change its intentionally distortive policies. Many hedged portfolios have remained diversified due to that uncertainty, and unfortunately they have often underperformed expectations.

The repeating pattern—and unprecedentedly long era—of interest-rate and bond-market interventions now has many investors capitulating to a new world outlook. As an analogy, it’s as though nine heads in a row from coin flipping has led to an expectation of perpetual heads. As irony would have it, this shift in attitude is gathering pace just as signs of change are appearing on the horizon.

In this article, we’ll review various reasons why equities have overperformed and alternative investments have underperformed in recent years. We’ll see that conditions are ripening for a reversal of that pattern. Changes and risks that have not been present for years are now on the market’s calendar. Portfolio diversification and risk hedging are more important now than they have been in quite a while. Yet the current momentum of the market is upward; thus portfolios should remain exposed while also sustaining protection from downside risks.

The convergence of numerous factors is beginning to raise a yellow flag of caution for the stock market. These are not definitive signals of an impending turn, but rather they represent dark clouds of risk on the near horizon. This outlook does not indicate that investors should retreat from stock market investments; instead, investors should consider a bias toward the “rowing” strategies that were conceptually presented in chapter ten of Unexpected Returns: "Row, Not Sail" (relevant excerpt here). Rowing strategies represent a more diversified, risk-managed approach to investment portfolios. The intended effect is to limit a portfolio’s participation in downside losses while capturing a portion of upside gains. The cumulative effect generates compounded returns that exceed the minimal equity returns of secular bear markets. An illustration of the benefits of rowing is discussed in "Half & Half: Why Rowing Works" (link here).

The evidence is compelling that current conditions in the stock market represent a secular bear period. Some prominent analysts have succumbed to the intoxicating effects of the ongoing cyclical bull market and now call for an extended
secular bull run. Their charts, positions, and Crestmont’s exposé on the issues are included in the July 6, 2015 article “Are We There Yet?” (link here).

Over the longer term, the stock market environment fluctuates from above-average-return secular bull markets to below-average-return secular bears. The most recent secular bull lasted from 1982 through 1999, yielding to the start of a secular bear in 2000. Secular periods includes numerous shorter-term cyclical cycles. These interim cycles are primarily driven by investor psychology and short-term factors—as a result, they are somewhat random and hard to predict.

The current secular bear is progressing similarly to the previous secular bear of 1966-1981. That notorious period consisted of dramatic cyclical cycles that churned upward and downward. Earnings grew over the period, yet P/E valuations declined, thereby stifling the market’s advance. Today’s secular bear includes all of the same elements. It also includes a cyclical bull that has reached new highs... just as in the early 1970s. Investors have been teased to expect a long-run launch. Figure 1 presents the cyclical bulls and cyclical bears for the current secular bear market; Figure 2 provides a view of history to contrast the current cycle with the previous one. Despite the apparent pattern of cyclical cycles, they are much more random and harder to predict than secular cycles.

Figure 1. Cyclical Cycles in the Current Secular Bear

Figure 2. Living Through the Last Secular Bear Market: 1966-1981
Yet randomness at times coexists with propensity. Although a tenth coin flip involves the same probabilities as the first, would you not bet differently following nine heads in a row?

**CATALYSTS & CONDITIONS**

Catalysts are fuses; they represent sparks that ignite unstable situations. Conditions are the fuels that lie vulnerable to ignition. Catalysts may give rise to an event, while the conditions determine what, if anything, happens next. Even as recently as a year or two ago, the catalysts for a change in the stock market environment were distant enough to bend away from visibility on the horizon. They were beyond the view in the headlights. The conditions were still evolving and had not reached the levels that exist today. But time passed and the catalysts of change have grown in strength, setting the stage for heightened risk, while at the same time they are preparing an environment of opportunity.

In a typical secular bear environment, investors will find that the more actively managed and skill-based rowing strategies tend to outperform the more passively managed and market-exposed sailing strategies. Not only can skill and value find opportunity, but passive market-based returns—across full cycles—are very limited in secular bears.

Nonetheless, the skill-based and value-oriented investments that are generally successful in naturally functioning markets have been distorted in recent years. With good intentions, the Fed and the federal government (“D.C.”) have imposed
policies and programs that have led to misalignments and complacency in the markets and in the economy. The reversion back from such market distortions should create a foundation to restore conditions that will again enable those who are skillful to manage risk and deliver returns.

The financial markets are in the seventh year of the Fed’s zero interest rate policy (ZIRP). ZIRP is the artificial suppression of short-term interest rates to zero or near-zero percent. Its goals have been to stimulate the economy by lowering the cost of borrowed money and to motivate investors to allocate capital to the stock market in order to promote a wealth effect that drives economic growth. Regardless of whether ZIRP has achieved its laudable goals, it has intentionally distorted market relationships. Distorted markets alter the effectiveness of skill-based and value-oriented investment strategies. This occurs because such strategies rely upon the ability of managers to identify and select undervalued and overvalued investments. When markets experience dislocated or manipulated relationships, skill acts as though it is executing in Alice’s Wonderland.

Recent statements from the Fed indicate the likelihood of an increase in interest rates and an end to ZIRP during 2015. Keep in mind, however, that a major election year is approaching. That could create an excuse for the Fed to further delay the end of ZIRP. Regardless, ZIRP’s conclusion is clearly on the foreseeable horizon.

Around the same time that the Fed started ZIRP, they initiated a series of bond-buying programs known as quantitative easing (QE). The purposes of QE have been to lower longer-term interest rates, provide liquidity to the financial markets, and promote higher stock prices. Like ZIRP, QE intentionally distorts the markets for laudable purposes. After accumulating $4.5 trillion in assets, the Fed ceased QE in October 2014. They have indicated that a reversal of QE will not occur until the Fed ends ZIRP. Now that ZIRP’s end is forthcoming, the reversal of QE may not be far behind.

In addition to the Fed’s monetary policy actions of ZIRP and QE, D.C. implemented a series of fiscal policy programs that were intended to stimulate the economy. Although there have been a range of beneficiaries, many of the programs were ultimately counter-productive toward their intended goals. Other programs favored some industries at the expense of others. For the economy overall, such fiscal distortions cause a misalignment of resources and relationships. Regardless, the upcoming election year will change the leadership in the executive branch of government. It is unclear whether the effects will include a reversal of recent policies or an extension of them in new forms. Either way, a change in fiscal policy is now on the near horizon.

Although reversing and ending the distortive programs may initially roil the financial markets, the end result should be to restore market relationships, thereby leading to more naturally functioning conditions. The resulting investment environment should be much more favorable for skill-based and value-oriented strategies.

CONDITIONS ARE FUEL LOADS
Beyond the upcoming catalysts from the Fed and D.C., the current market environment is being affected by a series of market technical factors, economic issues, and the level of valuation. These are not the reasons to expect a change in the investing environment; instead, they are the conditions that will potentially facilitate or accentuate the change. Analogously, a long period without fire in a mature forest does not cause such an incident, but rather the long period builds fuel loads that are susceptible once the catalyst of lightning or irresponsible visitors creates a spark. Likewise for the market, the following series of elements represents market conditions that should be watched closely.

The first element is the technical factor of market volatility... or the lack of it! Low volatility and long periods without corrections don’t cause future changes in the market environment, but they do set up the conditions that can accelerate or accentuate them once they do occur. Keep in mind that **low volatility is an indication of a recent and current good market; it is not an early indicator of a good market to come**. High or rising volatility is an indicator of a declining market.

As shown in Figure 3, the current level of volatility in the stock market falls within the lowest 20% of all periods since 1950. Our present period of low volatility has lasted for more than two years. As reflected in the graph, volatility itself has an erratic cycle. Although market volatility could remain in the low zone for some time longer, the pressures and risks from low volatility are building.

Figure 3. The Volatility Cycle
The eerie calm in the market is evident not only in the graph’s measure of volatility but in other signs of a mounting fuel load. Just as mild forest fires help to reduce fuel loads and prevent major fires, market corrections (well-named) help to correct a variety of unhealthy factors. Many market analysts use a ten-percent threshold to designate a healthy correction. As of August 2015, the S&P 500 is experiencing its third longest period without a ten-percent correction. It would need to make it to mid-April 2016 to move into second place.

In summary, market volatility has been fairly low for a relatively extended period, and the S&P 500 Index has gone a long time without a healthy correction. Both issues reflect conditions of latent risk; they are not foundations that support a continuation of the current cyclical bull market.

The second element of market conditions to watch is a series of economic issues. Although economic growth is not a significant cause of secular market cycles, it can be a driver within shorter-term cyclical cycles. The cycles of economic expansions and recessions tend to provide a relatively stable economy over the long term. As a result, their impact on long-term market cycles is relatively limited. In the shorter run, however, the surges of expansions and pauses of recessions can create psychological and statistical drivers in the market. The average economic expansion over the past
six decades has been about 62 months. The current expansion has exceeded the average by almost a year and is now the fourth longest among eleven. Although the economy could continue to expand for years to come, the extended length of this expansion and growing risk of recession acts as another condition of vulnerability for the market.

Also, as the Fed raises interest rates it is likely that the U.S. dollar will strengthen against foreign currencies. A stronger dollar makes U.S. goods less competitive internationally. As a result, a strong dollar can create economic headwinds. Recession risk (or fear) and economic headwinds thus represent a second element of adverse conditions for the market.

The third element is the relatively high valuation of the stock market. This was discussed in more detail in “Are We There Yet?” (link here), published on July 6, 2015. Rather than reiterate all of the points from that piece, let’s review one chart that emphasizes the high level of market valuation and the related comments from the article.

Figure 4 presents P/E during secular bear market periods. Since bears start where bulls end, the starting level for P/E in secular bear markets is generally in the red zone on this chart. The obvious exception is the most recent secular bull, whose dramatic end in a bubble gave our current secular bear quite an extra distance to travel.

Figure 4. Secular Bear Market P/E
The current secular bear market has lasted a long time. It’s reasonable that investors want to return to a secular bull market environment, but the reality is that the level of stock market valuation (i.e., P/E) is not low enough to provide the lift to returns that drives secular bull markets. As a matter of fact, P/E is at or above the typical starting level for a secular bear market.

The current situation is not the result of P/E hibernation over the past 15 years. P/E has declined by nearly the same number of points as it has historically in a typical secular bear. This secular bear, however, started at dramatically higher levels due to the late 1990s bubble. The market’s work of the past 15 years has been to deflate the excesses that preceded it.

Currently, valuations are high and vulnerable. Many analysts have confirmed this in a variety of ways, yet others are more optimistic. One of the more credible statements recently about high valuations in the stock market came from Fed Chair Janet Yellen on May 6, 2015: “I would highlight that equity market valuations at this point generally are quite high.” Although she avoids using the artful words of a previous Fed Chair (i.e., “irrational exuberance”), the message is clear that stock market values are high. As a result, without another bubble period, future returns are limited and the market is more vulnerable to negative surprises than it is poised for positive outcomes.
CONCLUSION

The blissful market environment of the past few years is now being disturbed by elements of change in the air. Although new directions by the Fed and D.C. are inevitable at this point, they are not necessarily imminent. Nonetheless, they are known, likely, and significant... and they are on the market’s and the economy’s radars over the upcoming quarters and year.

Invoking a baseball analogy, these changes are not the fastball surprises of a financial crisis like 2008, but rather they are a slow knuckleball from a particularly unpredictable pitcher. In response to 2008, the Fed implemented a policy of softball pitches to promote base hits and home runs. In recent years, skill was less relevant than simply swinging the bat of overweighted allocations. Going forward, policy will soon change and other environmental conditions will shift. Skill should be on deck and ready to prove itself.

Ed Easterling is the author of Probable Outcomes: Secular Stock Market Insights and the award-winning Unexpected Returns: Understanding Secular Stock Market Cycles. He is currently president of an investment management and research firm. In addition, he previously served as an adjunct professor and taught the course on alternative investments and hedge funds for MBA students at SMU in Dallas, Texas. Mr. Easterling publishes provocative research and graphical analyses on the financial markets at www.CrestmontResearch.com.
Winners don’t always win

Indexing in capital markets has proven to be a popular method to gain broad market participation in a low cost vehicle that tends to outperform active managers net of fees and expenses over the intermediate and long term.

Index investments worldwide totaled over $9 trillion in 2014 up from $6.1 trillion two years prior. The majority of these indices are market capitalization weighted.

This growth stems from cap-weighted indexes providing a low-cost, low-fee broad market exposure that historically has outperformed the majority of active managers over five-year periods. The cap weighted approach links the price of the security to the portfolio weight. Therefore, all over priced securities become over weighted in the portfolio relative to their future return. The converse is true for underpriced securities becoming under weighted relative to their future stock performance. In simple terms, cap-weighted approach suggests an investor to keep buying more of the winner. The result is a performance drag for cap-weighted portfolios.

The problem: a performance shortfall for cap-weighted indices, which means that if you invest in a capitalization weighted Index portfolio your investments will not deliver an optimal return.

Is not buying the winner a solution?

This is why we have seen the emergence of Smart Beta Indices. These indices are price-indifferent weightings. They break the link between price and weight, not buying something that keeps getting expensive. Any movement away from cap-weighting (buying winners) can result in consequential style biases relative to the cap-weighted benchmark, such as a negative relative momentum load. This means that if you don’t run after winners, you can automatically get value biased. Choosing not to be with growth means shunning growth, which also pushes investment selections to another extreme, mainly value extreme.

Smart Beta Indices have a tendency to load on value and small cap and a negative momentum load relative to the cap-weighted benchmark. While they tend to outperform cap-weighted benchmarks overtime, they tend to underperform the market during momentum phases, which may persist over time.

Neither buying winner helps, nor buying the loser
So this leaves investors with a problem. The popular cap-weighted indices tend to underperform in value style markets, while price-indifferent Smart Beta indices tend to underperform in growth style markets. This means buying winners or losers independently fails to deliver.

**Buy both winners and losers**

This is where we come in. Markets move from growth phase to transition to value phase to transition to growth phase, and so forth. This pattern may be repeatable, but the timing and duration of the change between market leadership of growth/value is difficult to predict. Further complicating the market cycles is the fact that within markets, individual securities may move in either the same pattern as the market or contrary to the overall movement of the market. Orpheus Index participates in both the market and security style biases and does so in a dynamic process that more fully captures the continuing momentum of appreciating stocks and the bottoming foundation of stocks and markets poised for reversion. We buy both winners and losers, because both of them deliver remarkable profits, but with different holding durations.

**Value and Growth**

Value and Growth are risk factors that reward investors over different cycles of variable time frames. But within style driven markets there are securities of contrary style that may outperform. The most efficient holding period is relatively short. Growth and Value have different return patterns. Growth stocks benefit from momentum, faster but fleeting. Value stocks benefit from mean-reversion, price reversal. Bottoming process tends to develop slower. This means value is longer term, while growth is shorter term.

**Why one rebalancing?**

Hence the key question: if growth and value stocks move in distinctly different price patterns why have one portfolio rebalancing? Should we not hold value longer than growth?

**Ranking Process and Jiseki**

Designed to effectively capture the benefits of momentum (growth) and reversion (value) in the equity markets in a single liquid, cost-effectively managed portfolio.

Cap-weighted benchmark constituents are ranked by their relative price movement measured around the dynamic mean of each quintile of holdings. The holdings are ranked into five quintile groups of high momentum on one end to high mean reversion on the opposite end. This is done through Jiseki Rankings of each quintile relative to its mean rather than the average mean of the whole index.
Jiseki Time cycles, which are seasonal patterns of growth (strength) or decay (weakness) in variables (assets). They are derived from percentile rankings from 1 to 100. 80-100 classifies performance as Growth, while 0-20 classifies performance as value. The 20-80 is the middle transition bin. We have included a case study on an American stock, to explain how Jiseki anticipates.

Visa was in reversion from early 2011, as the Jiseki ranking was at 20. This was a bottoming price trend. Visa got in momentum from mid 2012 as ranking pushed from bottom 20 to 80. This was a high momentum selection and was expected to exhibit continued price appreciation, winner continuing to persist. Visa in Reversion from mid 2014, as ranking fell below 80, suggesting time for underperformance, stagnation in this case.
Portfolio Construction

Our portfolio construction process captures the difference in value and growth. The two extreme quintiles of momentum and reversion are given higher weight vs. the middle three transition quintiles. All the securities of the cap–weighted benchmark are included in the Orpheus Index. Next the holding periods are established to most effectively extract the different contributions of growth and value holdings. Momentum (high growth) is held for a shorter time frame to better capture the momentum of growth stocks before they revert through lower price action. Reversion (high value) is held for considerably longer to allow such deep value stocks to appreciate.

<table>
<thead>
<tr>
<th>Bin Break Point</th>
<th>Weights</th>
<th>Holding (Months)</th>
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<tbody>
<tr>
<td>Value Bin</td>
<td>0 - 20</td>
<td>0.4</td>
</tr>
<tr>
<td>Transition Bin</td>
<td>20 - 80</td>
<td>0.2</td>
</tr>
<tr>
<td>Growth Bin</td>
<td>80 - 100</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Contribution Analysis

To further substantiate how Orpheus Index delivers more than the popular cap-weighted S&P 500 Index, we have illustrated here the contribution of value and growth components in the returns of RMI and that for S&P 500. As expected RMI dynamically selects between Value and Growth, while S&P 500 is static in its selections, not being able to move dynamically between Value and Growth is the reason S&P 500 is not able to perform optimally. We have carried the illustrations below.
Orpheus indexes are available on any platform. For example, the NASDAQ Orpheus RMI Value-Growth index can found under the symbol RMIVG20T.

Mukul Pal, CMT, Founder of Orpheus, has an MBA Finance from the Institute of Chartered Financial Analysts of India (ICFAI) Business School. Mukul started his career as a lecturer of Finance and Economics at Institute for Management Development, Mysore in 1999. After that, he joined India’s first electronic Broker IndiaBulls as India’s first financial derivatives analyst. IndiaBulls group currently has a market capitalization greater than US$50 billion. Mukul continued to work in the derivatives domain working for top Institutions like Bombay Stock Exchange and heading the derivatives research division of HDFC Securities, part of the HDFC group which is among India’s top diversified financial services conglomerates, and other top Indian Financial Intermediaries before moving to Romania and starting Orpheus in 2005. In Romania through Orpheus, He consulted Raiffeisen, Societe General and stock exchanges
in the country. Mukul has also written extensively on derivatives markets, sentiment indicators, alternative research, investment psychology, commodities and global assets for local and international journals like Business Standard (India), The Economic Times (India), E-Mecklai (India), Yahoo Business, Economistul (Romania), Ziarul Financiar (Romania), Bucharest Daily News (Romania), Business Week (Romania), Technically Speaking and Euro Physics letters (France). He also published an e-book on Derivatives for the Bombay Stock Exchange. As a speaker he has been invited to speak at various platforms like the Bombay Stock Exchange, Prague Stock Exchange, Bucharest Stock Exchange, Market Technicians Association New York, Canadian Society of Technical Analysts, CNBC India, Saxo Bank, Thomson Reuters Conferences, TED, Princeton University and the University of Chicago.
Editor’s note: This article was originally published at the Global Financial Data blog and is reprinted here with permission.

One of the most dramatic events in the financial history of Victorian England was the collapse of Overend, Gurney and Co. Its failure had a more severe impact on the London financial market than the collapse of Bear Stearns had on U.S. markets over 140 years later. During the financial crisis of 1866, over 200 firms went bankrupt, including a number of banks. The failure of Overend, Gurney and Co. also led to one of the first trials for financial fraud in history when all six directors were brought before the courts of London to answer for their alleged crimes.

Quaker Origins

Overend, Gurney and Co. was formed in 1805 by the merger of Richardson, Overend and Co., originally founded by Thomas Richardson in 1802, and Gurney’s Bank located in Norwich and founded in 1770. Thomas Richardson developed the bank’s business for discounting bills that became the foundation of the firm’s profits.

Overend, Gurney and Co. soon became known as the banker’s bank since they discounted the bills issued by other banks and held them until maturity, and made loans against bills issued by other banks. Between 1825 and 1865, Overend, Gurney and Co. was the greatest discounting house in the world. Only the Bank of England could match its resources.

Discounting was a reliable business that made consistent profits, but not content with the steady income from discounting bills, the bank wanted to expand into presumably more profitable investments. The only certain thing about a bank moving into uncertain investments is the certainty that the bank will probably end up losing money, which it did.

How to Ruin a Good Business

England was going through one of its periodic railroad booms in the 1860s with opportunities for profitable expansion also occurring in shipping, mail delivery, and other transportation activities. Between 1859 and 1862, the Quakers turned their back on the sound banking policies that had made their bank successful and managed to find speculative investments that won them the equivalent of a financial Darwin award.

It is amazing how a bank that could be so conservative in one area could be naïve enough to get involved with scammers who promoted projects that made themselves money, but were otherwise doomed to failure. The bank advanced money to invest in plantations in Dominica that grew little food, financed a railway line across the wilds of Ulster where there were few passengers, invested in the Greek & Oriental Steam Navigation Company which was unable to develop its
business, failed to get the mail service for the Galway Line and foolishly invested in the Millwall Iron Works on the Isle of Dogs which generated losses, not iron. The last three investments cost the bank around £5.2 million. As Walter Bagehot, then the editor of The Economist said, “one would think a child, who had lent money in the City of London would have lent it better.” As a result of these investments, the bank had liabilities of around £4 million, and liquid assets of only £1 million.

As the losses mounted, Overend needed capital to keep the bank solvent. The company decided to go public and issue shares as a way of raising enough money to cover their losses and return to a profitable future. The bank converted itself into a limited liability company, and offered 100,000 shares to the public at a par of £50, requiring £15 up front and reassurance that an additional call on capital would be unlikely. Of course, the prospectus never mentioned the consequences of the bank’s bad investments, the excessive liabilities, and other problems, but focused on its strong reputation and the potential profits of the company.

**When Limited Liability Adds Insult to Injury**

Overend, Gurney & Co. stock started trading on August 21, 1865, and hit a high of 22.5 on November 16, 1865. As the price rose, investors who had missed out on the initial offering bought shares, keeping the price around 20; however, they were unaware of the rot that lay beneath the façade of the bank. By the end of February, 1866, shares still traded above 20, but began to drift down, falling below 15 by late April.

In April, the investment in the Millwall Iron Works on the Isle of Dogs began unravelling, producing £500,000 in unexpected losses for the bank. The financial markets in London were reaching the heights of a small bubble, and the Bank of England responded by raising the lending rate from 6 per cent to 7 per cent on May 3, to 8 percent on May 5 and to 9 per cent on May 11 and 10 percent on May 12. As money tightened, Overend tried to raise capital by collecting on debts owed to it by the Mid Wales Railway and others, but when the bank was unable to get this money, it became evident that the bank would soon become insolvent.

Overend’s only alternative was to go to the Bank of England, which as lender of last resort, could have bailed out Overend, Gurney and Co. However, the Bank of England declined, not because allowing Overend to fail would reduce the amount of competition the Bank of England had, but because Overend was in such poor shape that no amount of money could have saved it.

On May 10, 1865, the bank announced that it was suspending payment on deposits. The price of the stock had closed at 10 on May 10, fell to 3.5 on May 11 and to 0.5 on May 12. Until then, few had suspected that the greatest name in wholesale banking could have collapsed so suddenly. If Overend, Gurney & Co. was unsafe, could any bank be safe? A financial panic ensued and during the next few months, over 200 companies, including many banks, failed as well.
For the shareholders, the worst was yet to come. The bank had issued shares at a par of £50, only requiring £15 of paid in capital before going public. Since the bank still had many outstanding liabilities, the shareholders were liable for these, though only to the extent of the par value of the shares. Still, this meant that not only had shareholders lost all they had invested in Overend, Gurney & Co., but now they would be required to pay an additional £35 to a bankrupt company to help cover outstanding liabilities.

Although some shareholders made legal challenges to this demand, the courts said a contract was a contract and shareholders had to pay the additional £35 (equivalent to about $7500 in today’s money) even though they would never get anything back. Can you imagine how shareholders in Bear Stearns would have reacted if, after losing everything, they had been required to send in an additional $7500 for each share they owned even though the company was already bankrupt?

Many felt the directors of Overend had committed fraud by issuing a prospectus to raise money for the firm while failing to mention the true state of the bank. Of course, in 1866 there was no SEC to review prospectuses before they were issued, and there were few legal precedents for financial fraud, but the demand for justice became so overwhelming that on January 26, 1869, the directors of Overend & Gurney Co. were committed to trial for fraud.

In December, 1869, all six of the Overend, Gurney & Co. directors were acquitted. As during the 2008 financial collapse, although the directors had obviously made some very bad decisions, and were less than transparent, they were found not guilty of having conspired to defraud investors and were allowed to go free.

The End of Overend
The failure of Overend, Gurney and Co. inspired writers for years to come. Anthony Trollope used one of the swindlers involved in the collapse for his novel, The Way We Live Now, Bagehot frequently referred to the Overend fiasco in his book Lombard Street, and Karl Marx used the Overend collapse as a symbol of all that was wrong with capitalism.

Just as no one from Wall Street went to jail as a result of the collapse of Bear Stearns, other companies, and the billions of dollars in losses that occurred during the 2008 financial meltdown, no one from Overend, Gurney and Co. was convicted of any crimes. In fact, the Norwich Gurney bank continued to operate even after shareholders had been fleeced of their money since the bank had been legally separated from Overend, Gurney and Co. when it became a limited liability company.

As the French say, plus ça change, plus c’est la même chose. The more things change, the more they stay the same. Today, banks may pay billions in fines to the government for their misdeeds, but no banker goes to jail. If only criminals worked for billion-dollar corporations, we wouldn’t have to build any prisons.

Dr. Bryan Taylor serves as President and Chief Economist for Global Financial Data. He received his B.A. from Rhodes College, his M.A. from the University of South Carolina in International Relations, and his Ph.D. from Claremont Graduate University in Economics. In 1990, Dr. Taylor began collecting and transcribing financial and economic data from historical archives around the world, which are now collectively known as the GFDatabase. Dr. Taylor enjoys analyzing financial markets in which he authors articles and blogs utilizing data derived from all of GFD’s databases. GFD specializes in providing Financial and Economical Data that extends from the 1200s to present—beyond what traditional data vendors provide. For nearly twenty years Global Financial Data has been accumulating and transcribing rare data sources into research-quality databases. The company distributes current market data from traditional data feeds and also offers the historical data that are not available from these common electronic sources. For more information, please visit Global Financial Data.
The 2015 Charles H. Dow Award winning paper, *Fixing the VIX: An Indicator to Beat Fear* by Amber Hestla-Barnhart, demonstrates a market timing technique based on volatility. While the VIX, the CBOE Volatility Index®, might be the most popular volatility measure, its applicability is rather limited.

As explained in the paper:

VIX is widely known as the “Fear Index” because it often increases when the stock market drops and the fear of further price declines increases. While this concept sounds useful, there are significant limitations to executing trading strategies based on VIX and these limitations make VIX virtually useless for the average investor.

Although it is not widely followed, there is a simple volatility indicator available in the public domain that can be used to implement trading strategies based on the concept of VIX. This indicator, the VIX Fix developed by Larry Williams, overcomes the limitations of VIX. This paper will explain the VIX Fix and introduce a quantitative trading strategy to profit from rising fear.

In the paper, the indicator is combined with a 20-week moving average (MA). Like VIX, the VIX fix is bearish when it is high. The MA provides a timing tool. When the VIX fix drops below its MA, it is moving from high to low and this is considered to be bullish.

The charts below illustrate that trading strategy. The indicator is shown as a red line and its moving average is shown as a green line at the bottom of the chart. Several major global stock market averages are shown. The indicator is bullish when it is below its moving average.

U.S.: S&P 500
Japan: Nikkei 225

India: NSE Nifty
Europe: STOXX 50

Source: Market Analyst 8