April 2010

In This Issue

Letter from the Editor

In this month’s newsletter, we take a look at several recent research papers on technical analysis. The field has been well studied by the academic community, and in many cases, the studies really do support our approaches. For example, relative strength has been the subject of a number of research papers. Academics prefer the term “momentum” to relative strength, but reading through any of the papers you will quickly see the underlying concepts are the same. The idea that momentum persists in stock prices has become so well documented that it is now acknowledged as a known anomaly of the Efficient Market Hypothesis. Many of the common indicators can be thought of as derivative of relative strength, and in fact Richard Tortoriello demonstrated the effectiveness of Wilder’s RSI in his book *Quantitative Strategies for Achieving Alpha*.

The academic community could prove to be a valuable source of trading ideas for the motivated technician. Math can appear to be a hurdle – while we as technicians tend to look at winning percentages and profit factors, academics use more daunting statistical techniques. Papers tend to explain and illustrate the mathematical concepts. This is done so that others can reproduce the results. For those new to reading this type of work, you could start by reading the abstract, introduction, and conclusion. If the results seem like something you can use in your work, wading through the math would be well worth the effort.

Personally, I have found a great deal of value in the academic work on momentum. There are also a number of papers showing that momentum doesn’t work well at times, and I have been able to use these papers to prepare a model showing when the risk is greatest for relative strength strategies.

For those wanting to get started on studying the diverse literature available to us, a good place to start is the Social Science Research Network (www.ssrn.com) where a search on the term ‘technical analysis’ yields 1,000 hits. Not all the papers are relevant to technicians, and not all papers are available for free download. But there are many hours of reading and testing available for those willing to dig into the field of technical analysis.

For those wanting to talk about whether or not academic research fits into the TA community, maybe we can continue this discussion at the MTA Symposium to be held in New York. Late May is a good time for us out-of-towners to gather there, it should be the ‘not too cold, not too hot’ time of year. The speakers lined up by the MTA are among the best in the industry, and there is always ample time to learn from the other attendees. It’s time well spent on professional education and personal collaboration.

Sincerely,

Mike Carr, CMT

Technical Analysis and the News

By Mike Carr, CMT

Noted technical analyst Andrew Cardwell is fond of saying that technical analysis writes tomorrow’s headlines. In his experience, and the experience of many others, price trends tend to start long before the news which explains the underlying fundamentals is understood.

Unfortunately, the media needs to fit the news to the price action. The headlines on a web site or CNBC need
to explain today’s market action in terms of the latest news story. So we see that healthcare stocks rally after Congress passes the final legislation. This clearly conflicts with one of the premises of technical analysis which is that market action discounts everything.

John Murphy, CMT, cited that as one of the three principles that technical analysis relies on as fundamental truths. The other premises are that prices move in trends and history repeats itself. As Murphy writes in his classic book, *Technical Analysis of the Futures Markets*, “The technician believes that anything that can possibly affect the market price of a commodity futures contract – fundamental, political, psychological, or otherwise – is actually reflected in the price of that commodity.”

While there are many reasons fundamental analysts take exception to technical analysis, this is one area of agreement. The Efficient Market Hypothesis, which has a number of acknowledged flaws, states that prices are informationally efficient and in its various forms, the hypothesis contends that the current market price reflects what is known about the future.

This leaves us with the seemingly conflicting realities that market analysts can ignore the news since prices already discount the future but being quoted as an expert requires us to fit the market action to the latest news story. An excellent example of how to resolve this conflict can be found in the work of Michael Kahn, CMT.

“Behind the Headlines” (http://quicktakespro.blogspot.com/) is a blog site that Kahn uses to provide comments “about anything that might affect your portfolio.” In real time, he often comments on the market and the news. As the healthcare vote was occurring in the House of Representatives on Sunday, March 21, Kahn was blogging about how the markets had been reacting to it and what was happening when the futures opened. He expertly pointed out what was happening, what the markets should do in theory if the bill passed or failed, and then concluded with the insight that smart traders should let the dust settle before placing trades.

In a single post, he delivered a headline, meeting the media’s requirement. And offered real trading advice which proved to be true – markets were volatile the next day as everyone assessed what the new future looked like.

As another example of his timely insights, on March 15, Kahn posted “Copper Bends Again” (http://quicktakespro.blogspot.com/2010/03/copper-bends-again.html) where he looked at the impact of the Chilean earthquake:

“Bent but not really broken - arguably.

But a few weeks ago - before the earthquake hit top producer Chile - I wrote a piece for MarketWatch saying copper and copper stocks looked bad. Then the earthquake hit and copper jumped up - a lot.

Blame the dollar if you like but today’s action is bearish and we may look back on last week’s trading as the second peak in a double top.

And for your odd music enjoyment, “Bend It” from 1966. You know there is always an ulterior motive in my blog titles.”

It is interesting to see strong technical analysis placed in the context of the news. For those looking at how to succeed in the field, Kahn offers a sterling example. A great technician who makes technical analysis
Technical Analysis is an Economic Research Topic

By Mike Carr, CMT

A recent working paper published the Federal Reserve Bank of St Louis offers an academic look at technical analysis rules. This is not the first time that the field has been reviewed by non-practitioners. While many technicians feel that the academic community takes a dim view of technical analysis, that is not really consistent with a close reading of some of those papers.


Technical analysis dates at least to 1700 and was popularized in the late nineteenth and early twentieth centuries by the “Dow Theory” of Charles Dow and William Peter Hamilton. Despite its popularity, academic economists have traditionally been quite skeptical of the value of technical analysis (e.g., Malkiel, 2007), because its success would violate the intuitively attractive weak-form efficient market hypothesis, which holds that past prices—which are clearly known to traders—should not help traders earn abnormal risk-adjusted returns.


This is a typical, and fair-handed, treatment of technical analysis in journals and working papers. Both sides are presented because the science is simply not settled—even among practitioners opinions differ on whether moving averages are effective. This can be said of any technical rule, but that does not mean the rules can not be subjected to academic scrutiny and held up to the highest statistical standards, as is done in this paper.

Math can be daunting, and this paper will be a challenging read for many. To begin with, the authors use a recursive regression framework to develop point forecasts from the moving average signals. In other words, they want to know what the expected price move of a signal is, something that traditional technicians do not do. If nothing else is reviewed in the paper, this technique alone should be explored by modern technicians since it has practical applications. Experienced technicians would argue that not all signals are equal—some will be more profitable than others and few successful traders blindly follow every signal given by a single indicator. We find in “Out-of-Sample Equity Premium Prediction: Economic Fundamentals vs. Moving-Average Rules” that academics can prove that not all signals are equal and we as traders can profit from that insight.

In the end, the authors demonstrate that a simple dual moving average system can deliver profits using monthly data. The signals work best during recessions. The authors conclusion states:

MA rules usually recognize sooner the drop in the average equity premium that occurs early in recessions, while economic variables tend to identify the increase in the average equity premium
prior to business-cycle troughs. Thus, fundamental and technical approaches are complementary. This might explain the continued use of both by practitioners and academics. While each approach has significant economic value, there is clearly the possibility for dynamically combining these complementary forecasts into a superior trading rule.

These results are statistically significant and potentially useful for traders, which means that the study enhances the prestige of technical analysis and can be used to make money.

Editor’s note: David Aronson brought this paper to the attention of the editor and we thank him for his contribution to the newsletter.

**Technical Analysis and FRED**

*By Mike Carr, CMT*

Technical tools work on any freely traded market and more and more we are seeing the techniques of technical analysis applied to economic data. While most technicians have a ready source of market data for stock market and futures prices, not all have embraced the use of economic data or identified sources for that data. One of the best, and fairly comprehensive data source is the Federal Reserve. In particular, the St. Louis Fed maintains FRED® (Federal Reserve Economic Data), a database of 20,478 U.S. economic time series. At their web site (http://research.stlouisfed.org/fred2/), you can download data into Microsoft Excel and view charts of the data series. A recent enhancement allows you to easily compare multiple data series on a single graph.

Using this site offers a quick tool to examine different data series. For example, we can look at the widely understood relationship between interest rates and inflation. The textbooks tell us that the market sets the long-term interest rate based in part upon inflation expectations. As inflation rises, interest rates should move higher. Actually the change in rates should precede the news on inflation since markets discount the future and we would expect that market participants collectively would correctly anticipate trends in inflation. However, using FRED we can quickly put 10 years, or more, of the data onto a single chart.

On a coincident basis, there seems to be no consistent relationship. With only a few more clicks, you could download the data into Excel and shift either data series in time, add a moving average, or create indicators such as RSI or a MACD to analyze the data in different ways. The S&P 500 or other broad stock market index could also be added to the spreadsheet, making another level of analysis easily accessible.

One problem with economic data is that it is frequently revised. Capturing the amount of data required to create an economic series is an overwhelming task and the revision process balances the need for timely data (by providing estimates) with the need for accuracy (by revising the estimate as more information becomes available). While a preliminary estimate for Gross Domestic Product (GDP) is released shortly after the end of the quarter, it is revised at least two times after that. The closely watched unemployment report is revised a month after it is released and comprehensive revisions are made annually that adjust the numbers announced a year earlier. Markets react to the news as it is released, and the historical data series can change dramatically, reflecting the revisions rather than the market-moving estimates.
FRED partially addresses this with ALFRED, which contains ArchivaL Federal Reserve Economic Data. With this system, you can retrieve a data series as it existed on a specific date in history. Vintage data can be downloaded directly from the ALFRED website (http://alfred.stlouisfed.org/). In the Fed’s words, “Vintage or real time economic data allows academics to reproduce others’ research, build more accurate forecasting models, and analyze economic policy decisions using the data available at the time.” At this web site, 20,115 data series in 14 categories are available. The broad categories are:

- Banking
- Business/Fiscal
- Consumer Price Indexes (CPI)
- Employment & Population
- Exchange Rates
- Greenbook Projections
- Gross Domestic Product (GDP) and Components
- Interest Rates
- Monetary Aggregates
- Producer Price Indexes (PPI)
- Reserves and Monetary Base
- U.S. Trade & International Transactions
- U.S. Financial Data
- Regional Data

The data series in ALFRED is invaluable for the technician seeking to create a market model based on economic fundamentals. As an example of the richness of the data, the earliest data available is the Industrial Production Index dating back to January 1927. Using this series, you could examine its impact on stock prices through the final bubble stages of the late 1920s and observe the relationship of the two through the Great Depression.

Another Fed database, FRASER offers access to historical documents. FRASER stands for the Federal Reserve Archival System for Economic Research and includes hundreds of documents prepared at the time of various economic crises. Additional data series are also available at this site, http://fraser.stlouisfed.org/. One example technicians may find interesting is the chart of “Business Booms and Depressions since 1775” prepared in 1943. We’ve reproduced a low quality extract from the chart below, but you can see “the past trend of price inflation, federal debt, business, national income, stocks and bond yields for the United States from 1775 to 1943” at http://fraser.stlouisfed.org/publications/bb/issue/5069/download/85250/1943chart_business.pdf.

While economic data has not been widely studied by technicians, that is most likely due to the problems associated with data availability and the fact that frequent revisions made it impossible to track the impact of the initial release on the stock market. With FRED, ALFRED, and FRASER those problems can at least partially be
overcome and a new branch of technical analysis may develop.

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. 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).

Taught by John Palicka, CFA, CMT

Read More...

**FUSION ANALYSIS**

This is a professional approach that blends fundamental, technical, behavioral and quant strategies. The approach attempts to exploit profitable opportunities in market investing by both investors and traders. Whilst the course focuses on US equities, other asset classes, such as, fixed income, commodities, FX, real estate, and GCC stocks will also be analyzed. Given the plethora of strategies, the workshop will help create focused approaches to meet specific investment objectives. Fusion Analysis can create: “The better approach to investing”

**EQUITY PORTFOLIO MANAGER**

Serious managers will utilize this course to analyze leading Wall Street valuation models and investment strategies for equities using fundamental, behavioral/technical and quant approaches, and then study how these are modified by the best performing equity portfolio managers to produce risk-adjusted excess returns. Also reviewed are: accounting and cash flow tricks that are sidestepped by professional investors, but punish many investors; various trading strategies, incorporating algorithms, hyper-trading, dark pools, and derivatives; new reporting requirements for regulatory considerations, consultants and clients as well as fund marketing techniques; and career advice to get the big bonus checks. An interactive investment workshop reinforces these skills when participants get to select stocks, choose a performance measurement method and then determine a marketing style and vehicle to create an investment approach producing excess returns. Case studies examining the investment approaches of leading versus average performing portfolio managers are also included. This intensive course goes beyond basics into the sophisticated and subtle strategies that can help achieve: “Top Quartile Manager”

**INVESTMENT FUND SELECTION**

This is a must attend course for all professionals involved in the selection and management of third-party investment managers. Investment Fund Selection offers an insiders perspective into the various challenges in determining the most appropriate fund structure, managerial style and fund value-added performance of third-party investment managers in order to achieve individual investment objectives. Portfolio theory considerations and statistical issues are discussed with behavioral considerations.

Reviewing different fund structures, such as mutual funds, private equity and hedge funds, participants explore regulatory, audit, established and recent portfolio performance measures and, learn about subtle tricks that some funds can use to “dress up” performance records and charge unwarranted fees.

An optional and practical one-day investment fund selection workshop will also include various fund case studies and exercises to reinforce the definitive selection techniques learnt. Participants get to perform an investment fund selection role-play in order to evaluate and screen funds for specific investment criteria and answer the question: “Is my fund manager giving me my money’s worth?”

**TECHNICAL ANALYSIS CMT 1**

A must attend 4-day course for investment professionals wishing to gain the CMT Level I professional qualification in Technical Analysis from the Market Technicians Association (MTA). Using real-life charts, participants learn traditional technical tools of charting and many specialized topics. Whilst the course focuses on US equities, other markets including GCC stocks, commodities, and real estate will also be explored. An optional 1-day session entirely dedicated to exploring trading opportunities for US and GCC equities, FX, commodities and bonds using technical analysis. Prior workshops correctly called turns in the US market.
collapse of real estate, and the decline of the Saudi market by blending technical indicators. This course should help answer the question: “Buy or Sell and When”

INTRODUCTION TO STEALTH TRADING USING FUSION, ALGORITHMS, AND DERIVATIVES FOR PROFESSIONALS

Today, portfolio managers increasingly must use stealth trading in order to disguise their intentions and thus benefit from best execution. The old ways of staring at a Bloomberg to get bid/ask quotes and transacting an order is gradually being supplemented by more sophisticated strategies, such as, algorithmic models to meet various investment goals. The objective of this course is to give the student an introduction to the mathematical challenges of creating algs and, utilizing various trading strategies that can achieve best execution. This course should help achieve: “Best Execution.”

ADVANCED CAPITAL MARKETS ANALYSIS

Spot, forwards, swaps, options, and statistical issues are discussed in dynamic capital market strategies. This course was first introduced to a top Ivy Business School. Solving the course problems and cases has brought angst to MBA and CFA candidates. Still, the topics are the food for advanced hedge fund techniques.

STRATEGIC GOLD INVESTING

Gold has been one of the very few assets to have created wealth in the past several years. Gold offers investment opportunities for investors, traders, and financial engineers. Errorneously, some feel that one must only speculate on rising or falling gold prices to make money. In fact, there are strategies other than pure directional ones that may also offer investment opportunities. Preconceived notions on gold may soon be giving in to today’s global economic challenges. This course is for believers and non-believers in gold. Gold offers hedges against both inflation and fear. Portfolio strategies can also benefit from owning gold. Bull and bear traders can profit by using unique strategies to capitalize from gold’s fluctuations. These strategies include the use of complex technical analysis, behavioral, economic, and algo models. Financial engineers may also be interested in replicating or enhancing traditional investment strategies with gold. This course should help answer: “Is gold the future global currency or the future paperweight”.

GLOBAL SMALL CAP INVESTING

Global small cap stocks offer investors the ability to participate in the world’s future big winners. Certain trends have made this exciting area more attractive. These trends include more common product standards and consumer expectations, as well as freer capital and financial information flows. It is more likely that innovations will be produced globally rather than in traditional countries. Despite the attractive nature of this investment universe, it holds many traps and challenges for the stock analyst and portfolio manager. Therefore, the typical global small-cap manager has not produced an alpha. This course also explores alternatives in venture, emerging, frontier, BRIC, and financially engineered companies. This course covers fundamental, technical, behavioral and quant approaches to investing in global small-cap stocks. Global small-cap investing will help answer: “Now why didn’t I invest in that company?”

Instructor John Palicka CFA CMT is a top-ranked portfolio manager of Global Emerging Growth Capital (WWW.GLGE tranny) with over 30 years experience of managing $ billions. He has doubled client money, on average, every 4 1/2 years since 1980*. His high course ratings from major investment firms reflect clear interpretations and practical applications of complex topics; knowledge applied to examples and cases found in the current worldwide and GCC marketplace; his experience with specific situations actually encountered in his career and consulting contracts that parallel the learning topics. John has an MBA from Columbia University and also teaches these courses for leading training institutions, including The New York Institute of Finance (WWW.NYIF.COM).

To find out more about these courses in GCC locations, please call Esam Hassanyeh + 9714 391 0234 or visit his website: www.enhance.ae. * Past performance is no guarantee of future results.

Letter from the 2010 Symposium Chairperson

By Jeffery E. Lay, CMT

On behalf of the Board of Directors of the Market Technicians Association, I want to personally encourage you to attend the 2010 Annual Symposium in New York City. This year’s event will be held at the prestigious Hudson Theatre in the Millennium Hotel, Times Square from Thursday May 20th – Friday May 21st. Our theme,
Global Strategy & Tactics: Risk Management Solutions for the Institutional Investor, represents an overarching thesis for two full days of ground breaking thought leadership in the field of technical analysis.

Our keynote speakers this year include Mary Ann Bartels, John Bollinger, Jeremy du Plessis, Mark Fisher, and Larry Williams. Presentations from these leading voices in the technical community form the core of the entire event. Their thoughts on topics ranging from breadth to volatility, trading to investing, and asset class specifics to global inter-market analysis represent cutting edge ideas useful for navigating today’s markets.

Between these fine speakers, attendees at this year’s Annual Symposium will enjoy the most robust set of panel presentations in years. To wit, herein follows a description of this year’s panels:

Media Panel: Managing Media Communication; Effective Strategy & Tactics to Expand Your Market Exposure

This panel will explore the challenge of effectively communicating technical market strategies to a fundamentally oriented financial services industry. Panel members will be encouraged to present case studies reflecting successful and unsuccessful communications campaigns, and will engage in addressing a wide range of related topics, including how the financial media treats technical analysis as a whole.

Master Trading Panel: Technical Analysis As A Risk Management Tool

This panel will explore the application of technical analysis as a risk management tool in professional trading. We’ll explore the risk management impact of technical analysis on macro trading factors including market & product selection, trading style and asset class selection, pre-market trade analysis, position sizing, risk reward, entries, stop loss orders, targets, trailing stops and post-trade analysis.

Institutional Money Management Panel: A Practitioners Review of Technical Analysis & Portfolio Management

We’ll explore the prevalence of technical analysis as a primary method of money management as practiced by institutional buy side managers. Panel participants will be encouraged to illustrate primary methods of money management segmented by style and asset class. Special attention will be given to the opportunity for international industry growth, in turn profiling common characteristics of institutions allocating funds towards technical managers.


Our organization’s hall market panel, this year’s market forecast will provide a risk assessment for global commodity, equity, fixed income and foreign exchange markets for the remainder of 2010. Panelists will be encouraged to detail the core thoughts which form their thesis, as well describe where the thesis itself might break down or markets could be headed in the next several years should their ideas play out.

Quantitative Research & Trading Panel: Do Quant’s Achieve Superior Risk Adjusted Returns?

Through a thorough examination of the question “Do systematic money managers outperform there discretionary counterparts?”, this panel will explore the benefits and challenges of systematic trading. Panel participants will be encouraged to broadly interpret the outperformance question itself in the context of their personal experience in the space. Panelists will also address the question in terms of both risk adjusted returns and business opportunity.

Institutional Research & Trading Panel: Examining the Evolution of Technical Research as Practiced by Institutional Professionals

This panel will explore the evolving role for technical research as practiced by institutional financial service professionals. Panel participants will be encouraged to demonstrate service offerings by research product, asset class, audience profile, marketing strategies, operational challenges, and regulatory hurdles. We’ll further delve into how to not only form a quality product, but also sustain it across what has become a truly global financial landscape.

MTA Past Presidents Panel: Global Demand for TA as a Risk Management Tool

Our final panel, this session serves several purposes. First, we plan to acknowledge the Past Presidents of the Market Technicians Association in attendance. Select members of this fine group will directly remark upon their personal experience as regards the emerging global demand for our profession. Finally, panelists will participate in presenting our organization’s annual awards to a select group of colleagues in our field deserved of recognition.

Certainly not the least important, this year’s Annual Symposium represents an incredible professional networking opportunity. The Seminar Committee has gone out of its way to ensure the event is well attended by industry leaders in our profession, and your attendance will ensure you will benefit in immeasurable ways. If there is only one event you will attend in 2010 – this is it!
I want to personally encourage you to invite your colleagues, both professional and personal, regardless of their affiliation with the Market Technicians Association. We have truly become a world class organization with a robust offering all financial professionals – buy side to sell side, discretionary to systematic, and (yes) fundamental to technical – can appreciate and enjoy. Plainly put, our organization has evolved into a global association whose services and sense of “giving back” continues to impress me in ways few words can express.

Finally, I would also be remiss if I did not thank this year’s sponsors, as well as the staff of the Millennium Hotel, without whom this event would not be possible. Each of these industry leaders has “stepped up” in their own rite, and we look forward to engaging them during the event. Many will have booths in the theatre where we can each learn more about not only their offering, but also their thoughts as to new products in the pipeline critical to our collective success.

I look forward to seeing each of at this year’s Annual Symposium. In the interim, please do not hesitate to contact me directly with questions. As always, I stand willing to help each and every one of you in any way that I can.

My best,
Jeff

US Government Sources of Data

By Mike Carr, CMT

In addition to the Federal Reserve, several other government web sites offer useful economic data.

- Census Bureau provides diverse economic data series including durable goods and new home sales. [http://www.census.gov/cgi-bin/briefroom/BriefRm](http://www.census.gov/cgi-bin/briefroom/BriefRm)
- USDA Economic Research Service has information that will be useful to commodities traders and those researching the agricultural sector of the economy. [http://www.ers.usda.gov/](http://www.ers.usda.gov/)
- US Energy Information Administration has detailed statistics on oil, gas, electricity, and other energy sources that could help researchers spot economic trends and assist traders in these areas. [http://www.eia.doe.gov/](http://www.eia.doe.gov/)
- Internal Revenue Service files show the tax rate changes over time. [http://www.irs.gov/taxstats/article/0,,id=188060,00.html](http://www.irs.gov/taxstats/article/0,,id=188060,00.html)

Editor’s note: Because the MTA is growing in many countries around the world, we realize that there are a large number of non-US based technicians reading Technically Speaking. We would like to provide sources for this type of information in as many countries as possible. If you know of a government web site offering economic data for free downloading, please let us know at editor@mat.org and we will provide those links to our membership in a future issue.

Is It Real, or Is It Randomized?: A Financial Turing Test

Jasmina Hasanhodzic, Andrew W. Lo, and Emanuele Viola

Editor’s note: One argument against technical analysis cited within the academic community is that technicians can not tell the difference between actual price charts and random data. This inability has been well documented in several studies and popularized in Burton Malkiel’s *A Random Walk Down Wall Street*. In this research paper, the authors take a different approach. They test the same idea but find that participants can tell
the difference between real and random data. This paper may be an important step in the acceptance of technical analysis by academia and serves as a model in its simplicity to demonstrate the utility of our work.

The abstract reads:

We construct a financial "Turing test" to determine whether human subjects can differentiate between actual vs. randomized financial returns. The experiment consists of an online video-game (http://arora.ccs.neu.edu) where players are challenged to distinguish actual financial market returns from random temporal permutations of those returns. We find overwhelming statistical evidence (p-values no greater than 0.5%) that subjects can consistently distinguish between the two types of time series, thereby refuting the widespread belief that financial markets "look random". A key feature of the experiment is that subject are given immediate feedback regarding the validity of their choices, allowing them to learn and adapt. We suggest that such novel interfaces can harness human capabilities to process and extract information from financial data in ways that computers cannot.

The entire paper can be read at http://jasminah.com/Papers/arorassrn.pdf, and for those wanting to see the game that the paper is based on, you can still play, as of late March, at http://arora.ccs.neu.edu/v4/tool/login.jsp.

US Stock Market Returns – What is in Store?

By Dr. Prieur du Plessis

Editor’s Note: Is this technical analysis? In this article, the author uses the past to develop an opinion on the future. The data is based on market action (price in the P/E ratio is derived from market movement). We would like your opinions on whether or not this fits into the field of technical analysis. Please email us editor@mta.org and we will print as many responses as possible in an upcoming issue of Technically Speaking.

Surging stock markets since the lows of March 2009 have caught most investors by surprise, especially as new pieces of the economics puzzle are not always rosy and do not quite seem to support an overly bullish case. In short, investors are increasingly struggling to make sense of the most likely direction of stock prices.

Are we perhaps nearing the end of a cyclical bull phase in a structural bull market? Or will strong earnings growth ensure the longevity of the bull? Or is a "muddle-through" trading range in store? It seems to be a case of so many pundits, so many views.

It is one thing to trade the market’s rallies and corrections, but this is easier said than done, with not many people actually getting it right with any degree of consistency. Others are of the opinion that the recipe for creating wealth is simply to follow the patient approach, saying that "it’s time in the market, not timing the market" that counts. But "buy-and-hold" investors in the S&P 500 Index are still 25.5% down from the levels of 10 years ago, the Dow Jones Industrial Index a similar 23.5% lower and the Nasdaq Composite Index a massive 52.5% under water.

This gives rise to the all-important question: does one’s entry level into the market, i.e. the valuation of the market at the time of investing, make a significant difference to subsequent investment returns?

In an attempt to cast light on this issue, my colleagues at Plexus Asset Management have updated a previous multi-year comparison of the price-earnings (PE) ratios of the S&P 500 Index (as a measure of stock valuations) and the forward real returns (considering total returns, i.e. capital movements plus dividends). The study covered the period from 1871 to March 2010 and used the S&P 500 (and its predecessors prior to 1957). In essence, PEs based on rolling average ten-year earnings were calculated and used together with ten-year forward real returns.

In the first analysis the PEs and the corresponding ten-year forward real returns were grouped in five quintiles (i.e. 20% intervals) (Diagram A.1).
The cheapest quintile had an average PE of 7.7 with an average ten-year forward real return of 11.4% per annum, whereas the most expensive quintile had an average PE of 23.4 with an average ten-year forward real return of only 3.8% per annum.

This analysis clearly shows the strong long-term relationship between real returns and the level of valuation at which the investment was made.

The study was then repeated with the PEs divided into smaller groups, i.e. deciles or 10% intervals (see Diagrams A.2 and A.3).

---

**DIAGRAM A.1**

S&P 500 INDEX: AVERAGE TEN-YEAR FORWARD REAL RETURNS
(Based on PE ratios from 1871-2010)

Source: Plexus Asset Management (based on data from Prof Robert Shiller and I-Net Bridge)

---

**DIAGRAM A.2**

S&P 500 INDEX: TEN-YEAR FORWARD REAL RETURNS

<table>
<thead>
<tr>
<th>Group</th>
<th>PE Ratio</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Average</th>
<th>Spread</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>2 &amp; 7</td>
<td>9.5%</td>
<td>20.0%</td>
<td>16.1%</td>
<td>10.5%</td>
</tr>
<tr>
<td>Group 2</td>
<td>8 &amp; 9</td>
<td>1.0%</td>
<td>20.0%</td>
<td>12.7%</td>
<td>18.1%</td>
</tr>
<tr>
<td>Group 3</td>
<td>10 &amp; 11</td>
<td>-4.2%</td>
<td>15.2%</td>
<td>6.3%</td>
<td>19.3%</td>
</tr>
<tr>
<td>Group 4</td>
<td>12 &amp; 13</td>
<td>-4.6%</td>
<td>15.7%</td>
<td>6.1%</td>
<td>19.7%</td>
</tr>
<tr>
<td>Group 5</td>
<td>14 &amp; 15</td>
<td>-4.0%</td>
<td>12.2%</td>
<td>5.0%</td>
<td>14.8%</td>
</tr>
<tr>
<td>Group 6</td>
<td>16 &amp; 17</td>
<td>-3.3%</td>
<td>9.0%</td>
<td>3.4%</td>
<td>12.3%</td>
</tr>
<tr>
<td>Group 7</td>
<td>18 &amp; 19</td>
<td>-5.9%</td>
<td>7.5%</td>
<td>1.3%</td>
<td>13.5%</td>
</tr>
</tbody>
</table>

Source: Plexus Asset Management (based on data from Prof Robert Shiller and I-Net Bridge)

---

**DIAGRAM A.3**

S&P 500 INDEX: TEN-YEAR FORWARD REAL RETURNS
(Based on PE ratios from 1871-2010)

Source: Plexus Asset Management (based on data from Prof Robert Shiller and I-Net Bridge)
This analysis strongly confirms the downward trend of the average ten-year forward real returns from the cheapest grouping (PEs of less than six) to the most expensive grouping (PEs of more than 21). The second study also shows that any investment at PEs of less than 12 always had positive ten-year real returns, while investments at PE ratios of 12 and higher experienced negative real returns at some stage.

A third observation from this analysis is that the ten-year forward real returns of investments made at PEs between 12 and 17 had the biggest spread between minimum and maximum returns and were therefore more volatile and less predictable.

As a further refinement, holding periods of one, three, five and 20 years were also analyzed. The research results (not reported in this article) for the one-year period showed a poor relationship with expected returns, but the findings for all the other periods were consistent with the findings for the ten-year periods.

Although the above analysis represents an update to and extension of an earlier study by Jeremy Grantham’s GMO, it was also considered appropriate to replicate the study using dividend yields rather than PEs as valuation yardstick. The results are reported in Diagrams B.1, B.2 and B.3 and, as can be expected, are very similar to those based on PEs.

**Diagram B.1**

![S&P 500 Index: Average Ten-Year Forward Real Returns (Based on Dividend Yields from 1871 - 2010)](image)

**Diagram B.2: S&P 500 Index: Ten-Year Forward Real Returns**

<table>
<thead>
<tr>
<th>Group</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Average</th>
<th>Spread</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1: Div Yield 9% &gt;</td>
<td>7.8%</td>
<td>20.0%</td>
<td>15.7%</td>
<td>12.2%</td>
</tr>
<tr>
<td>Group 2: Div Yield 9%</td>
<td>6.6%</td>
<td>20.0%</td>
<td>15.0%</td>
<td>13.4%</td>
</tr>
<tr>
<td>Group 3: Div Yield 8%</td>
<td>4.6%</td>
<td>18.2%</td>
<td>11.1%</td>
<td>13.6%</td>
</tr>
<tr>
<td>Group 4: Div Yield 7%</td>
<td>1.8%</td>
<td>11.7%</td>
<td>8.4%</td>
<td>9.9%</td>
</tr>
<tr>
<td>Group 5: Div Yield 6%</td>
<td>2.8%</td>
<td>18.6%</td>
<td>9.3%</td>
<td>16.0%</td>
</tr>
<tr>
<td>Group 6: Div Yield 5%</td>
<td>0.4%</td>
<td>17.3%</td>
<td>7.9%</td>
<td>16.9%</td>
</tr>
<tr>
<td>Group 7: Div Yield 4%</td>
<td>-4.6%</td>
<td>15.4%</td>
<td>6.9%</td>
<td>19.9%</td>
</tr>
<tr>
<td>Group 8: Div Yield 3%</td>
<td>-4.6%</td>
<td>16.1%</td>
<td>5.0%</td>
<td>20.8%</td>
</tr>
<tr>
<td>Group 9: Div Yield 2%</td>
<td>-4.0%</td>
<td>15.7%</td>
<td>4.5%</td>
<td>19.7%</td>
</tr>
<tr>
<td>Group 10: Div Yield &lt;2%</td>
<td>-5.9%</td>
<td>5.9%</td>
<td>0.7%</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

Source: Plexus Asset Management (based on data from Prof Robert Shiller and I-Net Bridge)
Based on the above research findings, with the S&P 500 Index's current ten-year normalized PE of 20.3 and ten-year normalized dividend yield of 2.1%, investors should be aware of the fact that the market is by historical standards expensive. As far as the market in general is concerned, this argues for unexciting long-term returns, possibly a "muddle-through" trading range for quite a number of years to come.

Although the research results offer no guidance as to calling market tops and bottoms, they do indicate that it would not be consistent with the findings to bank on above-average returns based on the current ten-year normalized valuation levels. As a matter of fact, there is a distinct possibility of some negative returns off current price levels.

Dr Prieur du Plessis is chairman of Cape Town-based Plexus Asset Management and author of the Investment Postcards from Cape Town blog: http://www.investmentpostcards.com. You can subscribe for free to e-mail updates of new articles by clicking on "Subscribe to Updates" in the top right-hand corner of the blog site and providing an e-mail address.

This article was originally published in John Mauldin’s E-Letters and is reprinted with permission. For more information on this free publication contact JohnMauldin@InvestorsInsight.com or visit www.investorsinsight.com.

MTA Announcements

Spring 2010 CMT Registration - Level 3 Closes in 1 Week!

Registration for the CMT Level 3 Exam closes on Friday, April 9th. Sign up today to ensure your preferred time, date, and location! Contact Marie Penza, on the CMT Program and/or if you are having trouble scheduling your exam with Prometric. For detailed instructions on how you can register online, please click here.

MTA May Symposium - Over 100 Registrants Already!

With over 100 of your colleagues and fellow MTA members already registered, this year’s MTA Annual Symposium is shaping up to be an excellent opportunity to further your networking while expanding your education of technical analysis. Sign up today to join this growing list of attendees which is on pace to be one of the highest attended events in recent MTA history!

To register online, click here. Alternatively, you can register over the phone by calling Cassandra Townes at 646-652-3300.

To learn more about this event, please listen to this podcast featuring Jeffery E. Lay, CMT (MTA Symposium Committee Chair) and Jeremy Berkovits, CMT (MTA Symposium Committee Member). Click here to listen.
MTA Board Elections

*Members, Honorary Members and Emeritus Members, please note the following:* Online proxy voting for the upcoming election of MTA Officer (4) and At-large Director (2) positions is now underway! If you haven't voted, you can do so through the link below, or the link on the MTA Member Homepage. Your vote is important to the MTA, so please take a moment to cast your vote. You will need your username and password (your MTA Member ID number) to log in. When entering your Member ID number, please leave out the first four zeros and the last "I". This will leave you with a five digit ID number. If you have any questions regarding the proxy voting process, please contact Marie Penza, MTA Director of Member Services, at 646-652-3300.

To vote now, please visit: https://vod.votenet.com/mtainc/login.cfm.

Thank you, in advance, for voting and your continued support of the MTA!

MTA Knowledge Base (KB) Video - New!

The MTA is pleased to announce the creation of a short new video that explains the value and functionality of the MTA's Knowledge Base (KB). This video will be used by the MTA on our website, in digital marketing, social media, Trade Shows, etc., to help create greater exposure and recognition for the KB. Please click here to view this video. We hope you enjoy it!

MTA Educational Web Series - New Archive, Upcoming Schedule, and New Addition!

*New Archive Available* - Larry Williams shows us "How to Beat Buffett with Technical Analysis" in another webcast as an ongoing part of the MTA Educational Web Series. View the archive of this webcast online!

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

- **Sign Up Now** - Wednesday, April 7th - Cornelius Luca, author, professor and trader of currencies. Cornelius will be presenting "Enhancing FX E-Micros Trading with the Ichimoku Analysis" at 12 PM EST. Register for this webcast.
- **Sign Up Now** - Wednesday, April 14th - Kevin Riordan, CTA, registered Commodity Trading Advisor and a broker with MF Global. Kevin will be presenting "Trading with Joe Dinapoli's Levels" at 3 PM EST. Register for this webcast.
- **Sign Up Now** - Wednesday, April 21st - Leslie Jouflas, author and instructor for live workshops and webinars providing ongoing education for traders. Leslie will be presenting "The AB=CD Pattern; Learn the Nuances of Trading this Profitable Pattern" at 12 PM EST. Register for this webcast.

*New Addition to the Schedule* - The MTA is pleased to announce the following presentation has been added to the Educational Web Series schedule:

- Tuesday, June 22nd - Kevin Haggerty, professional trader and institutional trading consultant and contributor to TradingMarkets.com will present at 12 PM EST. More information to follow shortly.

View the entire schedule of upcoming webcasts...

MTA Podcast Series - New Archive and Upcoming Schedule!

*New Archive Available* - Fast Money Month at the MTA Podcast Series continues this week as Carter Worth discusses the 150-day moving average, Capitulation, and shares his biggest secret in trading the markets: Keeping it simple!

*New Addition to the Schedule* - The MTA is pleased to announce the following interview has been added to the Podcast Series schedule:

- Tuesday, April 13th - Andrew Cardwell
- Tuesday, April 20th - Greg Morris

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.