

# EXPIRING MONTHLY

THE OPTION TRADERS JOURNAL

## TRADING THE CBOE BENCHMARK INDEXES

**VIX**<sup>®</sup>  
CBOE VOLATILITY INDEX

**BXM**<sup>™</sup>  
CBOE S&P 500 BuyWrite Index

**PUT**<sup>™</sup>  
CBOE S&P 500 PutWrite Index

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**Dr. Brett  
Steenbarger, Ph.D.**

**Plus, Market Insight & Commentary**

From Five of the Top  
Option Trading Bloggers

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# About the Expiring Monthly Team

## Adam Warner



Adam is the author of *Options Volatility Trading: Strategies for Profiting from Market Swings* released in October 2009 from McGraw-Hill. He co-wrote the

options column on Street Insight from spring 2003 to spring 2005, and is currently Options Editor at Minyanville.com.

When not writing, Adam is a proprietary option trader with Addormar Co, Inc. He traded as a member of the American Stock Exchange from 1988–2001, and in several off-floor locations since then.

Adam Warner graduated from Johns Hopkins University with a degree in Economics.

## Bill Luby



Bill is a private investor whose research and trading interests focus on volatility, market sentiment, technical analysis, and ETFs. His work has been

quoted in the Wall Street Journal, Financial Times, Barron's and other publications. A contributor to Barron's and Minyanville, Bill also authors the VIX and More blog and an investment newsletter from just north of San Francisco. He has been trading options since 1998.

His first book, *Trading with the VIX*, is scheduled to be published by John Wiley & Sons in 2010.

Prior to becoming a full-time investor, Bill was a business strategy consultant for two

decades and advised clients across a broad range of industries on issues such as strategy formulation, strategy implementation, and metrics. When not trading or blogging, he can often be found running, hiking, and kayaking in Northern California.

Bill has a BA from Stanford University and an MBA from Carnegie-Mellon University.

## Jared Woodard



Jared is the principal of Condor Options. With over a decade of experience trading options, equities, and futures, he publishes the Condor Options newsletter (iron condors) and associated blog.

Jared has been quoted in various media outlets including The Wall Street Journal, Bloomberg, Financial Times Alphaville, and The Chicago Sun-Times.

In 2008, he was profiled as a top options mentor in Stocks, Futures, and Options Magazine. He is also an associate member of the National Futures Association and registered principal of Clinamen Financial Group LLC, a commodity trading advisor.

Jared has master's degrees from Fordham University and the University of Edinburgh.

## Mark Sebastian



Mark is a professional option trader and option mentor. He graduated from Villanova University in 2001 with a degree in finance. He was hired into

an option trader training program by Group

I Trading. He spent two years in New York trading options on the American Stock Exchange before moving back to Chicago to trade SPX and DJX options. For the next five years, he traded a variety of option products successfully, both on and off the CBOE floor.

In December 2008 he started working as a mentor at Sheridan Option Mentoring. Currently, Mark writes a daily blog on all things option trading at Option911.com and works part time as risk manager for a hedge fund. In March 2010 he became Director of Education for a new education firm OptionPit.com.

## Mark Wolfinger



Mark grew up in Brooklyn and holds a BS degree from Brooklyn College and a PhD (chemistry) from Northwestern University. After working as a

research chemist for Monsanto Company, in December 1976 he packed his belongings, left a career as a research chemist behind, and headed to Chicago to become a market maker on the trading floor of the Chicago Board Options Exchange (CBOE).

Over the next 23 years, he worked primarily as a market maker, and also held a variety of positions in the industry.

After leaving the CBOE (2000), he became an options educator and stresses conservative methods, as detailed in his newest book (*The Rookie's Guide to Options*).

He currently resides in Evanston IL with his life-partner, Penny.



# Editor's Notes

*Bill Luby*

With all the turmoil in the markets and the record increase in volatility, this month's issue features an article on the CBOE Benchmark indices, where Mark Wolfinger details buy-writes, put-writes and collars as seen through the eyes of the CBOE. These strategies are excellent ways to outperform the broad-based indices in declining, sideways and slightly bullish markets. In the case of collars, one can also have complete protection against market crashes and fund this approach entirely by selling calls.

Tyler Craig is a guest contributor this month and he picks up the buy-write theme with an exploration of various strategic approaches to covered calls. The May edition also features a Mark Wolfinger interview with Brett Steenbarger of TraderFeed fame and picks up with the second installment of Jared Woodard's exploration of commodity options. For fans of this

subject, the July issue will feature a cover story on commodity ETFs and will dive deeper into the growing world of ETF options. Not coincidentally, this month I find myself talking about both ETFs and benchmarks in an article that delves into the world of micro benchmarking.

Mark Sebastian has two articles that draw upon his floor trading experience. With his floor stories and discussion of "trading the hard side," readers can get a better sense of the opportunities and pitfalls of being on the floor. The two Marks, Sebastian and Wolfinger, also debate an important subject: playing with "house money." Every trader is prone to creative mental accounting and this Pro & Con segment is intended to make sure that traders fine tune their thinking in this area and understand the psychological and money management implications of their personal take on the issue of house money.

In some recurring columns, Adam Warner has more of his trademark pithy and humorous take on the markets, Mark Wolfinger has a column dedicated to the new trader, I have a volatility-centric version of Charting the Markets and Mark Sebastian looks at a calendar spread in Follow that Trade. Of course, the EM staff is back to field reader questions, too.

Going forward, we continue to strive to keep a healthy mix of regular columns and new features, taking many of our cues from reader input. On that note, readers are encouraged to send questions and comments to [editor@expiringmonthly.com](mailto:editor@expiringmonthly.com).

Have a good expiration cycle,

Bill Luby  
Contributing Editor





*You have mentioned that experienced traders purchase units. I know what units are, but how do you determine how far out of the money to go?*

Regards,  
Don

Don,

That is a great and very common question. The answer is that it depends on the situation. If the trader is just trading a very small portfolio, learning to trade units does not make a lot of sense. If the trader is working with a somewhat larger portfolio, then a few units do make sense. Full-time traders who put up large amounts of capital and/or use margin *must* own units. Here are my general thoughts on units:

1. I try to own them in the front month, up to about 15 days to expiration. I want the maximum amount of gamma if the market tanks.
2. If the market drops more than 5–7% I should be in a position where my trading account is no longer losing money.
3. If the market drops more than 10% I want my position to be making money.

4. It is *not* smart to include these options in the overall position, except in the case of a major move.
5. When calculating the value the unit adds, traders must not forget to include the change in implied volatility (IV). Otherwise, the trader will over-value calls and under-value puts.

Thanks,  
Mark

*Do you ever sell your iron condor spreads separately? For example, let's say you believe that there is more likelihood of a downside move than upside. So you sell the call spread first, and then wait a while to sell the put spread, or vice-versa.*

–BB

The iron condor requires selling one call spread and one put spread. It is very tempting to leg into the position, as you suggest. If you have some skill as a market timer, it is a viable trading method. However, it is not quite as easy to make extra cash as you suggest. If you are bearish and sell the call side first, that can work very well. If the market declines, implied

volatility (IV) tends to increase and the combination of higher IV and a lower market makes it easy to get a better price when selling the put spread.

It is much more difficult to do it the other way. If you sell the put spread first and the market rallies, you may find it more profitable to simply cover the put spread and take the profit. Why do I say that? When the market rallies, out-of-the-money (OTM) call spreads (and I assume you are selling OTM spreads) do not expand quickly. There are two reasons for that: (a) shrinking IV makes the spreads worth less, and (b) the spread has a low delta, so it takes a big move to get it to widen.

I don't leg into iron condors, but I consider it to be a reasonable strategy when bearish and less so when bullish.

–Mark D Wolfinger

Hi Jared,

*I have a question regarding delta hedging for iron condors. Clearly, it is good to manage positions by looking at the portfolio delta, but how can I decide that the delta of one position or of the overall portfolio is too high? I imagine the*

*answer could be that it depends on your risk tolerance, etc., and I accept that idea, but I really can't find any 'objective' criteria to decide when to adjust a position. Should I compare the delta with the maximum possible loss or something similar? I'm going crazy trying to find a solution, so any suggestion is more than welcome. Thanks in advance for your reply and for your fantastic posts on the website.*

**Luca L.**

The simplest objective criterion for when to hedge delta exposure is when you have any unhedged deltas at all. But while time is continuous, market transactions and human actions are discrete, so we have to find approximations. Transaction costs are also non-trivial. Ultimately, it's a matter of balancing the frictions from frequent hedging against the

risk of unhedged deltas, and the right balance is, as you suggest, a matter of individual risk tolerance.

Approach the question using a worst-case scenario: you're short an OTM call, and between now and expiration the underlying will rise such that your call ends up with a delta of 1.00, i.e., you're going to have to do some very serious hedging along the way. Already we've found a relevant constraint: do you have the capital necessary to maintain the hedging regime? Now, let's say you're going to fully re-hedge the position every time your deltas equal  $|x|$  (i.e., if  $x = 100$ , any time your position delta is  $-100$  or  $100$ ). The rate at which the underlying rises is less important this way—unless the underlying makes huge jumps extremely quickly, an attentive trader can transact the hedge, or can use an automaton to maintain the position. The right number to use for  $x$  is sensitive to

the trader's risk tolerance, which is a highly subjective measure. Delta measures the change in the value of an option per unit change in the underlying, so to get a rough estimate of your daily exposure, take the likely daily range (use the Average True Range, de-annualized implied volatility, or some other measure) and multiply that by your position deltas. For example, if your position delta is 100 and the underlying has a likely daily range of 3, you stand to make or lose \$300 each day from your delta exposure. Since you cannot affect the likely range, change the position delta until you're comfortable with the daily exposure number.

There is plenty more to say on this topic (what to do about jump risk, how to adjust those delta bands as gamma changes, etc.), but hopefully that is a helpful start.

Best  
Jared



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# The New Option Trader

## Getting Started

Mark D Wolfinger

What to do first? There's a dilemma. There is so much to read, there are so many free webinars to attend, and there is so much to learn. It can be overwhelming. Few have the patience to absorb material at a comfortable pace. It's natural to want to get into the 'action' of trading.

Trading can be fun, tedious, or anywhere in between. If you find it to be fun and exhilarating, that is an advantage. But you must learn to keep your emotions in check. If you have too much fun, you will fail to recognize that trading and investing is a serious business. Your financial future is probably going to depend on how well you manage your investments over a lifetime. True, some people earn enough from employment, or collect a large inheritance. But most have to take care of their own financial needs—and often those of aging parents and dependent children.

The point is that trading is a serious business and not a game. So, how does one get off to a good start and build good habits? Patience. I understand the urge to begin immediately. I urge you to understand what you are trading—before making any trades.

When getting started, it is difficult to formulate a plan. The more you learn—and understand—the easier it is for you to begin trading. Here are some recommendations for getting off to a solid start with options.

### **I. Read about the basic concepts of options.**

If you *understand* the answers to these questions, then you can consider moving forward. I know this list looks trivial, and to some extent it is. However, many investors plunge into trading without grasping these concepts. They enter into a trade and do not know what comes next. That is not an efficient way to begin a trading career.

- What is an option?
- What can you do with an option when you buy one?
- What is the difference between puts and calls?
- Why would you want to buy an option?
  - What do you have to gain?
  - What can you lose?
  - How much should you pay for the option?
  - Is the market price always a fair price?
- Can you sell an option when you don't already own it?
- Why would you want to sell an option?
  - What do you have to gain?
  - What can you lose?

### **II. When you are comfortable with the concepts, you can move on.**

#### **1) Attend free webinars on a topic of interest.**

That could be a specific option strategy, such as writing covered calls or learning how to protect an investment portfolio with collars. It could be an options overview, but be wary of anyone who tells you that after an hour or two of training you will be ready to make a fortune.

Better yet, attend similar webinars from different organizations. That exposes you to different points of view. There is no single 'best' way to adopt any strategy and it cannot hurt to be exposed to different thoughts on any given topic. Brokers, yours and others, offer such webinars. Check out the offerings at the [CBOE](#) and Options Industry Council ([OIC](#)).

#### **2) Practice using this strategy by opening a paper-trading account with your broker or other**





**online resource.** Make the trades. Watch as the position moves up and down in value. Try to understand what is happening by applying what you already know about options. If the position begins to lose money and makes you feel uncomfortable about additional losses, do not be alarmed. That is a good thing: it is excellent experience to get a hands-on feel for risk. As you will eventually discover, your ability to manage risk and minimize losses is vital to your long-term success. But right now, you are taking it easy and picking up useful information in a variety of areas.

**3) Get an introduction to the Greeks.** Do not let anyone tell you this is far too complicated. The Greeks serve one purpose: they allow you to measure the risk of a specific option, option combination, and/or entire option portfolio. If you measure risk and find it is outside your comfort zone, then (as you will soon learn) it is easy to reduce that risk. This property is unique to options: the ability to measure and adjust risk. You always know your exposure to loss and profit potential.

Do not read a complex mathematical treatise on the Greeks. Keep it simple. Use a beginner's option text, or do a Google search. Start with delta, which gives a good estimate of how much the price of the option changes when the underlying stock price moves by one point. If you understand delta, that is an excellent beginning and

you are way ahead of most beginners who seldom bother with this 'stuff' until much later in their trading careers (if they have not yet blown up their account). There is nothing fancy here; for now, you just need to learn enough to allow you to understand how option prices change, and thus, recognize the risk and reward potential for a position. When ready, you can think about another Greek—such as gamma. There is no urgency. Absorb information at a pace that suits you.

**4) Learn other strategies.** There is no need to adopt the very first trading method that grabs your attention. You will not be happy with certain option strategies because they do not suit your personality. Psychological factors are important to all traders. Do not be alarmed if a strategy feels wrong, or risky, or too difficult to understand. There are other strategies. You may not believe this right now, but it is the truth: it is not the strategy (or two) that you adopt that is going to make or break you as a trader. It is your ability to manage risk—and that is true no matter which strategies you trade. Find a strategy that feels right and practice using it. Then keep reading, keep learning and be on the lookout for alternative methods for using options.

Options are versatile, and you are almost certain (hey, options are not for everyone) to find a suitable way to use them.



# Trading the 'Hardside'

Mark Sebastian



In 2003, as part of my move into indexes, I began working 'the step' in the SPX pit as an arbitrage clerk (the person responsible for filling futures and relaying messages to the trading team's risk manager). At first, I could not have been more confused. The pit spoke its own language. Instead of looking at a computer, these guys all had sheets. Instead of instant messaging each other, these guys used crazy hand signals. However, the longer I worked the pit, the more I realized that the pit was controlled chaos. The SPX pit is not a free-for-all, or nearly as bizarre and crazy as the outside observer may suspect. It is more comparable to a bee hive—loaded and busy, but controlled by a system of commendation unique to the pit. The most important skill is the ability to read which way order flow is moving. In reading this order flow, the traders develop their ability to read and analyze the marketplace as well as to gain control over their own positions.

Retail traders can take advantage of the market makers by exerting control over their own positions. At times, the SPX can be the most difficult product to get filled in; however, unlike most other products, it can also be the easiest. In trading the SPX, I have had to 'pay up' on many occasions to get an order filled. I have also had better fills than in any other product. What dictated the fills? Not the market makers themselves, but rather the market makers' positions. After a few months on the other side of the badge, I realized that as a retail trader I could vastly improve my fills if I thought like a market maker.

The first step to improving SPX fills is to do the 'hard side' first. The 'hard side' is the side that the trader thinks will be hardest to fill. Which side is the hard side will depend on the situation. However, there are a few generalizations that a trader can make:

1. In the money options are often very difficult to fill (both buying and selling), especially if the market is fluctuating. This is because market makers are always wary of having to hedge deltas.
2. Almost as difficult to fill are out of the money puts, especially if the trader wants to buy these options. Market makers use these much like butterfly traders: they buy a lot of puts so that they can sell ATM options.
3. Out of the money calls are usually going to be easy to buy and tough to sell.
4. It doesn't matter if it's a call or a put, ATM options are ATM options. Market makers do not mind selling them for the right price.

There are also a few generalization traders can make about the 'hard side' for specific volatility conditions:

When implied volatility is up:

1. Downside puts will be very hard to buy. The good news, though, is that these puts are not tough to sell. Traders are likely buying ATM options, and the market makers need these to hedge.
2. ITM options can be very tricky, because if the market is moving rapidly this is prime territory for a pick-off (fill at a terrible price). Market makers love ITM options when markets are moving, since it can be ripe picking.
3. ATM options will not be that difficult to trade, as there is likely high volume. Although if volatility is at an extreme, ATM options will also be difficult. Unless trading is one-directional, this is a market maker's favorite option to trade.



4. It may even be tough to buy calls when IV is up. The last thing these traders want to do is to be buying futures on a high volatility day.

When implied volatility is down:

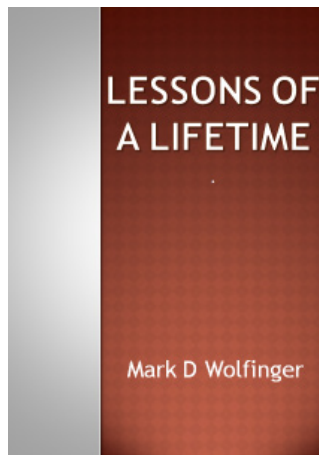
1. Downside puts will be much easier to buy. The market makers are likely buying ATM options, so they do not mind selling downside skew.
2. ATM options will be quite difficult to fill. When it rains it pours, and when IV is down ATM options can be poison.
3. ITM options will trade somewhat easily. If the futures aren't moving, market makers will take the easy dime or nickel.

4. Good luck selling calls, especially in a rallying market. Being long option premium as the market moves toward the market maker's long strike is a trader's worst nightmare.

While these generalizations may give the retail trader a glimpse into how the market makers think about orders, it really comes down to what the position of the pit is. If the pit is mostly long options, it will be easy to buy, and if the pit is mostly short it will be easy to sell. If traders try to trade the hard side first, it will likely give them an edge up when trading spreads in the SPX.

### Lessons of a Lifetime: My 33 Years as an Option Trader

Mark D Wolfinger



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# The Case for Commodity Options, Part 2: Volatility

Jared Woodard

Last month, I argued that options on commodities and other non-equity assets deserve attention because they offer genuine opportunities for diversification. My claim this month is that commodity options also deserve attention because their historical and implied volatility profiles are different from those of equities. These distinctive profiles provide opportunities (and risks) that are not available for those who only trade options on equities.

## Historical Volatility

Consider the series of returns achieved by a strategy as applied to some asset. No matter what rules or techniques the strategy employs, the returns it produces will be dependent, to a very high degree, on the volatility of the prices of the asset. To see why this is true, let's look at two limiting cases. Take your favorite quantitative factor, technical indicator, or whatever, and apply it to each of two hypothetical assets. Over the last hundred years, asset A has averaged 1% annualized volatility, while asset B has averaged 500% annualized volatility. Without any movement to exploit, any strategy applied to asset A will struggle to generate meaningful alpha; any strategy applied to B could easily run the risk of ruin (especially any strategy whose parameters are not sensitive to volatility). Options traders understand this point very well, and stock traders understand it, too, if implicitly.

If the returns that are possible from trading some asset are dependent on the volatility of the asset, then assets with distinctive volatility profiles offer meaningfully different opportunities for positive returns. Figure 1 shows the 3-month historical volatility of gold, sugar, oil, and natural gas futures from 2000–2009. For reference, note that the 3-month volatility of the S&P 500 tends to hover between 15–25%.

Of the four commodities shown, over the last decade only gold has exhibited equity-like volatility: the others are more volatile on average and have higher maxima and minima. Some of the peaks and troughs in volatility appear related – we would hardly expect oil and natural gas to move entirely independently – while others do not.

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**What is distinctive about many commodities, however, is that they are often subject to rapid price increases in a way that stocks are not.**

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Another way to compare the historical volatilities of these assets is to break them out individually into volatility cones. Since 2000, crude oil futures have exhibited an average historical volatility of about 40%, with maximal 15-day volatility above 140%. In spite of the increasingly popular concern that it is prone to forming “bubbles,” gold has actually exhibited less volatility than equities on

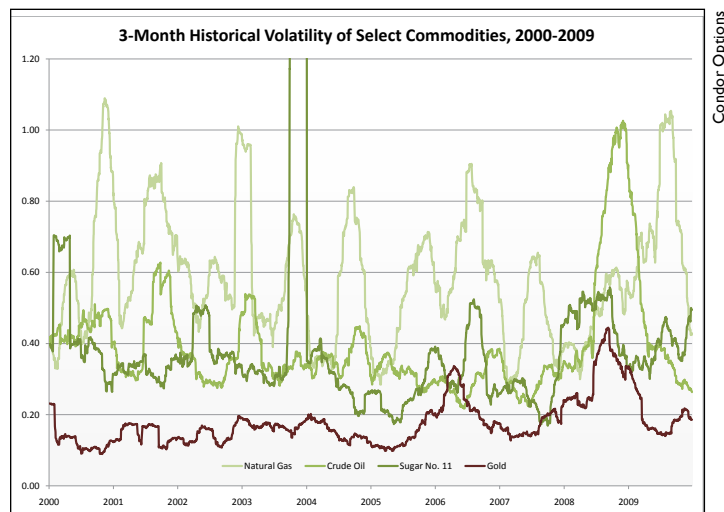


Figure 1

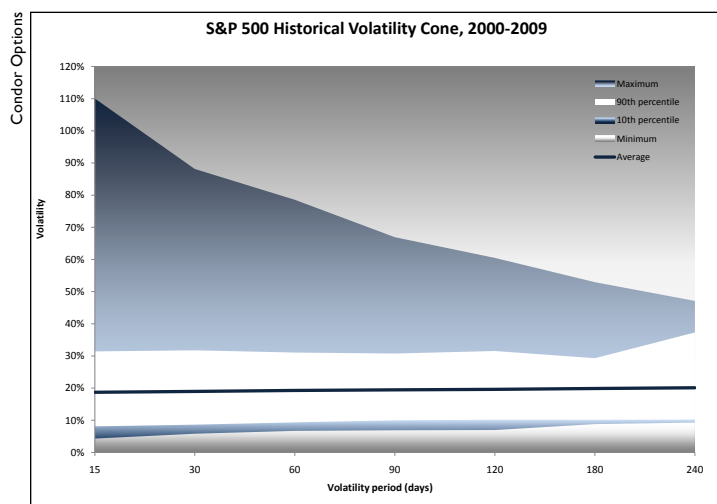


Figure 2

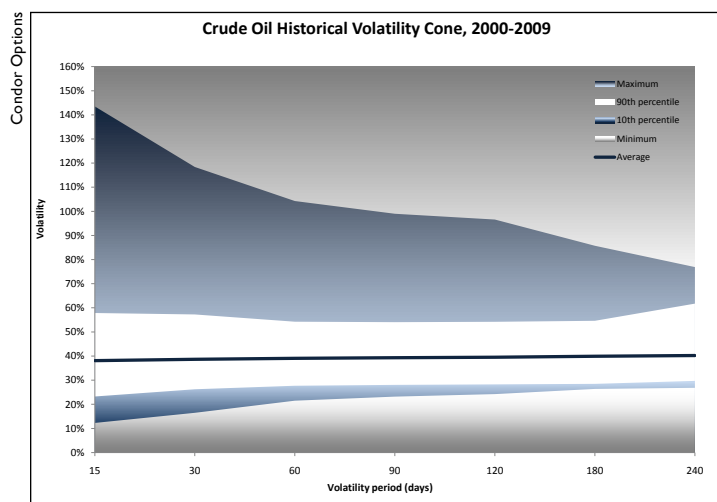


Figure 3

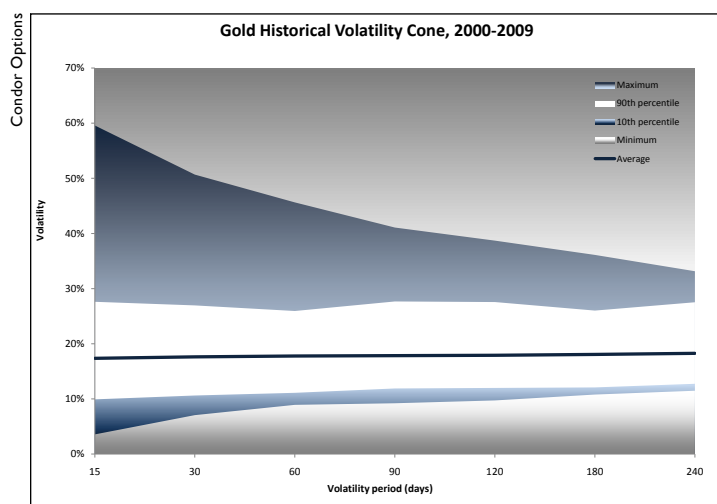


Figure 4

*A volatility cone is a visual representation of historical volatility ranges over different periods of time.*

just about any metric. (As this goes to press, the implied volatilities for short-term options on crude oil and gold futures are near their 90th percentiles, as indicated by these cones. E-mini S&P 500 option implied volatilities are well above the 90th percentile.)

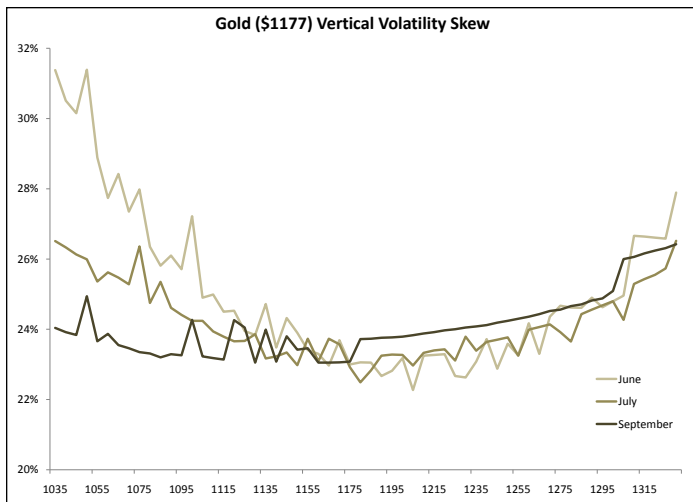
### Implied Volatility Skew

Investors tend to be overwhelmingly long stock, such that they are far more concerned about a dramatic fall in stock prices than they are about a rapid rise. This bias is reflected in the reverse vertical skew of equity options: implied volatility tends to decline at successively higher strike prices. The position of a commercial hedger in some commodity is similar: she is “naturally long” the commodity via a real-world business, and uses financial products to hedge that exposure. Since she and other hedgers will tend to buy puts / sell calls, the force of that demand will create a similar reverse skew.

What is distinctive about many commodities, however, is that they are often subject to rapid price increases in a way that stocks are not. Supply disruptions, sudden shifts in demand, and other real-economy events can cause prices to explode higher, and this upside tail risk is often visible in the options for commodities like coffee, cotton, wheat, gold, and others (see Figures 5 and 6). This creates an implied volatility profile called a “smile” or “smirk” (rather than skew), since both ends of an options chain may carry higher implied volatilities than the at-the-money strikes.

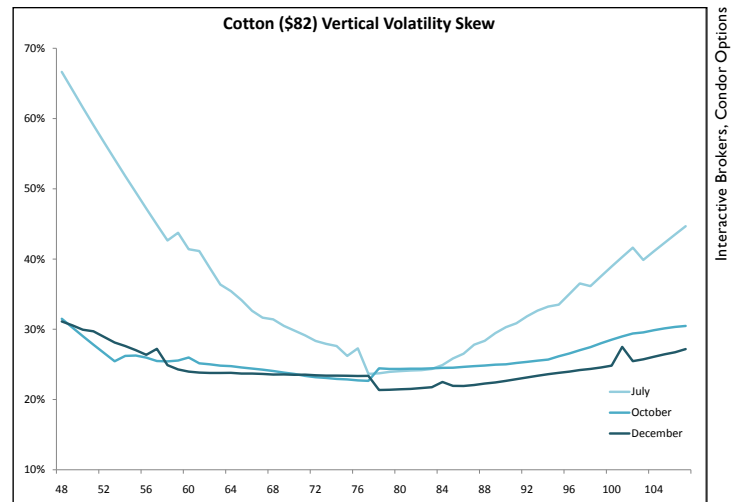
Horizontal or “calendar” skew exists in commodity options just as it does in equities. Uncertainty about some future expected supply or demand event may cause the implied volatility of commodity options expiring near that date to rise, just as an earnings release may boost the IV in options on a stock. One note of caution for traders who like to exploit horizontal volatility skew,





**Figure 5**

however: options on different futures contracts may, in some situations, just as well be thought of as options on entirely different assets. For any commodity market that is in contango (most usually are), a successful options calendar spread will require correctly predicting not only



**Figure 6**

future changes in the volatility skew, but also changes in the term structure of the underlying contracts. In fact, traders who want to express a view about the convergence or divergence of different contracts will usually enter calendar spreads using only the futures.

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# Trading the CBOE Benchmark Indexes

Mark D Wolfinger

Since options were first listed on an exchange in 1973, investors have used buy-write strategies. Before 2002 there was no major benchmark, and in 2000 and 2001, options portfolio managers requested that the CBOE develop a benchmark index for buy-write strategies.<sup>1</sup>

In April 2002, when the Chicago Board Options Exchange (CBOE) was already 29 years old, it announced the formation of The CBOE S&P 500 BuyWrite Index (BXM). This index turned out to be an indicator of things to come. It was developed with the cooperation of Standard & Poor's and turned out to be a wonderful marketing tool. By publishing an index that closely monitors a wildly popular investment strategy (writing covered calls), the CBOE provided an index that already had an established audience.

Covered call writers suspected that their chosen investment method worked for them, but seeing data that proves using options is beneficial in a concrete way had a two-fold effect. First, investors writing covered calls reinforced their belief in the validity of their favorite strategy. Second, the CBOE had hard evidence to demonstrate to the world that options increased investment returns.

Plus, those benefits were accompanied by an improvement in risk-adjusted returns. Every investor wants the chance to earn additional profits with reduced risk. With the publication of BXM, investors who had not considered the benefits of trading index options were awakened to that possibility. This was a public relations triumph for the options industry as the CBOE created a benchmark index that was likely to become widely accepted.

It must be remembered that options had not been enthusiastically accepted by the brokerage industry. Despite the fact that option traders would generate additional commissions for brokers, the industry salesmen never pushed options.

BXM was very well accepted, and the CBOE was well rewarded for granting that portfolio manager request. In December 2004, it was awarded the 'Most Innovative Benchmark Index' distinction at the Super Bowl of Indexing Conference. From the original press release (April 11, 2002):

"The Chicago Board Options Exchange (CBOE) today announced that it began disseminating the CBOE

BuyWrite Monthly Index, (BXM). The BXM is a benchmark index that measures potential returns of a theoretical portfolio of Standard & Poor's 500 Index stocks that also systematically sells S&P 500 Index call options (SPX) against the portfolio.

CBOE developed the BXM in response to customer demand for a quantified performance measure of the buy-write strategy.

For more than 25 years, portfolio managers have employed buy-write strategies to provide incremental income to boost risk-adjusted returns and provide a cushion against downside losses. BXM is exactly the tool every money manager needs to measure the performance of these portfolios and compare buy-write portfolio performance to other benchmark indexes.”

Anything that encourages the investing public to use options benefits the exchanges. Furthermore, spreading the word that options can be used to reduce risk *and* enhance returns negates some of the bad feelings that individual investors have towards options. Too many investors believe options are ‘risky’ and difficult to understand. Publishing ‘proof’ that options are beneficial investment tools helps increase the popularity of option trading, and that translates into more profits for the option exchanges.

More sophisticated investors recognize that writing covered calls (a la BXM) is more conservative than a buy and hold strategy, but it still represents a bullish strategy with considerable downside risk. That’s of little concern to the majority, who are naturally bullish and unconcerned with declining markets.

BXM is designed to mimic the performance of a buy-write strategy on the S&P 500 Index. Note: this is not a real world index and no positions are held. Instead, BXM is calculated daily by pricing a hypothetical portfolio containing each stock in the index, in its correct proportion. The index is rebalanced daily. That means each stock is readjusted to its correct weight (in the hypothetical portfolio) on a daily basis. Then the value of the option

position is determined. BXM is a total return index, meaning that dividends and option premium are reinvested.

Older data was used to calculate BXM values dating back to June 1, 1988. Later, additional data (back to June 30, 1986) was added to include the historic market crash of October 1987. The CBOE makes this [data available](#) at no cost.

### Covered Call Writing

BXM—and other indexes to be discussed below—are of special interest to option traders who write, or are considering writing, covered calls. In return for collecting the benefits (cash from selling call options), the investor must accept a limit on potential profits. For some investors, such upside limits are unacceptable. But the fear of missing a market surge (greed) and concentrating on earning the maximum on any given trade are blind spots for many investors. The evidence shows that the vast majority of investors cannot outperform the market averages. However, there is something about human nature (and the hard sell from brokerage houses) that encourages investors take extra market risk to achieve elusive outperformance.

One way to earn a pile of money is to own a stock that doubles and doubles again. That unlikely situation was not uncommon during the 1990s technology bubble. We all know it’s unlikely to occur again anytime soon, but some investors hold onto the dream, and refuse to adopt any strategy that limits profits. Most traders have little fear of a debacle, but there is a fear of missing the upside. And if the decline does occur, most believe the market will soon recover—as it has in the past. Fear of missing the upside blinds investors of the need to protect themselves against declines. Writing covered calls is far from the best method for preserving an investor’s assets, but it does provide *some* protection. To that end, BuyWrite indexes have appeal.

I’m a big fan of writing covered calls, but with a caveat. To me, this is an excellent strategy for rookies to learn about options. The caveat: If risk management is important, it’s more effective to use other strategies which require far less risk.



## BXM Details

Getting back to BXM, the *hypothetical* index is constructed this way:

- Own the S&P 500 stock index portfolio. That means owning each of the 500 stocks in correct proportions.
- Write (sell) front-month SPX call options in the morning, on settlement day—the third Friday of the expiration month (the method for [determining](#) the premium collected was modified in 2004, when an average, volume-weighted price, was calculated for trades made 2 to 2.5 hours after the market opened).<sup>2</sup>
  - The call expires at the *next* monthly expiration (in four or five weeks);
  - The strike price is the lowest possible strike price, with the rule that it must be out of the money at the time it is sold;
  - No adjustments are made. The position is held until expiration, at which time it is cash settled;
  - A new call is written and the cycle continues.

This methodology is be one that the average investor would follow—especially the parts about daily rebalancing and not making any adjustments. But it provides a consistent method for monitoring the covered call strategy.

BXM was quickly accepted as a useful index. And that led the CBOE to introduce additional BuyWrite indexes. Before considering any of the others, let's compare the performance of BXM with its cousin, SPTR (Standard & Poor's 500 Total Return Index). Both are 'total return' indexes in that all dividends and option premium are reinvested. For this article, only data since the year 2000 are considered. Graphs of the complete data set (through March 5, 2010) are available as a separate blog post at [Expiring Monthly's web site](#).

Figure 1 presents the last 10 years of data (the graph with data back to 1986 can be found [here](#)). During that time, BXM earned 31% as SPTR lost 3%. The reason for such outperformance is that this data begins when SPX was

near its all-time high, and BXM compares most favorably during market declines. Over the longer term, (June 1, 1986 thru Mar 5, 2010), BXM returned \$1.11 for each \$1.00 earned by SPTR.

The difference in returns is real, but no one suggests that it's mandatory to write covered calls. The true benefit of following a strategy such as covered call writing is apparent when comparing the risk-adjusted returns. In 2006, after 18 years of data, Callan Associates issued [this report](#). Summarizing:

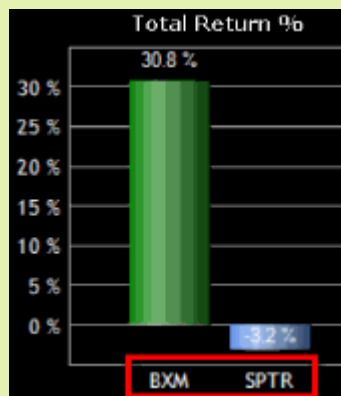
- BXM generated superior risk-adjusted returns over the last 18 years, generating a return comparable to that of the S&P 500 with approximately two-thirds of the risk.
- A comparison using the monthly Sharpe Ratio yielded similar results, confirming the relative efficiency of the BXM over the 219-month study period.
- The BXM underperformed the S&P 500 during most rising equity markets and consistently outperformed the S&P 500 in all periods of declining equity markets, demonstrating the return cushion provided by income from writing the calls.

## Additional Buy-Write Indexes

The second benchmark index introduced by the CBOE (2005) was **BXD**, a total-return index based on writing covered calls on the Dow Jones Industrial Average Index (DJIA). The methodology involves buying the DJIA Index portfolio—far easier to accomplish with 30 stocks than with 500—and following the same steps as used with BXM. That includes writing one-month, slightly out of the money calls every time the current option expires. As a passive index, the position is held through expiration with no adjustments.

Data is [available](#) in Excel spreadsheet format directly from the CBOE and dates back to mid-October, 1997. BXD outperformed the DJIA for most of its lifetime. As seen in Figure 2, over the past 10 years that outperformance was 41% versus a loss of nearly 6%. ([Longer-term charts](#) are available.)





Charts Courtesy of ETF Replay

Figure 1

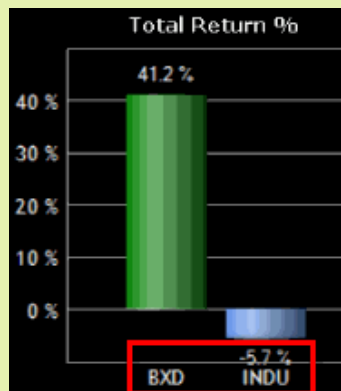


Figure 2

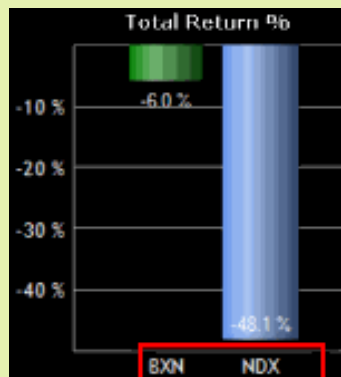
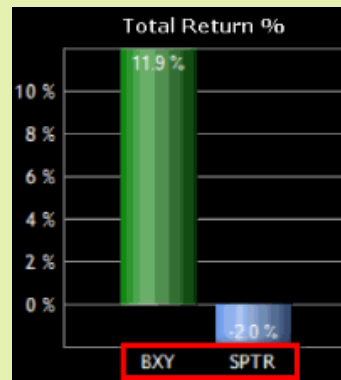
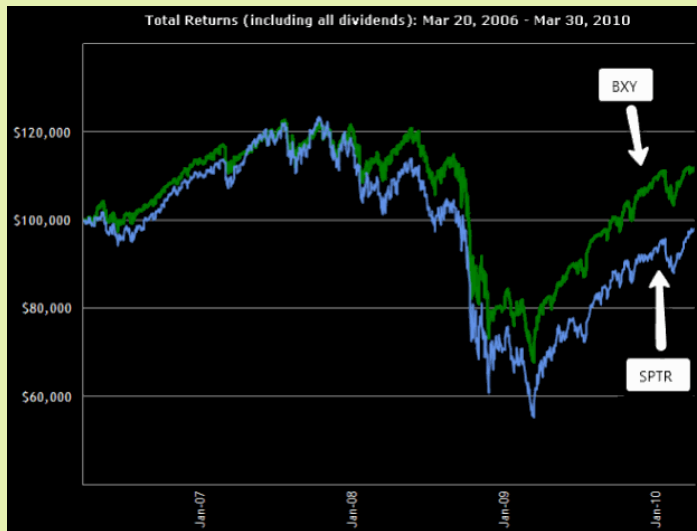


Figure 3





**Figure 4**

Later in 2005, **BXN** was introduced, with the NASDAQ 100 Index (NDX) as the underlying asset for the buy-write. The CBOE provides [data](#) from December 30, 1994. See Figure 3.

BXN easily outperforms its benchmark, as did BXM and BXD. However, this time the data are somewhat misleading. In the years leading up to the bursting of the technology bubble (clearly visible at the left of Figure 3) NDX crushed its buy-write cousin ([graph available](#)). Those technology stocks were increasing in value so rapidly, any strategy with limited upside performed poorly in comparison. During the five years (1995 through 1999), NDX soared from 100 to 937 while BXN rose to 'only' 349. An increase of 249% over a five-year period was dwarfed by NDX rising by 837%. Insanity.

You can conclude that NDX is the clear winner over the longer term, or you can decide that the last few years are more representative. This is not only important to investors who are considering writing covered calls on this index, but to anyone who is considering the entire concept of writing covered calls.

More than any other index, BXN show by how much a covered call index can underperform during a surging bull market, and by how much it can outperform during a rapid decline.

### Creativity

From the CBOE's perspective, the indexes served a purpose, and there was no reason to stop providing new benchmark indexes. From the perspective of individual investors, any benchmark that allowed them to measure their performance is useful. The 'industry' also gained as mutual funds that adopted a covered call strategy appeared on the scene. So the CBOE became a bit more creative.

**BXY**, the CBOE S&P 2% OTM Buy-Write Index, appeared in 2006. This trading methodology is similar to that of BXM, but the options written are 2% out of the money. The CBOE offers this rationale for introducing the index: "The BXY strategy diversifies the buy-write opportunities currently provided by BXM. The BXY Index yields lower monthly premiums in return for a greater participation in the upside moves of the S&P 500." Not mentioned is the obvious fact that this investment method generated larger gains than BXM because it was already known that the market had been bullish in the past. That leads me to wonder where the 2% *ITM* buy-write index is—for more cautious investors.

BXY provides an opportunity for more bullish investors to follow a buy-write strategy, and that defines the rationale for the CBOE to publish this index. One of the drawbacks for any stock market strategy that limits profits is that some investors will be dissatisfied with

those limitations. By introducing this index, some of the slightly more bullish investors are accommodated. Of course, some investors are always seeking unlimited profits while ignoring risk. For them, buy-writing is never a good idea. **BXY** [data is available](#) from June 1, 1988 and all the data is [plotted here](#). See Figure 4.

**BXY** outperforms **SPTR** over the 10-year period. A better comparison examines how **BXY** compared with **BXM** (figure 5).

**BXR**, the BuyWrite Index for the Russell 2000 (**RUT**), was introduced later in 2006, with [data](#) going back to Dec 29, 2000. See Figure 6. **RUT** outperformed (48% gain vs. 45%) over the nine years depicted in the chart.

In 2007, the CBOE offered a slightly different index, **PUT**, the CBOE 500 PutWrite Index. “The **PUT** strategy is designed to sell a sequence of one-month, at-the-money, S&P 500 Index puts and invest cash at one- and three-month Treasury Bill rates. The number of puts sold varies from month to month, but is limited so that the amount held in Treasury Bills can finance the maximum possible loss from final settlement of the **SPX** puts.”

This strategy involves the sale of cash-secured puts (naked put selling, in the vernacular). **PUT** Index data from June 30, 1986 is [available](#) from the CBOE, and the graph of all the data can be found at our web site: [Expiring Monthly.com](#). **BXM** and **PUT** returns are compared in figure 7.

**CLL**, the CBOE 500 95-110 S&P Collar Index, is the last of the current benchmark indexes to be introduced (2008). The index is based on holding the hypothetical S&P 500 Index portfolio and buying 6-month put options that are 5% out of the money (95% of the value of the index) and writing one-month calls that are 10% out of the money (110% of the value of the index). Information, including data back to June 30, 1986, is available at the CBOE [web site](#). **CLL** is compared with **SPTR** in figure 8.

This collar index is radically different from each of the other indexes. In fact, it's so different that it's not easy to include it when summarizing the benchmark index

story. The first significant difference is that options (puts) are being purchased (previous indexes use strategies that only sell options) with six-month lifetimes. All other indexes trade front-month options. Implied volatility at the time the puts are bought makes a large difference in the price paid, and thus, in market returns.

Another major difference is that the calls written are 10% out of the money—and that's an unusual move considering that all other indexes write ATM (or almost ATM) options. A true comparison requires that the calls be ATM, or no more than 2% OTM. The necessary data is available, but the CBOE has not yet published any alternative collar indexes. This is an important benchmark index for defensive investors and I'm hoping the CBOE addresses the differences with its other indexes and soon disseminates other collar indexes.

### Unexpected Results

For the most part, following any of the BuyWrite Indexes provides positive expectations for an investor. The portfolio undergoes smaller ups and downs, and on average provides a boost in profits. There's nothing unusual in these results. There is something noteworthy in Figure 7, however, which compares **BXM** with **PUT**.

NOTE: Writing covered calls and selling cash-secured<sup>3</sup> puts are equivalent strategies: when options on the same underlying asset, with the same strike price and expiration date, are sold, the profit and loss profiles are essentially identical. That takes into consideration all costs, such as dividends and the interest cost for owning stocks.

These two indexes performed similarly for a number of years. However, beginning near 2000, **BXM** and **PUT** performances begin to diverge (Figure 7). Why did **PUT** suddenly begin to outperform **BXM**? How do we account for the differences?

According to the methodology chosen by the CBOE, there are significant differences in the methodology used for these two indexes:

- **BXM** is rebalanced daily; **PUT** is held passively between option trade dates.



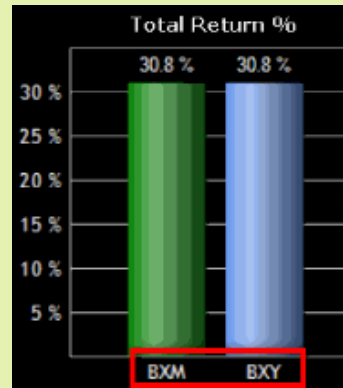


Figure 5

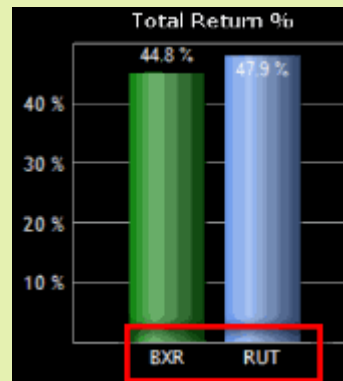


Figure 6

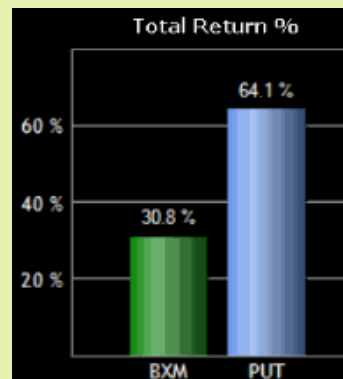
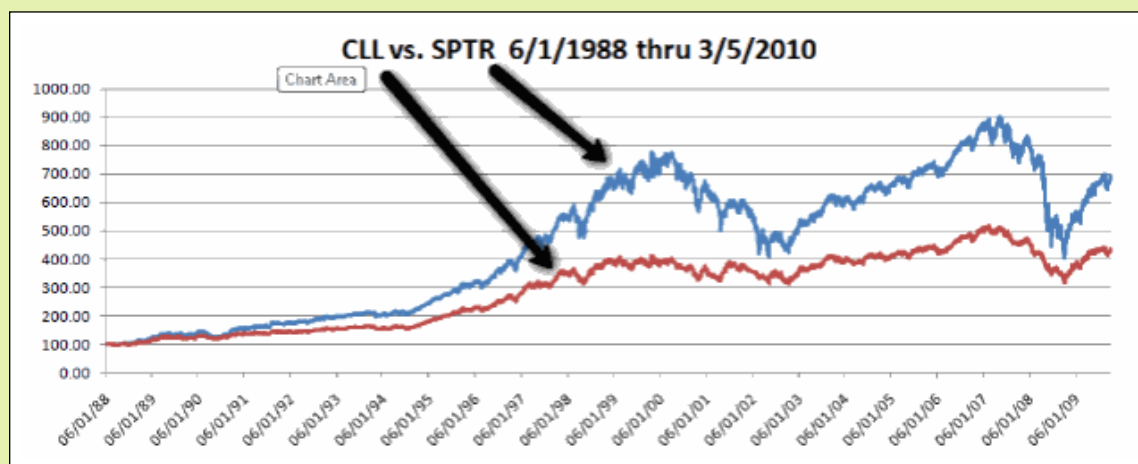


Figure 7



**Figure 8**

- Each index writes OTM options. Thus, the strike price of the option written is always lower than for PUT than for BXM. Example, when SPX is 1132, PUT writes the front-month 1130 put and BXM writes the 1140 call.

Consider these groups of facts:

- PUT writes a put option with a lower strike price.
- BXM writes a call option with a higher strike price.
- Because of the volatility skew, PUT writes the option with the higher implied volatility, and that leads to greater profitability.
- The skew has become more dramatic over the past few years, adding to this effect.
- During bullish periods, BXY outperforms BXM because the option sold is farther OTM (and has a lower delta, making the portfolio more bullish).
- After the early 2009 bottom, the PUT portfolio outperformed BXM.

PUT outperformance tells us that the difference in volatility skew produced profits more effectively than writing the higher strike (more bullish) option.

### Volatility and Risk-Adjusted Returns

The following charts compare the volatility (defined as: the *annualized standard deviation of daily returns*) for each of the buy-write indexes with its unhedged cousin.

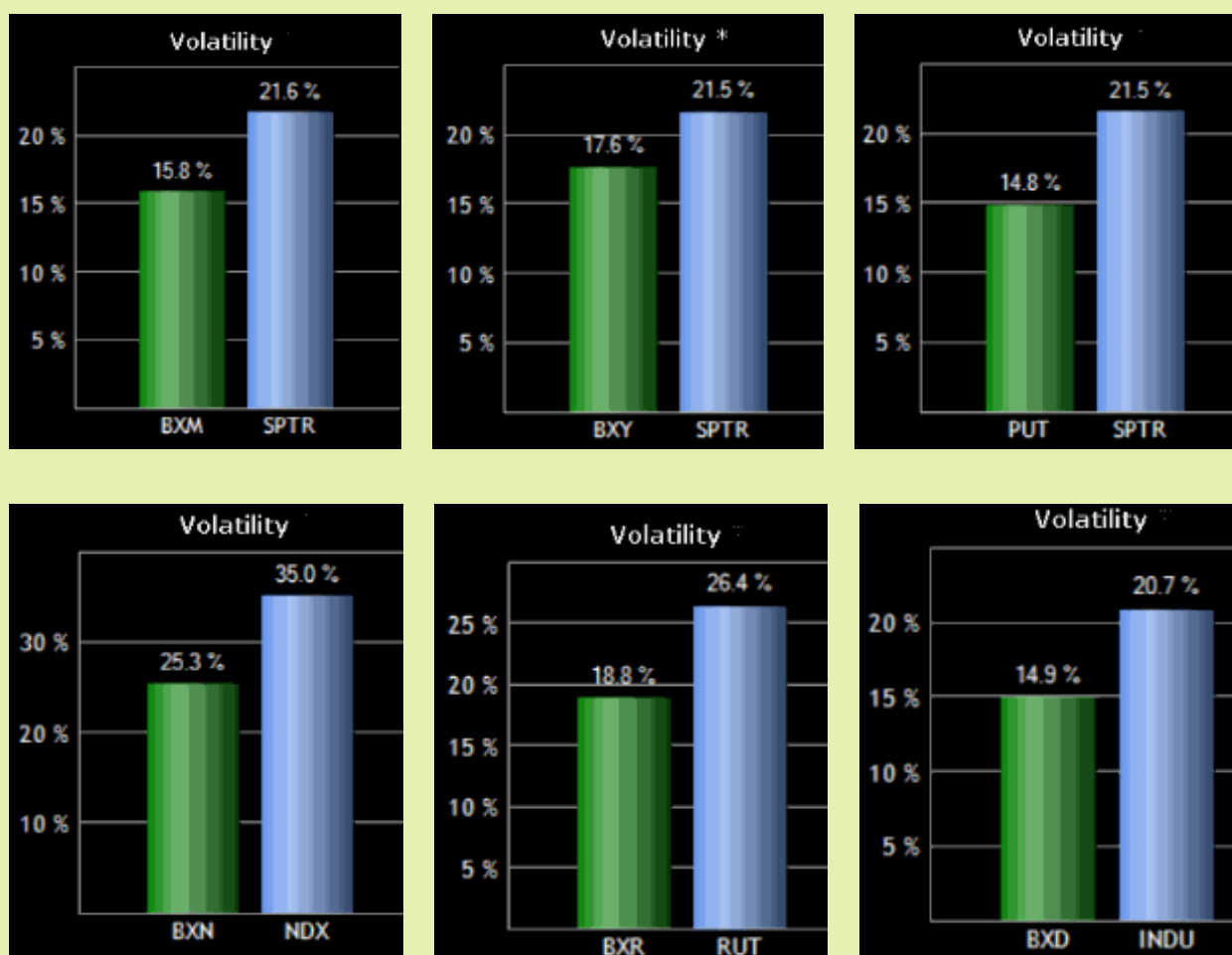
In each of the six examples, the unhedged portfolio was more volatile than its hedged counterpart. That's the anticipated result. Covered call writing is a strategy that reduces profits on big rallies and reduces losses on declines. Less volatility is the natural result. Couple that phenomenon with greater profits and it's obvious why covered call writing is one of the more popular strategies among individual investors.

These benchmark indexes further popularize that strategy. Some exchange traded funds are based on these benchmark indexes: the PowerShares S&P 500 BuyWrite Portfolio (PBP) is based on the CBOE S&P 500 BuyWrite Index, and the PowerShares NASDAQ-100 BuyWrite Portfolio (PQBW) is based on BXN.

There are also mutual funds that base all or part of their investment strategy on buy writing. Articles describing such funds have appeared in publications such as [Forbes](#), the [Wall Street Journal](#), and [SFO](#).

### The Future

What does the future hold? Will the option exchanges list benchmark indexes in an attempt to popularize other option strategies? Can you picture the CBOE S&P 500 92-108-10 Iron Condor index? This index would sell 8% OTM call and put spreads, using 10-point wide strikes. I assume the plan would call for writing front-month spreads and holding through expiration. Maybe we'll see the ISE NDX 85-115-20 Butterfly Index constructed of



**Figure 9**

butterfly spreads with wings 20 points wide, and each wing being 15% out of the money.

CBOE benchmark turned out to be a successful idea. The exchanges benefit by increased trading volume. The investor gains by having benchmarks he/she can follow, or by having the ability to invest in vehicles that adopt buy-write strategies. The investment industry gains by having customers buying their new offerings. Everyone likes a happy ending.

Some words of caution, however: emulating these indexes is a trade-intensive strategy. It's fine to write covered calls on a diversified portfolio, but mimicking an index is too complex. An index-mimicking ETF is probably more suitable. Conservative traders who like the safety of a collar index must recognize that under-performance is the norm, but that collars do provide

excellent protection. Finally, if the idea of leveraged ETFs appeals to you, don't try to duplicate a 2X return. If you use all available margin, you will be in trouble when these strategies lose money—as they inevitably do—at least part of the time.

<sup>1</sup>[http://en.wikipedia.org/wiki/CBOE\\_S&P\\_500\\_BuyWrite\\_Index](http://en.wikipedia.org/wiki/CBOE_S&P_500_BuyWrite_Index)

<sup>2</sup>This never made sense to this author. The investor is forced to hold an unhedged stock portfolio—until such time as the call is sold. Selling 15 minutes after the market opens makes more sense to me.

<sup>3</sup>If the put seller is assigned an exercise notice, cash is required to purchase the shares. The term 'cash-secured' means that the investor's portfolio contains the needed cash. When following PUT methodology, cash is invested in liquid money market funds and can be converted to cash instantly. Because SPX options are European style and cash-settled (no need to buy shares when assigned an exercise notice), it's unnecessary to have cash in the account. Money market assets always suffice.



# Options Graphics and Data

## Charting the Market

Bill Luby

For the second options expiration week in a row, there were fireworks leading up to expiration, as investors continue to grapple with how the European sovereign debt crisis will play out and what the implications will be for banks, currencies and global growth.

The middle of the options expiration cycle saw that biggest one-week percentage gain in the CBOE Volatility Index (VIX) since the VIX was launched in January 1993. On expiration day, the VIX spiked to 48.20, which is the highest VIX level recorded outside of the 2008-2009 financial crisis.

As a result, the graphics for the month have a decidedly volatility-centric slant.

Friday's most active options show an increased interest in small-cap stocks, with IWM the second most actively traded series. Emerging markets were also very active this month, with EEM moving into the top ten. Soaring implied volatility was even more evident by the cutoff for the top 25 IV list, where the cutoff was 74.30 in March, 79.26 in April and 110.96 this month. Note also that 8 of the entries on the top 25 IV list are triple ETFs.

The two-year daily history of the CBOE Equity Put to Call Ratio returns, with the dotted blue line representing the VIX. New this month is a five-year history of the VIX, which utilizes bars. Also included this month is a histogram which shows the distribution of how many days the VIX remains over 30 after an initial close over 30. Essentially the historical record suggests there is an 85% chance that any VIX spike over 30 will be back under 30 in six days. The complicating factor is that 6% of the time the VIX will still be over 30 in another 1½ months or 30 trading days. Such is the nature of many volatility gambits.

Most active options (5/21/10)

Rank	Prev	Underlying	Close	Opt Vol (1000s)
1	1	SPY	109.26	4,285
2	7	IWM	65.16	1,288
3	2	C	3.76	1,240
4	4	QQQQ	44.93	850
5	10	AAPL	242.44	534
6	3	BAC	16.03	520
7	4	XLF	14.80	376
8	12	EEM	37.40	356
9	8	GE	16.43	307
10	9	JPM	40.19	266
11	6	GS	141.80	264
12	13	GLD	115.20	252
13	14	F	11.41	248
14	-	EWZ	61.50	233
15	-	BIDU	71.38	231
16	16	FXI	38.17	222
17	-	PFE	15.30	207
18	11	GOOG	472.71	191
19	20	FAZ	15.03	189
20	24	DIA	101.88	187
21	23	MSFT	26.90	185
22	17	INTC	21.04	179
23	22	CSCO	23.50	156
24	-	USO	32.35	147
25	-	XRT	39.99	146

Interactive Brokers

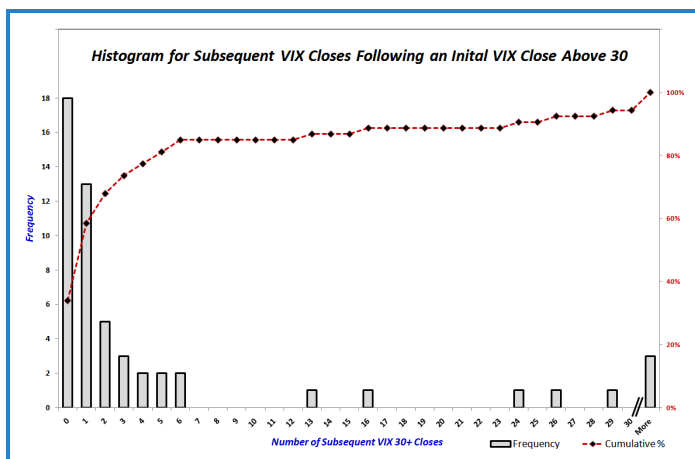
Options with highest IV (5/21/10)

Rank	Prev	Underlying	Close (>5)	IV
1	11	CLDX	6.90	143.47
2	-	TZA	7.28	138.50
3	-	DRV	7.83	137.30
4	-	ARQL	5.77	135.83
5	-	FAZ	15.00	133.08
6	-	EDZ	55.09	131.99
7	-	EDC	21.75	131.15
8	-	TNA	46.03	125.23
9	19	DRN	40.55	124.95
10	17	IRE	5.68	124.84
11	-	FAS	24.74	123.28
12	-	WNC	7.36	123.23
13	-	HEAT	6.37	122.43
14	-	ETM	12.19	119.22
15	-	HUSA	10.44	118.54
16	12	CAGC	12.67	117.62
17	-	SFI	5.75	116.66
18	-	TYP	8.90	114.93
19	-	LLEN	8.97	114.36
20	-	SBGI	6.45	113.70
21	-	RMBS	24.20	113.30
22	-	EXEL	5.07	112.22
23	15	CCRT	5.34	111.99
24	8	MBI	7.15	111.45
25	-	CSIQ	12.94	110.96

Interactive Brokers



VIX and More



**SPX 30-day IV and 20-day HV - 3 months**

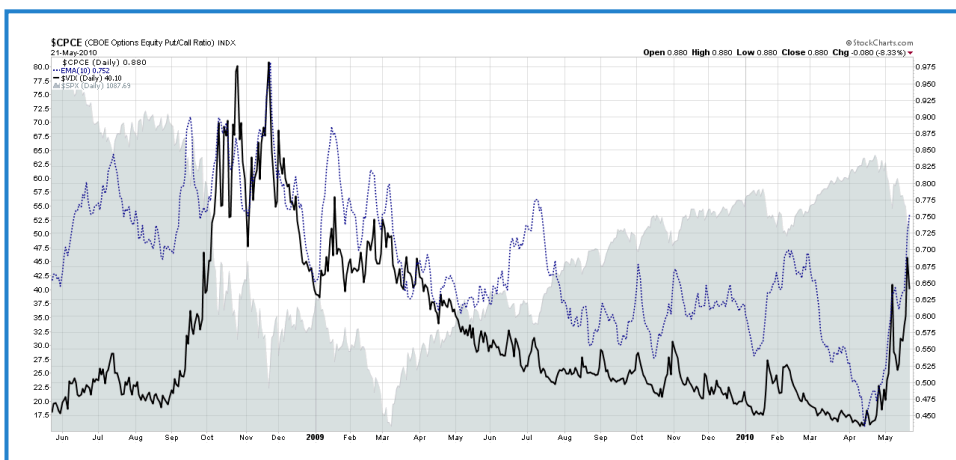
**Histogram for Subsequent VIX Closes Following an Initial VIX Close Above 30**

StockCharts.com



**VIX weekly chart - 5 years**

StockCharts.com



**CBOE Equity Put to Call Ratio and VIX - 2 years**

# The Monthly Options Report

Adam Warner

Black is white, up is down, good is bad, and dogs and cats are dancing in the streets.

That about sums up the VIX in May.

Relationships hold forever, or at least until CNBC notices them. Like gold vs. stocks: for the longest time, they moved in opposition. In fact, before they invented volatility products and inverse ETFs, gold was the asset class of choice to hedge a portfolio. Then, of course, Sir Alan inflated the world and every asset went up together. Until it didn't. Now gold is rekindling its safe haven past. Or, take the Euro. As recently as . . . well, a few months ago, the market rallied just fine on a weak Euro. Now? Not so much. In fact, the telepundits are overlaying charts to show the Euro leading the market down. But fear not, this will pass, too.

I bring all this up because the relationship between the VIX and the market has undergone a sea change since the month began. Forget what they tell you on TV, the VIX is a contrary indicator. Higher VIX indicates elevated fear. Some treat that elevated fear as smart money fronting some trouble ahead, and that does indeed happen. 2008 was a case study in fear being . . . well, founded. But by and large, fear is something you want to fade. If the throngs overpay for options, it's often a time to get bullish.

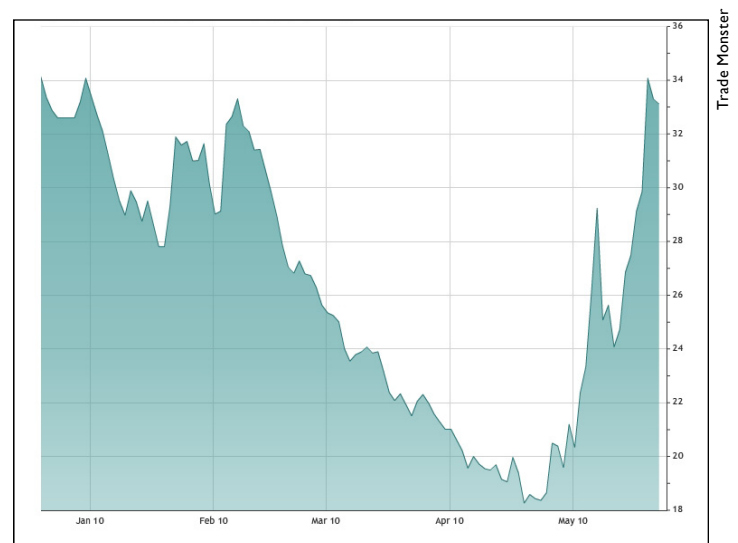
But alas, not in May 2010. Fear is the new Complacency. The greater the Fear, the worse the market acts.

Like all other phases, this too shall pass. No one ever advises being Fearful when others are fearful. Greece may float away into the Aegean and take all its debt with it. But sometime before that happens, the market will have discounted it already and will probably rally the day the news sounds at its absolute worst. Likewise, the market will surely gap down big one day and the VIX will have

an enormous spike, and that will fade, too. So as long as current relationships hold, it doesn't pay to fight them. Just don't get too cozy with it, up will be up again before you know it.

One interesting side effect of all this is the resurgence of VXX. Or really "surgence" (that should be a real word). VXX is an ETN that tracks 30 day VIX futures. It listed in late January 2009 with a double whammy of bad timing in relation to a VIX that had already begun a slow and steady descent, and a bad structure. It loses money each day that the front two VIX cycles are in contango. And they're almost always in contango.

Except now. The VIX nearly tripled off the lows with a 15 full, and the VIX term structure flatlined. That won't last forever, but so long as you see it that way you can buy and hold and swing trade VXX without fear of a mathematical erosion. Just keep your eye on the exit door, because the personality will change in a heartbeat.



VXX



# Follow That Trade

Mark Sebastian

One of the most misunderstood trades is the calendar spread. Because the trade is long vega, it is often believed that the best time to enter the spread is when implied volatility is low. The basic theory is that if I buy low implied volatility I will make money when implied volatility reverts back to its mean. There are certainly situations where this makes sense; however, more often than not, buying calendars when IVs are low is a losing trade. Often, the best time to buy calendars is when the IV is high, not low. Because of the term structure of options, I can make money on a long time spread when the implied volatilities are at or near a peak.

The first step is to examine where implied volatility has been trading over the past few months. Since the sell-off in 2008/09, the front month options have been trading at an implied volatility below that of the next month out. The spread has been trading at or around -1% (front month 1 percentage point below the next month). The spread can be clearly seen in this RUT skew chart, dated 5/4/2010.



Chart 1

The next day, the sell off begins. While the May (the front month) spiked over June, Thursday, May 6th, was not a day to enter any trade. When the market is moving extremely hard, typically the markets are so wide that it negates any edge the trader may see in a specific trade. The next day, however, the markets tighten back up. The May ATM IV is now soaring above June, and this is my entry point. I buy 2 of the RUT May/June 670 calendars for \$10.30.

Options	MAY <14>					JUN <42>				
	MktPr	MIV	Trade	Ex.Pos	Delta	MktPr	MIV	Trade	Ex.Pos	Delta
680 calls										
670 calls	18.95	41.1%		-2	47.3	29.15	35.2%		+2	49.4

Figure 1

This is an IV spread between the front and back months of about 6 points. Notice the change in the major spread movement between May and June.

My plan is to buy this spread, and when the market calms down, the IV spread hopefully will revert back to negative 1 point, or even. The other way I can make money is if time passes and the RUT doesn't gyrate me off this trade like a cowboy on a bull. My goal is to make a quick dollar; I am setting my profit target at 10% and hope to be out of the trade in a day or two.



Chart 2

The main risks of this trade are: first, that the market continues to completely tank and this spread goes to 0, and second, that the market rallies too fast and I am forced to exit the trade due to gamma. In order to ensure I do not get into trouble, I am going to be sure to adjust aggressively. With a trade like this, I feel the IV credit I received is so much in my favor that I must stay ahead of the risk and not play a catch-up game. My plan is to adjust if I am down 5%, and make my next adjustment if I am down 10%. My max loss is 15%.

On Monday, May 10th, the market rallies hard on the Greece news. The 670 spread begins to feel threatened. Tuesday, the market rallies hard again, and I am down about 5%. While the spread itself is still in a somewhat favorable position based on the implied volatility, the price movement has put the spread in danger of becoming a serious loser. I need to adjust, so I add another calendar to the trade. I buy the May/June 700 call spread for \$11.75. While this spread is not as attractive as the 670, it still has an IV credit of about 1%. On its own, this is probably a decent trade, and considering the favorable price I got for the RUT 670 spread, I am in a great position to win.

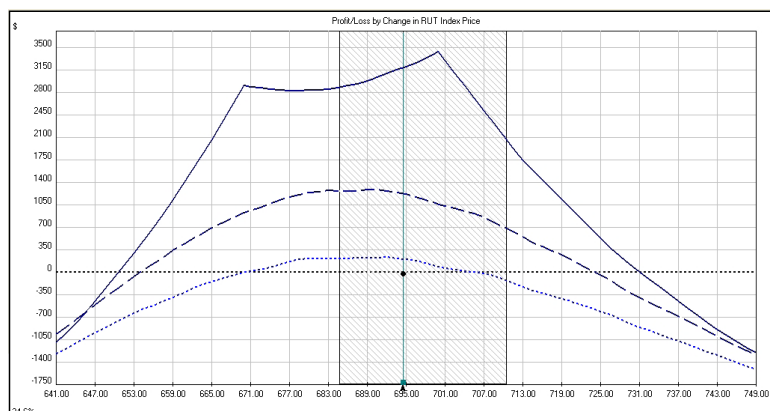


Chart 3

Options	MAY <10>					JUN <38>				
	MktPr	MIV	Trade	Ex.Pos	Delta	MktPr	MIV	Trade	Ex.Pos	Delta
710 calls										
700 calls	10.75	29.0%		-2	45.3	22.50	28.2%		+2	48.6
690 calls>	16.70	31.4%			55.5	28.20	29.2%			54.3
680 calls	23.60	33.8%			64.5	34.65	30.7%			59.7
670 calls	31.30	36.2%		-2	72.0	41.50	31.7%		+2	64.7

Figure 2

Over the next two days, the market continues to move up. On Wednesday, May 12th, I get to a point where I am just about to roll off the 670 spread. I had planned to unwind that portion of the spread if the RUT popped over 720, or if I was down over 10% on the trade. Neither happens.

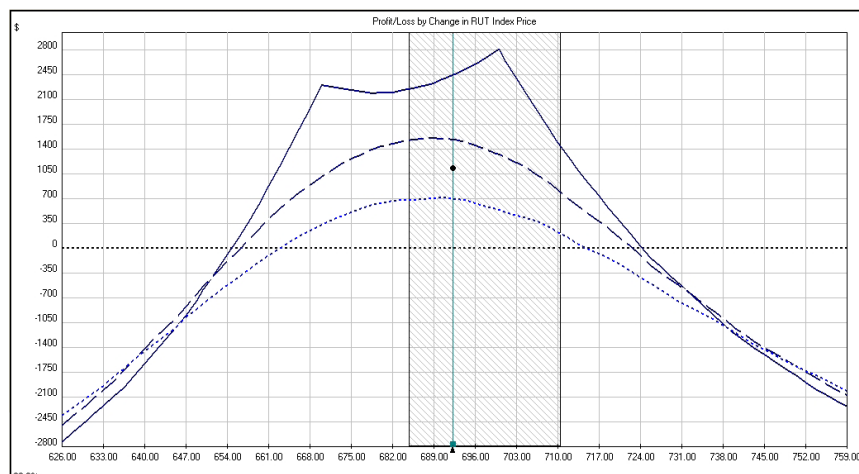


On May 13th, the market begins to fall back from the sugar high caused by the EU agreeing to bailout Greece. Over the next two days, the market drops back down to earth, right into our trading tent. By Friday morning, the trade is up over \$1100. Notice how the spread between May and June has fallen back down to earth:



**Chart 4**

As expected, the implied volatilities for the ATM options had become close to normalized. If I was to exit, I would make a return of 25% in one week. With the spreads almost back into alignment, and a weekend trip on tap, I decide that now is the time to call it a trade. I sell the 670 spread at \$13.50 and the 700 spread at \$14.25. Here is what the trade looks like at exit:



**Chart 5**

Understanding the relationship of the two terms allows me to enter the calendar at a time where, even if the market moves against me, I am still in a great position to win. Understanding how strongly the odds are in my favor allows me to adjust ahead of the curve. By understanding the term structure of options I can take advantage of not only selling high volatility, but of selling high volatility and buying lower volatility. This is why it is so important for traders to understand term structure.

# ETFs and Micro Benchmarking

Bill Luby

Simply stated, a benchmark is a standard against which investment performance is measured. Historically, benchmarks have been broad-based groupings of securities, typically indices, which provide a proxy for how an unmanaged portfolio of similar securities might have performed. Some of the most common benchmarks are the most popular major market indices, including the Standard & Poor's 500 Index, Dow Jones Industrial Average, Russell 2000 Index, etc.

In this month's feature, Mark Wolfinger looks at several of the more innovative benchmark indices from the CBOE that attempt to evaluate the performance of three different options strategies: buy-write (selling covered calls), put-write (selling cash secured puts) and collars. With the launch of ten different options strategy benchmark indices, the CBOE has assumed a leadership role in the creation of options strategy benchmarks.

While indices will undoubtedly continue to be the most commonly used benchmarks, what many investors fail to understand is that they no longer need to rely upon a third party to develop an index to act as a benchmark or proxy for the basket of stocks they trade. With the proliferation of exchange-traded funds (ETFs), investors now have a large and growing list of possible benchmarks that can be used in lieu of indices. Part of the beauty of the rapidly expanding ETF universe is that ETFs now cut across asset classes and include real estate, commodities, currencies and bonds. Of course, equity ETFs slice and dice the universe of stocks in many ways, including sectors, geographies and styles.

Exchange-traded funds even cover what I call the strategy-in-a-box approach to investing. There are ETFs for the classic sector rotation strategies (PowerShares Value Line Industry Rotation – PYH) and country rotation

strategies (Claymore/Zacks Country Rotation – CRO) as well as ETFs for technical leaders demonstrating high relative strength (PowerShares DWA Technical Leaders – PDP). ETFs are also available for those looking for a benchmark for portfolios that favor companies with high levels of insider buying (Claymore/Sabrient Insider ETF – NFO) or recently announced stock buyback programs (PowerShares Buyback Achievers – PKW). Some of the more exotic strategy-in-a-box ETFs include a carry trade strategy (PowerShares DB G10 Currency Harvest – DBV) and a buy-write approach that utilizes the S&P 500 Index (PowerShares S&P 500 BuyWrite Portfolio – PBP).

It is important to note that the rebalancing periods vary widely among strategy-in-a-box ETFs. For the most part, strategy-in-a-box portfolios are rebalanced on a quarterly basis. In some instances, such as with CRO, rebalancing takes place only twice per year. When it comes to benchmark selection, investors are urged to take note of the rebalancing period.

While ETFs are suitable for benchmarking broad strategic approaches, the narrow focus of many ETFs make them ideally suited for what I call micro benchmarking. Perhaps an example will best illustrate the micro benchmark approach. Some investors have a specialty of trading in the financial sector. While there are broad-based financial sector ETFs that are widely known, such as the Financial Select Sector SPDR (XLF), in some instances a more specific ETF drill down would make a better benchmark. The KBW Bank SPDR (KBE) is an excellent example of a broad-based banking ETF. Should an investor be a specialist in the regional banking sub-sector, then an even more specific benchmark can be applied, the KBW Regional Banking SPDR (KRE). As the graphic below demonstrates, with a narrower focus comes the opportunity for higher returns, but higher volatility as well.

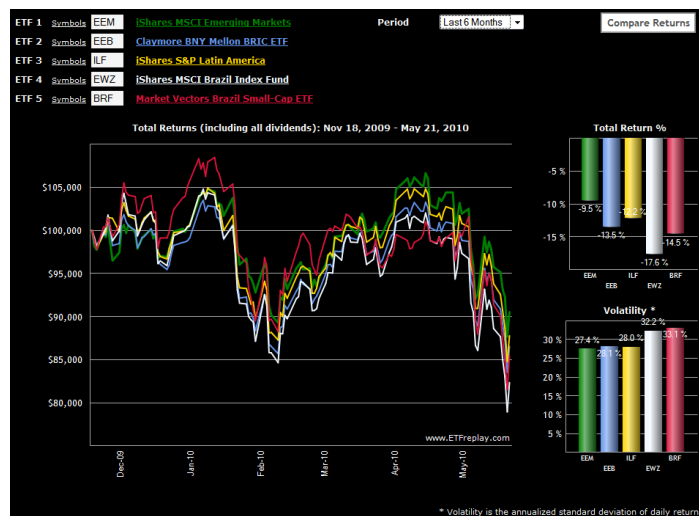




## Comparison of financial sector ETFs

An analogous approach can be applied to regional and geography-based ETFs. An investor with a large exposure to emerging markets may wish to use the iShares MSCI Emerging Markets ETF (EEM) as an emerging markets benchmark. If the majority of his or her holdings are limited to the BRIC countries, perhaps the Claymore/BNY Mellon BRIC ETF (EEB) is a better benchmark. Alternatively, if there is a regional focus on Brazil, Chile and Latin America as a whole, something like the iShares S&P Latin America ETF (ILF) would be a more appropriate benchmark. If an investor's focus is primarily on Brazil, then the iShares MSCI Brazil (EWZ) would be the logical benchmark, unless the focus is on small capitalization stocks, where the Market Vectors Brazil Small-Cap ETF (BRF) is probably a better alternative. As is the case with a sector ETF benchmarking approach, one can choose a broad-based regional ETF benchmark or take a micro benchmarking approach and drill down as far as desired. The narrower the focus of the ETF, the more volatility one should expect from the benchmark.

Another attractive aspect of ETFs is that many of them are optionable, which means they have implied volatility data associated with them. As a result, it is possible to calculate 30-day implied volatility for an ETF that is similar to how the VIX is calculated for the S&P 500 index. The graphic below shows six months of 30-day implied volatility for EWZ. Depending upon



## Comparison of geographical ETFs



## Implied volatility of iShares MSCI Brazil ETF (EWZ)

one's approach to options, investors might find these implied volatility numbers have significantly value when they are incorporated into customized volatility-related benchmarks.

In summary, exchange-traded funds have a number of potential advantages over indices as potential benchmarks. ETFs cover a broader range of investments than indices—and new ones are appearing each week. ETFs are also available for very specific strategies and cover the full range of asset classes, from broad-based groupings of investments to the very narrow slices of the investment universe we see in micro benchmarks. Unlike many indices, ETF values are readily available throughout the trading day. Best of all, if you find you are unable to consistently beat your benchmark, you can always just buy the ETF and head for the beach.

# Expiring Monthly Interview with Dr. Brett Steenbarger, Ph.D.

Mark D Wolfinger

Brett Steenbarger is a trading coach, professor at SUNY (Syracuse), author, blogger, trader and family man. His special interests include performance enhancement among traders and the psychology of trading. He's the author of three trading books and the publisher of two blogs: [Trader Feed](#) and [Become Your Own Trading Coach](#). Trader Feed is no longer publishing new material, but the archive is still loaded with resources. His latest book is *The Daily Trading Coach* (Wiley, 2009). In late March, I had the pleasure of spending a couple of hours with Dr. Brett.

**EM:** Brett, let's begin with a negative. You've said that traders experience a high failure rate. One reason is that they begin trading before finding their true niche in the trading world. Does that apply to options traders?

**BS:** Yes. Traders are attracted to options for all the wrong reasons. They come for the leverage and the perceived profits they can earn. They don't look at options as ways of limiting risk, and if not well trained, they can wind up blowing out. Some brokers advertise the availability of leverage, making matters worse. The trader cannot survive a string of losing trades because of that leverage. Most traders don't even

have a rudimentary background in statistics. The idea of a string of losing trades is not planned for, nor do they understand the 'risk of ruin.' The result is experiencing ruin.

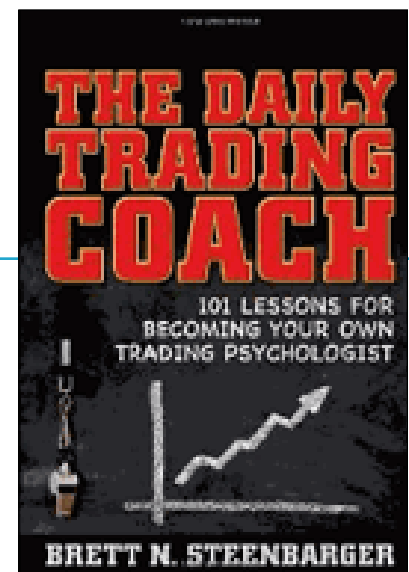
**EM:** These days, brokers are offering education on various strategies. Do you think they do enough on risk?

**BS:** Firms are doing a better job. They learned that it's not to their advantage to have a revolving door: new traders who blow out and then the process of finding new traders. Most firms don't have enough people qualified to teach, and that's why they don't talk about risk of ruin.

**EM:** Do you discuss risk of ruin with traders you coach?

**BS:** I work with trading firms and their traders, not individual investors. Those firms have their own risk managers who take care of educating traders about the risk of ruin. The problem is with the individual retail investor. Their brokers don't have risk managers. These are the people who particularly have to hear about these kinds of risks—but there are no coaches to tell them.

**EM:** Is it unreasonable to adopt trading as a career—or at least as a full-time opportunity—when you don't think you can be better



than average? Is it good enough to strive to be mediocre, or is that a killer mindset?

**BS:** How much you make depends on risks taken and account size. So it's not a matter of dollars earned. It's the risk-adjusted returns that count. The average trader is someone who loses all his money in a certain amount of time. Trading is different. A mediocre golfer can enjoy the sport and maybe even win an occasional local tournament. But there are no separate exchanges, no places where mediocre traders can trade. You are trading against the pros. If you cannot reach a high level of success, expecting to trade for a living is not realistic.

A competent trader is someone who can cover all costs. Overhead is high. Bid/offer spreads, commissions, software, hardware, office rent etc. If you can recover all those, you have reached a level of competence. By that definition, competent is not good enough to earn a living. But for mental development, it is a



good level to get to. Some people try to make a living with a small account: less than \$100,000. If hoping to make 6 figures a year, with an account of less than that size, they will be forced to accept levels of risk that will get them in trouble. The traders I work with—when you look at the notional capital they are trading—some can sustain low double digit returns, year after year. Low double digit returns: that's if they are really, really good. Consistent returns of 50% or more do not exist. People who do earn those returns eventually blow out because of the risk needed to generate those returns.

I don't work as a trading coach with the trading public. To generate business with the public requires the opposite of being able to tell the truth. I prefer not to make a living that way. It takes capital to make a living when trading. One must join a trading firm or save up the capital. They should not shoot for 'hitting the ball out of the park every year to pay their bills.' It's difficult to talk about a business when making 1% per month, but a trader who has minimal drawdowns, but earns 1% per month—is going to attract capital. But it's not sexy. You earn that money consistently, but it's not sexy.

**EM:** *I tell my rookies they should learn to separate their trading persona from their risk manager persona—and to be certain the latter has authority over the trader. Can they learn to do that? Is it possible?*

**BS:** It's absolutely necessary. They will have a short trading career if they don't learn to do that. By setting rules about risk: sizing, loss limits on a trade, loss limits on a day. Setting these rules governs the risk-taking.

**EM:** *Traders must make difficult trade decisions, such as when to exit a trade?*

**BS:** I don't ever think of getting out of a trade based on whether it's a winner or a loser. I think of getting out of a trade when the underlying idea behind the trade is not happening; when my thesis is wrong. In advance of making the trade, I want to know: what would tell me that the idea is wrong? It not money, it's not the dollar gain or loss that tells me I'm wrong. It's listening to the market talking. If the market moves higher and tests the low and fails the test, then my bullish idea is wrong. If we are showing greater volume on buying, then big sellers come into the market, we get out because the underlying issue—"buyers are in the market" is no longer true. That's when we get out.

**EM:** *That's a great concept. Most traders look at the P/L when deciding whether to exit, not wanting to take a loss. You get out when your 'good idea' is no longer so good.*

**BS:** Right. There is opportunity cost. If you stay with a bad trade, you are not in position to make the next good trade.

How to be successful in relationships is similar. The best way to succeed is to go on many first dates and very few second ones.

**EM:** *The 'get rid of the losers' principle.*

**BS:** You build your future by sticking with the good ones, the winners. You get out of the losers. You enter a lot of trades and get rid of the bad ones, keeping the good ones.

**EM:** *Is that similar to following the trend?*

**BS:** Yes. When you enter, you know the amount you are willing to risk, and it should be less than the amount you are targeting as your gain.

**EM:** *What happens with an iron condor when my potential loss is larger than the maximum gain? Example, I collect \$3, risking \$7; is that bad? Or is that acceptable because I limit my loss with risk management?*

**BS:** Yes. Good analogy.

**EM:** *Do highly successful traders go by the book? You've said that they do well by knowing when to deviate from the plan; equivalent to a quarterback seeing the defense and calling an audible. As a coach is this something you can teach—the ability to sense when it's a good time to call that audible?*

**BS:** Tough topic. To be a top trader you have to have excellent discipline. To become an expert trader, you





have to know when to break discipline. It's a mistake for a rookie to try to do this. When you are consistent with your discipline and see an opportunity—you can bend the rules. That's part of being an expert. Knowing when you can do that. This is not for someone who has not yet proven he has that excellent discipline. For the majority of traders: do not work on this. As a coach I would *not* be emphasizing this concept.

**EM:** *Is trading within a comfort zone good advice, or too restrictive?*

**BS:** Good question. It makes sense to trade within a comfort zone. If you make yourself uncomfortable with a trade—an unfamiliar strategy, too much size, market conditions that are unfamiliar—then you're putting a magnifying glass on emotions - and that's going to affect your decision-making and will create problems.

It's okay to move outside the zone—but carefully. Taking a bit of extra risk, putting on larger size—you don't want to go to 10x as much risk in one jump. But it does make sense to move size in a gradual fashion *as your account size grows*. It's okay to move a bit outside the zone—think of lifting weights. You never build muscles with lifting weights that are easy. You want to try for weights that are just a bit outside that zone. That's how you grow. But, not so much outside your zone that you damage yourself.

**EM:** *Do you like the ideas of having a trading plan?*

**BS:** A lot is written about the importance of having a trading plan and following that plan. The longer one holds a trade, the more important the plan. For example, it's not easy to have a plan when trading every couple of minutes. The longer the time period, the more the trader has time to think through issues: adding to the trade, scaling out, hedging. A plan can be very helpful as the holding period increases, because traders can become *distracted* and not follow through on the plan in an optimal way.

**EM:** *Plans cannot be robotically followed. They must have some flexibility. Is that correct?*

**BS:** Yes. For example, a basketball coach has tactics planned for a tournament. Sometimes tactics don't work and you have to adjust—call a time-out and revise. It's important to have a plan and to know when to adjust that plan as a result of changing conditions.

**EM:** *Some say 'stick to the plan—no matter what.'*

**BS:** No serious trader believes that. Stick with the plan when you can. But it's the nature of markets to change. We must adapt to those changes and change plans when appropriate. *If your plans are not well researched or well put together, then following them is a recipe for disaster.*

**EM:** *Traders get into bad habits—holding losers in an attempt to get even. And with options, negative gamma adds to the risk. What do you tell someone*

*when losses are already in place, and are accelerating?*

**BS:** This is where trade planning, as discussed earlier, is important. Part of that plan is knowing in advance when you are 'wrong' and when you will get out. That plan is something you mentally rehearse—it's something you are planning in your head—it's not just good intentions. It's how you want to act *automatically*. If you structure trading to suit, it is easier to follow the plan. Otherwise the consequences get to the point where you lose your account. Rehearse the points at which you stop yourself.

A great strategy for traders is to always have something else in life that's more important than trading. Religion, career, family... there should be something more important than the markets. When making money is the most important thing in your life, then the need to succeed is going to represent psychological interference.

**EM:** *Incredible advice. It's obvious, but crucial to mention.*

**BS:** Yes, it is. When I was learning, I set up a trading account that was separate from my retirement account and if I had lost every dime, it would not affect our family standard of living. That took a lot of pressure off. I was not trading the capital that my family needs to live on. If I lost the money that my children needed for school or for their health care...I couldn't go there. I couldn't do that.



When clear about your values—spouse, kids, beliefs...I may trade as a winner or loser, but my kids will be with me. The world continues to turn. You want to succeed in your trading, but you don't need it to be a winner. That's the big difference. If I'm a trading winner, it does not make me a good person. I'll just have more money. It's about making good decisions. Make enough of them and you will succeed. Trading is not all there is about life.

**EM:** *I know you are a big fan of simulated trading. Does that apply to paper trading for option traders?*

**BS:** The concept is the same. Paper trading is important in that sense. You are gaining a skill without the pressure of winning or losing. You must move from paper to live. You must master handling the pressures, but in the beginning when you are first learning, paper trading is very helpful.

It's also a great gauge. If you cannot make money when paper trading, by all means, don't put your capital at risk. There's no scenario in which you can believe that 'well, I didn't do well at paper trading but I'm sure that I'll do much better when I put my money at risk.' That doesn't happen. It's useful to move along the learning curve without losing capital.

Simulated trading uses live data, but orders only go to computer, not to a real-money account with a broker. The live aspect—prices moving—is an added value over paper trading.

**BS:** By definition, I work with people who have motivation. The people I work with have already taken the step to work on themselves and trading. Without great motivation to succeed, it's like those who lack the motivation in other fields, Broadway, business...it's going to be a great limiting factor in their success. That's why finding the niche is so important. In that niche, people are more likely to have the motivation to succeed. Some lack motivation, not because they are lazy, but because they are not in their performance niche.

**EM:** *How do people find a coach?*

**BS:** It's really, really hard. I find that coaches are people who are not really making it in the trading world.

I started in late 1970s. I had \$2,500. I couldn't afford a coach. It's difficult to afford a coach. Become your own coach. Learn the skills. Learn these things for yourself. Guide your own trading business.

**EM:** *Thank you. I have many additional questions, but I'll stick to the plan.*

**BS:** My pleasure.



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# Pro and Con Is It Your Money?

Mark Sebastian and Mark Wolfinger

**Wolfinger:** Traders and gamblers love the idea of playing with house money. I remember my few poker games of years ago. When I was ahead for the evening, I would pocket my original stake and play with 'house' money.

As time passed and I became an investor, I often heard that it is a good idea to sell half of a position when it doubles in value, allowing the investor to play with house money. This was suggested as a method for preventing a loss for a given trade. It all seemed reasonable, and I accepted that opinion without much thought. As a writer, risk and reward are constant topics, and one day I realized that this concept is absurd. Here is my argument:

When you place a wager, or make an investment, you take risk. There is a chance that all or part of your stake can be lost. When you lose, the money is gone. When you win, the money belongs to you. If you made a lucky or skillful play, you were correct in your expectations, and you earned a financial reward. Note: the reward was *earned*. It is now your money. To take half off the table is a fine idea. It is a smart risk management technique to avoid investing too much in a single trade. Pocketing cash accomplishes that objective.

But that is *your* cash in this trade. Every penny has been earned. If you believe this is a good investment, then it is right to hold. But if you adopt the false premise that it is 'only house money' and that you can afford to lose it, you are making a big mistake. The money once belonged to 'the house,' but it is yours now. When you get paid a salary, do you look at that as your money, or the company's money? One guiding principle for successful investing is being able to skillfully manage both money and risk. If you believe the current trade is suddenly less risky because it is not your money in play, you are not likely to manage risk well. That increases the chances that your money will return to its former owner. Don't kid yourself. The mindset that says 'It's not my money' is not the mindset of a skillful risk manager.

**Sebastian:** What is the classic mistake made by traders? There are thousands of possible answers to this question, but I think the worst mistake is letting their losers run, and closing the winners far too soon. Why does this happen? Simple: traders approach a trade worrying about their money as opposed to worrying about their trade.

Traders who are consistently profitable think about money as it pertains to a trade, not about money as it pertains to paying for dinner at Ruth's Chris on Friday. Traders who conceptualize the trade—as opposed to the money they have at risk—are far more likely to overcome the mental side of trading. The term 'house money' is a part of an approach, more than a single thought. Traders who see a winning trade as 'house money' are better able to evaluate their current trade.

I am going to paint a picture that applies to many retail traders. This trader has returns that look like this: 2%, 3%, -10%, 1%, -9%, 2%. This is the classic trader who takes trades off as soon as he or she is making money. This trader is also classically allowing his or her losers to run because the trader thinks he or she can 'make back the money.' If the trader saw even one or two of their successful positions as trades, instead of as money, the trader might break even for the year. Instead of playing with house money, this trader tries to grab his money. But in the end, this trader has *no* money.

Our second picture is of the trader who has returns as follows: 4%, 5%, -8%, 5%, -5%, 6%. One major difference between this trader and the former is that the latter takes the emotion out of the trade. When this trader is losing, he is not losing 'his money.' Instead, the trade is losing. When the trader is up, he has not made 'his money.' The trade is winning; the trader is up 'house money.' This trader does not count his money while he is sitting at the computer. There will be time enough for this trader to count it at his condo in Boca Raton.

# Protective Calls

## Give Me My Money Back!

Tyler Craig



One of the most common ways stock traders begin to implement options in their trading is through the use of covered calls. With the one-two punch of monthly income and downside protection, covered calls definitely offer some alluring advantages. However, like most strategies, covered calls do not offer something for nothing. To exploit these two advantages, traders must also be willing to reduce their upside profit potential. Selling covered calls involves the obligation to sell stock at the strike price of the short call. It can be a bit disheartening when your stock rallies 20%, but due to a covered call you were only able to participate in 5% of the move. However, that is why it is important to assess the maximum reward to ensure you are satisfied with it before jumping into the trade.

A covered call is sometimes referred to as a buy-write, covered-write, or synthetic short put. Regardless of the lingo used, just remember that the structure entails buying 100 shares of stock and shorting a call option. The conventional approach typically involves buying stock and shorting the call simultaneously. By entering both sides of the trade together, the trader has immediately locked in downside protection equal to the premium

received from the call option. For example, if I purchased 100 shares of stock for \$45 and sold a 50-strike call for \$3, I have \$3 of downside protection, which lowers my expiration breakeven point to \$42. The drawback to selling a call option concurrent with the stock purchase is that it caps your upside profit potential. To limit this potential

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**A covered call is sometimes referred to as a buy-write, covered-write, or synthetic short put. Regardless of the lingo used, just remember that the structure entails buying 100 shares of stock and shorting a call option.**

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drawback, some traders opt to leg into the trade by purchasing shares of stock first, then selling the call option later, after a rise in the stock price. This allows unlimited profit potential up until the decision to sell the call. Those with a knack for forecasting price direction likely prefer legging in, since it offers more flexibility in deciding an appropriate time to short the call.

Stock traders can also use covered calls as a means of hedging a stock

position that has moved adversely. When attempting to minimize losses, the typical approach for stock traders is to utilize a stop loss. A stop loss is usually a predetermined point in price where a trader decides to close the trade. Remember, closing a trade is usually the simplest, most efficient way to eliminate risk. One alternative traders may consider in lieu of stopping out of a long stock position is selling an in-the-money call option. Though short calls don't offer comprehensive insurance, they can provide a notable amount of protection and the potential to recoup one's losses. In addition, they also prevent the occasional whipsaws that occur when stop losses get triggered—shaking traders out of a position that quickly reverses back in the right direction. Consider the following example.

Having a bullish bias on Freeport McMoran, you decide to buy 100 shares of FCX at \$82 on April 16th. Unfortunately, over the next week FCX moves adversely and drops to \$79.70, leaving you with a \$230 unrealized loss (Figure 1). Instead of deciding to simply sell the shares, suppose we sold a June (8 week) 75 call for \$7.10 instead. At \$7.10 of premium, the 75 call possesses \$4.70 of intrinsic value and \$2.40 of



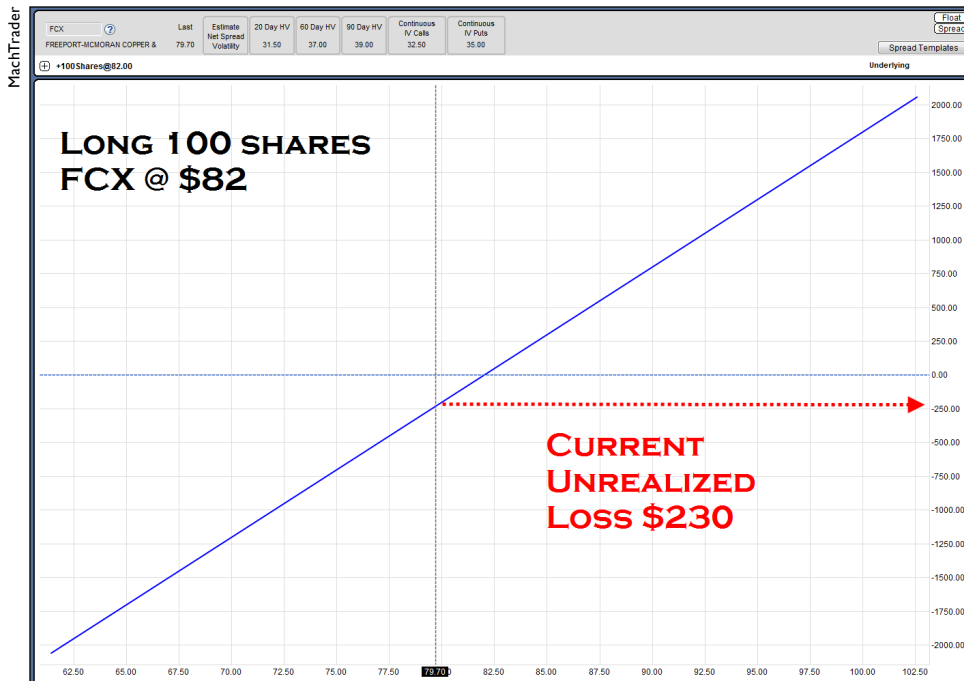


Figure 1

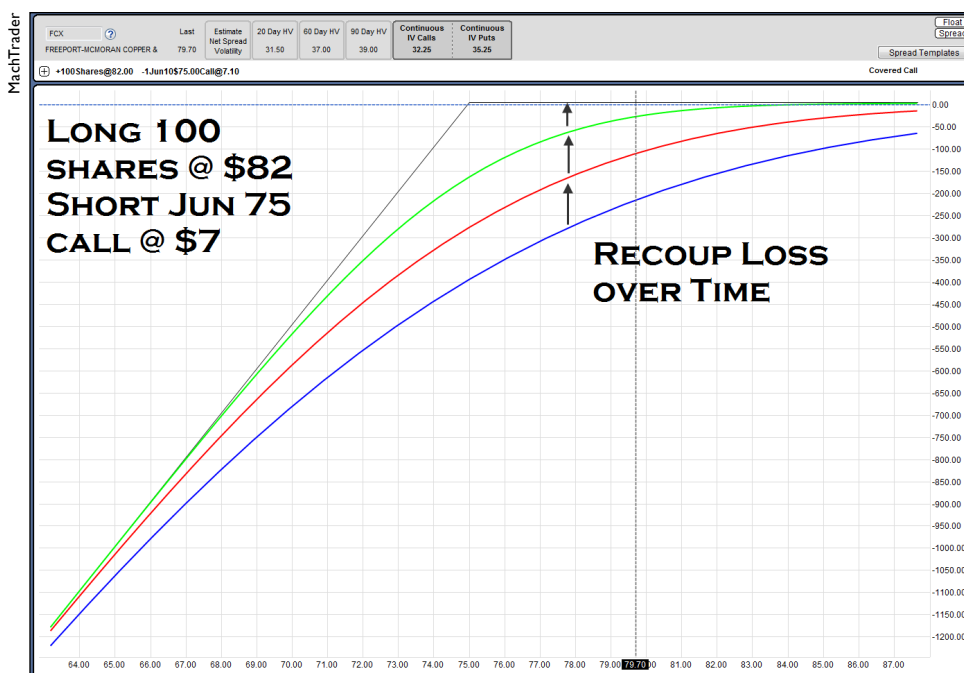


Figure 2

extrinsic value. When selling in-the-money covered calls, your potential profit is limited to the amount of extrinsic value in the option. Since the extrinsic value exceeds our current unrealized loss, we have

the potential to recoup our \$230 loss provided FCX remains above the 75 strike price (Figure 2). In addition, our expiration breakeven has dropped from the original entry point of \$82 to \$75.

Here is a key question to consider when deciding whether it's appropriate to sell an in-the-money call as opposed to exiting your long stock position. Would you rather close the trade now and free up your capital to put to work elsewhere, or would you rather stay in the trade until closer to expiration in an attempt to recoup your losses? In the case of FCX, by selling the June option we basically decided to remain in the trade for an extra two months in an effort to recoup the loss. While June is the expiration date we sold, the reality is that we may be able to recoup our loss more quickly if market conditions are favorable. Keep in mind that there are three primary variables that can affect how quickly an option loses its extrinsic value: time, price, and volatility. As we approach expiration, the call option will incrementally lose value due to time decay. Within the risk graph displayed in Figure 2, the effect of time decay is modeled using the blue, red, and green lines. While time decay is a slow and steady constant, a favorable move in either price or implied volatility can actually speed up the loss of extrinsic value. As FCX rises in price, the 75 call option will move deeper in-the-money. The further in-the-money an option moves, the less extrinsic value it possesses. Thus, a large enough rally in the stock price will aid in achieving maximum reward early. In addition, a drop in implied volatility can also cause the short call to lose its extrinsic value more quickly. Depending upon how favorable market conditions are,



traders may not have to wait all the way until expiration to exit the trade at a profit.

Another question to consider is whether or not you believe the stock has the ability to remain above the call strike price. In the example illustrated earlier, we needed FCX to remain above \$75 to recoup the loss. If we were of the opinion that FCX was going to continue to decline aggressively in price, it would be smarter to simply sell the stock. Remember, in-the-money calls don't provide comprehensive protection. Due to negative gamma, the short call option will progressively become less effective in hedging the long stock if the price continues to decline.

Now let's tackle the choosing of strikes. As with any covered call, traders must consider how much time and which strike to sell. The ideal scenario is to recoup the loss as quickly as possible. As such, traders may consider using front month options first. If there turns out to be insufficient premium in the front month it may be necessary to consider selling longer-term

options. This turned out to be the case with FCX. Since there was not enough premium remaining in the front month options (May), we ended up selling the second month (June). How does a trader determine how much premium is enough? The following formula can be used to calculate if the loss will be recouped:

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$$\text{Strike} + \text{Premium} \geq \text{Purchase Price.}$$

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In other words, the strike price you sell plus the premium received has to equal or exceed the original price of the stock. Our original purchase price for FCX was \$82 and we sold the 75 call for \$7.10. Plugging those numbers in the formula yields the following:  $75 + 7.10 \Rightarrow \$82.10$ . As you can see the \$7.10 received from selling the June call option is more than sufficient to recoup our loss.

In choosing which strike price to sell we typically stick to the first or second strike in-the-money. Options that are too deep in-the-money will lack sufficient extrinsic value to offset the unrealized loss in the trade. Traders can try plugging in

different in-the-money calls in the formula to determine which offers the ideal return.

In using short calls for hedging your downside and potentially recouping loss, it is important not to mistake this strategy as a "fix-all" adjustment. It bears repeating that the short call does not provide comprehensive protection if the stock continues to decline in price. You will certainly face scenarios where it is more advantageous to close the losing stock trade and move on, as opposed to marrying the stock position with a short call. However, this adjustment certainly deserves closer inspection for stock traders interested in alternatives to stop losses.

*Check out Tyler Craig's market musing and insightful views on option theory, strategies, volatility, and much more at [Tylerstrading.blogspot.com](http://Tylerstrading.blogspot.com).*



# Floor Stories

## Trader Tales

Mark Sebastian

Every trader has his or her war stories. There are funny ones and there are awful ones. Some stories involve some of the most ridiculous and silly scenarios you have ever heard. Others can be great stories of triumph. My story is about my utter defeat at the hands of Hugo Chavez. In 2007, I was trading a group of about 60 stocks. Some of the stocks were very large and very active, like General Motors. Others were little stocks that most traders had never heard of, like Compania Anonima Nacional Telefonos de Venezuela (VNT). This ADR was partially owned by Verizon, and partially owned by the public. It was trading around 20 dollars per share, and traded 'by appointment,' meaning that it rarely traded, had really wide spreads, and was often very profitable. Stocks that traded by appointment were some of my favorites to trade, but they could also be tricky.

Under most circumstances, the spreads were so wide that even if the customer was right, I could manage the option greeks in such a way that I would still end up being profitable. The problem with these stocks—and the reason for wider spreads—is that when these spreads went bad, they could go very bad. A trader would end up 'married' to his or her position. If the stock really moved against the trader, the trader was done. This happened with VNT.

On January 7th, Hugo Chavez announced that the Venezuelan government would take over the telephone company. He did not give any details about exactly what would happen. Unfortunately for me, I found out about his information about 10 seconds after some 'pick off' trading shops did. I got lit up on the January, February, April and July 25, 22, 20, and 17.5 puts all at once. All of the trips set in my system went off, and my system pulled my quotes. Sadly, by the time my system pulled quotes



I had been dinged for almost 8,000 deltas. I went to sell the stock (it was still open at the time), but this was when the uptick rule was still in effect. I got filled on zero stock. The NYSE then quickly halted the stock.

I immediately called a floor official and tried to get the trades that had been performed busted. However, since the stock had not been halted yet, I was not allowed to bust any of the trades. The final print on the stock was a little above 18 dollars. My sheets said I lost about 30k at the time. I was stuck waiting for the stock to re-open. Over the next three days, there was some clarity. Hugo announced he would pay a fair price (Verizon is a big enough company that they were not going to simply be taken for a ride with out getting the US Government involved). Even with that information, I knew the stock was going to go down; I just did not know how much.

Finally, the stock opened. It traded at 10 dollars. I was ordered by my risk manager to sell all the stock, on the open. I told him I thought it would rally. Despite my objections my risk manager ordered me to dump all 8k deltas I had in the position. I did, for 10 dollars. To add insult to injury, the stock rallied 2 dollars over the next hour or so. Over the next week it rallied all the way back up to 15.00. When all was said and done, I lost a little over 100,000 dollars.

Chalk one up to Hugo.

## Back Page

# The Education of a Trader

Bill Luby



Do you remember from your school days those students who, when confronted with a complex issue, would acquire a look on their faces somewhere between consternation and dread, immediately thrust a waving hand up into the air and blurt out in a worried voice, “Do we have to know this for the test?” I can be fairly sure that none of these people ended up as successful traders.

One only has to look at the history of hiring patterns at Wall Street firms to get a sense of the evolution of thinking about how to develop a successful trader. For many years, the model for aspiring traders was considered to be a genteel Ivy League education. Over time, Wall Street firms began to favor graduates with a more humble socioeconomic pedigree who were considered hungry, hard working and highly motivated to prove something to the world. In more recent years, we have seen Wall Street seek out physicists and those with exceptional quantitative skills. Lately, a desire for poker skills has also come into play.

As I see it, all traders are ultimately self-taught. There are no required classes, readings, homework assignments or even a syllabus with recommendations. Tests are administered on a daily basis, frequently with multiple tests on the same day. Worst of all, everyone is graded on an unfavorable curve in which there are more Fs than As.

Against this backdrop, education counts, but skill and experience count even more. An insatiable curiosity helps, as does a willingness to explore unfamiliar territory. Great trades, insights and strategies present themselves in somewhat random fashion and, as Louis Pasteur observed, “Chance favors the prepared mind.”

But what kind of preparation is ideal? Malcolm Gladwell asserts that 10,000 hours of experience is a prerequisite for greatness in almost any field. In a normal career, that level of commitment usually translates to five years,

but on Wall Street, 10,000 hours of experience can be crammed into 3–4 years. Of course, all hours are not created equal. A trader’s capacity to distinguish between random events and meaningful patterns is important to establish a solid trajectory of growth and development.

For my personal education process, unlearning was more important than learning. My formal schooling consisted of an undergraduate degree in political science and a traditional MBA program. After two decades of business strategy consulting experience deeply rooted in fundamental analysis, I was ill-equipped to excel in a short-term trading time frame. In order to embrace technical analysis, I first had to jettison my fundamental perspective on investments and build a new foundation based on technical analysis and market sentiment.

In my opinion, the best way to approach trading is to consider the educational process to be a lifelong endeavor, crossing as many multi-disciplinary boundaries as can be digested. In a way, I like to think of the foundation of trading success as building a large idea stew and developing an eye for spotting high potential new ideas. The trick is to have the right breadth and depth of knowledge so that when one stumbles on the next great strategy, it can be easily identified, captured and developed. Call it opportunistic research and development, if you will.

As luck would have it, some of the most successful trading strategies I employ are based on areas in which I had limited knowledge when I first encountered them. No matter how well things are going, I take the approach that I never have the luxury of being satisfied with the status quo and need to embrace the idea of getting out of my comfort zone. In trading and in life, it pays to constantly refresh the pipeline of new ideas and continue to tinker with them, because you never know what will be on tomorrow’s test.

