

EXPIRING MONTHLY

THE OPTION TRADERS JOURNAL



**An Interview with
the Founder of thinkorswim
Tom Sosnoff**

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

This has been a very interesting month for the options trader. The largest options exchange, the CBOE, went public last week; gold hit a new high and traded over \$1250 per ounce; and in the Gulf of Mexico, the ever-expanding environmental, economic and political fallout associated with the Deepwater Horizon oil spill has been responsible for some huge gains and losses in the options market.

Two themes permeate the June issue of *Expiring Monthly*: back-testing and volatility. In this month's feature, Jared Woodard and Martin Koistinen delve into the subject of backtesting volatility strategies and examine an active collar strategy which uses VIX signals, a volatility breakout approach, and continuous short straddles. James Vanke and Mark Wolfinger look at backtesting options in this month's Pro & Con column.

On the volatility side, while volatility is a theme that is woven through this issue, four articles in particular attempt to drill down on specific

volatility issues. Jared Woodard has a review of the Yang-Zhang volatility estimate and explains why it is an improvement over traditional measures of historical volatility. In the volatility trading realm, Adam Warner ruminates about the subject of volatility cycles, Mark Sebastian talks about the advantages of trading VXX options over VIX options, while I walk through a VIX bear call spread in the Follow That Trade segment.

Elsewhere in the magazine, Mark Wolfinger reviews *The Option Trader Handbook: Strategies and Trade Adjustments*, by George Jabbour and Philip Budwick, and Mark Sebastian continues his interview series in a sit down with thinkorswim founder Tom Sosnoff. In some of the regular columns, Mark Wolfinger looks at options strategies for the beginner in his monthly column, The New Option Trader; the EM staff pitches in to answer reader questions; and I recount some of the events of the last expiration cycle and look ahead to the next cycle for the visually

inclined in Charting the Markets. Finally, in the popular Back Page segment, Adam Warner puts the recent flash crash into historical perspective by recalling how market makers were blindsided by the unintended consequences of automation in the AMEX in the 1990s.

As always, readers are encouraged to send questions and comments to editor@expiringmonthly.com.

Have a good expiration cycle,

Bill Luby
Contributing Editor



What would be your strategy for rolling or adjusting one side of an iron condor that is causing problems?

I always believed that when price touches the strike of the short option, then roll that contract out and up/down. Possibly even increasing the number of contracts to salvage that side of the trade.

What are your thoughts? How do you manage the “bad” side?

—WS

Hello WS,

There are several reasonable alternatives when adjusting a position. In this short space, I want to make a couple of relevant comments:

1) Waiting until the strike is touched is a legitimate risk management method. In my opinion, it's too risky for most traders. Please think about the possibility of adjusting sooner. [This is your decision. I am only suggesting that you give the matter some thought.]

2) Rolling down and out (or up and out) is probably the most often used adjustment strategy. Rolling is a very popular technique because the mindset of the trader is always similar to: “This position is losing

money, but by giving it more time and moving the strikes farther OTM, I'm sure it will become profitable.” The problem with that way of thinking is that it's too optimistic. The idea of rolling to ‘salvage’ the trade is overwhelming, and the suitability of owning the new trade is too often ignored.

In my opinion, there is only one satisfactory rationale for rolling a position: The new position must have excellent prospects and you want to own it as part of your portfolio. Attempting to salvage a trade is not good enough. In fact, it's not a good way to think. Traders lose too much money trying to get back to break even. Instead, they should be initiating brand new trades that have a much higher expectation for earning profits. Thus, it's a trap to believe that you must roll every position in an attempt to recover losses.

I prefer to take the loss, exit the trade, and find something better to trade. I do not roll a position just because it affords the *possibility* of getting back to even.

3) Selling extra spreads in an effort to ‘salvage’ the trade is not a good idea. Been there. Done that. (Too many times.)

Think about it this way: You are opening a new position for one

purpose only, and that is to avoid conceding that the original trade lost money. You want to recover current losses by rolling to a new position in the same stock. All by itself that is often a poor choice of trades.

Then, to avoid paying a debit to make the trade, you sell additional spreads to bring in more cash. Think about that. You are increasing the size of the trade to recover losses. You are increasing risk to get even. Isn't it far more important to judge the merits of the trade before selling additional options to generate extra cash? Ignoring risk is not the path to trading success.

If the trade works out well, you do salvage your losing trade. But, what if it does not work out well? You own a larger and riskier position—not because you found a great trade, but only to salvage the current, losing trade. It's risky enough to increase risk when the reward justifies it, but to increase size, when there is no compelling reason to do so, is foolhardy.

4) Often the best adjustment is simply to exit the trade (don't neglect the ‘good’ side of the condor. Close that also). It's ok to accept losses. Don't jeopardize your account in an attempt to salvage a bad trade.



You like 1-month Butterfly and 2-month high prob Condors. When do you do which? If the market is dead, the butterfly is great. If the IV is high, the 2-month Condor seems good. If you expect an upcoming volatile market, which do you prefer—the butterfly or the condor?

**Thanks,
Patrick**

Patrick,

If I am expecting an upcoming volatile market then I don't like either to tell you the truth. I would probably try a long gamma/long vega spread. But, if I *had* to choose I would go with the butterfly. I like the fly because of the high reward low risk factor. I would set the wings at a 15–20 day standard deviation

width. Probably closer to 15 to protect the trade. I would also make sure I flattened the delta, and bought units to protect the position. Finally, I would probably have a very tight leash on the trade. If I fear volatility, I am taking off the trade as soon as it gets into trouble.

Good luck,
Mark S.

.....
I saw something in the Wall Street Journal and I want to ask about it. Can you outline the bullish risk reversal for me? Is it initiated simultaneously as a credit spread? Any information would be appreciated.

–AF

Hello AF,

A 'regular' reversal is a zero-risk position in which the trader is long calls, short stock, and short puts. The options have the same strike and expiration date.

The risk reversal is similar to a reversal—without the stock. And that's why it's a *risk* reversal.

First, the strikes are NOT the same and typically both calls and puts are out of the money (OTM). It's often initiated as a spread, but that's not necessary. The idea is to buy OTM calls—making it a *bullish* play—and sell OTM puts. Note that each leg is bullish. The trader prefers to sell puts at a high enough premium to pay for the calls, making the trade a cost-free, bullish risk reversal.

–Mark W

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The New Option Trader

Choosing an Option Strategy

Mark D Wolfinger



If you are learning about options based on the recommendation of someone who has been making money, it is very likely you will begin by adopting the same strategy as your friend. That is understandable. When a trader is unfamiliar with alternatives and knows someone who has been trading successfully, it is natural to feel some urgency to begin using the same methodology.

I encourage you to reconsider. A trader must choose a strategy before placing a trade, but it's not the strategy that is vital to your success. A strategy tells you which options to buy and sell and possibly when to make the trades. However, it's your ability to manage the position—by controlling position size and the money at risk—that determines your overall results. It's *potential losses* that are critical, and limiting those losses is the key to earning money as a trader.

Before investing real money, I recommend gaining hands-on experience, and that translates into opening a paper trading account. Some people lack the patience want to earn money right now—especially when an eager friend shares his/her profitable stories [Don't forget to ask about losing trades].

The fact that the option rookie has no idea how options work or how one 'makes money' does not dissuade the newbie from entering the arena.

The most commonly used strategy (among newcomers to the options world) is buying options. The purchase of puts or calls appears to be very simple. You believe a stock is moving higher, and buy calls. Or believing a stock is moving lower, you buy puts. Then wait to see how much money is earned when the prediction comes true.

If buying is difficult; if selling is dangerous; what is left?

If you adopt that idea, the probability is that you will lose your entire stake. Yes, there is a chance to earn some very attractive profits, but that chance is small. Why? To succeed as an option buyer, you must:

- Correctly pick the direction in which the stock price moves
- Be reasonably accurate in the timing of that move because options have a limited lifetime
 - If the move occurs after the options expire, it is too late

- Correctly estimate the size of the move
 - If the stock does not move far enough, your options are likely to become worthless
- Not pay too much for the options
 - Recognizing a reasonable price to pay is a skill that requires experience
 - This is one aspect of option trading that is difficult for the rookie to comprehend. The market price is not always a reasonable price (due to a preponderance of buyers or sellers)

If you plan to buy options, I hope you have a proven track record for predicting stock direction. Lacking that record, there is no chance that you will suddenly develop that skill.

If it is difficult to succeed when buying options, then selling options must be a good idea, right? That is *not* a valid conclusion. Selling options provides more wins than losses, but some of those losses can be large enough to demolish your account. Please take that as a heartfelt warning to be certain that all risks are understood *before* making real trades.



If buying is difficult; if selling is dangerous; what is left?

Spreads. Hedged trades.

A hedge is a trade that offsets or partially offsets, the risk of owning another position. A spread is a trade that includes the simultaneous purchase of one option and the sale of another. In other words, a spread is a hedged position.

Trading spreads may sound more complicated than buying options, but I prefer to consider it as an opportunity to trade with less risk, and that is something unique to options. No single trade should be large enough to seriously harm your account—if the trade turns out badly. Each trade must be monitored and there must be a point at which the trader understands that imminent risk is

too large, the trade is not working, and that prudence demands that the trade be re-worked. Often, exiting the trade is the best choice. Sometimes there is a suitable modification or adjustment. If you limit to losses, you are well on your way to success. Not guaranteed success, but a realistic chance.

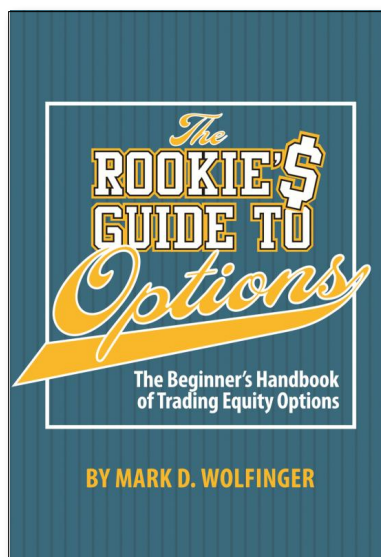
My advice is to begin by learning to trade one or more spread strategies. These hedged (risk reducing, as well as profit-reducing trades) plays will feel comfortable as you learn more about options. A few examples:

- Call spreads. Buy one call and sell another.
- Put spreads. Buy one put and sell another.
- Condor spread. Buy one call (or put) spread, and sell another.

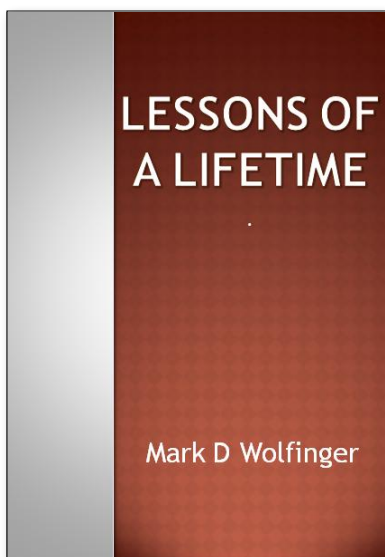
These trades can be constructed to be bullish, bearish, or market neutral. More experienced traders also try to profit by trading volatility, news stories, etc. Options are versatile and satisfy a number of investment needs.

The point of this discussion is not to discourage you from trading options. Instead it's to alert you to the necessity of getting an education *before* making trades. Paper trading is one way to gain experience. Free webinars are another. Reading blogs and books targeted to rookies is another. Have patience. Learn at a pace that suits you. Then adopt one method that feels most comfortable. When ready, learn another strategy in a similar manner.

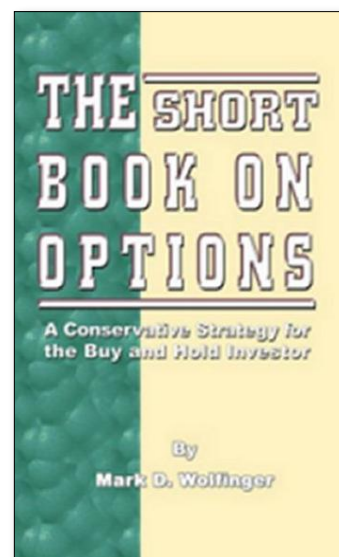
Good trading.



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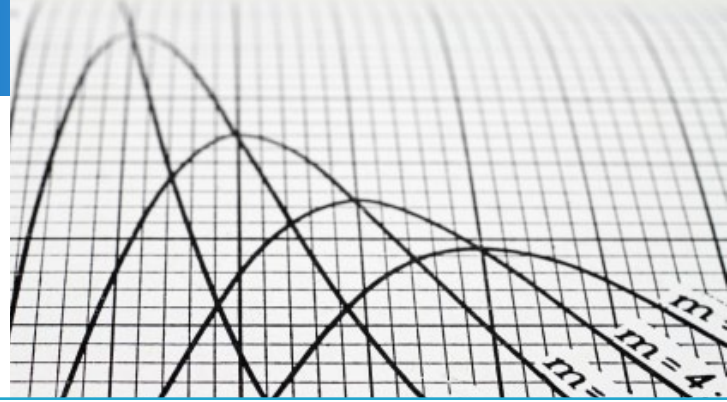


eBook



Trading the VXX

Mark Sebastian



One thing almost every professional trader knows is that the VIX is a piece of garbage. This is because the VIX is not a good predictor of future volatility, or fear. It can only grasp the here and now, and it doesn't do that very well. The calculation has severe problems dealing with weekend decay and is far too sensitive to movement in the underlying to effectively tell traders where the real implied volatility level is trading. VIX futures and VXX are actually far more effective at explaining the true trading level of implied volatility. The reason for this effectiveness is that the VIX Future and VXX ETN actually *trade*. It trades based on where volatility is predicted to be over the life of the contract. This is far superior to the VIX which is calculated based on trades at the whim of the always crazy SPX.

This leads us to VIX and VXX options. When the VIX options were first listed on the CBOE, it was a massive success . . . for the market makers. The VIX options are NOT based on the VIX; they are based on the VIX futures. Many traders did not understand this. These traders got absolutely smoked because they were trying to price options on futures against a whippy cash market. Needless to say, the market makers had a field day. I will never fault market makers for taking advantage of the stupid; they did what they are supposed to do, take the other side of trades. It is the public's fault for not doing their homework. Thankfully, the public eventually figured out how the contract works. The options are efficiently priced now. But, does that mean it is a great contract to use to hedge volatility risk?

The long answer is it that depends on the trader. The short answer? No, it is not a very good product for the public to hedge volatility risk. The futures are illiquid. In fact many option trading platforms don't even have the CFE (CBOE Futures Exchange), where the futures trade, available for trading. I am never a proponent of trading a contract where the trader can't easily trade the underlying. I am even less a proponent of trading a contract where the trader has a tough time getting a quote!

This is why I am so pleased that the CBOE listed the VXX options on May 28th. The VXX, an ETN that tries to mimic the front two months of the VIX futures, is actively traded. It can trade upwards of several million notes a day. Getting a quote? A no brainer! Just type it in and up it pops. This makes options on the VXX appealing. Traders finally have a volatility product that has an underlying that is easy to determine. Another bonus of the VXX is that it is listed on several exchanges. This means that there is competition for the trader's order.



VXX Chart


Thus, the bid ask spread across the months is much tighter than those of VIX options.

The market place apparently agrees with my analysis, as the volume on the VXX options has taken off since it became listed. Since May 28th the volume of the VXX has grown every day, adding liquidity to the VXX underlying, as well as to the VIX futures and options. There is some decent value in using VXX options to hedge a portfolio of option income trades. The value is apparent when volatility explodes and the options gain an incredible amount of value. There is also value in that they do not require the guessing game of buying unit (extra) puts (although the options are likely less effective than unit puts as well).

A good example is this most recent downturn in which the market dropped about 10%. The VXX more than doubled in price. Sadly VXX options were not available at

the time. Had they been, the VXX May ATM call would likely have gained almost 1000% (as the VIX calls did). If the income trader placed 10% of his or her trading capital into these options they would have hedged a very large portion of the trader's losses from the rest of the portfolio.

Clarity and effectiveness are the two things retail traders love, and market makers hate; the VXX has both in the underlying and the options. I encourage traders to steer away from VIX options and towards the VXX. While this may disappoint some of my market maker buddies, I have faith they will find a way to make money trading these products even WITH this new clarity. A sucker is born every day; in the trading world, it is more like every minute. Traders who do their homework will likely find the VXX to be an efficient tool. Traders who do not, will likely find they, and not the options they trade, are the tools.



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IV Index Change	IV Index % Change
-0.37	-1.39
-0.74	-2.26
-2.77	-5.18
-0.23	-0.56
-5.46	-9.68

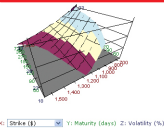
Use this ranking tool to find the best volatility opportunities

MY FAVORITES

SYMBOL	2009 IV	Correlation 2009	IV 2009 Index Mean	IV Index 2009 to Live Indicator
BABYVIXINDEX	28.03%	64.40%	23.20%	0.08
BABYVIXCALL	27.52%	59.54%	23.20%	0.03
			22.67%	0.02
			20.09%	0.04
			20.95%	0.04
			26.12%	0.04
			23.26%	0.07
			21.43%	0.04
			28.97%	0.06
			20.68%	0.06
			20.66%	0.04


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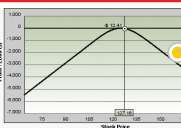
All of the important pricing data along with the "Greeks," skew and volatility surface data is here

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LIVE CALCULATOR

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Gamma:	0.0178	0.0178
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As a sincere thank you to subscribers, we are running a contest and offering a valuable prize.

Non-subscribers are encouraged to enter. In a separate contest, the winner receives a one-year paid subscription to *Expiring Monthly*.

It's easy to enter.

- 1) Send e-mail to: VXX@expiringmonthly.com
- 2) Predict VXX closing price on Jul 16, 2010

Entry deadline: Midnight (CT) Jul 3, 2010

Prizes awarded to the subscriber and non-subscriber who are nearest to the closing price. In case of ties, the earliest entry wins.

The winner is determined by *distance* from the closing price. It does not matter whether your guess is higher or lower than the actual closing price. [This is not *The Price is Right* TV show]

The Prize

Volatility.com is generously offering a three-month subscription to the 'Volatility Essentials' Package. Retail value \$96.80 per month (although occasionally they do make special offers, such as the one advertised in this month's *Expiring Monthly*).

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- All important pricing data plus the "Greeks," skew and volatility surface data
- Live P/L calculator. Automatically updates data for multi-variable risk profiles and simulation analysis

- Maintain updated portfolio with prices, volatility and correlation data
- Historical volatility data, put call ratios, volume, open interest, and volatility charts going back as far as 10 years
- Live calculator automatically updates prices and "Greeks"

A Little Information about VXX

The iPath S&P 500 VIX Short-Term Futures ETN, VXX began trading Jan 9, 2009. As Bill Luby reports at [VIX and More](#), this product was a hit from its first day, and trading volume has been expanding steadily. The unfortunate news is that most who bought this vehicle (as a long-term investment) were far too early. VXX declined steadily from the beginning. Until one day, it reversed direction.

VXX is not designed for investors. It's a short-term trading vehicle because it is re-balanced daily to keep the portfolio invested in futures with an average expiration 30 days in the future. That involves daily trading expenses and slippage.

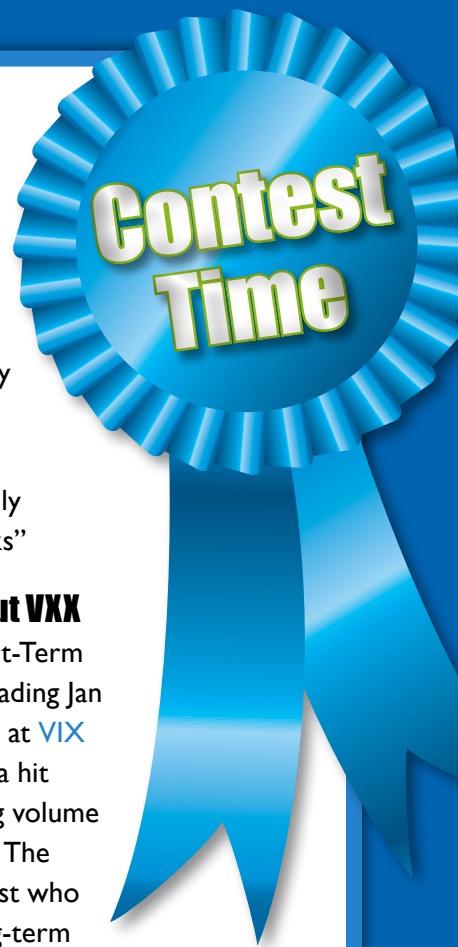
iPath, the company that manages VXX, [tries to explain](#) the important details. The sad fact is that too many individual traders buy and sell this item without understanding what they are trading. That's nothing new, as it has been a way of life for VIX option traders. (VIX options DO NOT track the daily VIX—they are options on VIX futures contracts.

Join the fun.

Enter the contest.

Thank you for subscribing,

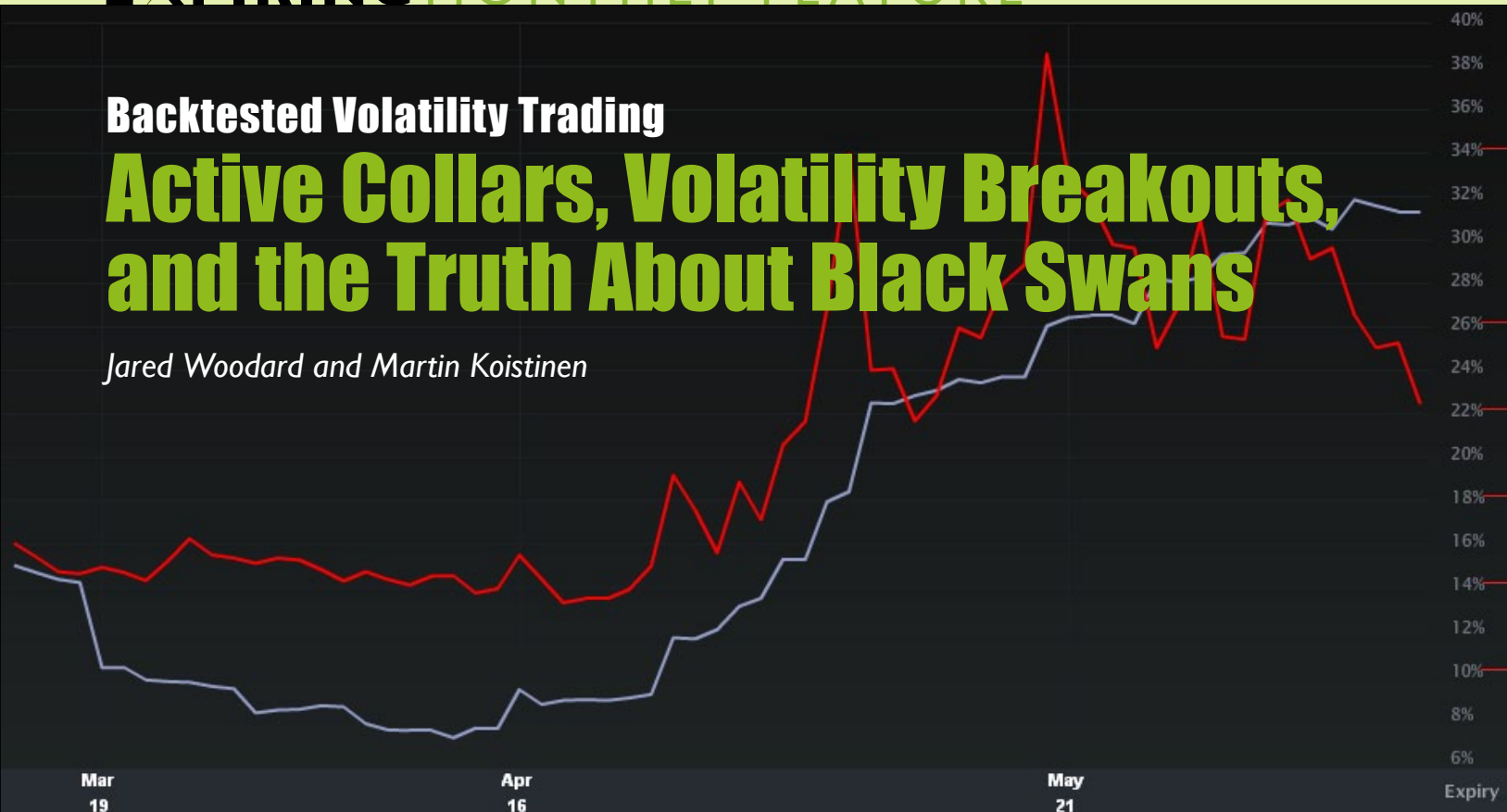
Adam, Bill, Jared, and the two Marks



Backtested Volatility Trading

Active Collars, Volatility Breakouts, and the Truth About Black Swans

Jared Woodard and Martin Koistinen



The software and data available to individual traders today make it simple to run historical tests on almost any strategy conceivable, provided the assets being tested are stocks, ETFs, futures, or forex pairs. Options traders, however, have no such resources: there is no commercially available software enabling straightforward backtesting of options strategies, and even if there were, the data required to conduct such tests can be prohibitively expensive when available.

Nevertheless, options traders who insist on confirming the statistical significance and historical profitability of strategies before employing them can overcome these limitations. Options exchanges, third-party vendors, and some brokers provide historical options data, and traders who are willing to commit some time, effort, and capital to researching strategies will be rewarded for their trouble. In this article, we'd like to demonstrate that backtesting processes are useful not only for finding profitable strategies, but also for providing new knowledge to help confirm or disconfirm initial intuitions about particular strategies. In our view, human creativity and intuition

are still the best sources for option strategy ideas, while rigorous backtesting processes provide a valuable method for checking the validity of such ideas.

We will examine the historical performance of three strategies, along with the initial idea in forming each strategy, and the conclusions, if any, that can be drawn from subsequent testing.

First we examine an active portfolio hedging strategy that uses volatility-linked allocation signals to trade option collars. The second strategy attempts to identify volatility breakouts and exploit those opportunities with market-neutral long straddles. The final strategy attempts to collect the volatility risk premium by consistently selling short-term at-the-money straddles, in part to examine the real significance of market disruptions and "black swans."

Strategy 1: Volatility-Linked Active Collars

Several studies have demonstrated the usefulness of passively-applied option collars for hedging a portfolio.¹

A collar is typically composed of one long OTM put option and one short OTM call option with the same expiration month; collars are most frequently used to hedge existing positions in the underlying asset.

Of course, one of the drawbacks of passive, “always-on” collar strategies is that they cap the amount by which an investor can participate in a strong bull market. The purpose of this strategy is to participate in more market upside without sacrificing the loss reduction offered by collars. One approach would be to use some price-sensitive timing signal to indicate when to apply and remove the collar; while such signals can be effective, we opted instead for a volatility-based signal. Drawing on the conventional wisdom that the VIX tends to take 15 and 30 as lower and upper limits most of the time, we’ll make the status of the collar hedge dependent on the recent average level of the VIX. The indicators and other components used for each of these studies are intentionally very rough: optimization, while useful, is often only useful for strategies that have at least shown some value using basic parameters.

Strategy 1: When the 10-day simple moving average (SMA) of VIX is less than 15, leave the portfolio unhedged; when the SMA is greater than 15 but less than 30, hedge half the portfolio using a 95–105 collar; when the SMA is greater than 30, fully hedge the portfolio using the collar.

A few elements need clarification. By a “95-105 collar” we mean the long put with the strike price closest to 95% of the value of the underlying asset and a short call using the strike closest to 105% of the value of the underlying. Options with at least 56 days to expiration are used. To implement the “half” and “full” allocations, we’ll assume a portfolio that is long 1000 shares of SPY: so a full allocation will require 10 long puts and 10 short calls, or 5 of each when the portfolio is only partially hedged. Options are held to expiration unless there is a change in the allocation signal, in which case the existing position is closed and a new position is opened using the new signal and the current date. For comparison, we’ll also test a passive

collar strategy that always fully hedges the portfolio and is otherwise identical to the active version. For simplicity, each of the charts used in this article display the cumulative profit/loss of a strategy, and therefore exclude compounding and any money management techniques.

The active hedging strategy performed as expected: it was inactive during the bull market through 2007, and while it slightly lagged a buy-and-hold benchmark, the active strategy significantly outperformed the passive strategy over that period. (Figure 1) Since 2008, both the active and passive collar strategies offered meaningful protection against market declines. Note that since option positions tested for this article were marked to market only upon closing and not on a daily basis, the daily equity curves for both strategies would be significantly smoother, eliminating (for example) the drop attributable to the market crash in the fall of 2008.

While the active and passive strategies produced almost identical cumulative net profits over the period tested, the active collar strategy was able to offer the same protection but with reduced time in the market (and therefore lower transaction costs) and with a better return distribution. One valuable feature of the active collar strategy that may not be obvious initially is that it is more amenable to the psychology of most investors than the passive approach. It is difficult to maintain hedging discipline during a raging bull market, especially when the hedging strategy causes consistent underperformance.

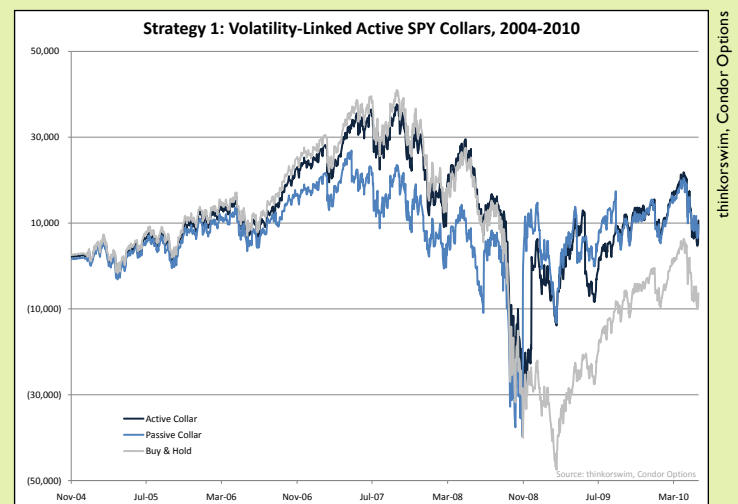


Figure 1

The risk, of course, is that an investor who sours on her hedging strategy may elect to apply the strategy on an *ad hoc* basis—or worse, may stop hedging altogether. By linking the size of the hedging allocation to the volatility exhibited by the markets, the active collar strategy reduces the likelihood of investor frustration, and increases the chances that the hedge will actually be in place when it is needed most.

Strategy 2: Trading Volatility Breakouts with Straddles

The next two strategies focus on outright speculation instead of portfolio hedging. With this strategy, we attempt to exploit the momentum effect by taking long volatility positions when asset prices move beyond a statistically-defined range. The assumption being tested is that a confirmed breakout is likely to precede further momentum in the direction of the trend, such that option buyers stand to profit from increasing volatility.

Strategy 2: *When the S&P 500 closes outside either 21-period 2-standard deviation Bollinger band, buy the shortest-term ATM straddle with at least 30 calendar days to expiration.*

Bollinger bands are a familiar technical indicator, and we've selected them for familiarity and simplicity. The guiding intuition here, again, is that because it takes such a substantial move for prices to close two standard deviations below or above their one-month moving average, such an occurrence is likely to coincide with

a momentum environment in which it is better to be long rather than short volatility. The strategy holds the selected straddles until expiration, and only takes one entry at a time. Options on the SPDR S&P 500 ETF (NYSE: SPY) were used for testing.

Since 2005, the only situation in which the strategy really succeeded was the fall of 2008—an environment in which just about any price-neutral, long-volatility strategy one can imagine should have succeeded. Otherwise, the costs from losing trades easily overwhelmed any incremental gains.

The most straightforward conclusion to draw from this study is that the initial assumption was just wrong: when stocks have already moved two standard deviations away from a one-month average, we can expect the trend to become exhausted or even to reverse modestly. In other words, a significant display of momentum (at least as defined here) is more likely to be followed by mean reversion than by more momentum. Of course, this can all be discerned by price behavior alone—we don't need options to draw the above conclusion.

The long straddles provide an additional lesson, however, which should be familiar to most traders: volatility is asymmetric. After a Bollinger band breakout in either direction, short-term ATM straddle buyers are very likely to see their premium erode to nothing, but note that the risks in each direction are different in kind. On an upside breakout, straddles can be bought at relatively low levels of implied volatility, but an asset that has just made such a sizable move higher is also more likely to revert to the associated mean. After a substantial price decline, the problem is reversed: while the odds are greater that a “correction” may become a crash, traders buying into the move will already be paying for options at high levels of implied volatility. Since option prices respond differently to large price changes depending on whether prices are rising or falling, it would be desirable for the strategy to take that asymmetry into account.

Given the poor—but rather consistent—performance of this strategy, it seems like a good candidate for a “do the opposite” approach, whereby we would sell

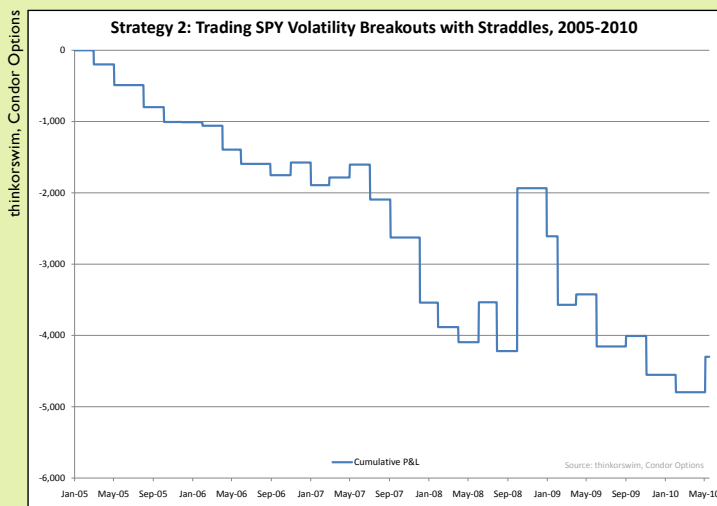


Figure 2

ATM straddles after a break above or below conventional standard deviation bands, instead of buying them. However, testing over a longer period using SPX options suggests that the inverted strategy does not provide much of a discernible edge. Moreover, such an approach would take on the opposite risks of negative gamma and the occasional crash scenario. We take a closer look at the significance of these risks in the final strategy.

Strategy 3: Continuous Straddle Selling

If ever there was a time in which traders thoughtlessly shorted naked options, that time is not our own. The consensus now seems to have shifted entirely in the other direction. Stock investors have been particularly happy to pay elevated premiums for protection against major negative events, and everybody now “knows” that the likelihood of tail risks, black swans, and etc. are not adequately reflected in option prices, such that periodic market dislocations will spell disaster for anyone who is a net seller of those options. Call this view the *swan thesis*.² If the swan thesis is true, a hypothetical perpetual seller of naked options will reap significant gains most of the time, but will be totally destroyed when the next crisis occurs.

Strategy 3: *On the Monday after options expiration, sell the nearest ATM straddle with at least two months to expiration and hold to expiration. Enter another position each subsequent month.*

To clarify, on any given Tuesday immediately after options expiration, we will hold two positions: the first will be a short straddle with one month until expiration, i.e. the trade we opened a full month ago, and the second will be a short ATM straddle opened the day before. We tested the performance of this strategy since 2005 using the Powershares QQQ Trust ETF (QQQQ), which tracks the Nasdaq 100.

The strategy generated exactly the returns one might expect: relatively consistent monthly gains in both declining and rising markets, with dramatic losses during the 2008 crash. But two features of the equity curve stand out. First, taking a longer-term view we note that the losses in late 2008 were relatively less severe

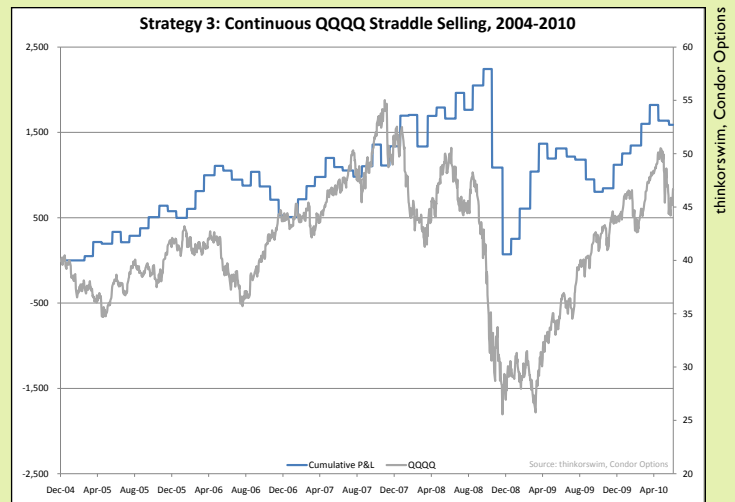


Figure 3

than those experienced by the underlying benchmark. By November 2008, QQQQ had lost 36% of its value since the study's inception, whereas the straddle-based strategy was actually still slightly profitable. Second, the strategy recovered very quickly—much more quickly than the benchmark, of course—but also relative to the pace of its own equity curve. A mere four months later (March 2009), the strategy had already recovered over half of its losses, and was within reach of its all-time high by March 2010. By contrast, even with the breath-taking reflationary rally in equities in 2009, QQQQ did not recover half of its crisis losses until August of that year.

This is clearly not a strategy ready for deployment, in spite of the positive features noted above. Few traders could tolerate such sizable drawdowns (nor should they). Even some rudimentary risk management procedures would do wonders for a strategy like this: simple stop losses would help, as would stops set at double the amount of premium received on a given trade. The latter is implicitly a method for indexing stops to implied volatility, since a short straddle will yield a larger premium when implied volatility is high. We also have not discussed position sizing: the cumulative profit/loss chart assumes the sale of a single call and put each month. One approach would be to size each position based on the risk in the trade: if implied volatility is increasing (and the stop-loss points are therefore looser), it might make sense to trade fewer contracts, so that the same absolute dollar value is at risk from month to month. Of course,

these variables provide additional opportunities for further testing.

Beyond the practical merits of this study, consider what it says about the swan thesis. Hopefully, readers will grant that if any event in the last two decades counts as a “black swan” or tail risk event, the 2008 financial crisis does. Additionally, note that the strategy selected represents one of the riskiest approaches possible with regard to the swan thesis: we are short naked options, with no dynamic hedging or other risk mitigation procedures in place. And yet, the result of applying a highly risky strategy during a tail event was only that a few years of (market-beating) profits were given back. The worst monthly loss from this strategy was, in fact, only 4.5 times larger than the average monthly gain: hardly a cause for celebration in itself, but proponents of the swan thesis would need significantly more disastrous results to warrant swearing off short gamma risk forever. A more moderate attitude toward extreme market dislocations might concede that while tail events do occur more frequently than would be expected under a normal distribution, everyone knows this fact, and that on average and in general, options tend to be overpriced even after allowing for disastrous outcomes.

Conclusion

The table below shows some summary statistics for the strategies discussed. We include this data here to emphasize one final cautionary note. When backtesting options strategies, all but the most active studies will yield a small number of trades, and small sample sizes decrease confidence about the statistical significance of a strategy.

Strategy Results			
	Trades	% Wins	Profit Factor
1: Active Collar (SPY)	30	0.33	1.73
1: Passive Collar (SPY)	42	0.21	1.33
2: Long Straddle (SPY)	29	0.27	0.48
3: Short Straddle (QQQQ)	47	0.58	1.30

Table 1

The solution, in our view, is twofold: first, conduct further testing using fresh data, varied parameters, and different underlying assets. Truly robust strategies will not suddenly fail just because they are being tested, for example, on small-cap instead of large-cap stocks. Second, understand historical studies, not as attempts at finding a ‘holy grail’ strategy that will generate profits forevermore, but instead as opportunities for understanding how a given market works under different conditions. Markets are too complex to be understood all at once; backtesting is a means of focusing one’s attention on those features of the market that might provide a reliable edge.

Martin Koistinen has been trading since 1989. Martin is a research analyst with Condor Options and is an independent risk management consultant working with a number of banks. Martin is based near London and enjoys travel, photography and finding profitable market strategies.

¹Cf. Szado, Edward and Kazemi, Hossein B., Collaring the Cube: Protection Options for a QQQ ETF Portfolio (April 2008). Available at SSRN: <http://ssrn.com/abstract=1133509>

²The allusion to Taleb’s popular book is not intended to suggest that this simple study will refute his thesis, mostly because the swan metaphor has been asked to do more heavy conceptual lifting than it, as a metaphor, is capable of doing. “Black swans” are so vaguely defined that, even if they do somehow serve as a true account of reality, they are beyond the realm of testing, prediction, and confirmation, and are therefore not relevant to the kind of activity we’re examining. Taleb’s recent “quadrant” essay is more promising, but with increased clarity it becomes less certain that a simple option seller is exposed to the kind of intolerable risk he has in mind. See Taleb, N. N., The Fourth Quadrant: A Map of the Limits of Statistics (September 2008). Available at: http://www.edge.org/3rd_culture/taleb08/taleb08_index.html.



Options Graphics and Data

Charting the Market

Bill Luby

After two months of a great deal of options expiration drama, last week came and went with relatively little fanfare, save for a statement made by the bulls that not only will the S&P 500 index refuse to be bullied below the 1040 level, but also that the index is capable of ascending its 200-day moving average in a hurry.

As is often the case, some of the changes in the investment landscape are reflected in the surge of interest in options. Specifically, BP debuts on the most active list in the #6 slot, while RIG lands at #12 and the energy ETF (XLE) is up to #23. Activity in precious metals is also heating up with gold (GLD) moving up to #7, the gold miners ETF (GDX) at #18, and the silver ETF (SLV) at #24.

In honor of the CBOE's IPO, I have pulled two graphics from their prospectus. One shows the annual history of option contract volume traded on the exchange; the other shows the change in product mix and market share over the course of the past five years.

Given their prominence in the news, I have chosen to highlight implied and historical volatility charts for BP (2 months) and GLD (3 months), the most popular gold ETF. Interestingly, BP's IV is surprisingly low relative to recent HV, while gold shows a recent pattern of high IV relative to HV.

For good measure, I have included a three month chart of the SPX, which shows IV leading HV on the way down. Note how put volume (red bars at bottom) and IV spiked just prior to the May 21st expiration and have been much more balanced as of late.

Looking ahead, two technology heavyweights, Oracle (ORCL) and Research in Motion (RIMM), are scheduled to report earnings after the close on Thursday. Lately both companies have dramatically underperformed the technology sector as a whole, and RIMM has had more than its share of troubles.

Most active options (6/18/10)

Rank	Prev	Underlying	Close	Opt Vol (1000s)
1	1	SPY	111.73	1,326
2	3	C	4.01	1,159
3	4	QQQQ	47.00	576
4	2	IWM	66.80	396
5	5	AAPL	274.07	329
6	-	BP	31.76	324
7	12	GLD	122.83	308
8	16	FXI	40.66	215
9	6	BAC	15.82	204
10	8	EEM	39.92	186
11	7	XLF	14.83	181
12	-	RIG	54.61	157
13	10	JPM	38.18	128
14	21	MSFT	26.44	127
15	9	GE	15.95	125
16	15	BIDU	74.09	117
17	14	EWZ	67.20	112
18	-	GDX	54.06	109
19	18	GOOG	500.03	87
20	17	PFE	15.21	84
21	-	RIMM	61.03	82
22	11	GS	138.18	79
23	-	XLE	55.61	74
24	-	SLV	18.75	74
25	-	ORCL	23.20	72

Interactive Brokers

Options with highest IV (6/18/10)

Rank	Prev	Underlying	Close (>5)	IV
1	-	VVUS	10.05	249.28
2	-	AFFY	23.01	246.71
3	-	MDCO	7.85	121.35
4	-	INFI	6.19	118.58
5	-	ATPG	11.45	103.51
6	-	OSUR	5.19	103.30
7	-	OMER	6.08	103.21
8	17	SFI	5.38	99.59
9	1	CLDX	5.03	98.06
10	-	SOXL	39.95	96.58
11	9	DRN	46.36	96.40
12	-	PGNX	6.06	96.02
13	-	ABD	5.34	95.12
14	-	SIGA	6.80	94.94
15	2	TZA	6.38	92.88
16	-	SRTY	46.90	92.77
17	3	DRV	6.16	92.57
18	-	SOXS	28.14	90.80
19	-	NBIX	5.50	89.76
20	-	URTY	104.71	89.66
21	6	EDZ	42.31	89.58
22	-	DRWI	6.30	89.39
23	16	CAGC	12.99	89.13
24	-	CVO	6.72	88.38
25	-	TNA	48.20	86.08

Interactive Brokers



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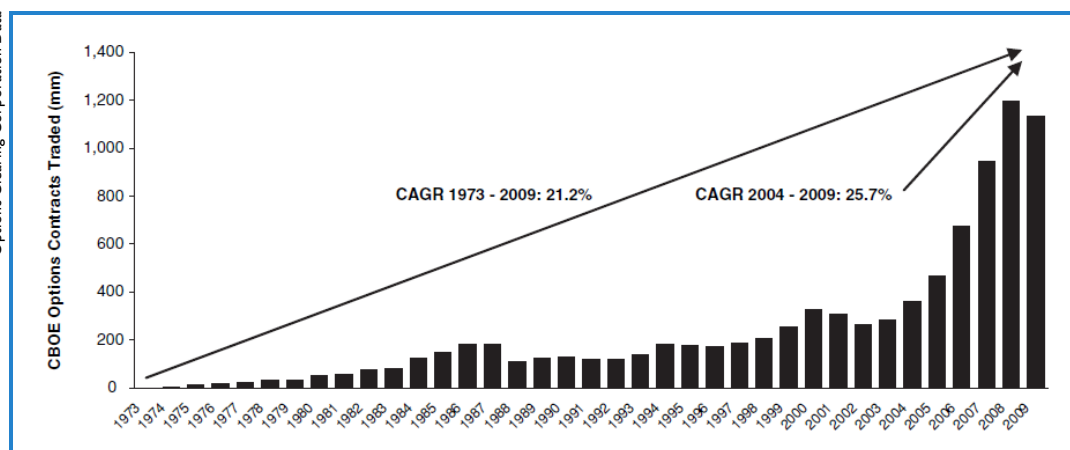
BP Implied and Historical Volatility, 2 Months

Livevol.com



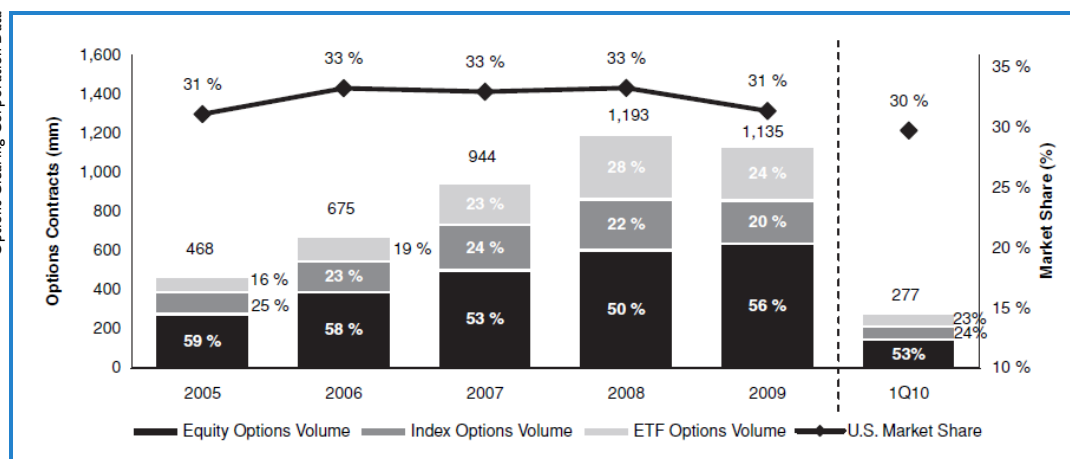
GLD Implied and Historical Volatility, 3 Months

Options Clearing Corporation Data



CBOE Options Volume History

Options Clearing Corporation Data



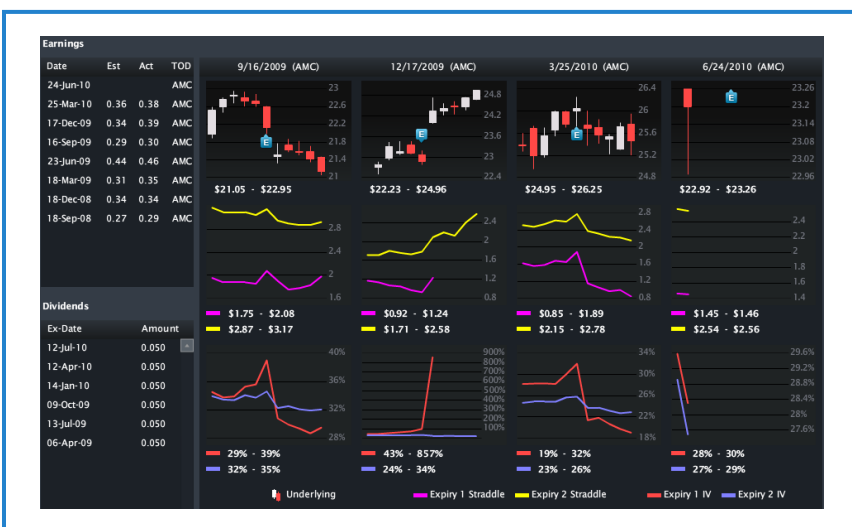
CBOE Options Volume by Product





Livevol.com

SPX Implied and Historical Volatility, 3 Months



Livevol.com

ORCL Earnings, 06/24/10



Livevol.com

RIMM Earnings, 06/24/10



The Monthly Options Report

Adam Warner

The storm has officially passed. For now.

How do I know that?

We're back to Summer Normalcy.

If you've ever spent some time on a trading floor, back when there were actual market makers on a trading floor, you could recognize a summer Friday from every other day. It's the Seinfeld of trading days, a session about nothing. "What happens?" "Nothing." "Well, why am I here?" "Because we're paying you to be here and do nothing."

It is the opposite of trading bedlam. Literally nothing of any interest trades.

Right here right now in fact is the pinnacle of nothing. We have a post-expiration week. I ran numbers for [my book](#) isolating each day of the expiration cycle, and found that the single worst days for the VIX are the first five days of a 5 week cycle. The reason is simple. The most popular options trade is the buy-write. The most popular time to buy-write is right around expiration day. On the margins, it puts pressure on options volatility as the lion's share of order flow is to the sell side.

Now we're not in a 5-weeker this go around, but the same rules apply. They just don't linger as long.

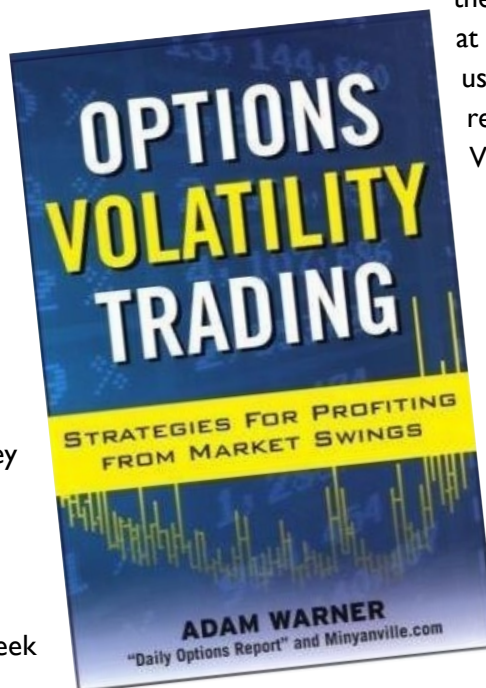
Except when we have Volatility Killer #2, a mid-cycle holiday. The post-expiration blahs will dissipate next week just in time to seamlessly morph into

pre-holiday blahs. Why pay up for options when you know you have a slow pre-holiday week on tap, followed by a long holiday weekend?

The answer is you don't, let someone else eat the options decay.

And finally, to make this completely circular, it's summer to begin with. Volume and volatility just tend to take a bit of a break. Over the course of time I covered in my book, July had the lowest median VIX reading of any cycle. Now that won't hold true this year as even if we go down to 15 in the VIX this cycle (extremely unlikely) it won't do it fast enough to get the mean or median down below March or April levels. So expect a dip, but not a new low.

Does this mean you sell VXX or VIX futures into this? Not really. They will not track so well into seasonal dips, the "market" will anticipate a bounce back at some point. What I would do though is use VIX futures and VXX as proxies for real volatility assumptions, rather than the VIX itself.





Pro & Con

In Defense of Backtesting

James Vanke and Mark D Wolfinger

James Vanke is the founder and portfolio manager of Argyle Management Group, a hedge fund manager based in Atlanta, GA.

Prior to founding Argyle, James designed and managed a fund of hedge funds. During his research on prospective fund managers, trading strategies and portfolio optimization, James traded for his own account and developed the index option trading strategies that represent the core of Argyle's strategy.

Previously, James was an investment banker with Wachovia Securities and Ernst & Young Corporate Finance. In this capacity, he advised public and private middle market companies on M&A, public and private equity financings, leveraged buyouts, recapitalizations and convertible securities issuances.

James holds both a Masters Degree in Accounting and a Bachelors Degree in Business Administration with a Finance concentration from the University of North Carolina at Chapel Hill. He is a former CPA.

Vanke: Traders are introduced to options in various ways. Whether we learn from books, newsletters, seminars, webinars, coaching or all of the above, sooner or later we have to stand on our own. I'm a big fan of getting a trading education. To borrow from my friends from Chicago, "Learn early, and learn often." I believe that backtesting is a very useful tool in the education of a trader.

Backtesting has two key (and related) benefits: strategy analysis without dollars at risk, and building of confidence.

By backtesting, a trader can compress years of market action into hours, and practice without emotion. Whether learning, refining, or developing a new strategy—or applying a known strategy to a new

vehicle—backtesting allows the trader to see how the trades perform under actual market conditions vs. theoretical assumptions. This is particularly important in exploring the effects of volatility changes, but also useful for the studying the impact of the other Greeks.

Because no dollars are at stake, a trader is free to be creative and explore new ideas that he may be too cautious to employ in live trading. A lot of those ideas will end up on the scrap heap, never to be seen or heard from again—much better to learn those lessons without losing money. But this trial and error is also where new knowledge can be gained, adding tools to the trader's arsenal, and a trader can clearly define his plan.

Confidence is the natural outgrowth of this process, and its importance should not be underestimated. When actual dollars are at risk, a trader can lean on his backtrading experience and know that he has a sound plan when he steps into the market.

Traders can also use backtesting to regain their confidence after a rough period in the market. It can help a beaten up trader get his mojo back before jumping back into the market.

Confidence will add to the trader's discipline in sticking to his plan, keeping him from both over-trading and "freezing" when action is required. Confidence will also allow a trader to sleep better at night.

A great analogy is pilot training in simulators. Is that the real thing with the pressure, adrenaline, and physical forces to match live take-offs, landings, and emergencies? Of course not. But it is the closest thing available and an important part of every pilot's training. Practice and simulation with no pressure gives pilots the skills necessary to react properly to live events.



Pilots are not the only profession that uses simulation. Sports teams practice and scrimmage. Salesmen simulate delivering their pitch. Trial attorneys practice in moot courts. None of these is a perfect replication of live events, but they are all important steps in the preparation.

To be sure, backtrading is not the Holy Grail. Among other weaknesses, data files can be incomplete and/or inaccurate, and trade fills will not necessarily reflect reality. Most importantly, it does not reflect the emotion that can come with waiting through real time while real dollars move up and down. It is, however, a valuable tool for accelerating trading experience.

It is one of many tools traders can use to become more profitable. Beyond the books, seminars, etc. above, we have self-education from experience. Backtrading is one form of experience, paper trading in real time is the next logical step, and then trading small with real dollars before trading with size.

At the end of the day, the best education comes from “the school of hard knocks”—the live markets—but it is every serious trader’s responsibility to show up to that school having done his homework.

Wolfinger: According to [Wikipedia](#), “backtesting calculates how a strategy would have performed if it had *actually* been applied in the past. This requires the back-test to replicate the conditions that prevailed at the time in question to get an accurate result.”

When it comes to analyzing trading strategies for stocks, I believe backtesting is a sound idea. It’s easy to backtest specific chart patterns and choose points in time when the specific pattern appeared.

This is far more difficult—I believe impossible—when testing option strategies. The trader may be able to find

a chart pattern for the underlying stock that mimics the current chart pattern. However, the outcome of option trading depends on how the options are priced, and not on the stock price (unless the price change is large).

Option implied volatility can move higher or lower by substantial amounts—sometimes from one day to another. In recent times, we’ve seen those up/down IV swings occur intraday. Backtesting cannot help the trader estimate option prices because those depend on IV swings. In turn, those sudden changes in implied volatility are often based on human emotions.

I agree with everything James says about the importance of simulated trading, recognizing that the necessary data is often unavailable to the retail trader. However professional traders can take advantage of simulated trading to test a variety of ideas under different market conditions. Once again, I agree that paper trading provides much needed experience to traders who take it seriously.

I don’t believe simulated trading is useful for backtesting *option positions* because different skills are being developed. The simulator helps the trader *react* to market conditions with greater confidence. Simulation helps the trader gain experience deciding which conditions are best for entering or exiting a trade. However, backtesting demonstrates whether the position, once initiated, has a high or low probability of success—for the given implied volatility environment. It’s very unlikely that future IV will behave as it did in the past.

Maybe there is no disagreement here and it’s merely a semantic difference. Paper trading and simulated trading are excellent learning tools. I favor backtesting when trading stocks. But not options. Option strategies are often dependent on a variable that can change in a heartbeat, and that is unsuitable for backtesting.



The Yang-Zhang Estimate of Volatility

Jared Woodard



Imagine that on May 6, 2010, the Dow Jones Industrial Average had been able to fully recover the losses from the afternoon “flash crash,” closing exactly at its opening price of 10,862.22. Instead of jumping three full percentage points as a result of that single session, the 30-day close-to-close historical volatility (HV) of the Dow Jones Industrials would have actually fallen to 12.63%. Whether you consider this hypothetical scenario or the actual HV—which was 15.78%—it is fair to wonder whether a method relying only on closing prices isn’t missing quite a lot. On a day when the Dow printed an intraday range of over a thousand points and the major implied volatility indexes closed above 25%, a 15% historical estimate seems downright, well, wrong.

The biggest problem with the standard close-close historical volatility estimator is that it ignores intraday price movement. As anyone who was trading on May 6th—or on so many other occasions over the last few years—knows, intraday volatility matters quite a lot. Several volatility estimators have been proposed to address this issue, using high, low, and closing prices to express the movement during a trading day.¹ Two other problems affect these range-based volatility estimators: they assume the absence of price drift, ignore the presence of opening jumps, or both. The estimation proposed by Yang and Zhang (2000) addresses these deficiencies.²

The Yang-Zhang estimate (YZ) includes opening data in its calculation, unlike earlier range-based methods, and it arrives at a volatility estimate that is independent of any price drift. Drift refers to the average return or bias in a time series. While volatility estimates are often tested against random (drift-less) samples, this is a poor approximation of real world prices. The authors explain that it is important for a volatility measurement not to require a “no drift” assumption:

[I]t happens quite often in practice that the price of a security goes through a “trendy” phase, in which the drift could be large compared with the volatility. The trendy nature of a strong bull market and price movements of certain high-technology stocks in recent years are good examples of large drifts (at least during certain periods). Therefore, estimators V_P and V_{GK} [Ed: Parkinson and Garman-Klass] will overestimate volatility during these periods. (481)

Options traders are familiar with the phenomenon in which the implied volatility of the options on some stock drops sharply during a strong trend higher. YZ essentially codifies this implicit practice of separating volatility from the trend:

When we applied both V_{GK} and our drift independent estimator to daily stock price data, we found that the difference between the two estimations is usually negligible. This is due to the fact that the dimensionless drift parameter $\mu\sigma/\sqrt{T}$ is usually small (assuming using daily data). However, we do find periods in stock prices of some high-tech companies where the 10-day V_{GK} is approximately 20% larger than V when the stock undergoes a steady upward motion. This phenomenon of overestimation is commonly observed in the option markets, namely, the implied volatility drops dramatically (10%–20%) when the underlying stock is in a steady upward movement (downward movement in real life tends to be more violent). Our new variance estimator V correctly reflects this volatility drop. (485–486)

The YZ formula includes a variable for opening price data. The period between the previous close and the current day’s open is the only period not accounted for in previous models. This wouldn’t matter if prices were guaranteed to begin today where they left off yesterday,



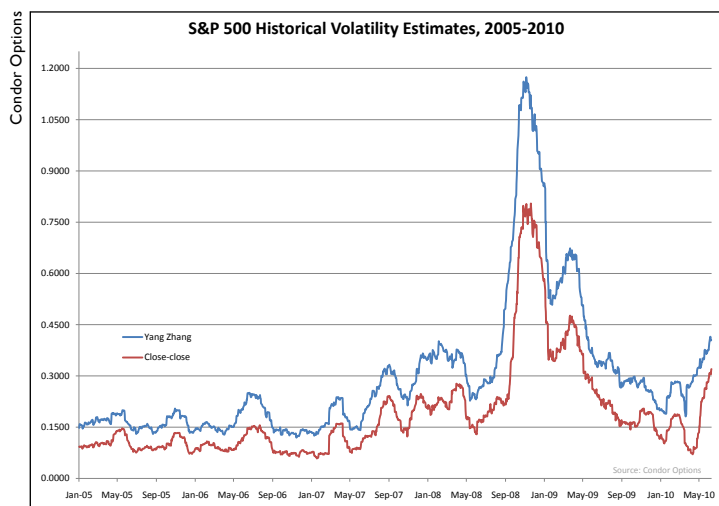


Figure 1

but in reality, of course, opening price jumps are often a significant component of market volatility.

The features of these estimates are of obvious academic interest, but do they make any practical difference? Comparative studies suggest that range-based volatility estimators are significantly more efficient than the standard close-close method; one analysis using simulated data puts YZ at 7 times more efficient than the standard method.³

As the chart above illustrates, including intraday and jump data yields an annualized estimate that is consistently higher than the close-close estimate. A quick comparative glance at the two methods suggests some opportunities for further research: since the difference between the close-close and YZ estimators can be attributed to intraday volatility (the close-close method

does a fairly good job of capturing jumps when they dominate), the difference between the two metrics might provide a useful signal of the degree of caution warranted for intraday entries and exits. YZ also tends to run slightly higher than—but still closer in absolute value to—familiar measures of implied volatility. Strategies predicated on the relationship between implied and historical volatility should produce different results when the historical volatility estimator is substituted. Finally, there is the small matter of accuracy for its own and for the sake of reduced cognitive dissonance: where the Dow Jones Industrial Average close-close estimate read 15.78% after the crash on May 6th, the Yang-Zhang estimate registered a far more satisfying 38.09%.

¹Cf. Garman, Mark. and Klass, Michael, On the Estimation of Security Price Volatilities from Historical Data. *Journal of Business*, Vol. 53, No. 1, January 1980 and Rogers, L. C. G. and Satchell, S. E., Estimating Variance from High, Low and Closing Prices. *Annals of Applied Probability*, Vol. 1, No. 4, August 1991.

²Yang, Dennis and Zhang, Qiang, Drift Independent Volatility Estimation Based on High, Low, Open, and Close Prices. *The Journal of Business*, Vol. 73, No. 3, July 2000. Available at SSRN: <http://ssrn.com/abstract=229190>.

³Shu, Jinghong and Zhang, Jin, Testing Range Estimators of Historical Volatility. *Journal of Futures Markets*, Vol. 26, No. 3, March 2006. See also Chou, Ray Y., Chou, Heng-Chih and Liu, Nathan, Range Volatility Models and Their Applications in Finance. *Handbook of Quantitative Finance and Risk Management*, Cheng-Few Lee and Alice C. Lee, eds., 2009. Available at SSRN: <http://ssrn.com/abstract=1143265>.

Follow That Trade

VIX Bear Call Spread

Bill Luby

The Rationale

When it comes to trading options on the VIX, I have found that my most consistently profitable trades generally resulted from taking short VIX positions following a large VIX spike. The trickiest part is typically defining an appropriate entry point in which the VIX appears to be elevated, while the risk of increasing volatility appears to be overestimated and perhaps already on the decline.

Given that my (self-imposed) window for finding a VIX trade began with the publication of the May issue of *Expiring Monthly* on May 24, I began examining potential VIX trades just one session after the VIX spiked to its highest level in 23 years (48.20), with the exception of the 2008–09 financial crisis. During the last week in May, the VIX bounced around in the 29–44 range, as Fitch downgraded Spain's sovereign debt from AAA to AA+ and there was an escalation of tensions between North Korea and South Korea. (Figure 1)

I waited for another VIX spike and caught a break when three separate events whipped up additional fear and

seemed to trigger a sense of hopelessness on the part of investors. First, an Israeli raid on a Turkish ship carrying humanitarian supplies to Gaza resulted in nine deaths. Then, BP's much anticipated "top kill" procedure failed to contain the Deepwater Horizon spill and growing disaster. Finally, on Friday June 4 the spokesman for Hungary's new prime minister was quoted as saying that Hungary's economy was in a "very grave situation" and added that talk about a possible default on Hungarian sovereign debt "isn't an exaggeration." With only 15 minutes of trading left before the end of NYSE trading and the VIX back up to 36, I decided to get short volatility.

The Setup and Entry

I selected a bear call spread (see *Expiring Monthly*, April 2010, for an introductory treatment of this strategy in *Options 102: Selling Vertical Spreads*) as my strategy largely because I wanted a defined risk position, with positive theta (time decay working in my favor.) I deliberated briefly over whether to trade June or July options. While June options only had 7 trading days left (June 16 expiration) and July options had 31 trading days remaining

(July 21 expiration), I selected the June options not because I thought Europe, Israel and BP would be able to solve all their problems in a week and a half, but because I wanted to choose options which would expire before this issue went to press.

In terms of strike selection, I was looking to enter this trade when the S&P 500 index was at about 1064, the VIX was swinging wildly in the upper 35s

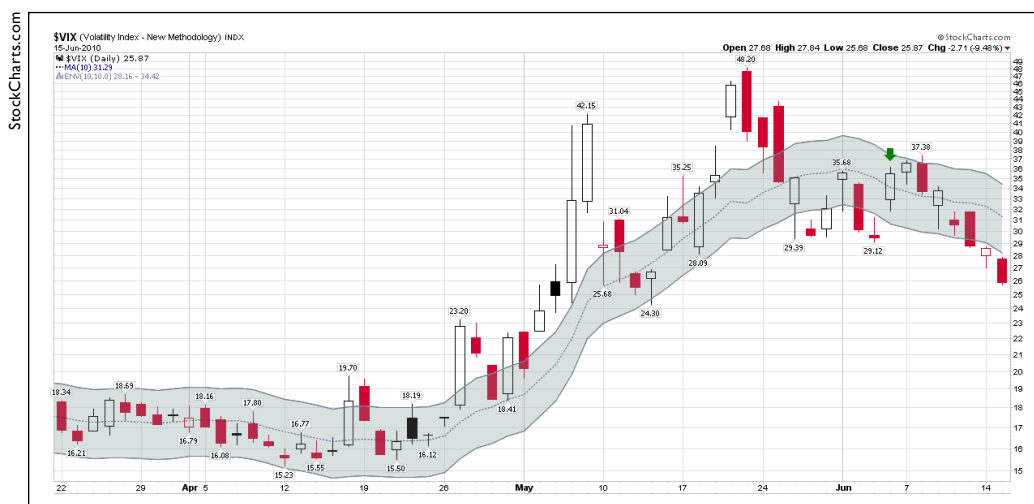


Figure 1

and the front month VIX June futures (VX M0) were in the mid 33s. My target was a VIX below 30 at the time of expiration, so I entered a limit order to sell 10 VIX June 30 calls and buy 10 VIX June 35 calls as insurance, in the event that the VIX decided to spike up again. After lowering my limit price twice amidst increasingly wild market gyrations (the SPX finished down 3.4% on the day), I finally gave in and elected to use a market order, which filled with a price of 4.80 for the short 10 June 30 calls and 2.80 for the long 10 June 35 calls. With 10 contracts, the \$2.00 differential netted \$2,000 in premium, making my maximum gain \$2,000 if all the options expired worthless and a maximum loss of \$3,000 if the VIX were to settle at 35 or higher. At the time of the trade, both the 10-day and 20-day SPX historical volatility was at about 33. Knowing that the VIX has a history of struggling to stay over 30 for an extended period, and even though the VIX closed at 35.48 on June 4, I still felt this was a high probability trade, with a high expectation (expected value).

I generally manage my VIX options trades by following three technical indicators:

1. SPX support and resistance levels
2. VIX front month futures
3. Spot VIX

Given the anxiety over the situation in Europe, I am also looking closely at the euro and credit default swaps for the likes of Spain and Italy as a barometer for investor sentiment about the future of the European Union. Looking at the recent history of the SPX, I decided that I would exit the trade if the SPX closed below recent support at 1040. Similarly, I decided that I would cut my losses should the VIX close above 40 and signal a possible extended volatility spike. (Figure 2)

Finally, as I expected to take profits when the position realized 90% of the potential profit (\$1800), I established a position-specific stop loss in the event the position shows a loss of 50% of my target profit (\$900) at the end of any trading session.

Position Management

Monday, June 7—As is often the case with a short volatility position initiated in the midst of a sharp Friday afternoon selloff, things got worse today, with stocks continuing to sell off and volatility rising, even though the geopolitical landscape improved. Over the weekend, the crisis atmosphere that had prevailed in Hungary, Israel and the Korean peninsula started to recede. Notably, the Hungarian government reversed its position on the possibility of defaulting on its sovereign debt, making Friday's comments look like a case of political posturing. Still, the VIX managed to rise another 3.1% to close at 36.57 and the position was now down \$700. (Figure 3)

Tuesday, June 8—Stocks took a dramatic turn for the worse, with the SPX falling as low as 1042 and the VIX

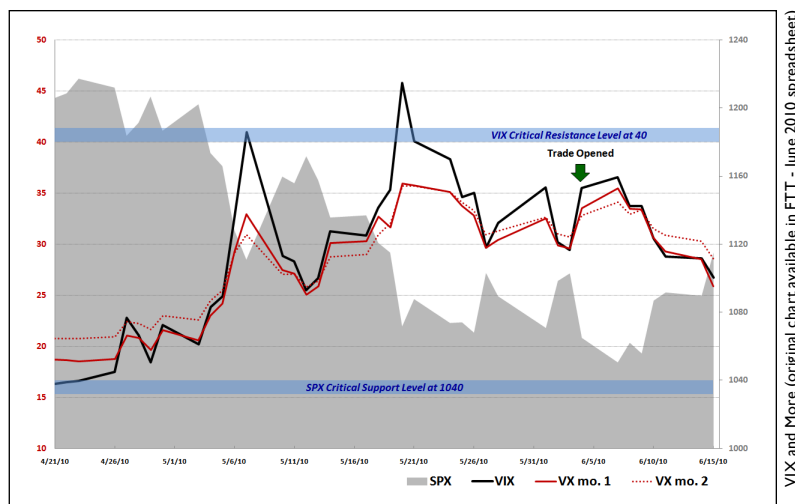


Figure 2

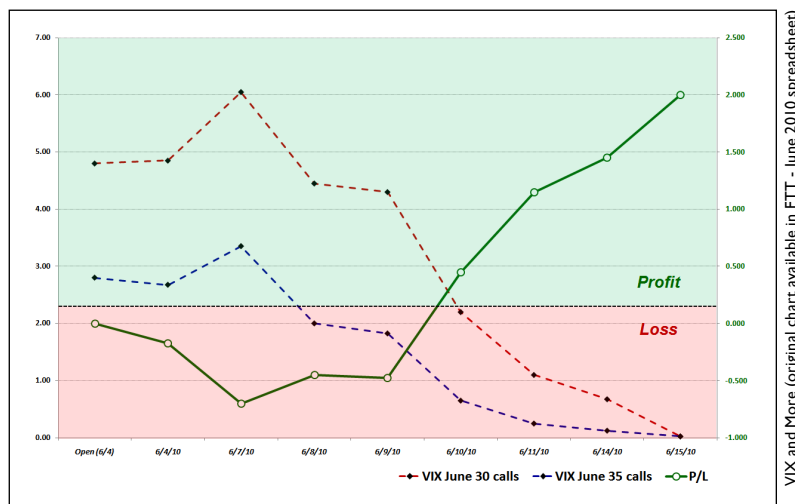


Figure 3

reaching a peak of 37.38. At one point the June VIX futures traded as high as 35.70, as Fitch characterized the United Kingdom's fiscal challenge as "formidable." With the SPX at 1042, I fully expected 1040 to be breached and stocks move sharply lower. Just as my gut was getting ready to take the loss, buyers stepped in. In fact, stocks managed to put together a strong rally during the last hour of trading, with the SPX finishing up 1.1% on the day and the VIX falling 7.8% to 33.70. The drop in the VIX reduced my cumulative loss in the position by \$250 to \$450.

Wednesday, June 9—An early rally in stocks gave way to selling later in the session. Even though the SPX fell 0.6%, the VIX gain was limited to 0.03 points (0.1%), suggesting that expectations for exceptionally high volatility were not being met. While the position loss widened to \$475, the trade is starting to look promising. My main concern is that the options now only have a week until expiration.

Thursday, June 10—The euro gapped higher and helped to propel the SPX to a 3.0% gain. Volatility responded by falling hard, with the VIX down 3.16 (-9.5%) to 30.57. The VIX June futures followed the VIX down, closing at 30.65. Looking at the VIX options, both the June 30 and 35 calls fell sharply, with the overall position reversing from a \$475 loss to a \$450 gain.

Friday, June 11—The day began with a disappointing retail sales report, but stocks shrugged off the news and rallied anyway, in a surprising show of strength. The VIX responded by falling 1.78 points (5.6%) to 28.79. The VIX June futures followed suit, dropping to 29.30. With the price of the short June 30 calls cut in half for the second day in a row, the profitability of the position jumped to \$1150. As the weekend approached, I contemplated taking my profits and exiting the position, but with the short leg now out of the money, bullish momentum back in stocks and the markets having shown enough strength to rally in spite of bad economic news, I decided I would hold the position at least until Monday.

Monday, June 14—Stocks meandered sideways, shrugging off a Moody's downgrade of Greece's sovereign debt and

buoyed by the continued rally in the euro. The VIX fell another 0.21 to 28.58 and the VIX June futures fell 0.75 to 28.55. The trade is now showing a profit of \$1450, up \$300 from Friday, and now it is going to take a 5% rally in the VIX to keep both legs from expiring worthless and netting a maximum profit of \$2000. Still, the plan is to exit when the \$1800 profit threshold is reached, rather than trying to squeeze every last nickel out of the position.

Tuesday, June 15—Today was the last trading day in the VIX June options, which settle with a special opening quotation at tomorrow's open. The plan had been to take my profits by closing out the position at the end of the day, but macroeconomic and technical factors caused me to rethink my strategy. Specifically, the SPX gained 2.35% and breezed 7 points past prior technical resistance at the 200-day moving average level, following successful debt offerings in both Spain and Ireland. The rally dropped the VIX another 1.88 points (6.2%) to 26.70 and pushed the June VIX futures down 2.65 points (9.2%) to 25.90. Now it will take a 12.4% overnight gap in the VIX to put the VIX June 30 options into the money. While the position has already achieved maximum profitability of \$2000, I am calculating that the probability-weighted risk of a 12.4% gap, which happens about once per year (0.69% of all trading days), is less than the commission required to close out the position. For that reason, I am holding the position overnight in the expectation that all options will expire worthless (see *Figure 4* for a TradeMonster snapshot of the position at the close of the trading day).

Epilogue and Takeaways

As expected, the large gap up did not materialize and the VIX options settlement price was down another 0.59 to 26.11.

Some concluding thoughts:

- Anyone who trades VIX options must be aware of their unique expiration cycle: they expire with a special opening quotation on Wednesday, 30 days prior to the next month's SPX expiration, with Tuesday being the last trading day.



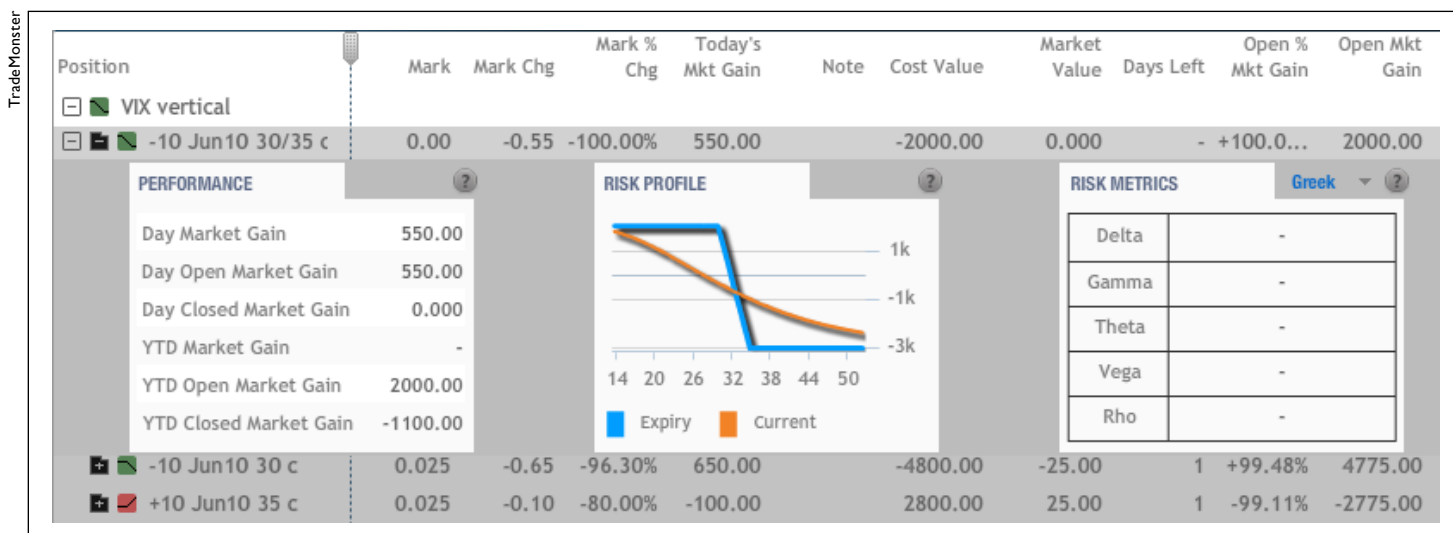


Figure 4 – Trade Monster Position Summary, 06/15/10

- Even if you are exclusively a technical trader, when trading the VIX it is important to keep abreast of key geopolitical and macroeconomic events that may strongly influence investor anxiety.
- Many traders manage their options trades entirely by focusing on the options themselves and the options Greeks. When it comes to VIX options trades, I prefer to focus more of my attention on the relevant underlying securities (primarily VIX futures, but also the spot VIX as expiration approaches.)
- I came very close to exiting this trade before it hit my stop loss position. When a trade is not working, there is no rule that says you have to wait until your exit triggers are hit to exit the position.
- I am one of those aggressive traders who is comfortable holding positions right up until expiration. In this example, however, July VIX options would probably have been a better choice, as they would have given the trade a much longer time frame to work. Volatility mean reversion does not always happen as quickly as it did here.
- One of my favorite rules is to make sure I do not add to a losing position. I occasionally make an exception in the case of volatility mean reversion trades. I like to scale in when VIX spikes trigger periods of extended volatility and subsequent VIX spikes. As the SPX was approaching 1040, for instance, I was tempted to open a similar bear call spread with VIX July options.

Expiring Monthly Interview with thinkorswim Founder, Tom Sosnoff

Mark Sebastian

Normally, in the introduction I write about how I met the individual and what it was like to sit down with him. In this case, it was at a conference and Tom is really great. I thought it more interesting that he and I went through some discussion on the market that turned out to be true and yet has become dated (the interview was in late April). While the (correct) market beliefs are stale, the reason he gave for those beliefs were interesting enough that I feel compelled to include them.

Expiring Monthly: How did you get into trading in the first place, back in 1980 when you first got onto the floor?

Tom Sosnoff: I got hired right out of college by Drexel Burnham into a junior training program. I met some guys there who were into technical analysis. They didn't want to be brokers or money managers they wanted to trade a system. I was single so they asked, If I wanted to move to Chicago and execute

orders. I wasn't sure what it all meant but I said, "Sure why not?" I loaded up the car and drove to Chicago and have stayed here ever since. They did not make it in the business, losing all their money within probably 3 months, and I managed to survive. From there I built a prop firm.

EM: So after they went bust, what happened?

TS: I scrounged around until I was able to find someone willing to take a shot on me. Somebody was willing to put up \$100,000. It was a nice deal for them. I learned how to make money and I bought them out one year later. Then I started backing traders through my prop firm: Sosnoff-Sheridan Group. It was I and Scott Sheridan, the two people who started thinkorswim.

EM: So then thinkorswim starts in 1999. How?



TS: I didn't know what thinkorswim would be but we had a bunch of ideas. We hired some very good developers, with a lot of domain skill and some very good talent. We morphed it into, I think, one of the best online brokerage firms in the country.

EM: One of the things I always like to do, especially with guys who have been around for both of the major crashes in the last 30 years ('87 and '08) is ask this question: 1987 allegedly brought us skew; if it didn't bring us skew, it made the world aware that skew existed. You may choose either argument. What lesson do you think is going to come out of the next couple of years, when we're looking back at 2008? What lesson came out of 1987?

TS: Ok. I'll tell you a brief story. It turns out that my specialty was



expiration trading. Don't ask me why. I probably should have been a futures trader rather than an options trader but I loved trading option expiration, and as you know OEX expires Friday afternoon. We're talking back in 1987. There was a ton of activity.

The unwinding of large baskets of stocks creates either very vicious buybacks or sell programs . . . most of the time buybacks. I was a very good expiration trader. For some reason I had a good feel for which way the cash was going to mark up at the close. I made most of my money trading expiration, so I never missed one.

The Friday before the crash, the market had its biggest down day that I had seen, like 100 points. Great trading day! We had a trip planned to go to Vegas that weekend. As soon as the market closed, we hopped a flight to Vegas. We closed the day a little bit short, not big, because we're not coming back from Vegas until Tuesday.

I remember like it was yesterday. About 15 guys were sitting out at the pool at Caesar's. We had gambled all weekend. It's Sunday afternoon and we didn't have a flight back until Monday night. One of the guys I'm sitting with turns to me and says: "I've got a really bad feeling about tomorrow." I replied: "I've got the same feeling." Our stomachs were churning. Friday had been the biggest down day and we were going to miss the following Monday!

So we run to the airport and get the last two seats, first class, because there is nothing else available. It was two or three thousand dollars . . . one way! The next day the market opens in the stratosphere. This is the morning of the crash. The DOW opens up huge, about 50 points.

It's a huge up opening and we came in short so we're thinking: "Great. We came all the way back here to get killed."

That was the opening. The rest of the day was the crash and I remember that people around me were crying. There were only 7 or 8 guys left in the pit at the end of the day. A lot of traders went to the clearing firms to get their money out, or see what was left because we thought Continental bank was going under. It was just kind of crazy. I traded until the end of the day. I made a little money, but nothing significant. I had no idea what was going on. Nobody did. Remember there was no real information and there was no way to update our positions.

I think 2008 was actually much less difficult to trade. We're not going to call it the same kind of crash but it was just as vicious. We had a volatility explosion at the end of 2008 but the market didn't bottom until March 2009. The listed markets were very efficient throughout the entire move. So from a trader perspective it was much easier to trade in 2008, but the velocity of the moves made it almost impossible for market making.

EM: *Could you have ever imagined a scenario in which the S&P 500 would be down 100 points and up 100 points in 2 days?*

TS: No. But I do believe that once every 20 to 25 years events like 2008 happen. I think the 1987 crash was far more shocking because of marketplace inefficiency, technological inefficiency, exchange inefficiency and also liquidity issues. Trading was such a small concentrated group. 2008 was a meltdown, not a crash. In a meltdown, there is more liquidity. There was a ton of liquidity in 2008. There was a ton of efficiency. It was just an impossible trade environment.

EM: *I knew a guy who used to think volatility went in waves. There's periods of time when we're in an uptick where vol is increasing, like in 1998–2001, and then where its falling during 2001. From 2001–2006 vol really fell. Our first inkling was probably in 2007 when the 'hard to borrow' scenario really heat up. What are your thoughts on that?*

TS: I think we made the situation worse trying to mess with free markets. Regulators got a little too close to messing with the efficiency of the markets when they put short term measures in place to protect against short selling. One of the nice things about short selling, by definition, is that short sellers also create buying as they cover positions. I don't buy the idea that short sellers manipulated this market to the downside. This was real selling fueled



by five years of contracted volatility and a market that essentially hadn't had a seller. This was an overdone market. The sell-off got overdone due to factors that were so obvious in hindsight, but people didn't care.

EM: Tell us where you think the market is, generally.

TS: I think the market is fully priced. I've used the terms rich and frothy, but I think fully priced best defines it. It's not healthy for a market to have a 15-month rally without any kind of pullback. I think that for traders—and when I say traders I don't care about professional traders, I care about self-directed retail traders, the people that read your magazine, the people that we are—the best marketplace for us is cyclical 2-way markets, with some kind of range bound volatility, but higher than it is currently. Also a clean distribution of volume. That means right now we have a very concentrated five to 10 stock concentration of volume. 25% of the daily volume is in the five or 10 stocks. I think we need a better distribution of volume for a more efficient marketplace. So you get a better distribution of volume and decent liquidity on a two-sided range bound or cyclical market and a little bit higher volatility, a little bit higher interest rates, you have a very good trade environment. You'll have support levels that work. You'll have resistance levels that work and you'll have a decent 2-sided trade.

EM: How do you feel about technical analysis?

TS: I've never been a technician. I've built 2 or 3 trading packages, so I know why customers use technical analysis. It's easier to see a graphical pattern. It's also easier to make assumptions and logical arguments out of different studies and patterns.

Do I have a lot of friends who are technicians? Yes I do and I love building technical software. I like building charting software and execution software, and combining the two. I think it's interesting. Whatever gets you to your directional bias is critical for a trader's success. So whether it's technical analysis, fundamental analysis, cyclical analysis, lunar analysis, I don't care what it is. Ultimately wealth is created through the proper selection and application of your trading strategy. Nobody who uses the wrong strategy makes money, period.

EM: Let's change direction here a little bit. Of traders who are really active, thinkorswim dominates the market. What do you think got TOS into that position?

TS: Our domain skill: We built thinkorswim to accommodate multiple products because we don't believe you can build wealth concentrating on trading stocks, forex, or futures. We think that good traders are successful because they use stock options, futures, and forex. The nice thing is to have those different products at your fingertips. I don't believe it's easy to make money without using options because they

have premium decay that's unavailable in any other product. The nice thing about thinkorswim is that a trader can, from a single click or single page, monitor, analyze, and execute different products. I think we were first to market, conceptually, with that kind of GUI (graphical user interface).

EM: Being the top dog, how do you stay there? What does thinkorswim have planned to keep you in that position?

TS: I think we work as hard as anybody in this business and for the last 10 years we've basically worked 16–18 hours a day to try to stay ahead. We've committed a ton of capital towards technology. Every time we make a dollar we commit X amount back to technology, and it's paid off for us. This is a tech firm as much as it is anything else.

EM: thinkorswim is now owned by TD Ameritrade. How has that integration gone?

TS: The integration is pretty much done. TD Ameritrade offers thinkorswim to their customers and our existing customers still have their TOS platform. The thinkorswim technology is a big part of TD Ameritrade's whole technology bundle, and the majority of their active traders are on TOS technology.

EM: Now that you have deep pockets behind you, are there any big plans for thinkorswim on the horizon?



TS: We just launched thinkon-demand, which is market replay. Prodigious, this has been a five-year project. It is a robotic trade engine. Our big plans for 2010 haven't been announced yet. We have two big launches planned, and I will say they are very interactive and very cool. But we don't want to make a public announcement yet.

EM: *What do you see as the environment for the retail trader over the next few years?*

TS: The environment for the retail trader is going to be a lot better. More and more firms are adopting portfolio margin which gives the retail investor a lot more leverage. More and more firms are trying to copy the thinkorswim model . . . which they should, introducing all different product mixes. At TD Ameritrade we're actually introducing futures and forex to 5 million customers. That's kind of scary, considering there's only half a million customers that trade futures right now retail-wise. When you start to look at the marketplace, you think: "Wow, we're really going to open it up to a lot of customers and it's going to be very interesting, a very different interesting product mix." I think the retail customer is in a good position, as long as the markets stay one tick wide, and almost all products do.

EM: *How do you feel about penny pricing?*

TS: Traders have penny pricing in options and stocks. One tick wide futures markets and one and two tick wide Forex markets. If

traders look at it that way, the retail customer is playing on a very level playing field. If they get their strategies down, they don't have any of the expenses that professionals have. They don't have the capital either, but they don't have the expenses. It's pretty level. So then it becomes an education thing.

Ultimately what are we talking about? We're talking about strategy, and which customers can afford to spend the time to attain different educational levels. I don't think you can be successful without a reasonable understanding of the product mix and strategies.

EM: *Do you think the one tick wide environment can really stay?*

TS: It is going to stay. Where is it going to go? We stayed tight during the meltdown. The markets are going to be one tick wide forever. This is the one industry globally that one can play in without any disadvantage to the counterparty.

EM: *What do you think as far as the exchanges go? What do you think of the newer models that are coming out, the Maker/Taker model for the professional trader? What do you think is the future of the professional trader?*

TS: The Maker/Taker model is in trouble and I'll tell you why. By definition the model is ok. The problem with the model is that it doesn't account for what it takes to bring in a new customer. Basically what the exchanges are asking us to do as a brokerage firm is to market to

bring in customers, bring in assets and customers, pay for all the technology, educate the customers, and then deliver order flow and pay for it. They are missing a piece.

What I always tell the exchanges that have the Maker/Taker model: "Unless you want to write me a check for \$10 million to pay for marketing for this next quarter, I'm not going to send any order flow."

I'm not in the business of building value for the exchanges. If it happens as a by-product of my work, or of the work of our company, then that's fine. I don't feel it's part of my job description to build value for various exchanges.

EM: *Off the top of my head, I can name more option exchanges than legitimate retail option brokers.*

TS: It's about equal. There's an even number of brokers and exchanges. That part of it's scary. They're all fighting for order flow and I'm nervous that everybody is getting too greedy. What's happening on the retail level is commission prices are contracting. As that happens, exchanges are passing on regulatory fees and bumping up Maker/Taker models and reducing payment for order flow. When all of those together happen, it's the customer who is going to end up paying for it. I don't think that's fair.

I don't think that the people who drive the order flow should be expected to pay for everything



I think the exchanges have an obligation to:

- 1) Improve their technology
- 2) Improve their product mix
- 3) Contribute to the marketing that it takes to bring in customers. Bringing in customers is not a bad thing, it's a good thing.

EM: *If you had to generalize, what makes the successful retail trader and what are the major flaws of the guys who think they they're going to make money, and end up losing half of their account in a couple of months?*

TS: One of the biggest mistakes retail customers make is that they trade too big. They take so much more risk than professionals. You'd be shocked. Retail customers need to trade smaller.

A lot of it is that they don't understand risk. They think that buying

100 options for a dollar, they're not risking the full \$10,000. They don't realize the probability of success for the trade may be 20% so they really are risking \$8,000 of \$10,000 for just a few days. Retail customers, by definition, take too much risk.

They also take too much risk relative to their knowledge base. There's a relationship between risk and your ability to apply different strategies. Retail customers need to crawl before they walk. It's pretty much common sense. I don't think there is much to it.

Activity breeds success, not the other way around. The industry is structured in such a way that you almost say: the less you trade the better off you are. That's not the way it is. It's like golf. If you play once a year, you're going to stink. If you play every day, you get better.

EM: *Efficient use of capital is a big problem for retail traders. One of the things I really like about thinkorswim is the no commission for buying back the nickel option.*

TS: We did that about 6 or 7 years ago. We did it for two reasons. Once, we did it as risk mitigation because a lot of people don't realize that when stuff gets to a nickel, the only reason they don't buy it back was because they had to pay commissions. They didn't realize that we're happy to let customers buy back those options, taking risk off the table. It also frees up capital to make another trade. For us, that's the real thing. It's risk mitigation and freeing up capital so you can trade more. And I think it shows a lot of goodwill.

EM: *Thank you.*



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The Option Trader Handbook

Book Review

Mark D Wolfinger

The Option Trader Handbook: Strategies and Trade Adjustments; 2nd edition, George M. Jabbour and Philip H. Budwick, John Wiley & Sons, Hoboken, NJ, 2010; \$85

This set of ideas represents the main theme of the book:

- Understand the trade:
 - Know the rationale for the trade;
 - Know the maximum loss you will accept;
 - Know the profit objective;
- In other words, manage the trade. That means: manage risk.

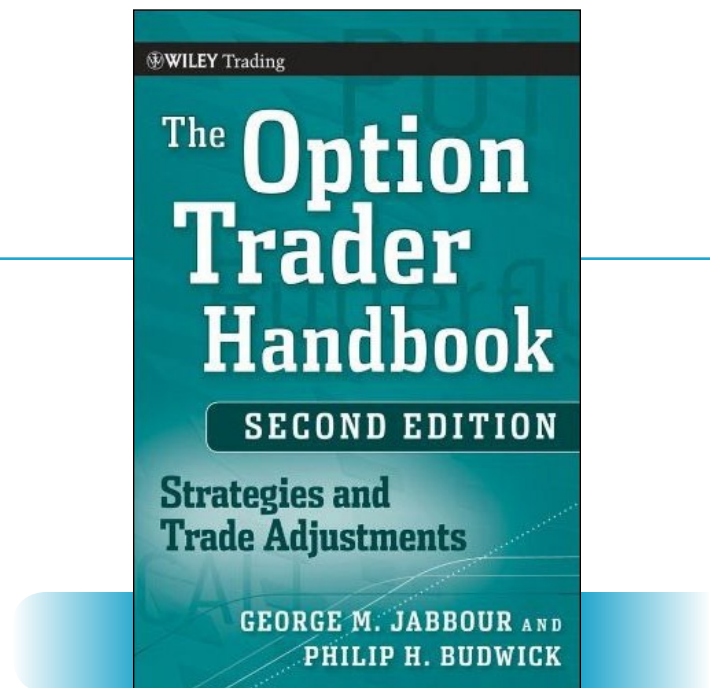
Jabbour and Budwick do a good job of being certain the reader gets their one major point—right from the beginning of the book—managing risk and managing the trade represent the key skills required to becoming a successful trader. These are not the only essential skills, but they believe these represent “the difference between a good trader and a bad trader.”

“You are a risk manager first, and an investor or trader second.” I agree and emphasize that point repeatedly.

It's a Business

Helping the reader understand that trading is a business that must be run efficiently, they draw good parallels between sound business practice and successful trading. One simple example is to fire under-performing employees. Translation: when a position is not performing as expected, ‘fire it’ before it costs you more money.

They stress the importance of having a trading plan. “Make money” is not a plan. A plan includes knowing when you will exit a trade. Hopefully, exits will involve taking a profit, but the truth is that it's probably more important to recognize when to take a loss. That's the basis of sound



trade management. They ask reasonable questions: if you don't know what you can earn, or how much profit to seek, how can you trade? How can you have an exit plan? Jabbour and Budwick draw this conclusion: without that plan, you are not using proper risk management.

If you are an undisciplined trader, then the idea of using a trading plan is going to help your profitability. Most writers, including Jabbour and Budwick, tell you that you must follow that plan. To me that's nonsense. Plans must be flexible—but only when there is a good reason. The undisciplined trader can always find an excuse to abandon the plan. That is not being flexible, it's being dumb. It's not easy to become disciplined, and it does not happen overnight. This book is filled with sound advice that should *encourage* you to make a *serious* attempt to follow a well-reasoned plan.

There is so much genuinely excellent advice in the early part of this book that I want to tell all traders to read and re-read it until the truth of the author's ideas sink in. For example: Losses are part of the trading business. No matter how successful you become, there will always be losses. Thus, practicing intelligent trade and risk management is essential to prevent those inevitable losses from becoming large enough to hurt you and your business.



What about the Strategies?

I agree with the advice, but this is supposed to be a strategy book. The purpose of the book is to give you an overview of various possible trade adjustments—helping you plan which specific adjustment may be required to reduce the risk of an existing position. They begin by offering guidance to investors who buy options: Choose an option with a lifetime of at least two months, offsetting some of the issues of time decay. Choose an at the money (ATM) option because it is a good tradeoff between the high price and small time decay of ITM options, and the high percentage time decay and low price of OTM options.

Another recommendation for option sellers: “Since we know options decay fastest in the last 30 days to expiration, we should always try to sell options with 30 days, or less, to expiration to take advantage of time decay.” This is one recommendation I cannot allow to pass without a comment. That rapid time decay is packaged with high negative gamma, and a sudden shift in the stock prices is far more risky when selling short-term options. This recommendation is fine for many, but not all options sellers.

The authors coined the term ‘VDT program’ (vega, delta, theta) to describe a method of analyzing the suitability of certain options for a chosen strategy. V: be aware of implied volatility and don’t overpay for options; D: choose an appropriate delta; and T: be aware of theta and its effect on the value of an option. For example, if you own 7 positions with long vega, and 3 with short vega, you may want to manage vega risk. They don’t suggest adjusting the total to zero. Instead, the idea is to close a position or two, and/or add a new position that profits from falling vega. This is a *realistic approach* for the retail investor.

These guys want you to think for yourselves. They are not providing formulas to be memorized. They present principles, describe how they work and let you choose an appropriate strategy when making an adjustment. More books should follow that pattern because no author can understand your personal trading style and investment goals.

Learning about possible adjustments gives you a deeper understanding of how options work and the relationship between different strategies. This is no small thing. The better you understand the relationships between different strategies, the better you can plan trades and adjustments. Often an adjustment converts a trade from one strategy to another. All adjustments are made with the sole purpose of locking in profits, managing risk, and reducing losses. Instead of theoretical discussions, this book is all about helping to make money, and includes the warning: just because you can adjust a position doesn’t mean you should. Some positions are best closed.

Here’s an example of sound advice that not available everywhere:

‘Here’s a perfect example of how options can sometimes increase your profits without adding additional risk.’

Example: buy 100 shares at 100. Also buy one call, strike 100; sell 2 calls strike 105. Credit 50 cents. The cash credit adds no risk to downside (but it still leaves considerable downside risk). The resulting position is now a covered call plus a long call spread. There is no additional upside risk, but it does limit profits—as does the more traditional covered call.

This is a nice play for the bullish covered call writer, and may encourage some who eschew covered call writing to reconsider. It affords less downside protection, but enables the trader to earn a larger profit if the stock moves higher. Jabbour and Budwick discuss trades that are equivalent, yet they never mention that fact. Perhaps they feel the idea of equivalency is too advanced for their readers.

I found a few statements that with which I disagree, but don’t want to quibble with this fine book. For example: put replacement involves buying in a short stock position and replacing it by buying a put option. In other words, buy stock and buy put. Protective calls involve buying a call when you are short stock. This is their commentary:

“Put replacement vs. protective call: Though both strategies have similar risk/reward profiles, the two



positions have different characteristics, and the choice between the two depends on your needs. The one main difference between the put replacement and the protective call strategy is that the put replacement strategy results in the closing of the short position, whereas the short position remains open in the protective call replacement. Because a short position has a margin requirement, it may come down to the decision of whether you prefer to keep the short position open.”

It’s true that put replacement reduces margin requirements. Buying stock and buying a put is equivalent to buying a call, as long as both options have the same strike and expiration, and the potential P & L are essentially the same.

Specific Adjustments

Much of the book is devoted to adjusting, or hedging a position when you own long stock. This is an excellent approach for investors who have experience trading stock but have little or no experience using options. These authors explain various ways to reduce risk, lock in profits, and exchange one type of hedge for another. Good stuff. The discussion continues with methods for

adjusting a short stock position and then moves on to adjusting option positions. Those include adjusting a long or short call and a long or short put position. Also included are adjustments for option spreads and combinations (a combination is a specific type of spread, involving both calls and puts). This hits home because I am always looking for ideas on how to adjust spread positions gone awry. The good news is that not all adjustments are designed to fix problems. Staying true to their theme, some describe how to lock in profits.

Summary

The discussion is thorough and can be beneficial to the reader who has a basic understanding of options but who needs additional trading ideas. It’s too advanced for the true options rookies, but serves its chosen audience well. There is one humorous typo. They refer to an option as a wasted asset. I would certainly hope that options are not wasted in the sense that your money is guaranteed to disappear. They term they meant to use is “wasting asset.”

I highly recommend this book.



Back Page

Looking Back at the Flash Crash

Adam Warner

As the Flash Crash drops down the Memory Hole, replaced by an actual bear market (well, at least in the intermediate term) I can't help but think we will never find out how in the world the market dropped and popped like that. Nor will we get a handle on who made or lost a fortune in 5 minutes that day.

One certainty remains. Some day, some exchange and the SEC will approve some new technology without fully understanding what happens when something goes awry.

In a small way, we once had an eerily similar day on the AMEX, back in the late '90s.

At the time, the exchanges had singly listed options. So if you had a busy name, you had the entire order flow in that busy name. On the AMEX, we had Intel all to ourselves. As the PC age morphed to the internet age, Intel sat at the crossroads of everything. The order flow was tremendous, by the standards of the day. And spreads were wide enough that seemingly half the AMEX floor made markets there.

The big trading innovation at the time? Something called "Auto-Ex." It was simple. You signed on in the morning on all the names where you made markets. If an order came through the system that was "good" (i.e., bid at least as high as the posted offer on a given series, or offered for sale at least as low as the bid) then it was automatically executed. Hence the name Auto-Ex. The customer initiating the order got one side of the trade, the other went to either the specialist or a market maker in the crowd, on a rotating basis. In order to keep us from getting too big at any one time, we could only buy or sell 10 contracts at once. If the other side of the order was larger, the remainder of the order would simply move on to whomever sat next on the auto-ex wheel.

Now in 1996 or so, we did not have handheld computers. Or really anything other than a pad and pencil and our printed "sheets." So you found out if you did an auto-ex

trade by a system that sounds like it came from the 1890's. Little pink tickets would print out in the back of the trading post, and an AMEX employee would take the ticket and walk it out to you. At best case, this all took a couple minutes. That sounds like a long time, but 99% of the time it mattered little. You couldn't do more than 10 contracts, and stocks were generally not so volatile. Besides, most trades tended to be winners. After all, you're buying as many as 10 contracts on a bid or selling as many as 10 on an offer, and that bid and offer were often $\frac{1}{4}$ or $\frac{3}{8}$ apart. You LOVED auto-ex.

Until one day it all went bad.

That would be some earnings day in Intel. The stock made a huge gap move down, then proceeded to rally. And rally some more. And some more. The options volume went through the roof. In fact it got so busy, the auto-ex reports couldn't print fast enough. In fact they got backed up in the queue for as long as an hour. Unfortunately, the actual auto-ex trades kept happening. And no one realized it at first. Eventually trades started coming off the system, all of them calls sales by the market makers, all of them now WAY cheaper than the calls were trading when they found out.

In other words, an hour after the fact, the exchange essentially doled out hundreds upon hundreds of pink tickets to the crowd, virtually all of them involving a call sale that was a disaster. As a friend told me, no matter how many small wins they got off auto ex before, and no matter how many more they got after, they would never earn back as much as they threw away that one day.

And the recourse? Not much. The system got better over time, we eventually all did get handhelds, and you could see auto-ex trade as they happened. But it wasn't much solace to anyone handed a bunch of losses for the simple reason that the technology in place at the time was ill-suited to handle an unusual event.

