Letter from the Editor

We are again presenting only a few articles in this month’s newsletter. MTA members are among the leading technicians doing great research and we are featuring a few samples of the work being done. In coming months, we hope to continue highlighting this type of original work. As always, if you’d like to share your work with your colleagues, please send it to us at editor@mta.org.

In “An Interesting Application of Neural Nets,” we highlight how Parallax Financial Research is using neural networks to develop a complete investment methodology. Their combination of fundamental and technical inputs has resulted in a long-term winning strategy.

Robin Carpenter presents a detailed analysis and thought-provoking piece on VIX, challenging the standard interpretation of this widely used indicator.

Short-term traders will be interested in “Candlestick Kicker Signal = Powerful Profits” by Stephen W. Bigalow. While candlesticks are widely used, this article offers a fresh insight into the patterns.

“Individual Monthly Charts for The 1924 to 1935 Period” is a partial reprint of a Safian Investment Research piece. The collection of charts and brief commentary are well worth reading for anyone trading today’s markets. Mark Twain is believed to have said, “History doesn’t repeat itself - at best it sometimes rhymes.” Traders need to study history so that they can benefit from the repetitive patterns often found in the market, and Safian’s piece is a valuable collection of market history.

We hope you find this collection of papers to be useful.

Sincerely,

Mike Carr, CMT
problems. Mathematical models are normally built by making a priori assumptions about the functional form of the solution. These are called parametric models, and are solved by regression methods to determine a number of coefficients. This is sufficient if you know that the solution must be a second order polynomial, or some other simple, well-known function. But in the real world, relationships are not necessarily simple. Inputs and outputs could even be related in a non-linear fashion. If you do not have to guess the functional form of the answer, you have a big advantage.

There are a number of funds using neural networks to improve stock selection, and neural networks have been the subject of articles in Barron's, The Economist, and Futures Magazine. It is a new cutting-edge technology. Parallax currently uses the professional neural network program NGO."

That's the technical part. The practical aspect of what Parallax does is applying neural nets to prices and fundamentals. The application of the technology seems to be unique to Parallax. Their Price Wizard application uses more than 15 years worth of fundamental data to determine what a stock's value should be. This application grew out of a project to identify the proper pricing of IPOs in the market. Typical IPO valuation models all look at the same fundamentals and determine the valuation using standard approaches. From the company’s web site:

"The Price Wizard equity pricing model uses neural networks to learn how a stock's fundamental balance sheet data has been translated to a market price in the past, within the context of its industry group and economic sector. The models created for each industry group are then used to estimate current fair market values for these stocks. The application of neural networks to this problem is a natural use of the technology since there are many factors making up a stock price. The analyst must juggle many factors at the same time to estimate value. This is difficult for one stock, let alone all the stocks in an industry group. Neural nets will do this easily and in an unbiased manner.

Nine factors such as earnings per share, earnings growth, return on assets, return on equity, current ratio, sales per share, book value per share, operating profit margin, and cash per share are fed to the network for each stock, for up to 40 back quarters, within a single industry group. The network is presented with the actual market price at the time the earnings were announced. It then tries to learn how these fundamentals were interpreted by the market into a price.

Once trained, the latest quarter's information is fed into the model, and the expected "fair value" is determined for each stock. In order to be able to estimate valuation error, seven prices are actually determined by the network by repeatedly splitting the per share data, retrieving the estimate, and then unsplitting it. The final average price and standard deviation are calculated from these estimates. A low standard error means the estimate is well determined.

These values can then be used to rank stocks within the group, find under-valued purchase candidates, find short sale candidates, help form spread trades, or be used together to rank the industry group."

The idea led the company’s founder and President Kris Kaufman to expand his research to other companies. He found that it worked well to identify undervalued companies. This would allow portfolio managers to overweight or underweight specific sectors, and spot companies with the most potential for price appreciation.

An example report, using data through August 30, 2009, is below:

PARALLAX US EQUITY AGGREGATE VALUATION REPORT

September 2009
(data window ends August 30, 2009)

67% of 2,316 US Stocks are undervalued, where >58% is a buy. The median valuation is 18.30%, where a buy is >=5%.

Valuation Highlights:  STRONG BUY

* Major Indices:
  - DJIA    worth 124.90 (DIA)  29.81% undervalued
  - S&P500  worth 139.17 (SPY)  32.84% undervalued
  - NASDAQ 100 worth 56.69 (QQQ) 36.54% undervalued
  - Russell 1000 worth 75.55 (IWB) 31.35% undervalued

* Undervalued:

Medical is 67.00% undervalued

Consumer Discretionary is 60.70% undervalued
Computer And Technology is 33.40% undervalued
Retail/Wholesale is 25.40% undervalued
Multi-Sector Conglomerates is 19.50% undervalued
Transportation is 18.80% undervalued
Oils/Energy is 18.60% undervalued
Finance is 17.20% undervalued
Industrial Products is 15.10% undervalued
Utilities is 14.00% undervalued
Construction is 2.60% undervalued

* Overvalued:
Consumer Staples is 1.70% overvalued
Aerospace is 2.70% overvalued
Business Services is 3.70% overvalued
Basic Materials is 8.90% overvalued
Auto/Tires/Trucks is 22.90% overvalued

Charts are also a part of the service, and sectors to research further are easily identified. An example is shown in Figure 1. The calculated values are shown as red lines when the stock is overvalued and green lines when undervalued. Visually it looks like Wilder’s Parabolic SAR indicator but it is not meant as a timing tool.

Figure 1: A valuation chart of XLF, the Financial Select Sector SPDR.

Parallax has developed other timing tools. We can see an example of this in Figure 2. In this case, the stock of Hansen Natural (HANS) became very overvalued. Just as technical indicators can reach extreme overbought conditions and remain overbought, there is no rule that a stock must trade in line with its fundamental valuations. The indicator which signaled the near the top is the Extreme Hurst, based on the work of J. M. Hurst. This
indicator is designed to identify the beginning and end of ‘trend persistent periods.’

Figure 2: Parallax tools provided timely signals for HANS. (Editor’s note: This is not a well-selected example provided by the company. In discussing bubbles, I mentioned HANS as an example and Mr. Kaufman was unfamiliar with the company.)

The use of technical tools like neural nets to fundamental is an area that can be explored by any technician, even without advanced programming skills. Parallax demonstrates the value of combining fundamental data with price data to develop a comprehensive trading strategy. They also highlight the fact that the best technical tools may not be found in standard charting software.

Parallax Financial Research, Inc., a registered CTA, is a small research boutique in Redmond, Washington, USA, dedicated to delivering the finest stock and commodity forecasting tools to the professional money management community. These tools and forecasting models are based on applications of chaos theory to the financial markets, and many incorporate neural networks as a final step to generate forecasts. Kris Kaufman, the president of Parallax, has degrees in Mathematics and Physics, and spent 13 years as a geophysicist before incorporating Parallax in 1990. Douglas Frick, vice president, has a Master's degree in Information and Computer Sciences, and a background in mathematics and software engineering.

Commercial products include Precision Turn and TurnAlert, which are available on our Precision Turn On-Line website. The turn forecasting models are based on the “quasi-periodic” oscillator cycle model from non-linear dynamics, and forecast the day a market is likely to change its recent trend. Other products include the ExtremeHurst Global Analyst daily e-mail report, and Price Wizard fundamental stock valuations.

Parallax also provides one-on-one services to a few select money managers by incorporating the Parallax Solutions Platform into the manager's investment discipline. The platform runs within TradeStation from TradeStation Group, and contains many custom indicators which are blended with a manager's own technique to enhance performance. Currently the managers using this platform are managing about 200 million dollars in client funds.

Chaos Theory is the scientific theory which deals with non-linear systems. These are systems in which some of the outputs are fed back in to form the next set of outputs. Auction markets, while not being perfect non-linear systems, do demonstrate many of their characteristics. By understanding these characteristics, Parallax has been able to build better indicators than has previously been possible. This is an evolutionary process in technical analysis.

For more information, visit their web site at http://www.pfr.com/index.html.
A New View of VIX

by Robin Carpenter

This paper describes material originally distributed but not discussed at Fraser Management’s Contrary Opinion Forum of 2009. It presents a contrarian view of the meaning embedded in option-implied volatility. The model is a work-in-progress. Comment and suggestion are welcome by the author who has allowed us to reprint his work here.

Is VIX Really a “Fear Index”?

The CBOE VIX index measures the S&P volatility implied in options prices. Given stock price, strike price, and time to expiration, implied volatility is the value of standard deviation that balances the Black-Scholes equation with actual option prices. It’s the volatility that “must be” expected by the market to justify actual observed option prices.

VIX values vary inversely with market prices. The VIX generally goes up when the market does down, and vice versa. As declining prices can be fearful, the VIX has come to be often referred to as a “fear index.” Here is a typical headline and passage from a recent Wall Street Journal:

“Fear’ Fuels VIX’s Jump”
--WSJ Oct 2, 2009

“The stock market’s fear gauge jumped to its highest level since September 3 as stocks slipped lower for the third day in a row.”

“The VIX tracks prices investors are willing to pay to buy and sell options...often to protect against drops in the market. As a result, the index tends to move up when stocks move down, and vice versa.”

Although causality is not explicit, both tone and context clearly suggest the market decline, and resulting investor fear, caused the VIX to jump higher. In that view, the VIX would be plausible as an index of fear.

But the “fear” theory has three problems. First, the VIX is derived from call options as well as put options. If fear of decline were the essential driver of VIX levels, then receding call price should offset expanding put price. But even while the dollar price of calls declines with the market, implied call volatility generally rises along with the implied put volatility. That is, call prices expand relative to the contract terms; hardly a profile of “fear.”

The second problem is that the single most potent factor in implied volatility is recent actual volatility, not market direction. Over the past two years, for example, current actual volatility alone accounts for about 80% of VIX variance, while S&P alone accounts for less than 40%. The extreme influence of actual volatility is seen in the following graph. Actual and implied volatilities track closely throughout.

The final problem with the market-driven-fear proposition is that the VIX leads the market (inversely) slightly more than the S&P leads the VIX. The lead-lag relationships go both ways, but based on lead-lag correlations, the VIX-leads-market relation is stronger. It’s not much of an edge, but it’s enough to undermine the idea of VIX primarily responding to market trend.

The chart below (page 3) shows correlation coefficients between 5-day VIX change and 5-day S&P change, at successive leads and lags out to 20 days each way. At left are correlations of S&P leading VIX; at right are correlations of VIX leading S&P. All the correlations are negative (as expected), but the correlations to the right are consistently larger (more negative) than those to the left. VIX says more about coming market change than market change says about coming VIX. The difference is modest, but clearly tilted toward VIX-then-market...
sequence, and hard to reconcile with VIX change as a result of declining prices.

An Alternative View of VIX

Suppose instead that expected volatility (embodied in VIX) is a factor in market price, in the same way that William Sharpe postulated over 40 years ago. Sharpe’s Capital Market Line portrays a simple risk-return relationship. The higher the risk of a security, the higher is the market’s required return for that security.

For all of these reasons, we suggest an alternative understanding of the meaning of VIX....

Sharpe’s model is cross-sectional. Risk and required return are assessed for each individual security (and for the market) all at one time. But the same kind of risk-return relationship should prevail through time for a given security or portfolio...so long as “everything else” is held constant. If perceived risk increases, the required return should increase; if perceived risk declines, the required return should decline.

The resulting risk-and-return scatter would create a Dynamic Market Line, as illustrated at the top of page 5. The hypothetical zig-zags through time align at or near investors’ risk-return preference line. That single line can only persist so long as “everything else” remains constant (which is to say, not terribly long). Then—when other factors have changed—a new dynamic line emerges.

Sequential Schematic: Risk and Required Return
Line Inversion. When required return rises, price falls. For a given level of fundamental value, the only way to get higher return is with lower price. This relation brings us to the negative relation between the VIX and the market fluctuation.

Sequential Schematic: Risk and Market Price

Actual Data. Below is a scatter plot of the VIX (horizontal) and S&P (vertical) for the bear market and bottom 2000-2003. The sequence starts at the red square near the top, at April 1, 2000. The color changes every calendar year (red-cyan-green-blue). The dominant zig-zags are all down-sloping to the right (north-west to south-east), as expected in our stylized price-and-volatility schematic above.

In addition to the NW-SE zig-zags, there are successive down-shifts of the broader bear market. In this risk-return framework, quasi-linear NW-SE zig-zags are taken as price adjustments to changing volatility, while the down-shifts represent real change in market perception or expectation. And down-shifts to the left, in particular, indicates lowered expectations in spite of lower volatility.
So the connected-dot scatter distinguishes volatility effects (the zig-zags) from changing investor outlook. Much of the S&P fluctuation and loss of 2002 (green segment above) is driven by higher volatility. But the net loss of 2001 (cyan segment) shows net movement to lower left...indicating lower valuation in spite of lower volatility. (2001 cyan also had its own volatility spike, but by end of year the net change was NE-to-SW.)

The final segment in 2003 (dark blue) is also interesting in close-up. The scatter plot below focuses on the final 1½ years of the scatter above. In this chart (below), the color changes with each calendar quarter. The final segment (cyan) covers 2nd quarter of 2003. Our view is that the “drift” of this final leg indicates a sentiment change, as reduced volatility first fails to bring commensurate price gain...and then the final price gain is not driven by commensurate lower volatility.
Final Bull Market Years

The Scatter Today. The sell-off in the 4th quarter of 2008 (red segment at right in chart below) is shown to be partly characterized by volatility-driven zig-zag and partly by down-shifting trade-off line. Then in 1st quarter 2009 (cyan segment) the path shifted clearly into a SW drift quite unlike the typical zig-zags. So as the March lows arrived, the price action (decline, then rebound) had become essentially independent of the volatility function.

12 Months Ending October 12, 2009

Then in 2nd quarter of 2009 (green segment), "sentiment" stabilized for a while as the sharp price advance resumed zig-zagging along its new risk-return function closely.

Finally, in 3rd quarter 2009 (dark blue) and early days of Q4, we find the risk-return path drifting upward—up-shifting from the 2nd quarter NW-SE line, but also not quite giving any NE drift. So we find recent price escalation virtually dis-associated from volatility, but not quite defying it. The upward drift of Q3 is reminiscent of the 2nd quarter of 2006 (red segment in top chart on page 8), representing net upward valuation independent of the VIX function.

The net upward valuation is reason for caution. It can be argued—and many do argue—that currently improving fundamentals justify such revaluation. That is a separate issue; the VIX analysis at this point shows only that although up-trends are often driven by reduced volatility (zig-zagging SE-to-NW), the present up-trend is not. If and when we find the path drifting upward to the right, that drift will present more pointed warning of price...
escalation even in the face of higher volatility.

**Work in Progress.** In this revised view of VIX, investor outlook or “sentiment” is tracked not in the VIX itself, but in the market’s pricing relative to VIX. Growing optimism is found in upward movement not supported by reduced volatility…and especially when prices rise in spite of higher volatility. Pessimism is found in downward movement not related to higher volatility. Price movement along negative diagonals (NW-to-SE) is essentially silent on outlook or sentiment, as that risk-return function is normal.

The present model of VIX and S&P interaction is incomplete. In particular, while the model successfully distinguishes between volatility-driven and non-volatility components of market trend, it does not yet distinguish between “fundamental” and “sentimental” factors of the non-volatility component. For that, the model will need a third dimension addressing fundamental or economic reality.

Robin Carpenter develops market metrics and models for investment professionals. Mr. Carpenter graduated from Dartmouth College in 1966 with an A.B. in Economics. He earned his MBA from the Amos Tuck School at Dartmouth in 1977, where he was a Tuck Scholar and was awarded the Walter Jacobs Memorial Prize by the faculty and his class.

Mr. Carpenter began his investment experience as a registered representative of Bache & Company in New York. In the 1970s he was a founder and president of The Stock Market Laboratory, a registered investment advisor. In the 1980s he was a vice president and officer of the MAC Group Inc, international management consulting firm.

Mr. Carpenter has been consulting and contributing to professional investor analytics through his Carpenter Analytical Services (Analytix) over two decades. He has originated and implemented various market analyses such as alpha hedging, moving beta, cross-sectional dispersion and skew analysis, and implied asset exposure metrics. He has developed many proprietary models and simulations including Autograf for complex lead-lag relationships, U-Turn for non-parametric trend-change testing, and DejaVu which searches and tests prior occasions of current market states.

Articles by and about Mr. Carpenter and his market analytics have appeared in the Wall Street Journal, Barron's, Mutual Funds magazine, Wiesenberger, Financial Strategist, Smart Money, Forecasting, and the New York Times. A number of market monographs have also been published privately over the years.

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A sample of a growing list of fundamental and technical courses is shown below. The courses are associated with global destinations and dates, both for open and private client formats in 2008-9. They are produced by various knowledge vendors throughout the world (some listed below). Specific details can be provided by contacting them, or John Palicka (palicka@pipeline.com).

**Candlestick Kicker Signal = Powerful Profits**

*by Stephen W. Bigalow, Director and Editor of The Candlestick Trading Forum*

This article was originally published at [http://www.candlestickforum.com/](http://www.candlestickforum.com/) and is reprinted with the permission of the author.

Do you chase a stock that is already up 12% on the day? What do you do when one of the your stocks announces an earnings warning? What do you do when one of your stock positions announces an SEC investigation and after a pleasant up-trend, it crashes and goes the other direction? Or a company you own announces a huge new surprise contract, reversing its down-trend, gaps up, continues higher. Will prices bounce right back after the news is digested? These situations baffle most investors. However, having the knowledge of Candlestick formations...
provides huge advantages. The formation that the price move creates is an important function of how to profit from that price movement.

Big dramatic moves! What do you do? Many investors act like deer in the headlights, do nothing as most advisors suggest. But Candlestick analysis tells you instantly what to do. An announcement can completely reverse a trend direction. For example, if a trend has been in progress, whether strong or mild, and a surprise announcement occurs, how that formation rolls out will tell the investor what to do. One viable possibility is observing the previous day's candle formation, with the open price, then the closing price continuing in the direction of the existing trend. After the announcement, the price alters its direction, opening at the same level as the previous day, a gap open, and proceeding to close in the complete opposite direction of the previous day. This is known as the Kicker signal. It is a high-powered candlestick signal. This signal should never be ignored. It can create huge easy profits.

The Japanese rice traders identified approximately 50 reversal and continuation signals through their centuries of developing candlestick signals. Of these, about 8 major signals will provide more trades than most investors will ever need. We put the Kicker signal in the category of a “major” signal because the results created from the aftermath of the Kicker.

Figure 1 - 1, Kicker Top and Kicker Bottom Formations.

The Kicker Signal is the most powerful signal of all. It works equally well in both directions. Its relevance is magnified when occurring in the overbought or oversold areas, but is effective no matter where it appears in a price trend.

Consider the investment sentiment that formed this pattern. It is formed by two candles. The first candle opens and moves in the direction of the current trend. Investors are continuing with the established trend, closing the price further in the existing direction. Then, something has occurred to violently change the direction of the price. Usually a surprise news item is the cause of this type of move. The signal illustrates such a dramatic change from the current price direction that the new direction will persist with strength for a good while. (There is one caveat to this signal. If the next day prices gap back the other way, liquidate the trade immediately. This does not happen very often, but when it does, get out immediately.) The second candle opens at the same open as the previous day, a gap open, and heads in the opposite direction of the previous day’s candle. The bodies of the candles are opposite colors. This formation is indicative of a dramatic change in investor sentiment. The candlesticks visually depict the magnitude of the change.

Figure 1 - 2, DLTR, Dollar Tree Stores
Due to the change being so dramatic, and the initial reversal effecting a large percent of the price, the trend usually persists in the new direction for an extended period of time. First, the news report takes investors by surprise. The people that heard it from the time it was reported bailed out on the open. Others will hear about the news later, making their investment decisions during the next day or so. If it is bad news, the overhanging supply keeps weighing down the price for a few weeks. If it is good news, it will take a good while for the enthusiasm to wane. These moves can usually be substantial, especially if it is moving in the same direction as the market in general.

The Kicker Formula

The Kicker Signal is can be easily formulated for search purposes. The position of the signal, in a trend, is not important. The important factor is that a severe change in investor sentiment has occurred. Because the Kicker signal is a two-day signal, two opposite elements are required. First, in a Bullish Kicker Signal, the predominant trend should have been downward. The first day of the signal would have opened, traded down, then closed lower than where it opened.

\[(O_1 > C_1)\]

Day two should have opened equal to or above the open of day one and then closed higher than the open of day two.

\[\text{AND } (O \Rightarrow O_1) \text{ AND } (C > O)\]

Do not let the magnitude of a kicker reversal signal deter you from making the trade. The announcement or event that created the Kicker signal in that stock is not going to be a one-day affair. It has reversed the direction of investor sentiment. That was the surprise in which the investment community reversed its outlook. The big percentage move, that first day before you got in, is just a small part of the rest of the move.

Many investors will mistakenly wait for the price to pull back so that they can get in. The candlestick investor does not want to see a pullback. The buyers should maintain their buying to make this trade a strong one. To wait for a pullback is not the buying pressure that you would want for a strong up-move stock.

The Bearish Kicker Pattern has the opposite formulas. Of course the trend should be in a predominantly upward direction. Usually a bad news announcement will send the stock price crashing. The formula should be:

\[(O_1 < C_1)\]

The open on the following day is equal to or lower than the open of the previous day and continues down, closing lower than the open.

\[\text{AND } (O <= O_1) \text{ AND } (C <= O)\]

The more overbought when the signal started, the better. Again, the magnitude of the reversal is directly related to the strength that should be conveyed in the remaining portion of the new trend. Do not be afraid to participate in
the move despite the magnitude of the initial move. Because the news was a surprise, it will take at least a few days, if not much longer, for the investment community to digest and assess the ramifications of the surprise.

**Candlestick Advantage**

Knowing what a candlestick signal looks like creates tremendous profit making advantages. If a surprise announcement occurs, the Candlestick trader can take advantage of the price movement immediately versus waiting to see what direction the trend will evidently take. These opportunities will happen almost every day. Having the proper search criteria provides a constant supply of highly profitable trades. In a universe of 9,900 stocks, it is likely that one or two will have a surprise external event that will drastically alter the perception of the future of those companies. Violent price moves usually leave investors in their tracks. Having the foresight of what candlestick signals can be forming great opportunities to make big profits. Somebody is taking advantage of the big profit situations. No reason it can’t be you.

Stephen W. Bigalow is the Director and Editor of the Candlestick Trading Forum ([www.candlestickforum.com](http://www.candlestickforum.com)). He possesses over twenty-five years of investment experience, including eight years as a stockbroker with major Wall Street firms: Kidder Peabody & Company, Cowen & Company and Oppenheimer & Company. This was followed by fifteen years of commodity trading, overlapped with twelve years of real estate investing. He holds a business and economics degree from Cornell University, and has lectured at Cornell and at many private educational investment functions over the past twenty years.

Mr. Bigalow has advised professional traders, money managers, mutual funds and hedge funds, and is recognized by many in the trading community as the "professional's professional." He is an affiliate of the Market Technicians Association (mta.org - A non-profit association of professional technical analysts) and a member of AAPTA, the American Association of Professional Technical Analysts. (aapta.us)

His first book, *Profitable Candlestick Trading: Pinpointing Market Opportunities to Maximize Profits*, published by John Wiley & Sons, hit the market in January 2002. The book is directed towards the new investor all the way up to the most sophisticated professionals. It is written in a manner that easily demonstrates the wealth of information, about price movement and the investor psychology, built into the Candlestick signals. He emphasizes the fact that investors, especially the unsophisticated investor, can extract information from the signals. This information, filled with common sense investment principles, greatly expands an investor's perspective. Reading the book eliminates the need to depend on investment professionals.


His experience with Candlesticks started over fifteen years ago. This was approximately the time that Candlesticks were first introduced into the United States. This extensive experience has been channeled into a concise and effective training procedure. Fifteen years of learning from mistakes and avoiding the potential pitfalls are consolidated into an easy to follow, comprehensive training program.

Throughout his investment career, Mr. Bigalow has directed his investment acumen towards developing improved methods for extracting profits from the investment markets. His research, encompassing all fundamental and technical methods, resulted in verifying that Candlestick analysis was superior to any other method. In consulting with money management and energy trading firms, he has successfully combined conventional research methods with Candlestick analysis to greatly enhance investment returns. His implementation of statistical analysis with the Japanese Candlestick methodology has produced some unique successful trading programs.

Mr. Bigalow has also played a role in creating effective methods for learning "how" to use Candlestick signals profitably. There are excellent books on the market describing Candlestick formation. The Candlestick Trading Forum was established to use that information to trade the signals profitably. You can learn more at [www.candlestickforum.com](http://www.candlestickforum.com).

**Individual Monthly Charts for The 1924 to 1935 Period**

Earlier this year, Safian Investment Research, Inc., reissued this historical report with a new introduction. We are fortunate to be able to reprint some of that report below, and urge anyone with an interest in market history to read or download the entire report at [http://www.safian.com/reports/4-6-09_ISR.pdf](http://www.safian.com/reports/4-6-09_ISR.pdf).
Enclosed is a study we issued to our clients in May 1987 when stock prices experienced one of the largest one day declines in history. Fundamental factors did not suggest a coming recessionary trend at that time as measured by our Composite Forecasting Index. There were no early signs of a recession at that time until 1989. That drop was caused in large part by the beginnings of major leverage being used by large portfolio managers. It was interesting to us that the regulatory authorities did not take stronger action at that time to limit the use of derivative products rather than just put in "circuit breakers" to attempt to correct that stock market drop.

This was the Milken era and we don't know why the government did not put 2 and 2 together at that time and reduce the potential impact of derivative products then. We remember when Ken Safian was at a National Association of Business Economists’ meeting at that time and asked a question as to why the authorities were permitting the use of derivative products in such unhealthy ways. He was booed out of the room and the lobbyists just kept on getting more and more advantages for their clients who wanted to take more risk and have lower taxes. Greater restrictions will now be put on these products, but we don't hear many proposals regarding the tax situation of these products as we did a few months ago. There was a reason why capital gains were taxed at a lower level than short term gains. Yet the authorities continue to permit stock futures to be taxed as a commodity rather than a stock. In our judgment it was policies as these that permitted traders to create the kind of mess we have today.

We hope you enjoy the graphic presentation and will tell your Congress person to pass laws that will reduce leverage in the system and encourage investment.

One final point should be made. Some younger readers of these company graphs dating back to the 1920s will not recognize the names of some of these companies presented. This was characteristic of a new era then and will most likely be the case for the current new era noted in our studies recently. The General Motors of today is not the same of earlier years. Technological changes, outdated corporate agreements, younger people starting new and more competitive firms, with new ways of doing things, and new regulations here and abroad should result in new corporations, new ways of doing things, and greater competition.
May 18, 1967

COMPARISON AND HISTORICAL INSIGHTS - 1987 AND 1929

There have been a number of articles and books about the similarity between the current investment environment and that of the late 1920's. It is our opinion that each investment period is different from another, but human nature and a free economic system create excesses in a financial system that are typically corrected by lower stock prices. The magnitude of the disciplining decline and the diversity within the stock market and economic structure are what separate one period from another.

The present is very different from the late 1920's in that commodity prices were generally stable as were the values of gold and currencies at that time. Interest rates on U.S. government bonds averaged about 3.3% in 1927, 3.6% in 1928 and 3.6% in 1929. Corporate bonds of the highest quality showed similar stability and were in the 4.5% to 4.8% area during that same three year period. Money market rates were higher than long rates with prime commercial paper rates averaging 4.1% in 1927, 4.85% in 1928 and 5.85% in 1929. Ninety day stock exchange call loans were 4.35%, 5.86% and 7.75% for those three years respectively. Liquidity was not as available then as is the case today as measured by the yield curve.

A more pragmatic approach to this period for investors can be seen in the prices of individual stocks and the popular averages during that earlier time. As pages 3 to 5 illustrate, there was little warning time prior to the decline in the prices of the averages in the autumn of 1929. The advances in the utility and rail averages were especially dramatic that summer. The prices of individual stocks, however, showed a focus in stock market strength and a deterioration in the breadth of that 1929 advance. The monthly price charts for 1924 to 1935 for over 100 companies, presented by groups, are on pages 6 to 17. Second and third columns of numbers are on some graphs showing the adjustment for stock splits. Additionally, the data on the lines for
earnings per share and dividends are not adjusted for these stock dividends. For example, the earnings of International Nickel fell from $5.10 per share to $1.05 per share in 1927 and 1928, but there was a six for one stock split in late 1928. The dividend did not show that adjustment until 1929. All these charts were selected by us from the W.V. Stephens Company "graphic stock" edition of more than 700 companies. The copyright data was 1946 by Graphic Financial Charts Company.

It is interesting to note the sizable number of companies that reached their peak prices prior to September 1929. Freeport Sulphur, a company that earned money during the depression, reached its high in early 1928 (Page 7). International Nickel and American Cyanamid (on that same page) also hit their high prices early in 1929. The substantial advances in stocks like Alcoa which rose from 180 to almost 540 in five months, created the strength in the popular averages and disguised the weakness in Freeport Sulphur. Page 14 illustrates the big consolidation top formed in American Home Products in 1928 and early 1929. A similar pattern was established for Coca Cola at that time, but notice how Coke rose to a new high in early 1930 (fall sharply and then rose dramatically in the early 1930's). The P/E multiple for Coke was about 17 in 1928 and 8 in 1932 when the yield was 11.4%. The dividend was cut, however, from $8.00 in 1932 to $6.50 in 1933; indicating a 9.2x dividend yield at the trough. IBM sold at $355, earned $11.06 and paid a $5.00 dividend in 1929. That amounted to a 23 P/E and a yield of less than 2%. Page 15. On the same page, in Burroughs which sold at a healthy 17 multiple. The aix (page 16) and such retailers as Associated Dry Goods, Kerns and Sears (page 12) were declining throughout most of 1929.

The important point that we would like to emphasize when looking through these graphs, is the volatility that existed in the late 1920's as the upward momentum of many individual companies was broken. This suggested distribution as was noted on page 4 of our May 11, 1967 report.

We would like to emphasize that this study should not be construed as predicting another decline like the 1930's. Many industries have already been through a cathartic period and do not appear to have the downside risk as suggested by those graphs in the 1920's. Undoubtedly, industries change character completely and they will continue to do so. Just as there are divergences today, so too were there disparities in the 1920's and there will be tomorrow. After a period of financial excess, however, it is difficult for the stocks of individual companies to overcome a general decline in the value of equity prices.
Safian Investment Research, Inc., (SIR) and its predecessor firm, Smilen and Safian, Inc. have been providing institutional clients with uniquely creative and innovative investment research for almost half a century. It all began in 1961 with the publication of "The Dual Market Principle," a monograph which divided the market into two distinct sector averages each consisting of either "growth" or "cyclical" equities, and which showed that a bull and bear market could exist simultaneously. The study was the introduction of modern "sector analysis," which is now widely accepted. The recent environment has produced greater government influence on economic conditions. As a result, sector analysis has become an increasingly vital investment research tool. SIR believes that great transition is occurring in the world and that a new era is developing which requires a different approach to industry and economic analysis. SIR is confident that it has the experience and the record to produce the new thinking to provide such analysis.

Over the years, the firm has refined and expanded its studies and has developed many original economic series and approaches for both stock market and economic forecasting purposes. For example, in 1984 it introduced the Composite Forecasting Index (CFI), which successfully forecast each of the past three recessions of 1990-90, 2000-2001, and 2008. Those were the only recessions which were forecast. There were no false predictions.

Based on its research SIR produced a Recommended Equity Portfolio for Institutions Investors, starting in 1972.
which significantly outperformed both the Dow Jones and the S&P 500 averages. SIR had managed money for
many years and stopped managing money and issuing its recommended portfolio in August 2008. Our clients' assets are currently being managed by a former employee of Safian Investment research.

Ken Safian, the president of SIR, is a graduate of the Wharton School at the University of Pennsylvania. He started his career at Dreyfus & Co. where the legendary Jack Dreyfus served as his early mentor. Another important mentor was Edward Johnson of the Fidelity organization. Ken has served as a director of the NY Society of Security Analysts, as a member of the National Association of Business Economists and is currently on the Executive Committee of Edward Jones and Co. He testified at a number of Congressional and other governmental hearings and has written articles for Barron’s Magazine and other financial publications. He was a major shareholder and investment policy director for Regent Investor Services, which managed $3 billion and was sold in the early 1990s to Alliance Capital.

A Fundraising Reception in celebration of the Opening of the MTAEF/MTA Library at Baruch College

by Bruce Kamich, CMT

With almost $17,000 raised for the Market Technicians Association Educational Foundation (MTAEF) with winning bidders from as far away as Kuwait and all across the United States this first of its kind auction event made the news wires. Bloomberg News interviewed Robert Prechter and noted the generous bid for Louise Yamada who together raised over $10,000 from two gentlemen eager to hear their views on the markets.

Starting in the late summer, Bruce Kamich, president of the MTAEF, started calling technicians and traders to be part of this unique on line auction. “Nearly everyone I called immediately said yes and they were a pleasure to work with,” Kamich said.

Bidding on eBay started slow, but as word spread electronically across blogs, emails, and home pages the interest and the dollars built. Some people familiar with eBay auctions came in aggressively at the end to snatch their prize. In addition to the right to take some of the best minds in this business to lunch, special DVD packages and trading courses were also included. “The people involved were very generous with their time and their products. I can’t thank you all enough,” according to Kamich.

Another Foundation fund raiser is happening on November 17th which will feature five top speakers and will include a number of silent auctions of book collections, VIP tours of the exchanges, and a piece of Wall Street memorabilia. There is still time to sign up and be a part of the opening of our library.

Tickets are $200/person and reservations are required. Please RSVP by November 6th, space is limited, and business attire is required. Click here for more information.

For more information about the MTA Educational Foundation please visit: www.mtaef.org

MTA Announcements

MTA Educational Web Series - New Additions, Archives, and Upcoming Schedule!

Registration is now open for the following upcoming presentations of the FREE MTA Educational Web Series.

- **Sign Up Now** - Tuesday, November 10th, Thomas Dorsey, President and founding member of Dorsey, Wright & Associates, will present "Creating ETFs & the Future of Investing" at 12 Noon EST. Register for this webinar.
- **Sign Up Now** - Wednesday, November 18th, Linda Raschke, CTA, CPO, President of LBRGroup, Inc., will present "Quantifying Structure and Identifying the Sweet Spots in the Data" at 4:30 PM EST. Register for this webinar.

New Additions to the Schedule - The MTA is pleased to announce the following presentations to the Educational Web Series schedule:
January 21, 2010: Véronique Lashinski, CMT, Vice-President & Senior Research Analyst at Newedge USA, LLC. More information on this webcast will be made available shortly.

View the entire schedule of upcoming webcasts...

MTA Podcast Series - New Podcast Available and Upcoming Schedule!

Now Available - Darin Newsom, Senior Analyst at DTN/The Progressive Farmer, shares his views and insights on the agricultural sector of the market.

- Tuesday, November 10th - Phil Roth, CMT, Chief Technical Market Analyst at Miller Tabak + Co.

Visit the MTA Podcast Series page to listen to this podcast and subscribe to our RSS feed, where you'll receive updates automatically every week.

MTA Library - New Additions!

The MTA would like to announce the addition of the following new books to the MTA Library:

- "Unveiling The Retirement Myth: Advanced Retirement Planning Base On Market History" by Jim C. Otar, CFP, CMT
- "Market Indicators" by Richard Sipley

The MTA would also like to thank Bloomberg LP for their gracious donations. If you have any suggestions of books that should be included in the Library, please contact Cassandra Townes.