**Introduction To Fusion Analysis**

V. John Palicka, CFA, CMT

**Introduction**

“There is no free lunch”, so says the Efficient Market Hypothesis (EMH). The overall track record of market participants who beat the market, whether by using mutual fund returns or doing corporate mergers and acquisitions is not good. The vast majority of funds underperform the indices, and acquiring companies (as compared to those being acquired) don’t have much to show for it. Getting risk-adjusted excess returns is not easy.

The EMH in its Weak form casts doubt on technical analysis, and in its Semi-Strong form, it casts doubt on the use of fundamental research. Perhaps, only in the Strong form of the EMH can one outperform by using material inside information. However, that invites an orange jumpsuit at the local jail.

Still, exceptions and doubts on the EMH are growing. In Technical Analysis, studies on certain common practices, such as the use of Moving Averages to create buy/sell decisions, seem to provide an exception to the Weak form, and there are others. Eugene Fama’s work has also cast doubt on the Semi-Strong, by creating buy/sell decisions using historical financial ratios. Behavioral Finance, which has recently attracted attention as a Nobel Prize winning topic, has also cast doubt on a rational market. At times, the market may not exhibit an expected symmetrical mean-variance efficient profile. This may be due to various human emotions. Somewhat of a kissing cousin to Technical Analysis, Behavioral Finance indicates that these emotions create irrational decisions by market participants.

Thus, the door is open to exploit anomalies and exceptions to the EMH. A blended discipline using exceptions in both fundamental and technical arenas should prove beneficial to the investor. These blended approaches have been used for many years by investors and have gone by many names, but I like Fusion Analysis. The prestigious CFA Institute devoted articles to Fusion Investing in their CFA Magazine, Sept-Oct 2003 issue. Prior to this, for years I have seen Wall Street research that has had a fundamental write-up and then at the end of the report provide some technical outlook on a stock as well. However, academic research usually focuses on one or the other (mostly fundamental). Generally, it does not try to examine investment issues by using both fundamental back testing and at the same time, technical/behavioral overlays. Thus, we are lead to believe that either a basic set of fundamental or technical factors leads to say outperformance, but there is an uneasy feeling that maybe it was not just technical or fundamental factors alone that explain the outcome. Maybe, each had some influence that was not picked up by the research.

So, academic journals seem to evaluate investment hypothesis either on a fundamental basis, if it is a fundamental journal, or a technical basis if it is a technical journal, etc. It would seem that benefits should grow if one uses Fusion Analysis. To my knowledge, there are no Fusion textbooks, nor Fusion journals, nor Fusion back testing approaches. One learns one or the other, but not both combined. Nobody uses I plus I to get 3 that Fusion may offer. Hence, I have for the past few years provided the only Fusion course in the United States, and have done workshops both in the US and abroad.

The Introduction To Fusion Analysis in this article will give a flavor of the many topics that are discussed in my Fusion Analysis workshop courses. This introduction will include:

1. An introductory discussion of the Fusion’s overview, niche, and bodies of knowledge.
2. Selecting one area to illustrate the use of Fusion, namely, the Selling Climax.
3. Concluding remarks.

**Overview**

An increasing number of portfolio managers have realized that Fundamental Analysis alone often does not make the best investment approach. The number of managers, especially hedge funds using a combined approach of Fundamental and Technical disciplines, Fusion Analysis, have been rising. Also, more applicants are taking both the CFA and CMT exams, with a growing list (although still small) having earned both designations. Distrost of accounting and other fundamental issues, has lead more investors to use technical analysis. Also, the volatile trading markets have focused increasing attention on the proper blend of Fundamental and Technical analysis for a broad array of investors with various timing requirements. Most major MBA schools and leading textbooks now devote specific sections to technical analysis. Even the CFA Institute requires some basic knowledge of technical analysis for the CFA exam. CAPM assumptions are increasingly being challenged with Behavioral Finance considerations. It seems that the strict fundamental investment world of Graham and Dodd is becoming only part of the story.

**Bodies of Knowledge**

My Fusion workshop stresses three bodies of knowledge and uses some of the leading tools of:

1. Technical analysis and Behavioral Finance
2. Fundamental analysis
3. Generating AI quant stocks screens that can be customized to meet investor risk profiles, and thus provide promising investment ideas using Fusion Analysis.

**Sample Topic- Selling Climax**

A fairly common occurrence in the market is the Selling Climax. This provides opportunities for traders and even longer-term investors. One can blend Technical, Fundamental, and Behavioral tools to reach an investment decision.

**Technical Considerations**

Based on the definition of a leading technical analyst, John J. Murphy2 a Selling Climax is: a significant reversal occurring at chart bottom. Once can also have the reverse, a Buying Climax at a chart top. It is “...usually a dramatic turnaround at the bottom of a down move where all the discouraged longs have finally been forced out of the market on heavy volume....The subsequent absence of selling pressures creates a vacuum over the market, which prices quickly rally to fill.” While it may not mark the final bottom of a falling market, it usually signals that a significant low has been seen. Edwards and Magee in their Technical Analysis of Stock Trends (8th Edition), page 171, state,” It is a harvest time for traders who, having avoided the Bullish inflection at the top of the market, have funds in reserve to pick up stocks available at panic prices.”

So, a Selling Climax based on the observations of leading technicians appears to provide good return opportunities.

continued on page 3
Technically Speaking

Market Technicians Association, Inc.
74 Main Street • 3rd Floor
Woodbridge, NJ 07095
Phone: 732/596-9399
Fax: 732/596-9392
E-mail: info@mta.org

MTA Administrative Staff
Shelley Lebeck
Jeanne Farrelly
Tom MacMahon
Marie Penza
Cassandra Townes

Technically Speaking Editor
Mike Carr, CMT
ditor@mta.org

Change of Address
Make changes on your personal home page of the MTA website, or e-mail the MTA office (admin@mta.org)

Website
www.mta.org

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Calendar of Events
November 3-5, 2005 - IFTA Conference
Pan Pacific Hotel in Vancouver, BC, Canada.
Details and registration information will be available on the CSTA Website: www.csta.org

2006 MTA Seminars
January 20-21 – MTA Retreat
Second annual mid-winter MTA Retreat in Miami Beach. Mark your calendar. To register www.mta.org/seminars (after May 22nd).

May 2006 MTA Education Seminar
New York City. This Education Seminar has been designed to address the repeated requests for more basic technical education by the majority of our organization: affiliates.

Award Winners
The volunteers of the MTA are the people who make the organization run. With a staff of 6 and a membership of 2500, the MTA could not run without the active participation and frankly the selfless giving of the volunteer time of so many people. From the board to the committees to the grading to the speaking engagements, many are giving and more people are participating in the volunteer effort every day. MTA is fortunate to have so many willing volunteers. Thank you all very much. Your organization appreciates your efforts.

Because you give so much and so few thank yous are said, Duke Jones, Chair of the annual Awards Committee championed an effort to expand the recognition process beyond one annual award. That is not to diminish the MTA annual award.

John Bollinger was the winner of that prestigious award this year. His contributions to the MTA and the field of technical analysis are long and legendary. John Murphy said it best when presenting the award at the recent annual seminar in New York city. My own thanks to John for pushing the MTA on completing the body of knowledge study. Without his eloquent emails, we might still be debating the process. Thank you John.

Brad Herndon received a service award for his efforts on the accreditation committee, the CMT exam process, the body of knowledge study and his service on the finance committee. Thank you, Brad.

David Upshaw received a service award for his long term service to the accreditation committee. David has quietly given more of his time and his thoughtful comments to that committee than perhaps any other member. Thank you, David.

Tim Snively received a service award for his efforts on the regions committee. Thanks in large part to Tim’s efforts our chapters have grown tremendously over the last year. His “regional initiative” accepted by the Board at their December 04 meeting has resulted in more speaking engagements supported by the MTA than ever before. Thank you, Tim.

Barry Sine received a service award for his efforts on the accreditation committee, the body of knowledge study, providing guidance to CMT candidates and the seminar committee. Everywhere I turned this year Barry seemed to be there willing to lend a hand. He also stepped into an unexpired term as secretary to the Board. Thank you, Barry.

If you have the opportunity, please extend your thanks to these outstanding contributors. Thank you.

Sincerely,

John R. Kirby
Executive Director

New York, New York and Thank You.

Another May, another successful MTA conference in New York. It was a great experience to meet everyone and as always, interact on markets, ideas, personalities and whether the drum or the bass solo was better at Birdland that Saturday night. Many thanks to not only everyone who attended, but everyone behind the scenes. On that note, a tip of the cap to Barry Sine who did a lot of work organizing, leading and steering the conference this year.

As the summer hits, we have the post-election additions and subtractions from the MTA Board. While I will say more about the new additions in forthcoming letters, I wanted to say a most sincere thanks to two gentlemen who have served their term on the Board: Phil Roth and Mike Epstein. I am sure these names are not new to anyone in the MTA or, dare I say it, many technicians globally. Both have been mainstays and leaders in our field both within the US and in the greater global community for longer than I am sure they would like me to mention. You just cannot replace the kind of experience they both brought with them. They go with our thanks and their phone numbers close at hand...as they will soon find out, you never really leave the MTA Board, not really! Finally, as promised, please note our first article from our correspondent from India. The potential here is unlimited.

Have a wonderful summer.

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Jeanne Farrelly jeanne@mta.org
Marie Penza marie@mta.org
Cassandra Townes cassandra@mta.org
Jordan Kotick president@mta.org
Fundamental Considerations

Selling climaxes may reflect various corporate imbroilings, such as earnings disappointments, governance issues, etc. Optimistic fundamental earnings models of PEG and DDM are scaled down substantially, evidence by lowered earnings estimates and the removal of Street Buy recommendations.

Upon sell-off, however, a stock may reach valuation levels that offer the opportunity to generate future risk-adjusted excess returns (Alpha). That would then be an exception to the Semi-Strong Form of the Efficient Market Hypothesis. Under this form of the Efficient Market Hypothesis, historical financial information should not be useful for generating an Alpha. The Selling Climax would also be an exception to the Weak form which precludes the use of technical analysis.

At the relatively low levels, the stock would show more attractive valuations evidenced by relatively lower price/book ratios and even smaller market cap sizes. These historical measures, based on the work of Fama and French¹ would provide better opportunities for investors to outperform a seemingly efficient market. Some value players would also claim that the lower p/e ratio of the stock should enable it to show future risk-adjusted returns as well. This is based on the belief that over long periods, low p/e stocks perform better than high p/e firms, because investors emotionally overpay for perceived growth associated with a high p/e ratio on estimated earnings. Under the Gordon Growth model, a p/e increases as growth increases, assuming the other variables remain constant.

Behavioral Considerations

James Montier¹, a leading observer of Behavioral Finance on Wall Street has commented: “...if a stock price drops, then in theory if the analyst were correct in their initial price target, it should become even more attractive to buy. However, in practice, analysts actually reduce their target prices in response to a drop in the current market price.”

One Behavioral influence on analyst forecasts is Representativeness. It is a “…tendency to evaluate how likely something is with reference to how closely it resembles something rather than using probabilities.” For example, one could see initial accounting scandals of Tyco as similar to those of Enron, even though upon subsequent events it wasn’t even close.

“Representativeness generates excessively extreme forecasts...” This would partially account for the willingness to trade the stock at much lower levels. Other behavioral factors would also come into play.

Example- Impath

We can demonstrate our Fusion process by examining the stock of Impath. Impath was medical diagnostic company that reached lofty valuation levels and eventually went into bankruptcy. Along the way, it had several investor disappointments. These included, at first, earnings disappointments and later, announcements of management governance violations, thereby causing Selling Climaxes. The chart below indicates a Selling Climax in late April, based on a disappointing earnings announcement.

One a technical basis, when IMPH went below 30 at the end of April, a short-term Fusion trader would have bought the stock at that point because the combination of the stock plunge and relatively high volume would seem to indicate a Selling Climax. Thus, one would expect some sort of rally once calmer days set in.

On a fundamental basis, the stock’s P/E and P/B relative to the market was markedly more attractive at the approximate 30 selling climax low and appealed more to value investors. The expected P/E was 26 (1.2 x the SP 500), the trailing P/E was 33 (1.3 x the SP 500) and the P/Book was 3.3 (about 60% of the SP 500). Just a few months ago, IMPH traded at 60 with much higher absolute and relative valuations. IMPH came down significantly to more attractive valuations. IMPH paid off its creditors and as proving true, as IMPH paid off its creditors and as proved true, as IMPH paid off its creditors and as

Other Considerations- Derivatives 1

Selling climaxes in my opinion, are becoming more common, especially with the increased use of momentum strategies in rising markets by hedge funds.

In a Selling Climax, one can attempt to buy the stock at the low and hedge risks with derivatives, namely buying a protective put option with an elasticity that is a close as possible to -1.0. Naturally, upon a stock rally from the low, the price of the put should expire worthless, but its loss would be offset by the much larger gains of the stock.

In the case of Impath, one can use an upside target price objective of around 40 based upon drawing a downward trendline that connects the peaks of near 58 in February and 48 in April. Thus, buying around 30, the Selling Climax, would lead to a 10 point potential gain, using technical analysis use of trends. For illustration purposes, should a 30 put strike price with about a months expiration left cost under 3, the ensuing risk/reward of over 3 to 1 would be very attractive. Since the Selling Climax tends to reverse in a few days, one would not pay much for an option’s Theta (time value) but one would seek a near term put with a strike price close to Selling Climax price. Should the stock not have options, one could create a synthetic option from other securities. This would be more for professionals and, in this paper I shall not do the computations for this strategy (discussed in another section of the course).

Other Considerations-Derivatives 2

One can also do a “spread” trade on an intermarket basis. For example, if the stock was a housing stock that sold off because of a Selling Climax, one can evaluate against which area (most likely the industry ETF) was the sell-off done, and try to position a ‘spread’ trade. A ‘spread’ trade may try to buy the “cheaper” security, say the housing stock, from the proceeds of a short on the “more expensive” asset, say the ETF. Hopefully, the spread will narrow and thus generate profits after carrying and transaction costs.

Other, more complex strategies that play up behavioral aspects could also be used, such as Vega analysis of the implied and historical volatility of the stock’s option. One would then exploit the Vega mispricing (again, discussed in another section of the course). Since a Selling Climax would lead to panic selling, this could artificially boost the option’s price based on investors expecting relatively higher volatility in the security going forward, as compared to the past.

As we can see, a Selling Climax combined with derivative strategies could lead to many trading permutations that should satisfy the utmost leveraged speculator.
Fusion Analysis - continued from page 3

Other Considerations-Quant/AI

Traders and Hedge Funds may seek Selling Climaxes as a major strategy for profitable trades. Using Fuzzy Logic one can create algorithms to identify technical patterns5. Fuzzy logic has been applied to more complex patterns such as Head and Shoulders, and a Selling Climax can be more easily programmed. These should lead to a Quant decision-making process. This is discussed in another section of the course.

Using fundamental databases, one can select fundamental filters to screen for optimal valuations, say those similar to Fama. Combining both, one can have Artificial Intelligence programs automatically present real-time trading opportunities. In fact, these trades could be done without human intervention under strict parameters. Yes, the Fusion black box!

Leading Wall Street funds spend millions of dollars per year on quantitative trading techniques. Fusion should be a part of this program.

A very simple approach that I use for my own funds is demonstrated in the Fusion workshop, using Excel spreadsheets.

Concluding Remarks

In physics, Einstein unsuccessfully tried to reconcile the key forces in the universe into a Unified Theory. Each force explained a key aspect of the universe, yet was there some way they could be blended to explain the entire universe? Some say that today unification has been solved with String Theory. In investments, we should also try to find out the unifying force that blends the major forces of Fundamentals and Technical/Behavioral. Fusion Analysis could be the start to such an approach. It can enable better decisions for profitable trades.

The challenges are formidable. Few can master the combined Technical, Fundamental, and Behavioral Aspects of an investment situation. Academic journals must get a mindset that all disciplines are somehow related. Back testing should use all the bodies of knowledge of Fusion Analysis.

In my Fusion Analysis seminars, I examine other investment situations with other technical tools, such as:

• Evaluating the current real estate outlook in the context of the Elliot Wave Cycle,
• Hot IPOs and Gann Analysis,
• Momentum trading and SUE fundamental analysis
• Strategic Asset Allocation using sentiment and momentum technical measures with the fundamentals use of the Fed Model.

The Author

John Palicka, CFA, CMT has been managing money since the 1970s using Fusion Analysis. He helped take a $25 million small cap fund at The Prudential and grow it into $1.5 billion in eleven years, with a premium of 600 basis points per annum over the Russell 2000 Index. He started his own investment firm, Global Emerging Growth Capital, over 14 years ago. His funds have been ranked among the leaders by various reporting agencies. He has taught Fusion Analysis for the New York Institute of Finance and various professional conferences. John consults to leading hedge funds, and also teaches finance and technical analysis courses at some of the leading New York business schools. He lives in Manhattan with his wife, Cindy, and three children, Clark, Chris, and Cullen. For fun, he plays two hours of tennis each day, weather permitting.

Footnotes


Chapter View of National Meeting

Clare White

I just attended my first MTA annual conference and want to urge other chapter members to make it a point to get to (at least) one of these events. It was truly a great experience. I had an unusually high travel schedule right before the conference and figured I’d just blend into the background to wind down my week. I had only met a couple of the attendees in person and was looking forward to putting “faces with names” for those I’ve been in contact with by e-mail.

Absolutely everyone-and I mean everyone—was so welcoming and receptive to conversation. Any concerns of being an outsider were quickly alleviated. Additionally, the range of backgrounds for the attendees seemed extremely varied. Whether new to the association or established with a couple of widely used indicators under your belt, you had someone in which you could commiserate. It was great.

Funny it’s a side note, but it seems important to mention that the actual sessions were also varied and extremely relevant for me. One sign of a good conference is when attendees need to make choices on which sessions to attend. This event filled the bill—I really enjoyed all of the ones I had the opportunity to catch and missed a couple due to scheduling conflicts.

Given budget constraints at many companies, you’re probably not alone in making the decision to foot the bill on your own. To help with that decision, I just want to express how glad I am I did. I was looking forward to the conference and it far exceeded my expectations on all levels. Thanks.

Clare is an affiliate of the Rocky Mountain Chapter of the MTA

Thank You

Mathematical Investment Decisions Inc. would like to thank the members and affiliates of the MTA who have taken advantage of our free offer of Financial Data Calculator. The product has truly benefited from the valuable input of professional technical analysts. This free offer (three years running) will expire on June 30, 2005. After June 30, MTA Members and Affiliates will still receive a 38 percent discount on purchases of Financial Data Calculator and FDC-Plus. That is, MTA persons may purchase FDC for $100 (instead of $160), and FDC-Plus for $160 (instead of $260). All owners of the software (whether promotional or paid) receive free upgrades for life!
In Memoriam

One of the worse tasks in assembling the monthly issues of Technically Speaking is an In Memoriam to an MTA member. This one is especially difficult as I knew and liked Frank. Never did I ever imagine that I would doing a tribute to him. I have asked a few of his friends to write something about him – and I also asked his wife to do the same. I never met Loes, but she is very brave to write such a personal tribute and send it to me (someone she never met) to publish in our newsletter. Our condolences to her and their two children.

- BG

I am writing this with great sadness to inform you of the passing away of our good friend and colleague Frank Vlug from the Netherlands at age 44, way too young. Many of you have known him as a very professional analyst and a dedicated IFTA board member who did an outstanding job putting together the conference manual, which has proven to be an excellent guide for conference organizers in past years.

Personally I worked together with Frank at Robeco for more than five years and recently we have been involved in various projects together. One of those projects being the revival of the Dutch society of technical analysts.

Some time in March Frank told me that he had been diagnosed with colon cancer. The good news, as he stated, was that it was in its early stages and doctors were pretty confident that a relatively minor operation would be sufficient to remove and cure it. Shortly after this diagnosis he underwent the necessary surgery and the initial results looked very good. According to the doctors it could not have gone better that day. However, some days after the operation complications started to arise and the situation grew worse and worse by the week, eventually leading to three heart failures in about 6 weeks. The last one in the early hours of Sunday 8 May was too much for Frank...

We will remember Frank as a dedicated technical analyst and somebody one could count on. No big stories but simply delivering what he promised and always willing to help out a colleague.

On a personal note I know that Frank was very loving and caring husband and father for his family. He leaves behind his wife Loes and their two children Thomas (15) and Dominique (12). Let our thoughts and support be with them.

So long Frankie-boy! We will miss you!

- Julius de Kempenae

Frank was a very dedicated person, to his family, to his work, and to Technical Analysis. He thought he invented TA until he found out it was a profession and started working at IRIS, Robeco. He worked and studied very hard and was proud to be the first Dutch Chartered Market Technician.

For the last four years he owned his own company Technical Analysis Consultancy, which was very successful.

His ideas and professional vision will be continued by our new firm Vlug, Davids & van Mourik which he started in January 2005 with Hendrik Jan Davids and Rene van Mourik, both CMTs.

Frank was a favourite everywhere, not only by us, his family, but also it seems in the TA business, domestic and international as well.

We have received so many kind letters, flowers and cards from colleagues all over the world. It is very touching to know that he was special for a lot of people.

We really like to thank you all for your support during his sickness and after his passing. It makes us very strong.

- Loes Vlug

In May 1999 at the MTA Seminar in Manhattan Beach, I met Frank and spent quite a lot of time with him walking one day after the seminar on the beach, before boarding our planes. At the time I was chairman of IFTA and was very proud to have gained Frank’s offer of his time for IFTA as Conference Chairman (for Mainz, Germany).

I keep great memories of Frank as a trustful, warm and solid personality. I admired him when he decided to go on his own consultancy. He was then very busy and I missed him in the following IFTA conferences, he was not able to attend. But he still managed to fill his duties and the manual for conference organiser as well as his work was very much appreciated by all his IFTA board colleagues.

- Bruno Estier, MFTA

A warm and friendly person, it was a pleasure to accommodate Frank, who asked for a few minutes to promote the (then) upcoming IFTA Conference (Mainz, Germany 2000) during the MTA’s Silver Anniversary Seminar.

I made room for him between dinner and dessert and his presentation was well received. He spoke fluent English and was well prepared with a series of slides spotlighting some of the historic sites of the area, as well as program highlights.

Those there may recall his wit by including a slide of one of the historic buildings with a “puppy dog” in the picture. He explained that photo was a favor to a lady-friend/associate who dared him to make her “puppy dog” WORLD FAMOUS. He kept his promise to her that he would do it by including that slide in his presentation to the attendees from all over the world at the Atlanta seminar.

I’ve just realized there is a smile on my face as I recall that moment; but now, a sinking feeling as I realize he is gone. I’m sure he was a great friend to many fellow technicians and I’m glad our paths crossed, if only briefly.

My Emory University intern at that time, Ramon de Groot, was from Amsterdam and has since returned there as a trader with an international hedge fund. He had kept in touch with Frank and, on behalf of the MTA, Shelly, Barbara and others, personally extended condolences to his wife and family with a floral arrangement.

- Sam Hale, CMT

Frank was a gentleman, always willing to help, and a technical analyst, always willing to learn. I can’t speak higher than that.

- Michael Smyrk

The last time I saw Frank was in Atlanta where he was pleased to show me that he had taken notes in English. And, during a discussion over cocktails with Frank and Bruno Estier, I realized that he (also Bruno) knew more about American history than I did...embarrassing!

Frank put together a conference manual for IFTA that assisted us greatly when the MTA hosted IFTA in Washington, DC in 2003. I only wish that he could have been there – and still here right now.

- Barbara Gomperts
The Market Pulse Indicator
Frank Testa

Market Pulse Indicator Objective

Often times, investors are led astray by the performance of the Dow Jones Industrial Average, Standard & Poor’s 500 Index and/or Nasdaq Composite Index, as these “generals” will behave contrary to the underlying market (soldiers). In an attempt to gauge the true overall strength/weakness of the market, fine technical analysis work has been conducted leading to the development of the advance/decline ratio, McClellan Summation Index, and the ARMS Index. In an effort to fine tune the existing tools that are available to technicians, I have developed the Market Pulse Indicator (MPI).

The MPI utilizes both price and volume into its calculation, however the key strength and pivotal difference separating it from the ARMS Index is the flexibility of the MPI Indicator. The determent of the numerator and denominator is based on whether the number of advancing issues outnumbers declining issues during the session. The result is an indicator possessing a strong inverse correlation versus the ARMS Index, though its direction of the MPI runs in sync with the market - meaning oversold conditions will appear as valleys and overbought as peaks. Like the ARMS Index, MPI is designed to point out an imbalance in the advancers/decliners and the volume behind those advances and declines.

I have back tested the MPI utilizing daily market data on the Nasdaq for the period spanning December 31, 1997 through June 30, 2004. However, due to the scope of a monthly newsletter, I have elected to display a sampling of the actual data.

MPI Calculation

The methodology of the MPI is consistent with the principle of technical analysis, namely market direction first followed by volume. Consequently, bullish/bearish sessions are determined by whether the number of advancing issues outnumbers the number of declining issues. The volume component contributes to the degree of bullishness/bearishness. Hence, the larger the MPI, the more bullish the session, while a large negative outcome is considered bearish.

Bullish Tone

If advancing issues eclipse declining issues, then the MPI formula is calculated as follows:

\[ MPI = \frac{\text{Advancing issues}}{\text{Declining issues}} \times \frac{\text{Advancing volume}}{\text{Declining volume}} \]

Example 1

<table>
<thead>
<tr>
<th>Date</th>
<th>AI</th>
<th>DI</th>
<th>A/D</th>
<th>AV</th>
<th>DV</th>
<th>A/D Vol.</th>
<th>MPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/6/98</td>
<td>2,884</td>
<td>1,315</td>
<td>2.19</td>
<td>608,058</td>
<td>136,093</td>
<td>4.47</td>
<td>9.80</td>
</tr>
</tbody>
</table>

Bearish Tone

If declining stocks outnumber advancing stocks, then the MPI formula is calculated as follows:

\[ MPI = \frac{\text{Declining issues}}{\text{Advancing issues}} \times \frac{\text{Declining volume}}{\text{Advancing volume}} \]

The sum is then assigned a negative value to reflect the bearish session.

Example 2

<table>
<thead>
<tr>
<th>Date</th>
<th>AI</th>
<th>DI</th>
<th>A/D</th>
<th>AV</th>
<th>DV</th>
<th>A/D Vol.</th>
<th>MPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/28/98</td>
<td>1,399</td>
<td>2,802</td>
<td>-2.00</td>
<td>203,643</td>
<td>548,190</td>
<td>-2.69</td>
<td>-5.20</td>
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MPI Interpretation

The MPI depicts the tone of the market based on eight possible combinations as described in the table below:

<table>
<thead>
<tr>
<th>Issues</th>
<th>Volume</th>
<th>Nasdaq Performance</th>
<th>MPI Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI &gt; DI</td>
<td>AV &gt; DV</td>
<td>Falls</td>
<td>Bullish Divergence</td>
</tr>
<tr>
<td>AI &lt; DI</td>
<td>AV &gt; DV</td>
<td>Falls</td>
<td>Bullish Tone</td>
</tr>
<tr>
<td>AI &gt; DI</td>
<td>AV &lt; DV</td>
<td>Falls</td>
<td>Bullish Tone</td>
</tr>
<tr>
<td>AI &gt; DI</td>
<td>AV &gt; DV</td>
<td>Rises</td>
<td>Bearish Confirmation</td>
</tr>
<tr>
<td>AI &lt; DI</td>
<td>AV &lt; DV</td>
<td>Rises</td>
<td>Bearish Divergence</td>
</tr>
<tr>
<td>AI &lt; DI</td>
<td>AV &gt; DV</td>
<td>Rises</td>
<td>Bearish Tone</td>
</tr>
<tr>
<td>AI &gt; DI</td>
<td>AV &lt; DV</td>
<td>Rises</td>
<td>Bearish Tone</td>
</tr>
</tbody>
</table>

As depicted in the aforementioned table, a session whereby the number of issues advancing outnumbers decliners, but up volume trails down volume qualifies as a mixed session. The bullish action in the advance/decline ratio is muted by the fact that volume in declining issues was heavier than volume in advancing issues.

The most bullish scenario transpires when both gainers lead decliners AND up volume eclipses down volume, while the major indices finish higher. Conversely, the most bearish scenario takes place when decliners lead gainers AND down volume is heavier than up volume, while the major indices lose ground. But how do we gauge the overall health of the market when the indicators finish mixed? By analyzing the advance/decline ratio and up/down volume equation, we are in better position to determine whether the bulls or bears had the upper hand.

Daily Analysis

Like the ARMS Index, the MPI does not lend itself to daily interpretation as the day-to-day fluctuations in the market are far too erratic. One could smooth out the process by applying moving averages (perhaps a 9-day moving average) of the two respective indicators. When the 9-day moving average deviates from the center points of the indexes, it often will return as the market turns around.

A split view daily chart, located below this section, depicts the cumulative MPI indicator overlaid with the performance of the Nasdaq Composite Index, while the bottom chart is devoted to the daily MPI Indicator and ARMS Index.
The choppy market that characterized the period spanning February 27, 2004 through April 30, 2004 was clearly evident by the dramatic fluctuations in the MPI, Cumulative MPI, ARMS, and Nasdaq Composite Index. The March 25th session signaled a turning point in the bulls’ favor, as the underlying action of the “soldiers” was overwhelmingly bullish with advancing volume outpacing declining volume by nearly a 17-to-1 ratio and advancing issues exceeding declining issues by nearly 3-to-1. The MPI and ARMS weighed in with bullish readings of 47.84 and 0.17, respectively. Meanwhile, the Cumulative MPI’s inability to penetrate its April 19th peak, as it showed signs of rolling over during the April 20 - April 27 period, spelled trouble for the Nasdaq Composite Index. Ultimately, the underlying deterioration in the market pulled the Nasdaq lower by month’s end.

Divergences

**Bullish Divergence: (AI > DI and AV > DV, while Nasdaq Declines)**

A bullish divergence transpires when advancing issues outnumber declining issues and up volume is heavier than down volume, while the Nasdaq Composite Index declines.

In Example 1 below, bullish action in price and volume equates to a MPI reading of 1.41. The underlying strength of the soldiers is impressive given the fall of the general (Nasdaq Composite Index).

**Example 1:**

<table>
<thead>
<tr>
<th>Date</th>
<th>AI</th>
<th>DI</th>
<th>A/D</th>
<th>AV</th>
<th>DV</th>
<th>A/D</th>
<th>MPI</th>
<th>ARMS</th>
<th>Nasdaq</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/24/98</td>
<td>1.940</td>
<td>1.705</td>
<td>1.14</td>
<td>229,449,165,252</td>
<td>1.24</td>
<td>1.41</td>
<td>0.92</td>
<td>-9.50</td>
<td></td>
</tr>
</tbody>
</table>

**Bearish Divergence: (AI < DI, while AV < DV and Nasdaq Rises)**

A bearish divergence transpires when declining issues outnumber advancing issues and down volume is heavier than up volume, while the Nasdaq Composite Index rises.

In Example 2 below, the Nasdaq’s gain of 6.63 points masked the overall weakness in the market, as declining issues outnumber advancing issues and down volume outnumbered up volume, resulting in an MPI of -5.19 (since the session was controlled by the bears we automatically assign a negative value to the MPI).

**Example 2:**

<table>
<thead>
<tr>
<th>Date</th>
<th>AI</th>
<th>DI</th>
<th>A/D</th>
<th>AV</th>
<th>DV</th>
<th>A/D</th>
<th>MPI</th>
<th>ARMS</th>
<th>Nasdaq</th>
</tr>
</thead>
</table>

**Bullish Tone (AI > DI, while DV > AV and the Nasdaq Declines):**

While the Nasdaq Composite Index suffered a loss and declining volume was heavier than advancing volume, the price action resided in the bulls’ camp, as advancing issues outnumbered declining stocks. The underlying strength of the soldiers results in a positive session for the MPI. However, the bears’ ability to wrestle control from one part of the MPI equation (volume) lessened the bullish tone of the session.

**Example 3:**

<table>
<thead>
<tr>
<th>Date</th>
<th>AI</th>
<th>DI</th>
<th>A/D</th>
<th>AV</th>
<th>DV</th>
<th>A/D</th>
<th>MPI</th>
<th>ARMS</th>
<th>Nasdaq</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/25/00</td>
<td>2.088</td>
<td>1.816</td>
<td>1.15</td>
<td>571,682,612,379</td>
<td>0.93</td>
<td>1.07</td>
<td>1.23</td>
<td>-10.60</td>
<td></td>
</tr>
</tbody>
</table>

**Bullish Tone (AV > DV, while the AI < DI and the Nasdaq Declines):**

The bearishness of the session marked by a decline in the Nasdaq Composite Index and declining stocks outnumbering advancing stocks is offset to some extent by heavier trading in stocks that rose in value versus stocks that fell. As a result, the DV/AV component of the MPI lessened the bearish impact caused by the negative DI/AI ratio, thereby leaving the session with a very slight bullish tone. As technicians typically place more emphasis on price action first then volume, the bullish tone of this scenario is less in magnitude than the preceding example whereby the number of advancing issues outpaced declining issues.

**Example 4:**

<table>
<thead>
<tr>
<th>Date</th>
<th>AI</th>
<th>DI</th>
<th>A/D</th>
<th>AV</th>
<th>DV</th>
<th>A/D</th>
<th>MPI</th>
<th>ARMS</th>
<th>Nasdaq</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/29/99</td>
<td>1.800</td>
<td>2.356</td>
<td>-1.31</td>
<td>779,768</td>
<td>683,605</td>
<td>-0.88</td>
<td>-1.15</td>
<td>0.67</td>
<td>-26.44</td>
</tr>
</tbody>
</table>

**Bearish Tone (AV > DV, while AI < DI and the Nasdaq Rallies):**

The strength in the “generals” masks the weakness in the “soldiers”, as declining stocks outnumber advancing stocks. However, advancing issues were able to garner more volume than declining issues, thereby lessening the bears’ grip on the session and reducing the negative impact of the MPI. Nevertheless, as price is accorded more weight than volume, the day belonged to the bears.

**Example 5:**

<table>
<thead>
<tr>
<th>Date</th>
<th>AI</th>
<th>DI</th>
<th>A/D</th>
<th>AV</th>
<th>DV</th>
<th>A/D</th>
<th>MPI</th>
<th>ARMS</th>
<th>Nasdaq</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/15/02</td>
<td>1.303</td>
<td>2.112</td>
<td>-1.62</td>
<td>1,177,357</td>
<td>809,271</td>
<td>-0.69</td>
<td>-1.11</td>
<td>0.42</td>
<td>9.12</td>
</tr>
</tbody>
</table>

**Bearish Tone (AV > DV, while AI > DI and the Nasdaq Rallies):**

The bulls’ grip of the session is weakened by the bears’ ability to control the volume component, thereby reducing the bullish tone of the session. However, since price action is afforded slightly more weight, the bears’ influence is diminished compared to the situation where the bears’ controlled the price action.

**Example 6:**

<table>
<thead>
<tr>
<th>Date</th>
<th>AI</th>
<th>DI</th>
<th>A/D</th>
<th>AV</th>
<th>DV</th>
<th>A/D</th>
<th>MPI</th>
<th>ARMS</th>
<th>Nasdaq</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/17/01</td>
<td>2.067</td>
<td>1.728</td>
<td>1.20</td>
<td>878,383</td>
<td>949,651</td>
<td>0.92</td>
<td>1.11</td>
<td>1.29</td>
<td>13.65</td>
</tr>
</tbody>
</table>

**Weekly Analysis**

When applied to weekly data, the MPI is a useful tool for measuring the underlying health of the market. However, the divergences are not visually noticeable when glancing at the weekly cumulative MPI chart overlaid with the Nasdaq. In order to extract the full value of the MPI, we must isolate the weeks where the divergences transpired. Thus, for ease of analysis, a detailed weekly breakdown, along with the interpretation of the market is presented below.

<table>
<thead>
<tr>
<th>Date</th>
<th>Cumulative MPI</th>
<th>MPI Chg.</th>
<th>Nasdaq Chg.</th>
<th>MPI Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/31/97</td>
<td>2.94</td>
<td>1,570.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/2/98</td>
<td>5.08</td>
<td>1,581.53</td>
<td>11.18</td>
<td></td>
</tr>
<tr>
<td>1/9/98</td>
<td>(26.30)</td>
<td>(31.38)</td>
<td>1,503.22</td>
<td>(78.31)</td>
</tr>
<tr>
<td>1/16/98</td>
<td>(16.79)</td>
<td>9.51</td>
<td>1,562.88</td>
<td>59.66</td>
</tr>
<tr>
<td>1/23/98</td>
<td>(17.43)</td>
<td>(0.64)</td>
<td>1,575.93</td>
<td>13.05</td>
</tr>
<tr>
<td>1/30/98</td>
<td>(11.82)</td>
<td>5.61</td>
<td>1,619.36</td>
<td>43.43</td>
</tr>
<tr>
<td>2/6/98</td>
<td>0.71</td>
<td>12.53</td>
<td>1,694.35</td>
<td>74.99</td>
</tr>
<tr>
<td>2/13/98</td>
<td>5.22</td>
<td>4.51</td>
<td>1,710.42</td>
<td>16.07</td>
</tr>
<tr>
<td>2/20/98</td>
<td>(1.16)</td>
<td>4.06</td>
<td>1,728.13</td>
<td>17.71</td>
</tr>
<tr>
<td>2/27/98</td>
<td>12.01</td>
<td>7.95</td>
<td>1,770.51</td>
<td>42.38</td>
</tr>
<tr>
<td>3/6/98</td>
<td>10.29</td>
<td>(1.72)</td>
<td>1,753.49</td>
<td>(17.02)</td>
</tr>
</tbody>
</table>
Bearish Divergence

During the week ending May 1, 1998, the cumulative MPI fell 14.80 points, while the Nasdaq tacked on 4.48 points. The strength in the Nasdaq was masking the underlying weakness in the broader market. Subsequently, the bearish divergence manifested itself into five consecutive losing weeks for the Nasdaq Composite Index.

During the week of April 16, 1999, the market diverged as the MPI rose 1.53 points, while the Nasdaq plunged 109.01 points. The action set the stage for a snap back rally during the following week.

Bullish Divergence

The MPI also forecasted several bullish divergences. Specifically, during the weeks of December 29, 2000 through January 5, 2001, the MPI advanced 28.39 points, while the Nasdaq witnessed a 109.37 point setback. Underlying strength set the stage for a powerful rally over the ensuing two-weeks for the Nasdaq Composite, which vaulted 362.73 points.

MPI Implementation

As noted earlier in the report, the MPI, like the ARMS Index, is best suited for weekly analysis. The investor looking to take full advantage of the MPI should focus attention on divergences that surface from time-to-time between the Cumulative MPI and the Nasdaq Composite. In an effort to profit from a bullish divergence, the investor would go long the Nasdaq 100 Trust (QQQs). Conversely, a bearish convergence would trigger a sell signal of the Nasdaq 100 Trust.

The inherent advantage of the MPI is the flexible nature of the components of the equation, as the underlying strength of the market dictates whether the advancing portion of the equation will be reflected in the numerator or the denominator. Such flexibility ensures that the overall trend of the MPI is in sync with the direction of the Nasdaq Composite, thereby making it easier for the market technician to gauge the true health of the market.

Data Origin: The 6-1/2 year market breadth data compiled in this study was supplied by Pinnacle Data Corp. (pinnacledata.com), while the Nasdaq Composite daily closing figures were retrieved from Yahoo Finance.

Frank E. Testa has over 20 years of investment experience and is a CMT Level 2 candidate. Frank can be reached at fjktesta@verizon.net
“India has been waiting for the MTA,” I said to Mr. Jordan Kotick, President MTA when I recently met up with him in Mumbai. Why? Let me take the opportunity to explain India and its thorough involvement with Technical Analysis of Financial Markets by repeating another observation that I had to submit to him, “The third of the third wave on a supercycle scale for technical analysis is awaiting to be triggered in India.”

Global Macro Traders, Emerging Market Funds, the biggest of big names from the Global Hedge Fund community, S&P (just offered to buy and in the process of completing the transaction of taking over India’s largest credit rating agency), Bloomberg, Reuters, E-signal, Metastock, Thomson Publishing – you name it and they are already there firmly on the ground floor of one of the fastest growing economies and one of the most rapidly deepening markets. Futures Industry Magazine estimates already rank the National Stock Exchange of India, Mumbai to be one of the top 10 volume producing derivatives markets in the world today. Debates between trend-followers and contrarians are fought right from the sandwich stalls in Dalal Street to the trading screens, each day.

A typical day on the CNBC in India does not go by without featuring a battery of chartists through a typical trading day. It would be hard to find a single financial daily or weekly that does not have columnists after columnists dissecting charts with their favourite sputulas of Candlesticks, Elliott Waves, and Oscillator systems. So, here’s welcoming the MTA to Mumbai and its hinterland where not only Bob Prechter has thousands of followers, but where there are hundreds who debate and continue their efforts at mastering the waves on Glenn Neely’s thoughts too.

Let me bring to attention, MTA has chosen to arrive in a city and country where Martin Pring, Robert Prechter, Steve Nison, John Bollinger, Ralph Acampora, Larry Williams, Welles Wilder, Robert Colby and all their contemporaries are highly user-friendly names and the day may not be far when MTA may be able to convince them to set-off on highly ecstatic seminar/webinar jaunts to India. Let me repeat, what I had to submit to Mr. Kotick, “India has been waiting for the MTA.”

D.E. Shaw, that enigmatic financial engineering powerhouse of a trading firm that has got most still guessing, has a full-fledged system developing and testing centre functioning in India at Hyderabad for several years. The computing and programming skills apart, the hordes of III graduates that India produces each year apart, India has a millennium ago contributed ‘zero’ to the mathematics prevalent on the globe today, paving way for first writing the big numbers before which the Theories of Big Numbers and grappling with Infinity became feasible! Welcome MTA to a culture that is as comfortable in handling abstract thoughts as zero as much as it has today staked its claim on the software and programming landscape of the globe.

When Technical Analysis as a profession is on the cross-roads of evolving from the experimental and empirical evolution of its tools to statistically tested and well-counted decision systems, there does ring a bell that its esteemed members with their expertise in global markets and practises would possibly find a burgeoning network of bright, sparkling minds that would not only bring argued merit to the profession but also provide greater fuel to the evolution of the Artful applications of the Scientific study of price action.

Whether or not a student of value is found in a brokerage in India, ardent followers of price action are there in every broking, fund-management, advisory firm or a currency trading desk of a bank. Now in such a scenario, if the gold standard of the veracity of Technical competence – the CMT accreditation – becomes available for properly coaching, guiding and testing the skills of this burgeoning army of Technical Analysts, are the odds for the explosion of the third wave of the third wave of Technical Analysis in India high enough? Proliferation of Technical Analysis to a critical mass having being achieved, the rest is up to the MTA. Here’s to the world, a young 3rd wave of the 3rd in the bull market that the profession of technical analysis continues to find!

Sushil Kedia is responsible for Foreign Institutional Investors’ sales at Alchemy Share & Stock Brokers Pvt. Ltd in India. He can be reached at sushilkedia@vsnl.net

Practice Exams & Quiz Cards
Practice Exams for CMT Levels 1, 2 & 3 and flash cards for CMT Levels 1 & 2 are available for purchase through Electric Books from your personal home page. They are based on the suggested readings and can be used as part of a candidate’s overall preparation for the CMT exams. They should not be seen as the actual exam questions.

2005 IFTA Conference
Vancouver, BC
The next Annual IFTA Conference will be held November 3-5, 2005 at the Pan Pacific Hotel in Vancouver, BC, Canada. Come learn in a spectacular setting on the Pacific Ocean. Details and registration information is available on the CSTA Website: www.csta.org
It is not often that traders get a crash course from a legend, but they had that opportunity recently. On May 14, 2005, more than 100 attendees gathered to hear the world record holding stock trader speak at a conference in Los Angeles. They weren’t disappointed and listeners were kept on the edges of their seats for more than 7 hours as Daniel Zanger spun his magic. As an added bonus, they also got to hear a presentation by Stan Ehrlich on learning how to identify powerful commodity cycles and chart patterns and profit from them.

Both men will also be speaking at the upcoming IFTA Conference in Vancouver, B.C. November 2005 hosted by the Canadian Society of Technical Analysts (CSTA) (please see link below). Dan Zanger is the keynote speaker.

Zanger first came to public attention when he was featured in a Fortune magazine article in December 2000 entitled, My Stocks are Up 10,000%! The truth was even more amazing. He became the unofficial stock trading record holder in 2000 by transforming a $10,775 investment into $18 million in 18 months, which actually worked out to 164,000% in a year and a half. In 23 months his market nest egg had grown to a mind-boggling $42 million. He even has the tax receipts to prove it.

The pool contractor turned millionaire had developed quite a following in the process during the bubble heyday. On any given weekday from 1998 through 2000, you could find Zanger glued to his computer screens with laser focus surrounded by a half-dozen friends watching his every move on occasions. Without saying a word, he would remain poised like a hawk watching 40 - 60 stocks and waiting for the all-important breakouts from patterns on volume, calling his broker to buy and sell a stock when the time was right. This would go on from market open to market close. His audience would do their best to follow his every move in silent amazement. Today they are gone and he trades solo for the most part. Most of his friends just didn’t have the stamina or commitment, especially when the going got tough.

What did he talk about at the seminar? Much of the day was spent examining chart patterns and daily bars, but more importantly, seminar attendees had a chance to hear a detailed post mortem on each of his largest and best winning trade of the past 7 years.

When asked what are the keys to his incredible success, he simply replies, “chart patterns and volume, that’s pretty much it.” Volume is the real key for without a strong surge in volume, even the best pattern breakouts won’t go anywhere. Sounds simple but like all great success stories, it’s not so easy.

Those who subscribe to his newsletter, The Zanger Report and his member’s chatroom at Chartpattern.com quickly learn that it took Zanger years to become an overnight success. His clients range from private traders with small accounts to hedge fund managers trading millions and possibly billions of dollars and numerous clearing and trading houses.

Want to spend a day watching him trade? He doesn’t say much, especially when the market is really moving, but he is only too happy to share his many secrets when he has a spare minute between scanning more than 60 stock charts and watching for volume breakouts on another stock list. That will set you back $5000, but his students know they will always get their money’s worth.

His system is not for the faint of heart. As Dan says using a racecar analogy, “I like to drive at 180 miles-per-hour inches from the wall,” when describing his high velocity 2:1 margin trading style. He is constantly on the lookout for the high beta movers he calls his “frisky buddies.”

“I want to find the market leaders, the up and comers and I only trade them. If it’s not moving higher, I’m not interested.” Contrary to popular practice, he steers clear of bargains. “Why buy a stock that will go up $5 or $10 if you are lucky when there are stocks that will move $30 - $50 in the same time frame?”

**Mixing It Up: Technicals + Fundamentals = Consistent Winners**

Zanger takes a top-down approach when looking for stocks to buy. First he looks for stocks putting in “interesting chart patterns on increasing volume.” If the stock is acting frisky, there is generally a fundamental reason why; often institutions are accumulating the stock and the chart pattern is simply proof of this.

A one-time student of William O’Neil, founder of the Investors Business Daily newspaper dynasty, Zanger has paid his dues. He spent more than 10 years logging 20 or more hours per week (on top of his day job) studying chart patterns. Like a Top Gun fighter pilot looking at enemy aircraft silhouettes until they can identify them in their sleep, Zanger internalized a myriad of chart patterns until he could pick them out in an instant.

A breed apart from most traders who are either technical or fundamental, Zanger uses O’Neil’s CANSLIM formula discussed in his best selling book, How to Make Money in Stocks: A Winning System in Good Times and Bad. O’Neil recommends that you buy only companies exhibiting certain fundamental and technical characteristics.

Zanger has added some of his own criteria, and, interestingly, he has discovered over the years that stocks demonstrating interesting chart patterns on volume very often turn out to fulfill most if not all of the CANSLIM criteria. Here is a summary of the CANSLIM criteria, including the way Zanger uses them.

- **Current Quarterly Earnings/Share Growth** – This must be up a minimum of 40% and quarterly sales accelerating at 40% or better to capture Zanger’s interest. O’Neil recommends, earnings must be up 18 - 20% and sales accelerating at 25% but this just isn’t good enough for Zanger. He also needs to see companies with both earnings and revenues that demonstrate a continual quarter-over-quarter sequential expansion, a process he refers to as “ramping up.” Retailers are a little different and he looks for year-over-year expansion due to the seasonal industry characteristics.

- **Annual Earnings Growth** – Studies by Investor’s Business Daily have shown that winning stocks over the last 50 years had a return on equity (ROE) of 17% or more. Any CANSLIM-worthy stock should demonstrate this kind of ROE in each of the last three years. The higher the annual growth, the better the candidate.

- **New Products, New Management, and New Highs** - This feature combines fundamentals and chart techniques. Companies offering new products/services, with new management and/ or industry innovations are prime candidates. Technically, Zanger only buys stocks that are emerging from basing chart patterns and that have put in a new high out of the base or consolidation pattern. It is also important that they have a global domination in their market space and are “under-known and under-owned.” This means that institutions that don’t yet have these stocks in their portfolio are going to become major buyers, at which point they create demand for the stock and this in turn pushes up the stock price.

- **Supply and demand in share volume/shares that float** – Shares outstanding is of less importance here than demand but Zanger likes to see no more than a maximum of 75-100 million shares. The total number of shares that the public can buy is known as the float. A small number of shares that float means that fewer shares have to be bought to push up the stock price. TARK, one of Dan’s big winners in 2003-2004, it started out with a float of just 3 million shares. The stock made a 5000% move in 18 months and now has a float of 54.3 million due to numerous stock splits. A stock should demonstrate increasing volume as price moves out of a basing chart pattern such as a cup and handle, saucer bottom, or inverted head and shoulders bottom. Other patterns such as flags or pennants, ascending triangles, bullish island patterns, and bullish wedges also represent excellent buying opportunities when greater-than-average volumes accompany the breakouts.
Leaders (or Laggards)? – Buy market sector and industry leaders. Sell laggards. Own the industry leaders and sell them when they no longer lead. This also applies to the sectors and groups in which they reside.

Institutional – Dan look for stocks with a high potential of institutional participation. Ideally, he wants to find stocks that institutions are beginning to accumulate. This includes those with a higher degree of corporate executive insider ownership.

Market direction – Seventy to eighty percent of a stock’s price movement is determined by the direction of the overall market. Even a winner will be fighting a strong current to get to higher prices in a market that is tanking. It is best to be long big winners in a bull market (and short losers in a bear market) and never fight the trend unless it is giving strong signs of a potential turn around. Catching a bottom is great when you can do it, but if wrong it’s like trying to catch a falling knife, it can also be extremely detrimental to your (financial) health!

Which stocks have been some of his big winners recently? Other than Taser (TASR), some of his big winners in 2003-2004 included Research in Motion (RIMM), E-Bay (EBAY), Sina Corp (SINA), Sandisk (SNDS), Chicago Mercantile (CME), Kmart (KMRT), which is now Sears Holdings (SHLD), Apple Inc. (AAPL), Travelzoo (TZZ) and of course Google Inc. (GOOG). In 2005, it’s Google (GOOG) again and he says this stock could run big for the rest of 2005, is one of his major “leader” stocks and his largest single position in years.

He was short EBAY when it broke down in January 2005, dropping from a pre-2 for 1 split price of $103.50 to $83 in one day after an earnings shortfall. It was his biggest single one-day loss on one stock ever as he was short 160,000 shares prior to the earnings news.

Zanger offers a key caveat. Most of the stocks that he trades are CANSLIM stocks, but there are two key exceptions that show why checking company fundamentals is so important. First, Biotech stocks often act like CANSLIM stocks but don’t have earnings growth and other positive criteria. Second, near the end of a major bull run in the markets, after most of the quality stocks have already moved and are starting to exhaust themselves, the trash stocks will get pushed higher as investors scramble to find the “next big thing.” A rising tide lifts all boats including those that don’t have the fundamentals behind them. Loading up on these trash stocks late in the game can lead to serious losses and a situation that can be avoided by looking at the fundamentals.

Stan Ehrlich, inventor of the Ehrlich Cycle Finder, and Zanger have teamed up to provide a full spectrum of analysis and commentary to readers through the Chartpattern.com website: Zanger on stocks http://www.chartpattern.com/cf/registration_form.cfm and Ehrlich on commodities http://www.chartpattern.com/cf/ehrlich/ehrlich_report.html. Each newsletter costs $69USD per month or $190USD per quarter. Those interested can sign up for free trials at https://secure2.lorber.net/cf/chart-pattern/shopping.htm

Adding Some Perspective

Zanger’s high-speed trading method is not for everyone. Any system that offers big potential wins also works in reverse and Dan is the first to attest to that. Dan got caught in a stock that does an abrupt about face and the game turns into a survival of the fastest to reach the exits. But like all successful traders, Zanger has had to learn how to limit losses while maximizing profits and he doesn’t let his bad days get him down for long.

Internalizing your trading rules and patterns is also critical to success. Besides How to Make Money in Stocks, two other books that are absolute essential parts of trader education in his opinion are Reminiscences of a Stock Operator and Encyclopedia of Chart Patterns. His daily newsletter is also very useful for those who are interested in getting his input on the market and stocks making moves.

It is also important to take your own personality into account. By his own admission, Zanger is a type “A” personality and needs the thrill of the chase to keep his interest. He thrives on the high adrenaline rush of trading fast moving stocks. Others might consider this stressful but it’s not just the best game, it’s the “only” game in the world to him.

But then again, that describes a high percentage of successful traders.

Dan Zanger will be the keynote speaker at the International Federation of Technical Analysts Conference, November 3-5, 2005 in Vancouver, BC, Canada. Stan Ehrlich will be speaking at the same event. It’s a great opportunity for traders, money managers, analysts and brokers to get together and network as well as learn about cutting edge techniques. For more information visit http://www.csta.org

Recommended Reading

• Blackman, Matt, 2003 The Charts Know It All. Chart Patterns, Trading, and Dan Zanger
• Bulkowski, Thomas, 2005 - Encyclopedia of Chart Patterns (Second Edition), John Wiley & Sons,
• Lefevre, Edwin, 1993 - Reminiscences of a Stock Trader, John Wiley & Sons
• Dan’s 10 Golden Rules
  http://www.chartpattern.com/10_golden_rules.html
• Other Articles about Zanger
  http://www.chartpattern.com/media.html

About the Author

Matt Blackman is a technical trader, author, reviewer, keynote speaker and regular contributor to a number of trading publications and investment/trading websites in North America and Europe. He also writes a weekly and monthly market letter. His articles have appeared in such publications as Technical Analysis of Stocks & Commodities magazine, Laffer Economics, Working Money, Traders.com Advantage, Traders Mag (Europe), Active Trader, SFO (Stutes, Futures & Options) Magazine, Trader Monthly and Investopedia.com. He has also written articles on a wide variety of international finance and e-commerce business-related topics. In a September 2004 article for Offshore Investment Magazine, he was referred to as “one of Western Canada’s leading international financial analysts” by Walter H. Diamond, economist and author of more than 50 books on international taxation and trade. Blackman is an affiliate Market Technicians Association and Canadian Society of Technical Analysts member and currently enrolled in the Chartered Market Technicians (CMT) program.

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And, the winner is....

John J. Murphy, CMT

It was a great honor being asked to present this year’s MTA Annual Award. As you know, this is the most prestigious award given each year by the Market Technicians Association. I first become aware of this year’s recipient in his role as the technical analysis for the Financial News Network many years ago. I was impressed with his daily discussions of the technical aspects of the market in front of the camera and often felt sorry for him having to do so on especially difficult market days. I once told him that I wouldn’t do his job for a million dollars. I actually wound up doing it later on CNBC for a lot less. My role as technical analyst for CNBC was actually a direct result of his work at FNN. CNBC felt that they needed a technical presence to compete with their FNN show Tech Talk. That started my 7-year TV career.

John is best known for his invention of Bollinger Bands, but has also developed a solid reputation for his quantitative approach to the market. His TV work helped introduce an entire generation to the technical side of the market. His award is richly deserved and long overdue. It is my great pleasure to present the 2005 MTA Award to John Bollinger for his creative contribution to the field of technical analysis.

J U N E  2  0  0  5
Technical analysis of stock behavior is currently created around three pieces of data: price, volume and time. There is, however, a fourth piece of data which can be incorporated into a stock chart that has been generally overlooked. That piece of data is the float. For those technicians unfamiliar with the term float, it is the number of shares actually available for trading. When a company comes public they issue shares outstanding. The company’s management retains some percentage of those shares and the remaining shares to be traded by the public is the floating supply or float.

The origins of the terms, float and floating supply are unknown to me but I do know that one of the earliest attempts to incorporate the float technically into a price chart can be traced to famed trader W.D. Gann. In his book, Truth of the Stock Tape, he made two references to the float that indicated he was tracking the float on his charts. In one passage he talked about the amount of volume it took for a stock to make a 23 point move to the upside. He said that 1.6 million shares traded hands, which was “five or six times the floating supply.” In a second passage, he talked of a stock in which the shares were “changing hands about twice each week.” Upon first reading these two passages, I realized that Gann had a unique way of looking at a stock’s trading volume. He was treating a company’s tradable shares as a whole unit, and he was tracking that unit as it changed hands one or more times. Gann was looking at time distances on the chart in relation to cumulative volume that equaled the number of shares. I believe he was searching for areas on the chart in which changes of ownership of the float would help in determining when the stock was under accumulation and when it was under distribution.

To understand Gann’s idea more clearly I have coined the term “float turnover” and in this article I will define the term and explain how it can be quite useful as a new technical analysis tool.

**Defining a Float Turnover**

The simplest definition of a float turnover is “any time frame on a stock chart in which the cumulative volume equals the number of shares in the floating supply.” Float turnovers are shown on the chart as a rectangle. The rectangle changes from day to day like a moving average and is known as the Float Turnover Box or more simply the Float Box. The float box has two functions. One is to show the dimensions of the current float turnover or it can be used to generate trading signals when the price penetrates above the top of the box or below the bottom of the box.

To explain float turnovers I’ll use the chart of Sirius Satellite (SIRI). Figure 1 shows the chart of Sirius as it looked on February 8, 2005. On this day it had a float of 1.262 billion shares. Notice that in the last several months of trading the stock made a low at the $2 level in August 2004 and a high at the $9 level in December 2004. I’m going to presume that Gann was looking for areas on the chart that represented accumulation at the bottom and distribution at the top and search for the highest and lowest float turnover boxes on the chart. My float tracking software allows me to move the float box from bar to bar on the chart and thus quickly find the float turnover boxes at the bottom and the top and I’ve plotted them on the chart.

The float turnover at the top shows how the float box looked if we use a starting date for the cumulative count on December 10th. The float turnover at the bottom shows how the float box looked if we use a starting date for the cumulative count on September 9th. The cumulative total of the shares traded in each box is 1.262 billion shares. I’m simply adding up backwards until the cumulative total reaches to 1.262 billion shares.

Note that the cumulative total does not exactly equal the float when using a daily chart but actually exceeds the float. When using a daily chart I add up volume going backwards until the cumulative total is equal to or greater than the float. Here are the actual volume numbers of the five days at the top that are added up in a backward cumulative count:

<table>
<thead>
<tr>
<th>Date</th>
<th>Daily Volume</th>
<th>Running Cumulative</th>
<th>Total Float (1,262,000,000)</th>
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</thead>
<tbody>
<tr>
<td>Dec. 10th</td>
<td>104,084,600</td>
<td>1,262,000,000</td>
<td></td>
</tr>
<tr>
<td>Dec. 9th</td>
<td>143,520,304</td>
<td>2,496,521,904</td>
<td>is less than 1,262,000,000</td>
</tr>
<tr>
<td>Dec. 8th</td>
<td>540,453,376</td>
<td>3,176,975,280</td>
<td>is less than 1,262,000,000</td>
</tr>
<tr>
<td>Dec. 7th</td>
<td>407,152,992</td>
<td>3,584,128,272</td>
<td>is less than 1,262,000,000</td>
</tr>
<tr>
<td>Dec. 6th</td>
<td>216,497,104</td>
<td>3,790,625,376</td>
<td>greater than 1,262,000,000</td>
</tr>
</tbody>
</table>

To understand the implications of the float turnover boxes that I’ve presented, we need to view them in the context of two very old technical analysis terms: accumulation and distribution. Accumulation as defined in the glossary of the Edwards and Magee classic Technical Analysis of Stock Trends is “The first phase in a Bull Market. The period when farsighted investors begin to buy shares from discouraged or distressed sellers... Volume is only moderate.” Distribution in the same book is defined as “The first phase of a Bear Market, which really begins in the last stage of a Bull Market. The period when far sighted investors sense that the market has outrun its fundamentals and begin to unload their holdings at an increasing pace...trading volume is high.”

The chart of SIRI fits nicely into this definition as its volume in the bottom is only moderate but the volume at the top is quite high. The shape of the boxes themselves signifies this; a long and flat float turnover box at the bottom shows slow gradual accumulation and a tall narrow float turnover box at the top shows fast paced distribution.

When discussing float turnovers at tops and at bottoms it is important to understand that we cannot say that the entire float trades hands right at the bottom or right at the top.

This is because we cannot know the intentions of all the market participants. There may be day traders who buy and sell within the float turnover and there may be long-term investors who hold their shares through several turnovers. But this does not negate the power of the float turnover box as a technical tool. The reason for this is that technical analysis is grounded on recognizing recurring patterns on a stock chart and a close study of float turnover boxes shows that a float turnover box will always be found at long term bottoms and long term tops. Thus they are a powerful tool for identifying areas of accumulation and distribution on stock charts. Two other examples of float turnover boxes at the bottom and the top are Onyx Pharmaceuticals (ONXX) (Chart 2) and Sina Corporation (SINA) (Chart 3).

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Steve Woods has been an MTA Affiliate for He is CEO of www.FloatCharts.com and www.FloatAnalysis.com
Reflections on the MTA Seminar Software Vendor Panel Discussion

Robert W. Colby, CMT

Barry Sine, CFA, CMT, Co-Chair of the MTA seminar committee asked me to moderate a two-hour panel with four top TA software vendors as part of the MTA Education Seminar. The intention was to educate MTA members about what is available, how the various alternatives compare, any unique capabilities, and costs. Also, three vendors set up and staffed full live data displays so we could test drive their software, get answers to questions, and check the market during the three days of the conference.

Four vendors each took 15 to 20 minutes to talk about their unique benefits, then we opened it up for audience Q&A. The vendors arrived at a consensus in advance to keep the panel friendly and non-confrontational.

I felt that as moderator I should be unbiased and only speak in order to keep the discussion moving or ask a question when it might help clarify some point. As it turned out, I think they might have been a little too gentlemanly, and it might have been more interesting with a dash of controversy. One of the vendors set the tone early on saying that all the software was very good and much the same! That statement passed unchallenged, somewhat to my surprise.

True that all four have very good graphics and most of the standard trendlines, moving averages, popular indicators, etc. But some lack back-testing and automated order entry. And there are considerable differences in costs.

For software and data, costs range from $545 a month (plus exchange fees) for CQG Chart Trader (cqg.com, 800-525-7082) to “free” (but only for Fidelity customers who place 120 trades a year) for Fidelity Active Trader’s Wealth-Lab (wealth-lab.com, 800-823-0175).

Both include data feed, have a built-in profit back-testing simulators with optimization, automated order entry, and are very attractive high-end products. In addition, on its website, Wealth-Lab offers a growing list of indicators and formulas contributed by its 20,000 users.

RealTick (from Townsend Analytics, realtick.com, 800-827-0141) offers top-tier pairs and spread trading analytical displays, as well as basket trading, but it does not include profitability testing or optimization. RealTick costs about $250 a month for software and data feed (plus exchange fees).

Aspen Graphics (from Aspen Research Group, aspenres.com, 800-359-1121) offers uncluttered charts and emphasizes ease of use and customer support. Aspen also costs about $250 a month for software and data feed (plus exchange fees). Aspen has no profitability simulator and no automated generation and execution of actual trading orders.

Software selection can be complex because everyone’s needs are not the same and one size does not fit all. I have my biases, but they may not match yours. So, my advice would be test drive a few and don’t buy without a free trial on the full software version, or at least a realistic demo version. Take some time to evaluate and compare, and ask questions. Here are some points you may wish to consider:

- Price of Software (monthly and yearly)
- Price of Data, if Sold Separately (specify monthly and yearly)
- Overall Capabilities
- Ease of Use
- Ease of Learning to Use & Customer Support
- Getting Started Tutorial
- User Selectable Flexibility, Adaptability, Customization
- Visual/Graphics Capabilities & Display Options
- Back Testing And Simulation Capabilities
- As A Trading Systems Development Tool
- Breadth of Pre-Programmed Analysis Tools
- Flexibility & Ease of User Created Analysis Tools
- Time Period Selection Flexibility
- Data Accuracy, Checking, Automatic Corrections
- Data Breath of Coverage (how many & what kinds of securities)
- Data Depth of History (how many years back)
- Ability to Access Outside Data From Spreadsheets
- How many variables can be contained in a single data file?
- Trade Filtering & Screening Included, Preprogrammed
- Custom Filtering & Screening Design Tools
- Automated Generation and Execution of Actual Trading Orders
- Automated Portfolio Tracking
- Back Testing Profitability Simulation
- Optimization of Parameters
- Back Testing Flexibility
- Back Testing Performance Measures
- Pattern Recognition, Classic Chart Patterns, with Labeling
- Elliott Wave Identification and Labeling
- Japanese Candlestick Pattern Recognition with Labeling
- Expert Systems Included
- Expert Systems Design Tools
- Artificial Intelligence, Built In, Customizable
- Neural Networks
- Genetic Algorithms
- Cycle Finding Tools, Cycle Measuring Tools
- Other

Thanks to these four vendors for their participation. And special thanks to Hima Tadoori and Barry Sine for volunteering to set up this panel, and to the entire MTA staff for the complex task of staging the whole seminar.

Robert W. Colby, CMT, is an author and consultant providing custom research services to institutional and private investors and traders. He offers daily market updates and educational information on his free website, www.robertwcolby.com

MTA Needs Senior Editor

Mike Carr has done a great job as MTA Senior Editor but would like to retire. MTA needs to fill his shoes with a member who has editorial writing experience and is willing to be overworked and underpaid. The job pays $500 per month and takes about 5 hrs per week. If you are interested, or would like to discuss it, please let me know. jk@mta.org

Attention:

To the attendees of Steve Nison’s Session at the MTA Education Seminar 2005 and all attendees

During Steve Nison’s session on candle charting, he offered a free 2-week trial of his daily newsletters. To take advantage of this offer – which he is also making available to all attendees of the May seminar – please contact tracy@candlecharts.com

All emails are kept confidential.
MTA Regional Chapter Contact Information

If you are visiting any of these chapter areas over the next several months and might be willing to make a presentation to the local group, please contact the regional chapter chair as noted to work something out. Some are long-standing chapters, some are trying to get started, but ALL of them are in need of speakers now and then.

<table>
<thead>
<tr>
<th>Chapter Area</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Atlanta</td>
<td>Tim Snavely 404-926-5473 <a href="mailto:tim_snavely@rhco.com">tim_snavely@rhco.com</a></td>
</tr>
<tr>
<td>Austin</td>
<td>Sean Mackie 512-517-6506 <a href="mailto:sean_mackie@sonoranfunds.com">sean_mackie@sonoranfunds.com</a></td>
</tr>
<tr>
<td>Boston</td>
<td>Chuck Dukas 508-841-4195 <a href="mailto:chuck@trendadvisor.com">chuck@trendadvisor.com</a></td>
</tr>
<tr>
<td>Chicago</td>
<td>Ross Leinweber 847-849-8236 <a href="mailto:Rheinweber@lakeshoretrading.com">Rheinweber@lakeshoretrading.com</a></td>
</tr>
<tr>
<td>Cincinnati</td>
<td>Ron Brandt 513-622-5421 <a href="mailto:traderon@aol.com">traderon@aol.com</a></td>
</tr>
<tr>
<td>Dallas</td>
<td>Michael (Mike) Allocco <a href="mailto:mallocco@mcstay.com">mallocco@mcstay.com</a></td>
</tr>
<tr>
<td>D.C./Northern Virginia</td>
<td>Cary Greenspan 703-442-9225 <a href="mailto:greenspanc@aol.com">greenspanc@aol.com</a></td>
</tr>
<tr>
<td>Denver</td>
<td>Lyle Dokken 970-266-4707 <a href="mailto:kyledokken@yahoo.com">kyledokken@yahoo.com</a></td>
</tr>
<tr>
<td>Florida, Orlando</td>
<td>David Gonzalez 407-481-8286 <a href="mailto:Dgonzalez@rwbaird.com">Dgonzalez@rwbaird.com</a></td>
</tr>
<tr>
<td>Florida, Tampa/St.Pete</td>
<td>Will Shahriari 562-495-5580 <a href="mailto:wshahriari@yahoo.com">wshahriari@yahoo.com</a></td>
</tr>
<tr>
<td>Houston</td>
<td>Randi Schea 281-437-0817 <a href="mailto:randi@prismtrading.com">randi@prismtrading.com</a></td>
</tr>
<tr>
<td>LA Area</td>
<td>Kristin Hether 562-495-5580 <a href="mailto:kristin.hether@ubs.com">kristin.hether@ubs.com</a></td>
</tr>
<tr>
<td>Minneapolis</td>
<td>Pat McGrath 612-671-9809 <a href="mailto:tradinpat@hotmail.com">tradinpat@hotmail.com</a></td>
</tr>
<tr>
<td>New York City</td>
<td>Jeanette Young <a href="mailto:optnqueen@aol.com">optnqueen@aol.com</a></td>
</tr>
<tr>
<td>Portland, Oregon</td>
<td>Leonard H. Smith <a href="mailto:lensmith@teleport.com">lensmith@teleport.com</a></td>
</tr>
<tr>
<td>San Antonio</td>
<td>Duke Jones 210-481-2863 <a href="mailto:duke@dukejones.com">duke@dukejones.com</a></td>
</tr>
<tr>
<td>San Diego</td>
<td>Julia Bussie 858-350-8101 <a href="mailto:jebussie@sbcglobal.net">jebussie@sbcglobal.net</a></td>
</tr>
</tbody>
</table>

If you have any questions about the regional chapters, please contact the Regions Chairperson, Tim Snavely, 404/926-5473; tim_snavely@rhco.com

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</tr>
<tr>
<td>Jordan Kotick, CMT</td>
<td>Michael Kahn 516/647-7466 <a href="mailto:michaelkahn@lycos.com">michaelkahn@lycos.com</a></td>
</tr>
<tr>
<td>212/412-1137</td>
<td>Jon S. Duke Jones, CMT 713/203-7030 <a href="mailto:duke@dukejones.com">duke@dukejones.com</a></td>
</tr>
<tr>
<td>Director: Treasurer</td>
<td>Larry Berman, CFA, CMT 416/594-8067</td>
</tr>
<tr>
<td>Larry Berman, CFA, CMT</td>
<td>612-671-9809 <a href="mailto:tradinpat@hotmail.com">tradinpat@hotmail.com</a></td>
</tr>
<tr>
<td>Director: Secretary</td>
<td>Barry Sine, CFA, CMT 646/422-1333</td>
</tr>
<tr>
<td>Director: Past President</td>
<td>617/253-3784 <a href="mailto:mepstein@mit.edu">mepstein@mit.edu</a></td>
</tr>
<tr>
<td>Ralph Acampora, CMT</td>
<td>212/778-2273 <a href="mailto:ralph_acampora@prusec.com">ralph_acampora@prusec.com</a></td>
</tr>
<tr>
<td>Directors:</td>
<td></td>
</tr>
<tr>
<td>Mike Epstein</td>
<td>Philip Roth, CMT 212/370-0040 <a href="mailto:proth@millertabak.com">proth@millertabak.com</a></td>
</tr>
<tr>
<td>617/253-3784</td>
<td>Michael Kahn 516/647-7466 <a href="mailto:michaelkahn@lycos.com">michaelkahn@lycos.com</a></td>
</tr>
<tr>
<td>Committee Chairs</td>
<td>Jon S. Duke Jones, CMT 713/203-7030 <a href="mailto:duke@dukejones.com">duke@dukejones.com</a></td>
</tr>
<tr>
<td>Academic Liaison, Journal of TA</td>
<td>Charles Kirkpatrick II, CMT 970-884-0823 <a href="mailto:kirkco@capcoed.net">kirkco@capcoed.net</a></td>
</tr>
<tr>
<td>Charles Kirkpatrick II, CMT</td>
<td>Leslie Williams, CMT 817/571-8332 <a href="mailto:capitalmg@hotmail.com">capitalmg@hotmail.com</a></td>
</tr>
<tr>
<td>970-884-0823</td>
<td>Andrew Bekoff 646/576-2748, Fax: 646/576-2755 <a href="mailto:abekoff@bloomberg.net">abekoff@bloomberg.net</a></td>
</tr>
<tr>
<td>Education, Library, and Distance Learning</td>
<td>Philip Roth, CMT 212/370-0040, Fax: 212/697-7106 <a href="mailto:proth@millertabak.com">proth@millertabak.com</a></td>
</tr>
<tr>
<td>Ethics &amp; Standards</td>
<td>Neal Genda, CMT 310/888-6416, Fax: 310/888-6388 <a href="mailto:nealgenda@cnb.com">nealgenda@cnb.com</a></td>
</tr>
<tr>
<td>MTA Educational Foundation</td>
<td>Mike Epstein 617/876-5615 <a href="mailto:mepstein@mit.edu">mepstein@mit.edu</a></td>
</tr>
<tr>
<td>IFTA Liaison</td>
<td>Larry Berman, CFA, CMT 416/594-8067</td>
</tr>
<tr>
<td>Laura Acampora, CMT</td>
<td>817/571-8332 Fax 17/571-5889 <a href="mailto:capitalmg@hotmail.com">capitalmg@hotmail.com</a></td>
</tr>
<tr>
<td>National Director</td>
<td>Andrew Bekoff 646/576-2748, Fax: 646/576-2755 <a href="mailto:abekoff@bloomberg.net">abekoff@bloomberg.net</a></td>
</tr>
<tr>
<td>Internship</td>
<td>Mark Eismont, CMT 415/296-7831 <a href="mailto:alaskatrader78@yahoo.com">alaskatrader78@yahoo.com</a></td>
</tr>
<tr>
<td>Membership</td>
<td>Mike Epstein 617/876-5615 <a href="mailto:mepstein@mit.edu">mepstein@mit.edu</a></td>
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<tr>
<td>Programs (NY)</td>
<td>Jeanette Young, CFP, CMT <a href="mailto:optnqueen@aol.com">optnqueen@aol.com</a></td>
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<tr>
<td>Regions</td>
<td>Timothy Snavely, CMT 404/926-5473, Fax: 404/926-5946 <a href="mailto:tim_snavely@rhco.com">tim_snavely@rhco.com</a></td>
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</tr>
<tr>
<td>Seminar</td>
<td>Barry Sine, CFA, CMT 646/422-1333 <a href="mailto:bsine@nye.rr.com">bsine@nye.rr.com</a></td>
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