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EXPIRING MONTHLY

THE OPTION TRADERS JOURNAL

FEAR & LOATHING IN OCTOBER

AN INTERVIEW WITH
Jay Caauwe

Seasonal Volatility in Commodity Options

VIX Futures: Putting Ideas into Action

EXPIRING MONTHLY
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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 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 2011.

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 1 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

Students of market cycles know that September is historically the most bearish month and that October has earned its reputation as the most volatile month, but for the last two expiration cycles, the markets have appeared to be determined to defy conventional wisdom.

In this month's edition of *Expiring Monthly*, the emphasis is on seasonal cycles and volatility products. Jared Woodard reviews seasonal volatility in the commodity markets and I author the month's feature article, which examines October seasonality from a statistical and behavioral finance perspective. In a related piece, this month's Wolf Against the World feature finds Mark Wolfinger and Tyler Craig debating the merits of iron condor traders buying portfolio insurance in October, when seasonal risk appears to be highest.

On the volatility side, Jared Woodard has a sit-down interview with Jay Caauwe of the CBOE and CBOE Futures Exchange (CFE) that covers a wide range of issues in the volatility products space, including one of my favorite topics, VIX futures. Not coincidentally, this issue also happens to include the third and final installment in my VIX futures series, in which I address how to transition from an analytical framework for VIX futures to various VIX options trading strategies. Adam Warner also tackles some tangential ideas in an article that delves into implied correlation, volatility and high frequency trading.

In an article that combines theory and practice, Mark Sebastian takes a critical look at broker options pricing models in "Modeling the Model" and explains how sometimes the models fail to properly account for the impact of changing implied volatility options prices.

In his recurring column for new options traders, Mark Wolfinger explains why experienced traders are partial to taking losses—and what the implications are for less experienced traders.

Last month in Follow That Trade, Mark Sebastian attempted some gamma scalping with Potash Corp. in the middle of a bidding war for control of the company. This month, he is back to discuss the measures he took to try to salvage a trade that had gone awry.

Reflecting on his days in the options pit, Mark Wolfinger recounts how coincidences can be expensive in the trading pit and off of the floor.

As usual, the EM team is back to answer reader questions in Ask the Xperts.

Finally, Mark Wolfinger shares his thoughts about death squads, insurance and the health care system on the back page.

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

Have a good expiration cycle,

Bill Luby
Contributing Editor

Ask the Xperts

The Expiring Monthly Editors

Mark,

What is the probability of receiving an exercise notice prior to expiration date? Are there scenarios where being assigned prior to expiration are likely to occur?

Thanks,
JM

Hello JM,

The probability of receiving an exercise on a call option—prior to expiration—should be near zero. There is no logical reason why any investor/trader would prefer to own stock rather than an option because the risk of loss in a sliding market is much higher for the stockholder.

However, there is one significant exception. When the stock pays a dividend, sometimes it pays for the option owner to exercise the call option one day before the stock goes ex-dividend. Thus, when the call is deep ITM and the dividend is large, and especially if expiration is nigh, the probability is VERY high (>99%) that the call will be exercised for the dividend.

That allows the exerciser to own stock and collect the dividend. How can you know when exercising is the best decision (and thus, it is likely you will received that assignment notice)? Sometimes it's difficult.

- If the stock tumbles, that investor who now owns stock instead of a call faces the possibility of a large loss. Thus, the risk of owning stock must be weighed against collecting the dividend
- When the dividend is a few pennies, it seldom pays to exercise.
- When interest rates were higher, an important consideration was the cost to carry: the cash than was tied up in the position and thus, not earning interest. The interest 'not earned' must be more than the dividend, or else the person who exercises loses money.
- On a simpler basis, an option is 'an exercise for the dividend' when its delta is 100 (not 99) and the bid for the option is NOT above parity. That means there is zero time premium in the option. As an example, if the Oct 50 call is 8.20 bid when the stock is 58.25, there is no time premium. If the dividend is large enough, the option owner would exercise one day prior to ex-dividend date.

Another possibility: A market maker may have a need to own stock so it can be sold (stock cannot be borrowed). That MM would exercise a very deep ITM call if it's near expiration—just to acquire long stock. This does not happen often enough to be of concern to you.

Deep ITM puts are assigned more frequently than calls. If the investor owns both puts AND stock, he/she must pay cash to carry that position. The higher the interest rate, the more likely that investor will exercise to eliminate the position.

Bottom line: The probability of being assigned an early exercise notice is *very* low when there is no ex-dividend date prior to expiration.

—Mark W.

Mark,

You have written about how option traders decay time ahead of the weekend. If this is true, then is there a way to game the system by buying premium on Friday evening?

—Mike

Mike,

I wish it was that easy, but sadly, it is not. In the end, *most* weekend time premium is decayed out of the market by the end of the day on Friday, but not all. As there is on any day, there is always a decent amount of overnight

risk priced into options. On a Friday, this overnight risk does not get priced out of the options until the open of business on Monday. Thus, even if one bought an option at the end of the day on a Friday, the option would still be worth less the following Monday. This falls into that "there is no such thing as a free lunch" category. Remember, if you think you've found a way to game the system, somebody probably thought of it years ago and probably either arbitraged it away or discovered it didn't work.

—Mark S.

I haven't previously traded SPY options before, as I normally use SPX. I have noticed that there is occasionally some slight disconnect in the pricing of SPY vs. SPX, though. If some author or trader publishes a trade on SPY, and I wanted to translate the trade into SPX options, should I just assume they are at parity or would you recommend making a correction for the differential? For example, instead of buying an SPY November 113 call, should I just buy an SPX November 1130 call?

—R.H.

R.H.,

Yes, I think it's best to trade as though they are at parity. Since any non-trivial difference between SPY and SPX would be arbitraged away very quickly, there's little to worry about with respect to the underlying assets/indexes themselves. As far as option positions are concerned, the best thing to do if your goal is to execute a particular SPY trade using SPX options is to confirm that the option Greeks of the SPX contracts you're considering match the values of the SPY options. Besides the larger product size—which can be a blessing for traders managing larger accounts—another factor in favor of SPX and Emini S&P futures options is that the greater number of strike prices allows for more precision when constructing option spreads.

—Jared

Trading Advice from a Different Perspective

Mark D Wolfinger

When venturing into a new business, the vast majority of people construct a business plan that guides them when it's time to make important decisions. Often they can learn from the experience of others by reading, asking questions, or hiring help.

When people begin investing, they often feel confident enough to proceed by themselves, despite lack of prior experience. They often read material produced by their brokers and option traders are given an important pamphlet (ok, it's electronic these days) to read. Perhaps they grab some books or search blogs. But for the most part, they are often content to begin trading first and try to learn as they go.

Lessons are learned the hard way—often by incurring unnecessary losses. In the spirit of minimizing those losses, let's discuss one common situation from a different perspective. I'll tell you upfront that most traders disagree with my approach to this situation, but I know that if you adopt it as part of your individual trading philosophy that you will do better over the longer term.

The principle is fairly simple: When you own a position, especially an options position for which the calendar plays a vital role, there will come a time when you know it's best to exit the trade.

Why exit? When expiration arrives, the options expire and the trade is over. You may want to make a trade to 'renew' the position for another month or two, but that's a separate decision. When expiration arrives, the current position goes away. Another reason for exiting is that the market has moved and suddenly your position is too risky too hold. That's true both for traders who own options and for those who sold them. The time remaining prior to expiration plays a big role in deciding whether to hold 'em or fold 'em.

Alternatively, traders often exit a trade to lock in a profit before it disappears.

Advice

Most traders are very willing to exit any position for which they have earned a profit. Those same traders are seldom willing to exit a trade when it has been a money-losing proposition. This style of trading feels as if it makes sense. Everyone likes to earn money and if you take a profit, then it must mean that you succeeded. Similarly, once a trader takes the loss, the position is closed, and the loss is a loss forever. Inexperienced traders don't like losses.

That last statement requires clarification. Experienced traders, and especially successful traders, love losses. They know when to take those losses as a method of preventing large losses. The willingness and ability to exit a trade when it is underwater is necessary for long-term success. Many traders lost their entire investment accounts because of a 'need' to break-even before exiting a trade. Think of it like this: The trader holds to earn 10 or 20 cents from a trade before being willing to exit. Part of the time, the position moves further against them, and the resulting loss is several dollars (per share). Sometimes they make that extra 20 cents, but sometimes they lose 20 times as much by refusing to exit. Traders who act according to this mantra:

Experienced traders, and especially successful traders, love losses.

'I cannot take a loss'—are not likely to succeed.

So here's the advice: when it comes to managing risk or when it's time to exit a trade, base that hold/fold decision on the position as it exists today. Look at that position. Do you love it? Are you tempted to buy more? If yes, then this is no time to exit the trade.

However, if you believe risk is too great or that the probability of making any money (from today forward) is very low, then there is no reason to own the position. Ask yourself: if I have a small profit or loss on this trade, how does that change the fact that this is a poor position, is no longer working, and is too risky to hold? Logic should tell you that it has no bearing on whether to own the trade. You know it's a bad position, so exit. It does not matter whether it's a loss. Surely you can find a better trade with an improved probability of earning a profit.

Your job as trader and risk manager is to make money in the future. You cannot change the past. If you do not believe your current holdings can do the job—or are too risky to take the chance—then your *job* is to exit now and make a better trade when you find it. There is no urgency in finding that new trade. EM

Modeling A Model

Mark Sebastian

As an option mentor, one of the hardest things to explain to someone is the greeks. Not because of the greeks themselves: most traders quickly get the concept of delta, vega, and theta pretty quickly, and with a little nudging gamma isn't so difficult either. Yet the greeks still confuse the heck out of almost every non-professional trader out there. Why? Because, while the concepts are easy, the application of those concepts can be very difficult. *The truth is that the greeks are not real.* They are a picture of how a trader's model (there are a lot models) will react to a given condition *ceterus paribus.*

The problem is that all other things are never equal. Price can change, time can pass, and interest rates can move up or down. While these factors can usually be handled by the average trader, it's when implied volatility is added to the mix that most traders drive over the edge of the cliff. The funny thing is that, in many ways, it isn't only the trader's fault that they mispriced implied volatility. It is often the platform that trader is using that is as much to blame as the trader himself. This is because most platforms adjust implied volatility uniformly across every strike. If the trader increases implied volatility by any amount, on just about any standard brokerage platform the 5 delta put will go up by that amount, as will the ATM call and the 30 delta call. This is a flawed way of manipulating implied volatility, because options along the skew curve are not tied together; they are only correlated.

Implied volatility movement across strikes is more like a wave, a swinging chain, or a cracking whip.

If implied volatility increases, generally speaking, all strikes will see some uptick in implied volatility—the puts, the calls and the straddles. However, these will be somewhat non-uniform. There are cases where downside OTM options will see their IV increase at a faster rate than ATM options. ATM options will see their implied volatility increase at a faster rate than upside OTM options. There are cases where the exact opposite of my last example happens. *IV movement is more like a wave, a swinging chain or a cracking whip.* The varying severity of movements can render a pricing model borderline useless if the trader doesn't have any understanding of this variability in the distribution of changes in implied volatility.

Here is an example of why this phenomenon is so important: suppose a trader puts on a bullish ratio back spread selling 1 call that is ATM and buying 2 OTM calls. While the model used in many platforms will allow the trader to clearly see that if the implied volatility comes in, this position will lose money, Many times it completely underestimates how severe a loss will be under a whole host of conditions. One common scenario where the model fails in the above trade is if the implied volatility falls and the underlying rallies.

1255 calls	MktPr	MIV	Trade	Ex.Pos	Delta
1025 puts	22.40	33.5%		-10	-40.2
1020 puts	20.50	33.6%			-37.4
1015 puts	19.00	34.3%			-34.8
1010 puts	17.50	34.9%			-32.3
1005 puts	15.90	34.9%			-29.9
1000 puts	15.10	36.0%		+10	-27.6

Figure 1

1255 calls	MktPr	MIV	Trade	Ex.Pos	Delta
1025 puts>	21.60	27.3%		-10	-49.9
1020 puts	18.50	26.4%			-46.1
1015 puts	16.70	27.1%			-42.5
1010 puts	15.40	28.0%			-38.9
1005 puts	13.80	28.4%			-35.6
1000 puts	12.20	28.7%		+10	-32.4

Figure 2

Let's suppose that the above happens: the underlying asset rallies and ATM IV falls by exactly the amount we were predicting. Does that mean that the model predicted our returns? Suppose our short call that was originally an ATM call is now slightly in the money. At its place on the curve, this option has a smaller decline in IV than the ATM and OTM options. Thus, the model under-predicted how much this option profited from being short delta and vega. Meanwhile, the two options that were originally OTM options become slightly less OTM options on the rally. At this place on the curve, these two options see their IVs decline more than the model predicted. These options gain less from delta and lose more from vega than the model originally predicted. The position as a whole gets smoked! If the trader had been able to visualize how the vols were going to move along the skew curve, the trader likely might have tried a different strategy, hedge differently, chosen different strikes, or "leaned into" the trade.

Here is a real world example of the model failing. Leading into the July employment report, implied volatility was reasonably high. The VIX was over 30 (for the last time since then) and downside skew was steep. On Jun 30th around 3:30 eastern time, a trader could have sold a July SPX 1025/1000 put spread at 7.20, with the SPX around 1035.

How did the trade perform after a dud of a non-farm payroll on July 2nd?

Notice that in the 1000 puts, MIV (market implied volatility) fell by almost 8 points, while the implied volatility in the 1025's fell just over 6 points. For two options that have pretty similar vegas (80 vs. 72 respectively), that two points is a huge difference, and results in the trader being down an extra $700 simply due to the curve not moving uniformly.

The above scenarios are not only possible—they are actually fairly common. There are many cases where the downside of the curve simply does not move the same way the ATM options do. This is a classic example of the model fooling the trader. It is also why traders—especially those using the antiquated models in the retail world—need to take the time to visualize and model the volatility curve moving non-uniformly. Traders using these models must understand how each part of the trade could move with IV going up or down. Basically, until the brokerage houses catch up to volatility, it is going to be up to the individual trader to 'model' the option pricing model. EM

Seasonal Volatility in Commodity Options

Jared Woodard

The seasonal behavior of commodity prices has been well-documented, but the literature is relatively sparse on the impact of seasonal volatility on the prices of commodity options. Back, Prokopczuk, and Rudolf (2010)[1] address this lacuna by testing two pricing models calibrated to be sensitive to the seasonality of volatility. They analyze the soybean and heating oil markets, and find that including the seasonality of volatility substantially improves the performance of option pricing models.

It is intuitive that the volatility of some commodities should be related to seasonal factors. The authors provide one example:

> A good example is provided by most agricultural markets, where the harvesting cycles determine the supply of goods. Shortly before the harvest, the price uncertainty is higher than after the harvest when crop yields are known to the market participants, resulting in a seasonal pattern in volatility in addition to the price level seasonality. (3)

Soybeans are one such supply-driven product—their seasonal patterns are determined by factors like the perishable nature of the product, changes in the weather, and harvesting cycles. Heating oil and other energy products are, by contrast, more vulnerable to changes in demand. By analyzing markets with such different seasonal pressures, the authors reduce the chances that the inclusion of seasonal volatility in an options pricing model will merely reflect idiosyncratic fundamental factors. Figures 1 and 2, from the paper, show the seasonality of soybean and heating oil futures prices and historical volatility, respectively, from roughly 1990–2006.[2]

It is hard to imagine a justification for trading commodity options without accounting for seasonal volatility.

Improved Pricing

Two models are developed to assess the value of seasonality as a pricing factor. The first model assumes a deterministic long-term equilibrium price and includes a factor for seasonal volatility; the second model keeps the seasonal volatility factor, but adds a second factor allowing for uncertainty about the long-term equilibrium price. The authors concede that other pricing models will include jumps, stochastic volatility, regime switching, etc., but exclude these considerations in order to focus on the impact of seasonal volatility alone.

The results are promising, both in- and out-of-sample. The consistency of the price improvement achieved by factoring in seasonal volatility is particularly notable:

> Incorporating seasonal volatility reduces the [pricing error] in every instance, i.e. for both markets, both models, in-sample and out-of-sample, for every maturity bracket, and for every moneyness category at a 1% significance level. […] The overall pricing errors of the one- and two-factor models are reduced by 10.26% and 12.47% for the soybean options, and by 18.37% and 11.95% for the heating oil options in the out-of-sample test, respectively. The greatest

Equilibrium Price *The price at which the market clears, i.e. where the supply of the commodity matches demand.*

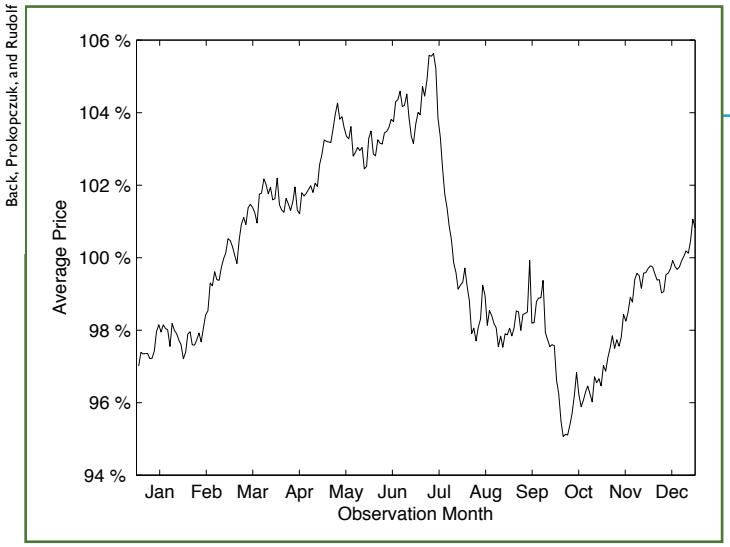

Figure 1: Soybean Futures Seasonal Volatility

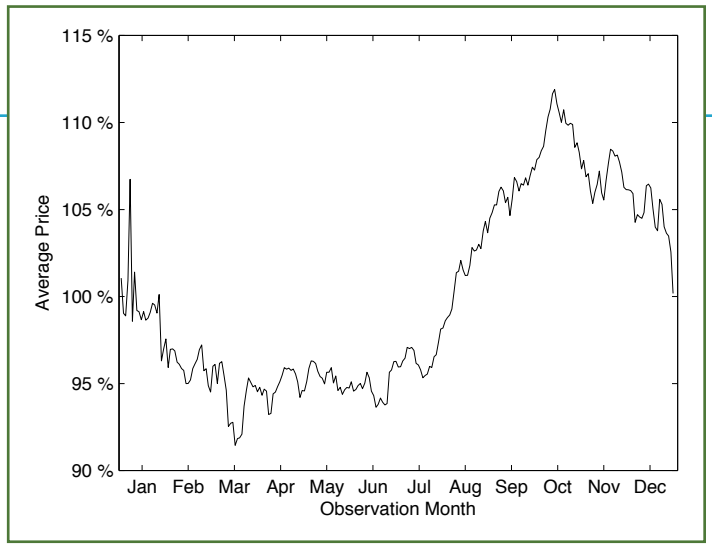

Figure 2: Heating Oil Futures Seasonal Volatility

improvements are observed for short term heating oil contracts, with a maximal improvement of 37.96% for the ATM options and the one-factor model." (20)[3]

The most surprising outcome was that in some cases the one-factor model adjusting for seasonality alone offered lower pricing errors than even the two-factor model: "thus, allowing for seasonally varying volatility seems to be more important than adding additional stochastic factors." (18) Given this data, it is hard to imagine a justification for trading, for example, ATM heating oil options without adjusting for seasonal trends. Other research has arrived at similar conclusions after analyzing seasonal effects in the volatility of options on wheat futures.[4] It is hard to imagine a justification for trading commodity options without accounting for seasonal volatility.

Seasonality in Practice

In addition to using the seasonal volatility of commodities to modify theoretical option prices in general, traders could use observed implied volatility seasonality as the justification for a trade. If, for example, implied volatility in the options for some agricultural commodity tends to rise in advance of reports of crop yields (with attendant volatility in the underlying occurring immediately thereafter), a trader might enter long vega positions before the bid-up in implied volatility and hedge directional exposure to remove unwanted price risk.

Sometimes, academic research provides confirming evidence for theories that are already well-established among market practitioners. This may be just such a case: the commodity traders I know tend, as a group, to at least be cognizant of prevailing seasonality when structuring trades, even if their pricing models don't make explicit allowances for it. This doesn't diminish the value of such research, of course, since mere tradition is no substitute for evidence. EM

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[1] Back, Janis, Prokopczuk, Marcel and Rudolf, Markus, *Seasonality and the Valuation of Commodity Options* (March 09, 2010). Available at SSRN: http://ssrn.com/abstract=1514803

[2] A good resource for similar charts plotting the seasonal tendencies of various stock indexes and commodities is http://www.seasonalcharts.com/index.html

[3] The percent changes quoted are in reference to the root mean squared pricing error, not percent revisions in the option contract price.

[4] Koekebakker, Steen and Lien, Gudbrand, "Volatility and Price Jumps in Agricultural Futures Prices—Evidence from Wheat Options," *American Journal of Agricultural Economics* 86:4 (November 2004).

FEAR AND LOATHING IN OCTOBER

Bill Luby

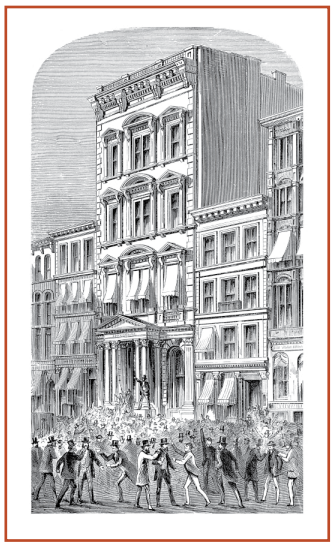
When investors turn the calendar to October, there are very few who fail to pause and reflect on the famous stock market crashes of 1929, 1987 and 2008. All three crashes happened in October and all three had a profound effect on investors. It turns out that even looking past these three headline stories, October seems to be a magnet for precipitous drops in the stock market.

What is it about October and crashes? Is this a seasonal trend investors should seek to capitalize on? Are there reasonable explanations for why October should be so strongly associated with crashes? What are the implications for investors in terms of risk management and speculation?

In this article, I will examine the questions posed above and attempt to make sense out of a month that has a tendency to elevate heart rates and leave investors scratching their heads. I will look at both anecdotal and statistical evidence and try to weave together history, volatility and behavioral finance along the way.

A Brief History of October Crashes

Long before the events of 1929, October had already established itself as a month that was hospitable to stock market crashes. In the 1840s, Great Britain was gripped by a speculative frenzy which stemmed from the possibilities created by the new technology of that era, the railway. Prices of railway company shares more than doubled from 1843 to 1845 in what became known as the British Railway Mania. Railway shares peaked at the beginning of October 1845 and fell 20% in a month, on their way to losing 64% by 1850. The bursting of the railway bubble led directly to the Panic of 1847 two Octobers later, which saw the Bank of England nearly forced to close its doors after a run on the bank dropped reserves to less than £2 million.



The Panic of 1873

The ancestral lineage of the British Railway Mania leads all the way back to the South Sea Company, where a bubble in the company's stock peaked in August 1720 and was burst in spectacular fashion in September, when South Sea Company shares fell 75% in four weeks. Had the September decline not been so precipitous, October would likely have turned out to be the peak of the crash, but by that time, most of the damage had already been done.

As was the case with the South Sea bubble, the most famous stock market crashes in the United States in the 19th century seemed to be partial to September rather than October. One of the two biggest crashes was the Panic of 1873, which was also known as the Long Depression or the Great Depression in Europe. The proximate cause of the Panic of 1873 was the failure of Jay Cooke & Company, the leading American bank at that time, which lost the confidence of its creditors when the bank was unable to sell large holdings in railroad bonds. Jay Cooke & Company failed on September 18 and set in motion a chain reaction that lasted through the remainder of the decade. At the time, the Panic of 1873 was the most severe financial crisis experienced on American soil. It eclipsed the Panic of 1857, which saw a run on the banks on October 13th.

It was not until the 20th century that October cemented its reputation as the month for stocks to crash. The most famous of all the crashes occurred in 1929, when stocks fell 23% over a two-day period spanning October 28 and 29, signaling an end to the great bull market of the 1920s and ushering in the economic mayhem that would later be known as the Great Depression. Fast forward 58 years and we find the largest single-day decline in stocks in U.S. history: the 22.6% drop in the Dow Jones Industrial Average that ravaged investors on Black Monday, October 19, 1987. Just two years ago, the events of 2008 brought October back into the limelight, when what was once a sub-prime mortgage crisis blossomed into a full-blown global financial meltdown. The S&P 500 index was down 27.9% before the month was one third over. Even though stocks bounced a little before the end of the month, October turned out to be the second worst month for the S&P 500 in 70 years—second only to October 1987.

In between 1987 and 2008, there were two other smaller October stock market crashes worth noting. On October 13, 1989, the Dow Jones Industrial Average fell 6.9% after

a collapse in the bond market that was likely triggered by a failed leveraged buyout for United Airlines. On October 27, 1997, the Dow Jones Industrial Average plummeted 7.2% at the height of the Asian Financial Crisis.

Looking back at the largest percentage losses in the Dow Jones Industrial Average, an incredible 9 of the top 16 are from the month of October. Ultimately, however, October is best thought of as a month of outliers. Even factoring in all of the October crashes, the month as a whole has been more average than exceptional as far as long-term performance is concerned.

Using Standard and Poor's data going back to the 1950 and Dow Jones Industrial Average data going back to 1928, the performance of stocks in October tends to not to stray far from the median, as confirmed in a recent study by Michael Stokes of MarketSci.com.

The Volatility Angle

Part of the reason for thinking that October is more of a month of outliers than a month for the bears has been the somewhat bimodal history of Octobers. For example, the largest single-month return in the history of the S&P 500 index (16.3%) dates from October 1974. The S&P 500 index also managed to return over 10% in October 1982 and the Dow Jones Industrial Average topped a 10% return in October 2002.

Looking at historical volatility, October easily ranks as the most volatile month in the history of the S&P 500 index. Considering the history of 21 years of CBOE Volatility Index (VIX) data, October is also the volatility champion by a large margin. When it comes to October then, investors are both anticipating elevated volatility and reacting to high volatility when those expectations are met or exceeded.

An interesting question to consider is whether the extremes in October volatility are more pronounced in terms of expectations or in realized volatility. In an effort to answer that question, I analyzed data for the VIX and realized volatility to see to what extent the VIX estimates of volatility during the subsequent 30 calendar days matched up against realized (historical) volatility during the next 21 trading days.

Based on VIX data going back to 1990, it appears as if November is the month in which investors are most prone to overpaying for options, as the ratio of the VIX to realized volatility is highest during this month. After November, it is December that edges out October for second place for the highest VIX to realized volatility ratio. It should be noted that this data is strongly influenced by the extreme readings in 2008. If data from 2008 are removed from the calculations, October becomes a strong second behind November in terms of the highest VIX to realized volatility ratio.

Keeping in mind that 21 years of data is a relatively limited sample, the results of the above study still raise some interesting questions about performance. Stringing together performance data for the S&P 500 going back to 1957 and VIX data going back to 1990, a compelling composite picture emerges.

The bottom line is that while September is unassailably the worst month of all for investors in stocks, it also marks the beginning of a seasonal pattern in which September's bearish bias gives way to October's extreme volatility. November then follows with the highest implied volatility relative to realized volatility. Finally, since 1957, the three months with the most consistently bullish bias have been November, December and January.

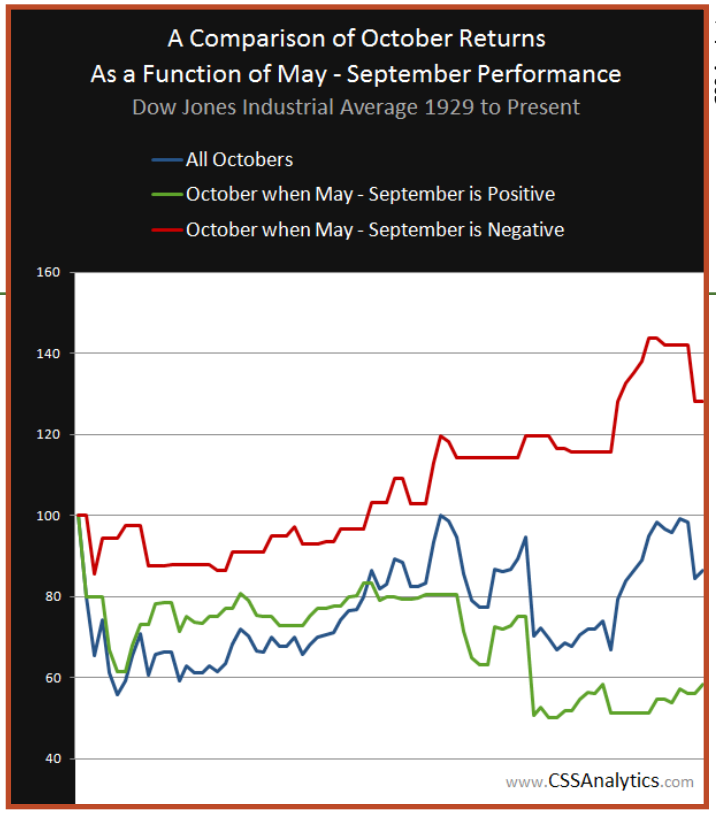


Figure 1: October Returns as a Function of May to September Performance

In a nutshell, poor performance begets high volatility, which begets high implied volatility relative to realized volatility and the three best performing months of the year.

Factoring in Behavioral Finance

A number of theories have been advanced which attempt to explain the September seasonal slump and October crashes, with varying degrees of success. Before the industrial revolution, it was easy to pin seasonal factors on the planting and harvest cycle and even link credit crises to the flow of funds between country banks and city banks. By the second half of the 19th century, however, when a second wave of industrialization was sweeping across the United States, the agricultural cycle had lost much of its impact.

Candidates for modern seasonal factors seem much less convincing than the agricultural cycle. Elections, holidays and taxes may all hold some minor significance, as might climatological factors and their psychological counterparts. As best as I can determine, the influence of these modern factors on the stock market is not conclusive and certainly not strong enough to be crash-worthy.

One possible explanation that I find compelling has been advanced by both Rob Hanna of Quantifiable Edges and David Varadi of CSS Analytics. Both believe that the phenomenon of a crash-prone October is partly the result of institutional money managers who are attempting to beat a benchmark index and find that in order to increase their chances of success, managers change their approach in the last quarter of the year. Hanna hypothesizes that those who are trailing their benchmarks at the beginning of the fourth quarter and are more prone to taking on extra risk in hopes of matching or exceeding the benchmark by the end of the year. Varadi focuses on the flip side of the coin and argues that money managers who are beating their benchmark and have positive returns for the year "are more sensitive to locking in positive performance for the year." His research (see Figure 1) demonstrates that "if the performance during the summer period through the 3rd quarter was positive this would make money managers far more likely to take profits" and notes that the "disposition effect" (selling big winners while holding on to poor performers) is even stronger during bull markets.

Another tenet of behavioral finance that is undoubtedly at work during October is anchoring, in which investors place too much emphasis on a particular piece of information. Nearly every investor is acutely aware of the track record of crashes in October. Accordingly, any drop in stock prices is met with an abnormally high level of anxiety that another October crash may be in the offing.

Somewhat related to anchoring is availability bias, in which investors liken the probability of an event

October is best thought of as a month of outliers.

happening based upon how easily an example can be brought to mind. The more lurid or newsworthy an event is, the more likely we are to overestimate its probability. A severe crash in the financial markets is a perfect example of availability bias. I also liken availability bias to something I call disaster imprinting, which refers to a phenomenon in which the threats of financial and psychological disaster were so severe that they continue to leave a permanent or semi-permanent scar in one's psyche. Another way to describe disaster imprinting might be to liken it to a low level financial post-traumatic stress disorder. The extent to which disaster imprinting affects behavior is partly a function of temporal proximity to the disaster. With the fallout from the financial panic of 2008 still being felt, disaster imprinting from October 2008 is still substantial at this time.

Drawing upon ideas from behavioral finance such as the disposition effect, anchoring, availability bias and disaster imprinting, it is possible to explain some of the reasons why October has become such a notorious and difficult month for investors.

Some Possible Causes

As noted above, it is difficult to argue that specific fundamental factors have been responsible for the propensity of stock markets to crash in October, particularly in a post-agrarian economy.

Of all the explanations put forth, the ones I find most convincing are those that deal with the October phenomenon as to some extent a self-fulfilling prophecy. This line of thinking finds some support from Jason Goepfert of sentimenTrader and Michael Stokes of MarketSci, whose studies of market sentiment and seasonal cycles put more stock in the workings of the human mind than in macroeconomic triggers.

I find that elements of behavioral finance offer an explanation that fits many of the facts we have witnessed in October. Unfortunately, it is difficult to test some of the behavioral finance explanations, so they will have to remain as hypotheses for now.

Conclusion

In a recent survey of investors, 58% indicated that they believe U.S. stocks are more at risk for a sharp move downward in October than in another randomly selected month.

As Frank Hogelucht of Trading the Odds notes, in pure statistical terms, October is "neither a bad month nor an especially risky one for being invested in the stock market, although headlines may suggest otherwise." Hogelucht adds that over the course of the past 80 years investors who were to pick only one month in which to invest would have found that October's month-end drawdown is actually the third lowest of all months.

With the absence of compelling fundamental causes for the spate of October crashes, behavioral finance offers some possible explanations, the gist of which is that the October phenomenon is, in the words of Jason Goepfert, "a self-reinforced statistical anomaly."

Like all anomalies, however, this one suggests some possible trading edges, as a pattern has emerged in which September's poor performance yields to high volatility in October, high implied volatility relative to realized volatility in November, and three months of strong performance for stocks in November, December and January.

Of course a recurring pattern is a long way from a guarantee, as September's 8.8% gain in the S&P index demonstrates. EM

Insurance for An Iron Condor

Tyler Craig and Mark D Wolfinger

Given: You are a trader who earns his/her money by using income-generating strategies, specifically iron condors. It is October, a month that has seen some extreme market volatility.

Resolved: It is a good idea to own insurance against a huge market move, thereby protecting your portfolio against a disaster. It is especially a good plan to own that protection now.

PRO

By Mark Wolfinger

The primary rule for any trader is to survive, and that translates into not blowing up a trading account. The simplest and most direct method for achieving that result is to carefully size each trade and the entire portfolio. If a worst-case scenario occurs, losses may be painful, but you maintain more than sufficient funds to continue trading. Your account survives and your ability to trade continues. I don't buy into the idea that October is an especially good time to be insured, but I am not going to take extra risk as my concession to the calendar.

However, part of the time there will be a trade opportunity that is more attractive than at other times. If you feel that it's right to trade bigger size, then one way to accommodate both your desire to seek extra profits *and* see that you remain solvent, is to pay a premium to buy portfolio insurance. Whether it's a owning some index options, or any other strategy that earns money when your iron condors are losing, the exact nature of the insurance is beyond the scope of this discussion.

As an example, if you are very bearish, but not bearish enough to buy a boatload of puts (the payoff would be spectacular, but the odds of losing money are far too great) and decide to make a change to your iron condor strategy by selling a mountain of call spreads (and far fewer put spreads), then you not only must own something that earns a very good profit on a big rally, but it must be a position that does not result in a double whammy: losing on the credit spreads and losing on the insurance trade. That bad result can occur when the insurance play is not appropriate. For example, buying a bunch of calls that are too far OTM can lead to that disaster.

From my perspective, if I am going to sell enough extra call spreads to generate a $10,000 credit, then I can afford $5,000 or $6,000 for call options that will offset some potential loss and may, in a spectacular rally, provide the chance to earn an upside profit. When my trade premise is correct, and the market does not move higher, I earn my original profit, plus the extra $4k from selling extra spreads and paying for insurance.

That's a better play than trading too many contracts for my account size and comfort zone. Risk management must come first.

Perhaps the strongest argument lies in the following wisdom: **simplicity trumps complexity.**

CON

By Tyler Craig

Though I understand the rationale in such advice, I must admit I possess more ammo in attacking such a statement versus defending. Don't get me wrong, I like the idea of feeling protected or having a contingency plan if things go awry, but I'm not so sure owning extra options is the way to go.

As I see it, condor traders have two choices when purchasing additional options. They can take the more cost prohibitive route by purchasing options residing closer to the money than the short call and put spreads, or purchase those residing either within or further out-of-the-money than the spreads. Since the lion's share of condor traders shun the "lottery ticket" mentality and are likely seeking more effective insurance, I'm going to assume we're discussing the relative merits of purchasing closer to the money options. In other words, an iron condor with an embedded long strangle.

By far the biggest hurdle facing the insurance argument is that of cost. After all, if insurance were bordering on free, how could one argue against it? It can be tough doling out money month to month, purchasing protection that is likely unneeded. The million dollar question, whose answer is ever elusive, is whether or not the few times the insurance ends up saving your bacon is worth the numerous times it goes unused. Those electing to take the insurance route obviously must have confidence that it is indeed worth it.

Now, what if we're selective as to when we buy insurance? As put forth in this month's introduction, October has historically registered increased volatility for the stock market. If we stick to purchasing insurance in statistically bearish months or other times when the odds favor heightened volatility, might that increase the effectiveness and overall performance of the insurance approach? While this improves on the notion of simply buying insurance every month, it presumes, of course, that your ability to select the right months is better than just chance. That's a feat much easier said than done.

Perhaps the strongest argument lies in the following wisdom: simplicity trumps complexity. Often, in our attempt to create the "holy grail" strategy poised to work wonders in any environment, we end up with a convoluted position that increases commission, slippage, and our margin for error. Consider the whole new can of worms that is unleashed when you traverse the insurance route. Which strikes do you purchase? When do you enter or exit? Do you hold the embedded strangle until you exit the condor? Since the profitability of the insurance relies on a large enough directional move in the underlying, it requires condor traders who are by and large non-directional players to think like directional traders. Furthermore, their profitability may no longer be reliant on how well they manage the condor, but rather their timing on when to exit the insurance.

Traders entertaining the idea of insurance would be well-served in considering the simpler methods of protection already available to them; namely, money management and position sizing. Rather than upping the complexity by adding insurance, how about practicing some subtraction? In other words, cut down on your position size. If you are used to trading a 10-lot of condors, try trading 7, or 5, or whatever quantity you deem fit, given the increased risk you perceive in the market. Unlike adding an embedded strangle, this route decreases commission, slippage, and margin for error.

(continued on page 23)

Why Correlation Matters

Adam Warner

Index volatility has two components. One is the volatility of the components themselves. The higher component volatility, the higher the index volatility. The other is the degree of correlation. The higher the correlation, the higher index volatility.

The CBOE runs some correlation indices under the symbols ICJ, JCJ and KCJ. You can read all about them here. The gist is that it compares a weighted index of the implied volatilities of 50 large stocks versus the volatility of the SPX index itself. The higher the correlation the market expects going forward, the higher the SPX volatility relative to the implied volatility of individual names.

As the VIX itself is to volatility, these CBOE numbers just give a snapshot on correlation using one unique methodology. The big flaw is that they just pick one expiration, stick with it, then just create a new number. The problem is that you go from measuring longer term correlation assumptions, say a year out, to shorter term ones as they get closer to expiration. Note how different that is from the VIX, which always estimates the volatility of an option with 30 days duration.

Any time you decide to trade an individual stock option as opposed to an index option, you are making a bet on correlation.

What's happening now is that component volatility is generally low, but correlation is high. This might just be the new normal in the age of high-frequency trading (HFT). Market structures change over time, and perhaps new "normal" correlation is higher than it was 5, 10, or 15 years ago. Or perhaps not: only time will tell.

So the VIX is at a reasonably high level. I say reasonably, because the VIX certainly could drift into the teens given the slow but strong market.

What does it all mean? Well, high correlation is a sign of apprehension and fear. The more confident you are, the more likely you are to diversify and try to *beat* the market. Conversely, the less confident you feel, the more likely you are to just use the index proxies. And that's pretty much what we're seeing right now.

High correlation also says a strategy of owning options gamma in individual names and shorting it in indices has done quite poorly, and continues to get worse. That's bad news if you're a big trading desk or derivatives player in that that's the very position you tend to slide into over time.

But for individual traders, the real reason you should know about correlation is that any time you decide to trade an individual stock option as opposed to an index option, you are making a bet on correlation. If you want to own an option, but believe correlation will decline, you should buy the option in an individual name. Conversely, if you believe correlation here is the new normal, you should use index or index ETF options. EM

Trading a Short Time Spread

Mark Sebastian

In last month's column, we had entered a short time spread in Potash of Saskatchewan (POT). The reason for the trade was our belief that a buyout of the firm was imminent. Thus, we wanted to be long gamma and short vega. Sadly, the expected buyout did not happen by the time I was finished writing up last month's Follow That Trade. We will pick up where we left off on September 10th.

On Monday, September 13th, POT began to sell off from its high in the low 150s. As the delta dropped, we decided to buy in several hundred shares and attempt to scalp more gamma. Obviously, we wanted the stock to rally back after this purchase. We bought 200 shares of POT for $147.79.

I have become increasingly certain that a deal is not going to happen in October, and so has the market. As we hold this position, October implied volatility is getting smoked and December is holding steady.

Actuals | POT Common | Legend

147.79	-0.91	+200	Last	Chg	Trade
149.39	147.79	-400	High	MktPr	Ex.Pos

Options	SEP <5>					OCT <33>					DEC <96>				
170 calls	MktPr	MIV	Trade	Ex.Pos	Delta	MktPr	MIV	Trade	Ex.Pos	Delta	MktPr	MIV	Trade	Ex.Pos	Delta
165 calls	0.12				0.63	1.10	33.7%			11.8	1.94	24.0%			23.5
160 calls	0.19	43.0%			1.32	1.76	32.6%		-22	18.8	3.20	25.0%			34.5
155 calls	0.47	37.5%			3.52	2.90	32.2%			30.0	5.05	26.5%			46.0
150 calls›	0.77	23.6%			22.0	4.65	32.1%		+50	44.8	7.45	28.0%		-30	57.2
145 calls	3.30	22.6%			82.8	7.10	32.0%			60.9	10.35	29.8%			67.1
140 calls	7.95				97.1	10.35	32.9%			75.2	13.55	31.2%			75.3
160 puts	12.40				-98.7	14.05	32.5%			-81.3	15.35	24.4%			-65.6
155 puts	7.55				-96.5	10.15	32.0%			-70.0	12.25	26.3%			-54.0
150 puts›	3.05	24.7%			-78.0	6.90	31.7%			-55.2	9.70	28.1%			-42.8
145 puts	0.57	23.3%			-17.2	4.25	31.2%			-39.1	7.55	29.6%			-32.9
140 puts	0.17	31.4%			-2.86	2.52	32.1%			-24.8	5.80	31.2%			-24.7
135 puts	0.09				-0.97	1.44	33.5%			-14.8	4.40	32.7%			-18.1
130 puts	0.07				-0.42	0.71	33.9%			-8.76	3.40	34.6%			-13.1

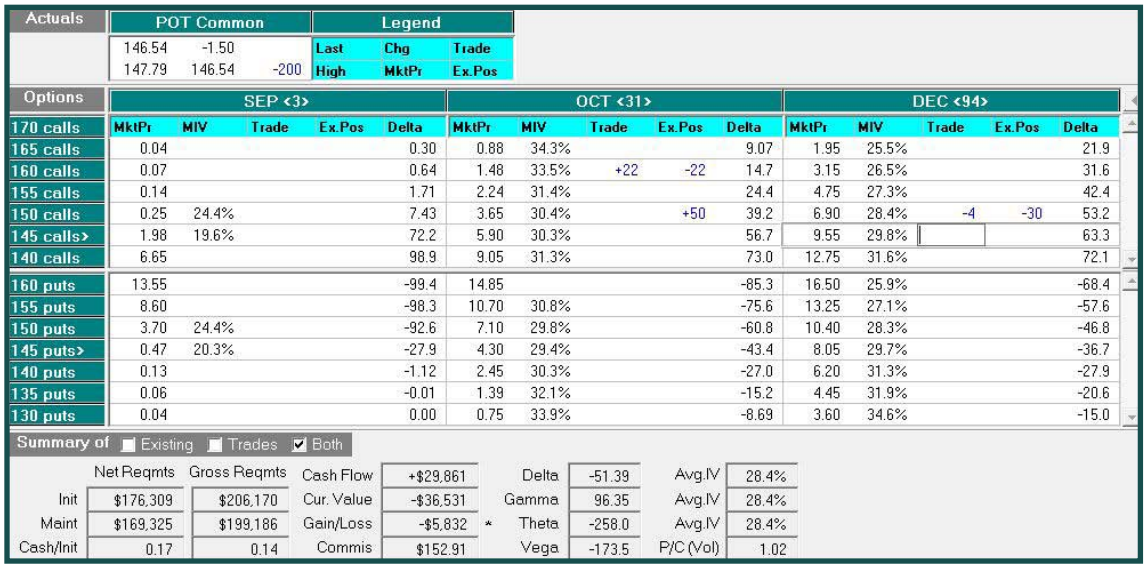
Summary of ☐ Existing ☐ Trades ☑ Both

	Net Reqmts	Gross Reqmts						
			Cash Flow	+$31,240	Delta	-87.63	Avg.IV	28.5%
Init	$163,286	$194,526	Cur. Value	-$63,451	Gamma	57.45	Avg.IV	28.5%
Maint	$155,881	$187,121	Gain/Loss	-$3,179 *	Theta	-155.1	Avg.IV	28.5%
Cash/Init	0.19	0.16	Commis	$131.87	Vega	-312.2	P/C (Vol)	0.78

Figure 1

By Sep 15th, POT had fallen right back into the $146 range. Rather than buy back stock, we decided to re-balance the entire position. We did this by buying back our short October 160 calls. The calls were losing delta fast and, at this point, were more of a liability than they were an asset. We took a portion of the purchase and sold back a few of our December 150 calls.

At this point the trade was in pain, October implied volatility had been crushed and the position was likely to be a loser. Successful traders make smart decisions not emotional decisions. The smart trader closes this sucker up. We will stay in to see where the trade takes us; however, before moving on, if the smart paper is selling the front month, this is a tell-tale sign that the deal is unlikely to be done soon. Generally, if one wants to bet against the big paper, one is going to have a short trading career.



Actuals	POT Common			Legend		
	146.54	-1.50		Last	Chg	Trade
	147.79	146.54	-200	High	MktPr	Ex.Pos

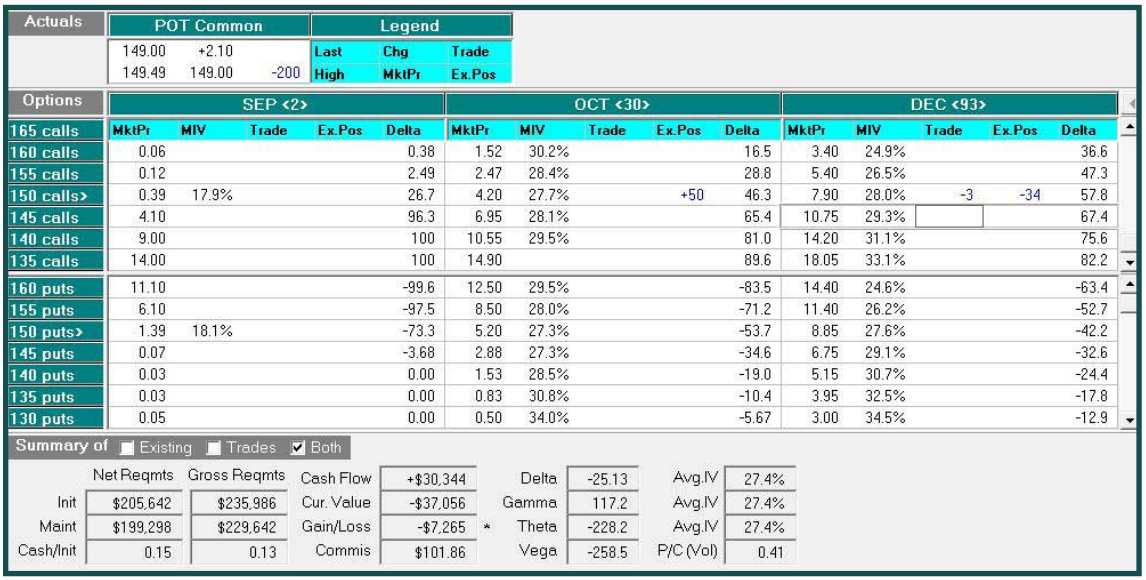
Options	SEP <3>					OCT <31>					DEC <94>				
170 calls	MktPr	MIV	Trade	Ex.Pos	Delta	MktPr	MIV	Trade	Ex.Pos	Delta	MktPr	MIV	Trade	Ex.Pos	Delta
165 calls	0.04				0.30	0.88	34.3%			9.07	1.95	25.5%			21.9
160 calls	0.07				0.64	1.48	33.5%	+22	-22	14.7	3.15	26.5%			31.6
155 calls	0.14				1.71	2.24	31.4%			24.4	4.75	27.3%			42.4
150 calls	0.25	24.4%			7.43	3.65	30.4%		+50	39.2	6.90	28.4%	-4	-30	53.2
145 calls>	1.98	19.6%			72.2	5.90	30.3%			56.7	9.55	29.8%			63.3
140 calls	6.65				98.9	9.05	31.3%			73.0	12.75	31.6%			72.1
160 puts	13.55				-99.4	14.85				-85.3	16.50	25.9%			-68.4
155 puts	8.60				-98.3	10.70	30.8%			-75.6	13.25	27.1%			-57.6
150 puts	3.70	24.4%			-92.6	7.10	29.8%			-60.8	10.40	28.3%			-46.8
145 puts>	0.47	20.3%			-27.9	4.30	29.4%			-43.4	8.05	29.7%			-36.7
140 puts	0.13				-1.12	2.45	30.3%			-27.0	6.20	31.3%			-27.9
135 puts	0.06				-0.01	1.39	32.1%			-15.2	4.45	31.9%			-20.6
130 puts	0.04				0.00	0.75	33.9%			-8.69	3.60	34.6%			-15.0

Summary of ☐ Existing ☐ Trades ☑ Both

	Net Reqmts	Gross Reqmts	Cash Flow	+$29,861	Delta	-51.39	Avg.IV	28.4%
Init	$176,309	$206,170	Cur. Value	-$36,531	Gamma	96.35	Avg.IV	28.4%
Maint	$169,325	$199,186	Gain/Loss	-$5,832 *	Theta	-258.0	Avg.IV	28.4%
Cash/Init	0.17	0.14	Commis	$152.91	Vega	-173.5	P/C (Vol)	1.02

Figure 2

On September 16th, POT ran up 1%. We sold three more of the December 150 calls back. Front month IV had continued to get smoked; if the deal did go through we would have done really well, but it simply seemed unlikely at this point.



Actuals	POT Common			Legend		
	149.00	+2.10		Last	Chg	Trade
	149.49	149.00	-200	High	MktPr	Ex.Pos

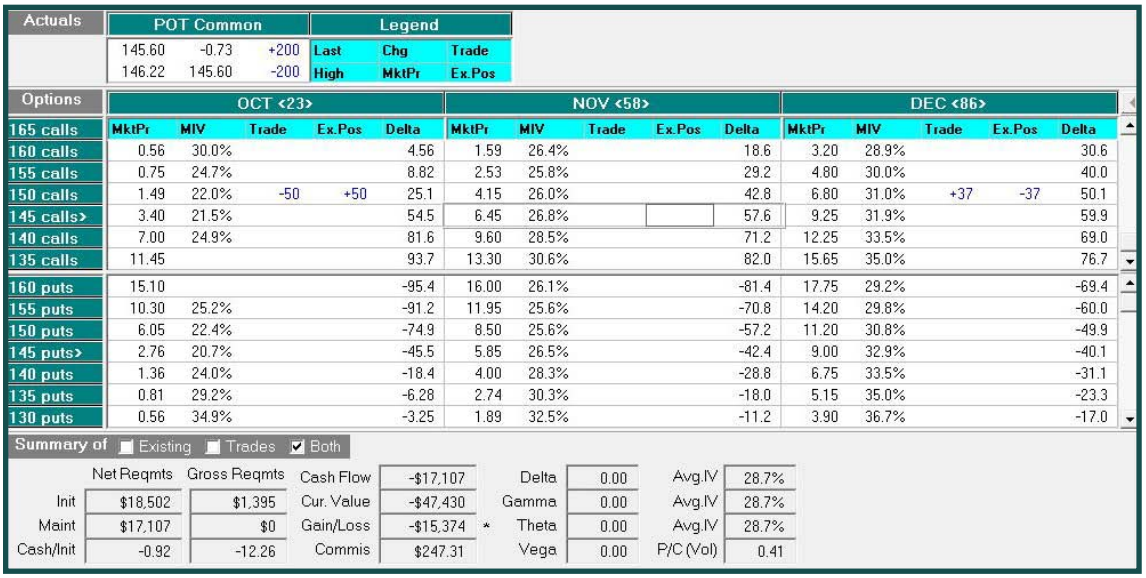
Options	SEP <2>					OCT <30>					DEC <93>				
165 calls	MktPr	MIV	Trade	Ex.Pos	Delta	MktPr	MIV	Trade	Ex.Pos	Delta	MktPr	MIV	Trade	Ex.Pos	Delta
160 calls	0.06				0.38	1.52	30.2%			16.5	3.40	24.9%			36.6
155 calls	0.12				2.49	2.47	28.4%			28.8	5.40	26.5%			47.3
150 calls>	0.39	17.9%			26.7	4.20	27.7%		+50	46.3	7.90	28.0%	-3	-34	57.8
145 calls	4.10				96.3	6.95	28.1%			65.4	10.75	29.3%			67.4
140 calls	9.00				100	10.55	29.5%			81.0	14.20	31.1%			75.6
135 calls	14.00				100	14.90				89.6	18.05	33.1%			82.2
160 puts	11.10				-99.6	12.50	29.5%			-83.5	14.40	24.6%			-63.4
155 puts	6.10				-97.5	8.50	28.0%			-71.2	11.40	26.2%			-52.7
150 puts>	1.39	18.1%			-73.3	5.20	27.3%			-53.7	8.85	27.6%			-42.2
145 puts	0.07				-3.68	2.88	27.3%			-34.6	6.75	29.1%			-32.6
140 puts	0.03				0.00	1.53	28.5%			-19.0	5.15	30.7%			-24.4
135 puts	0.03				0.00	0.83	30.8%			-10.4	3.95	32.5%			-17.8
130 puts	0.05				0.00	0.50	34.0%			-5.67	3.00	34.5%			-12.9

Summary of ☐ Existing ☐ Trades ☑ Both

	Net Reqmts	Gross Reqmts	Cash Flow	+$30,344	Delta	-25.13	Avg.IV	27.4%
Init	$205,642	$235,986	Cur. Value	-$37,056	Gamma	117.2	Avg.IV	27.4%
Maint	$199,298	$229,642	Gain/Loss	-$7,265 *	Theta	-228.2	Avg.IV	27.4%
Cash/Init	0.15	0.13	Commis	$101.86	Vega	-258.5	P/C (Vol)	0.41

Figure 3

The position was through any logical maximum loss and we had little to worry about on the upside. If the deal got done the trade would end up in the black regardless of any stock buying below 146. We were better off letting the stock run than trying to scalp on the downside. We sat and watched POT fall on the 19th, 20th, and 21st. At the same time, implied volatility in October continued to get smoked. December, which is still believed to be in play for a buyout, had not seen the same corrosion of its implied volatility. This is a lesson in trading time spreads into an event. Traders that get trapped long and short the wrong months are setting themselves up for a real problem. By September 22nd, despite letting POT drop on us, the position was simply down too much for even the most irresponsible trader.



Actuals	POT Common			Legend		
	145.60	-0.73	+200	Last	Chg	Trade
	146.22	145.60	-200	High	MktPr	Ex.Pos

Options	OCT <23>					NOV <58>					DEC <86>				
165 calls	MktPr	MIV	Trade	Ex.Pos	Delta	MktPr	MIV	Trade	Ex.Pos	Delta	MktPr	MIV	Trade	Ex.Pos	Delta
160 calls	0.56	30.0%			4.56	1.59	26.4%			18.6	3.20	28.9%			30.6
155 calls	0.75	24.7%			8.82	2.53	25.8%			29.2	4.80	30.0%			40.0
150 calls	1.49	22.0%	-50	+50	25.1	4.15	26.0%			42.8	6.80	31.0%	+37	-37	50.1
145 calls>	3.40	21.5%			54.5	6.45	26.8%			57.6	9.25	31.9%			59.9
140 calls	7.00	24.9%			81.6	9.60	28.5%			71.2	12.25	33.5%			69.0
135 calls	11.45				93.7	13.30	30.6%			82.0	15.65	35.0%			76.7
160 puts	15.10				-95.4	16.00	26.1%			-81.4	17.75	29.2%			-69.4
155 puts	10.30	25.2%			-91.2	11.95	25.6%			-70.8	14.20	29.8%			-60.0
150 puts	6.05	22.4%			-74.9	8.50	25.6%			-57.2	11.20	30.8%			-49.9
145 puts>	2.76	20.7%			-45.5	5.85	26.5%			-42.4	9.00	32.9%			-40.1
140 puts	1.36	24.0%			-18.4	4.00	28.3%			-28.8	6.75	33.5%			-31.1
135 puts	0.81	29.2%			-6.28	2.74	30.3%			-18.0	5.15	35.0%			-23.3
130 puts	0.56	34.9%			-3.25	1.89	32.5%			-11.2	3.90	36.7%			-17.0

Summary of ☐ Existing ☐ Trades ☑ Both

	Net Reqmts	Gross Reqmts						
			Cash Flow	-$17,107	Delta	0.00	Avg.IV	28.7%
Init	$18,502	$1,395	Cur. Value	-$47,430	Gamma	0.00	Avg.IV	28.7%
Maint	$17,107	$0	Gain/Loss	-$15,374	Theta	0.00	Avg.IV	28.7%
Cash/Init	-0.92	-12.26	Commis	$247.31	Vega	0.00	P/C (Vol)	0.41

Figure 4

The eulogy of this trade is that it is a testimony to the dangers of not being nimble. If one is going to engage in calendars, one has to stay on top of where the implied volatilities are trading. As soon as one gets an inkling that expectations about a key event might change, one needs to take immediate action. EM

Wolf Against the World *(continued from page 19)*

P R O

In reply to Tyler's questions

If a condor trader buys condors with an embedded strangle, that strangle becomes part of the position. Unless the condor is closed, those extra options cannot be sold.

However, because the purpose of this type of insurance is to own extra units, the extra calls or puts can be moved to different strikes when appropriate. My favorite play is to sell the options I own when I can move the strike 20 points farther OTM and collect more than $10 for that spread. That leaves me with $1,000 cash and $1,000 less protection. It's acceptable to modify the strangle, but extra options must be owned at all times.

Tyler Craig is president of TC Trading, Inc. He has personally coached hundreds of traders over the years through his contract work with one of the nation's leading educational firms. He is an avid writer and current monthly contributor to the Wealth Intelligence Magazine. In 2009, he began his venture into the blogosphere by starting Tyler's Trading (www.tyler-strading.com), where he can be found giving daily market commentary for stocks and options. EM

Meet
The Boss

Mark D Wolfinger

Sometime during the latter stages of last century, when I was making markets on the CBOE trading floor, something happened that's worth sharing.

While standing in the pit and waiting for orders, I received a phone call from First Options, my clearing firm (think of them as my broker). The caller requested that I come to the booth to receive an important message. Hating to leave the pit, I marched to the booth, picked up a different phone line and was told by a cheerful voice that a trade from yesterday was missing from my daily 'sheets' (trade confirmations plus other reports). The trade: I bought one BS (Bethlehem Steel) call option 'at the cabinet.' In those days options traded in fractions and a cabinet sale was a convenient way for a customer to unload an essentially worthless option at a total price of $1 per contract, or $0.01 per share. To trade at that price, the call must be very far out of the money.

This information was 100% worthless and a complete waste of time. I was not happy to have been summoned from the trading pit to receive this information. I chose to share my feelings about that with the caller (who was just doing his job), and needless to say, that innocent clerk was not happy to have someone scream in his ear.

I hung up the phone, went back to the pit, and discovered that I had missed out on a very nice trade, and that my share would have been worth several hundred dollars in expected earnings. That did not make me feel any better about that phone summons.

About fifteen minutes later, some stranger entered the pit and told me that he was displeased that I had yelled at one of his clerks. So here I was, once again distracted by this very same piece of business. Wanting to know who this person was, I looked at his membership badge. Lo and behold, the badge belonged to Jim Porter, the top gun at First Options. But this was not Jim Porter.

I asked his name and was told "Barry Seidman," but that name meant nothing to me. Not being slow to anger and not appreciating being confronted by someone wearing the boss's trading jacket and membership badge, I fought back. I don't recall much of the exchange, but I decided to punish this guy—whoever he was. I called for a floor official to come to the pit. When he arrived, I told him that this person was on the floor using a badge that was not his own and demanded that he be fined.

The floor official agreed, but I never did learn whether he was fined or escaped. But it's absolutely a no-no to allow anyone to use your membership badge, or to enter the floor using a badge that is not your own.

~

When he had finished delivering his message, he left the pit and I asked if anyone knew who he was. Yes, someone did know. It turns out that he was the new President of First Options.

~

One of the advantages of being a good-sized client of your clearing firm is that occasional perks are offered. I had previously been given two perfect seats for a Ravinia (well-known outdoor music stage located in the northern Chicago suburbs) Peter, Paul and Mary concert that evening.

The day many not have been one of my best, but it was going to end well. PP&M were my favorite entertainers and I was excited to have tickets. I arrive at my seats and who did I see right next to me? You guessed it: Barry Seidman. We arranged for the women to sit between us and the music made the evening enjoyable. We never spoke of our initial meeting again. EM

Jay Caauwe, Director of Business Development at CBOE, is primarily responsible for promoting the CBOE Futures Exchange's (CFE) roster of volatility products based on the VIX Index to both sell-side and buy-side clients. Prior to joining the Exchange in 2004, he was a floor trader at CME for 17 years, acting as either an independent trader or lead broker for some of the industry's leading prop houses. Jay serves as a board member of the FIA Chicago and is active within the City Club of Chicago and the Chicago Council on Global Affairs.

Expiring Monthly Interview with Jay Caauwe

Jared Woodard

Expiring Monthly: *To start things off, I would be interested to get your take on the significance of volatility-based products for an investor who's accustomed to buying put options to hedge a portfolio or for someone who's used to more conventional options strategies like collars or call writing. Can you explain in general why an investor might want to consider volatility products?*

Jay Caauwe: A wiser man than me once said: why not have a little bit of everything? While outright long puts offer some protection, there is some delta adjustment required in a portfolio that's dependent on pure options. So as strikes move in and out of the money, you're going to have to monitor and adjust that position. However, with VIX futures you put your relative contract on and either carry it to expiration or roll it to another month. You can call that a bit cleaner way of implementing the hedge.

But going back to my original statement, why not have a little of both? I think that works best given the gains in liquidity that we've made in the VIX futures. Augment the portfolio by protecting yourself with enough types of insurance. In my mind, that equates to having a blend of not only long puts but long volatility futures.

EM: *That makes sense. You mentioned the increased liquidity in the VIX futures and I know that there's been a lot of progress in recent years in these products. I understand you've played an important role in the development and success of volatility products at CBOE. Tell me more about that role, and what the process has been like since the VIX futures were listed.*

JC: Credit goes to CBOE. While I brought in the necessary background from the futures arena, I was given a tremendous amount of latitude in bringing business development plans from the concept to the deployment stage. This involved marketing, educational, and volatility futures awareness campaigns. As the investment community warmed up to the VIX futures, we assembled a team that maximizes our efforts and areas of expertise. As the CBOE product set has grown, so have we.

Certainly, it's been a process in that a lot of it was education-based. I think there are a lot of folks who thought that VIX would be a panacea for them in helping to augment a portfolio. And yet, on our part, we had to really get out

there and educate the public and even the professional traders. And to this day, we still get calls from investors wanting to know about the sensitivity of the front month futures contract to the VIX; we still have to explain that the VIX, itself, while an important barometer is not a tradable product; and we have to explain the whole term structure—which makes it a fun product once you can look at the contango—or periods of backwardation—or periods like earlier in the year when the term structure was pretty flat. So for me, it has been a process of creating awareness about how to use the product.

It's also a product that's based off of supply and demand. When you come right down to it, VIX is based off of the supply and demand of SPX options, because it is sensitive to the prices of the options used. If there's more demand for the [SPX] puts, that's going to affect the level of VIX; therefore, it's going to affect the level of the pricing of the relative futures contracts. So that I found very intriguing, which makes my role here a lot more exciting; it's helped me grow as part of the exchange and as a someone who's been involved with the futures market for 30-plus years myself.

Now, we have this proliferation of volatility-related products, but it all started with the CBOE VIX index. So from day one, it was about creating awareness about VIX. People who heard that we were going to list the futures product needed to know first about the makeup of VIX itself, and then we could start talking about the relationship between the index and the futures.

EM: *I've heard investors raise questions about how much of a role investor sentiment can play in, let's say, the price of a VIX futures contract that's three or four months out, and I wonder whether investor sentiment is actually as important a role as I think people want to regard it?*

JC: I would say that investor sentiment is certainly a driving force behind the futures prices, because we have to remember that the VIX is going to be based on the demand for that put protection as viewed by SPX options. So if the investors are anticipating an event somewhere out on the time horizon and they're willing to pay more for that protection then yes, those prices are going to be reflected in the futures contract.

That being said, it comes back to that awareness of the relationship between the futures and the actual index. As we all know, the VIX index looks at implied volatility 30 days forward. On a Monday, it's going to look at another 30 days forward; Tuesday, it's 30 days from Tuesday. But the futures contracts are trader expectations for where VIX will be on settlement day. So it's a forward interpretation of volatility, and that has to be factored into the pricing of the futures contract.

EM: *That's helpful. Could you give an example—thinking about the importance of factors like forward expectations and price discovery—looking at the current term structure?*

JC: When I look at the November contract—keeping in mind that we have an election coming up in November—there's a not-insignificant difference between the October and November contracts right now. But after you get done with the elections, look at the January 2011 contract—which, again, is pricing itself off of the February SPX options—I see that implied levels of volatility as expressed by the January contract are running at about 31%. So that's where the investor sentiment comes into it. Yes, there is price discovery being expressed in the price of the futures, but a 31% volatility at the first of the year tells me that investors and traders are expecting an elevated level of volatility at that point. I'm not offering trading advice, mind you, just giving you an example.

VIX . . . is like the insurance policy you buy on your house or on your car. You pay your monthly premium and when you need it . . . it does what it's supposed to do.

EM: *I'd like to talk about the increased popularity of these products. I can recall looking at the volume and open interest on a VIX futures contract a few years ago, and it sure was different from where it is these days. Volumes have really soared in both the VIX options and the futures over the last year or two, and I wonder whether you would attribute that increased interest mostly to the 2008 financial crisis, or whether there are additional factors at work. How would you account for the real explosion in trading volumes?*

JC: Certainly, events of the last few years have helped bring focus and awareness of the whole volatility sector. But even before the crisis, there were a good number of conferences and events with the lead agenda item being, "Is volatility an asset class?"

So events of the past few years have allowed folks to go back and say, "What could I have done—how could I smooth out my returns? How would the fund or portfolio have performed had I initiated a small amount of VIX into the mix?" Whether that's futures or options, more people have come back and said that they needed some of this protection. VIX, to a lot of us, is like the insurance policy you buy on your house or on your car. You pay your monthly premium and when you need it—when the house burns down, when the car crashes, when the market explodes—it does what it's supposed to do. And I think that was kind of the key factor in getting people to sit up and take notice, which allowed some of these other products to come to market. With the advent of the ETNs tied to VIX and some of these other products tied back to our product, people are looking for how can they get some exposure to volatility in order to protect their portfolio. That has allowed for the market to develop further.

EM: *I'd be interested to know, in terms of order flow, whether you think that major players in the futures are still primarily institutional. I know that the VIX options have been taken up really well by retail traders and individual traders. I wonder whether you have a sense whether individual traders are getting more involved in the VIX futures.*

JC: As you noted, it's kind of hard for us to say. Remember that the VIX futures contract has a $1000 multiplier, so it is a fairly large contract. My sense is that it's still the preferred volatility tool for the institutional audience. I think it's hard to say what is truly "retail" nowadays. If you're talking about the dentist down the block who trades through a securities account or maybe has a small futures account, he's probably not trading the VIX futures; maybe a little bit in the VIX options. But maybe a small hedge fund could be considered retail when compared against one of the larger investment banks, agreed?

EM: *Sure, that's a good point. You mentioned some of the volatility ETNs earlier, and I know that you launched the Mini-VIX Futures not that long ago, and I'm curious about the interest you've seen in those Mini-VIX futures. I imagine, as you mentioned, that a lot of small individual traders who might have securities accounts will have easier access to the ETNs. One thing that we have discussed in this magazine and in other places is the negative roll yield that you see in the volatility ETNs that are holding that front-month contract. It means there's a little bit of a drag on the price, and I wonder if the Mini-VIX futures might be a little more attractive in the sense that traders can have more control over what their precise term of exposure is.*

JC: We brought out the mini as a way to make the volatility product space a little more applicable to the intended retail audience by virtue of its smaller contact size. Minis have certainly gained a lot of acceptance and popularity through other small-sized products and that's our intent. Now that being said, it's an area that we need to continue to put some more muscle behind. It isn't traded

as widely as the big VIX futures contract, but it does have a role. It does have a purpose. It does have a need from what we hear from some of the option traders who trade VIX options here at CBOE as well as our VIX futures. It's a great product for cleaning up those little deltas that are lying around on your option position, where maybe a big VIX future is too large. We do have support—a specialist—in the Mini-VIX quoting continuous two-sided markets. But it's incumbent upon us to make that product a lot more available to the retail segment.

I'm sure you look at the volumes and open interest on it as well as we do and are probably scratching your head sometimes like I do and saying, "Why can't we get this to the next level?" Remember that, in the early days of the VIX futures itself, a lot of education and awareness-building was required. So, it's just a matter of time before Mini-VIX gains in terms of popularity and usage by a broad segment of the investment community.

EM: *Do you have a sense about the adoption of these products on trading platforms—among brokers that are catering to the high-end retail and interested individual traders? I know that there are a few brokers like Interactive Brokers and, I think, optionsXpress that offer access to VIX futures. Are there any plans to encourage wider access for individual traders? I wonder if that's part of an overall strategy.*

JC: For the mini?

EM: *For the mini or the regular contract. I've had a lot of questions from clients who say, "These sound like interesting products, but I don't have a large futures account or I don't know how to get access to them."*

JC: We certainly make ourselves available to the firms like optionsXpress and Interactive Brokers in terms of webinars and education efforts. We work with the Options Institute here at CBOE to do presentations, and we have partnered with some of the member firms to do one-off client events where the pure focus and agenda is the VIX futures and the Mini-VIX, recognizing that they represent futures-oriented clients looking for some exposure to volatility. And part of the initiative for the year going into 2011 is to work closer with the CTA community.

EM: *I can see a lot of potential there. And speaking of CTAs [commodity trading advisors], I want to talk a little bit about the regulatory status of these products. As far as I'm aware, someone who has a futures account as a trader or who is registered as an advisor with the NFA [National Futures Association] and CFTC can trade VIX futures. Someone who has a securities account or who is registered with the SEC as an advisor can trade VIX options. But to trade both products, as far as I know, you would need to have advisor registrations with both agencies or as a trader have separate securities and futures accounts. It doesn't strike me as an optimal regulatory situation, because it might create a situation where, for example, a trader might take a position in VIX options and want to hedge their delta exposure. But without a futures account, it doesn't seem like there would be a simple way for them to do that, except of course by creating a synthetic position in the options. It just strikes me as an unusual regulatory divide there between the big futures and the options on CBOE VIX. I just wonder how that came about or whether that's something of which people have taken notice.*

JC: I don't really want to wade too deep into the regulatory pool, but with our introduction of VIX options on futures in the weekly format, hopefully that will address some of those issues for the time being until the regulators figure out how to make everyone happy.

EM: *Could you tell us more about these new weekly options? There's the interesting fact that they're settled physically rather than cash-settled, which is the case with CBOE VIX options.*

We are exploring bringing back the **Russell VIX** . . . [T]here are probably some folks out there who would want to arbitrage the difference between these two key volatility measures.

JC: Sure. By the time this is published, we will have launched trading in Weekly options on VIX futures (launch date: September 28, 2010). What we're doing is listing four expirations for the weekly options. And as you note, these are American-style exercise that settle into a big futures contract. Anything that is in the money by 0.01 automatically exercises into a futures contract unless otherwise specified by the customer/client to the OCC [Options Clearing Corporation]. Let's say it is Monday the 6th: we'll have a one-week contract listed that expires on Friday. Week two will also expire on a Friday, and both of those will exercise into the front month futures contract. But after the front-month VIX futures expiration, your third and fourth week options are going to convert into the next month's futures contract. That's one of the unique aspects—the fact that it's physically settled.

EM: *Finally, I wanted to ask about some of the products that have been delisted. I'm thinking of the Dow Jones Industrial Average and the Russell 2000 volatility futures, and I'm curious why you thought those products didn't really attract sufficient interest to keep them listed. You've mentioned earlier that a lot of education has been necessary even for institutional traders about the nature and usefulness of these products. Do you think it's just that maybe some of these products were listed before the educational efforts had really caught up, or is there some other reason adoptions of some of these different volatility products was so uneven?*

JC: I guess I can sum it up by saying that most people benchmark themselves to the S&P 500, correct?

EM: *Yes.*

JC: The correlation between something like our Dow VIX and S&P 500 VIX was 99%. You don't really benchmark to the Dow—you benchmark to a broader-based index. As a result, people were more content staying with something that they knew like the S&P-based VIX product. That's why the Dow didn't gain much traction, and you could say the same thing for NASDAQ VIX. Find me a firm or a manager that benchmarks to NASDAQ. It certainly is our hope and intention to continue to build out an entire volatility suite of products. We just have to find the products that are going to be applicable, broad-reaching and accepted by retail, institutional, and professional traders alike.

EM: *I was thinking about the Russell 2000 and the fact that small-cap stocks have traditionally exhibited substantially different volatility profiles versus the top 100 or even 500 large-cap stocks, such that I could see volatility products on something like the Russell—something targeted at a much wider base of stocks—offering some more meaningful divergences to the S&P 500.*

JC: Actually, that's something we are revisiting, too: how to get the Russell VIX [futures] back out there.

EM: *That's interesting.*

JC: Actually, before the events of the last couple of years, Russell was a pretty active volatility product for us on the exchange. But after the events, people kind of went back to what they knew and what they already had a comfort level with. But we are currently exploring bringing back the Russell VIX, recognizing that there are probably some folks out there who would want to arbitrage the difference between these two key volatility measures. If you look at the Russell VIX, you know it's running at a higher volatility level than S&P 500 VIX, based on the fact that there are 2,000 constituent stocks in the Russell VIX. So, it creates a scenario where people will hopefully be able to arb between these volatility levels in a listed futures product.

EM: *That's exciting, and I hope things progress there. Thanks for your time today.*

JC: All right, Jared. Thanks for the opportunity. EM

VIX Futures: Putting Ideas Into Action

Bill Luby

Last month, in "An Interpretive Framework for VIX Futures," I outlined six different analytical approaches to the VIX futures term structure in order to provide a basis for identifying a number of strategic approaches and trading opportunities.

To briefly recap, the analytical framework incorporates the following factors:

1. Contango vs. backwardation
2. Uniformity of direction
3. Largest net change
4. Degree of contango or backwardation
5. Terminal VIX
6. Evolutionary changes over time

In order to make the jump from a framework to some trading ideas, the first question one should attempt to answer is to what extent investors see a difference between future volatility and current volatility. For future volatility, the terminal VIX or most distant futures is a good proxy; current volatility can be evaluated in terms of the front month VIX futures contract, the cash VIX or realized volatility in the S&P 500 index. I have labeled the difference between future and current volatility as the volatility range and think of that range as the degree to which the crowd is susceptible to leaning in the wrong direction.

Looking broadly at volatility, I have a tendency to try to simplify picture as one of the market anticipating a small or large volatility range and either underestimating or overestimating the future range of volatility. Traders can either bet with the crowd or fade the consensus.

Ideally, each trader should have their own volatility forecast that they can overlay on the VIX futures term structure to see where the biggest difference of opinion is. To capitalize on that difference of opinion, a trader can construct a trade focusing on one point in the term structure or enter a spread trade that is long one part of the term structure and short another part.

For example, a trader who believes that the market is underestimating the potential for a VIX spike with the November VIX futures contract trading at 25 may wish to buy a November VIX call or call spread, perhaps sell a November put or put spread, or implement a number of other directional trades on volatility. If, however, the same trader sees more risk in the chaos of the November election season than in the chaos of the first quarter of 2011, he or she may choose to structure a calendar trade which is long VIX November calls and short VIX February calls.

As this is being written, the VIX is just under 21 and the VIX futures are tracing an extremely steep arc from 21.95 to 31.60. In fact the term structure is so steep that the proprietary VIX Futures Contango Index I use indicates that the October 8th term structure represents the most extreme VIX contango reading since the 2004 launch of the VIX futures.

With the VIX above its lifetime average of 20.41 and the VIX futures indicating that the market is expecting a 50% increase in the volatility index by February, analyzing the current situation is fairly straightforward. More often than not, when the VIX is above its lifetime average, the VIX futures term structure will anticipate some form of future mean reversion and price in a decline in the VIX futures in some of the more distant months. The current situation flies in the face of historical precedent and suggests that investors see ominous storm clouds on the horizon that the markets are

VIX futures have a tendency to overestimate future volatility.

overlooking at least for the next month or so.

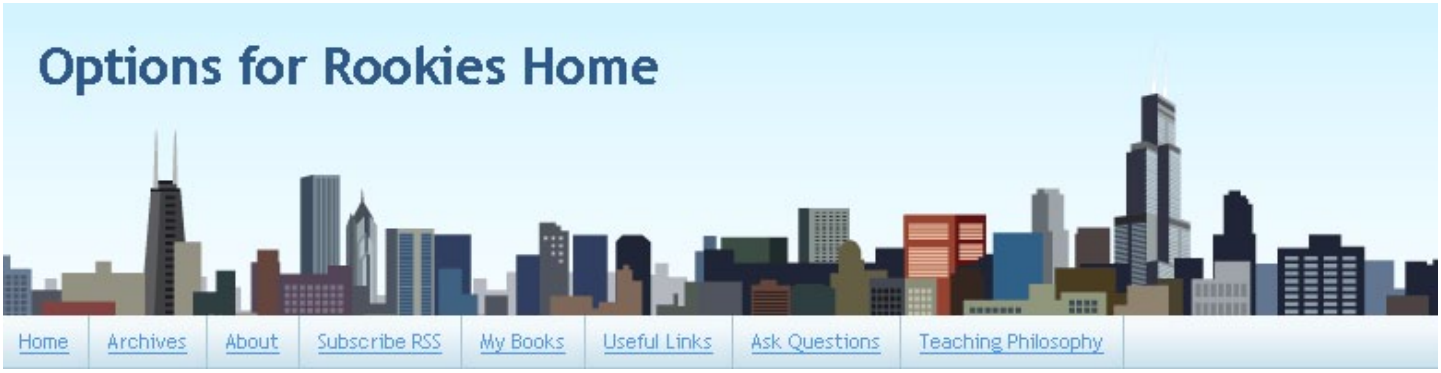
Extreme VIX futures contango is typically the result of investors who are anticipating a sharp correction in equities and expect to see a sharp spike in volatility. These expectations can often push front month implied volatility into the stratosphere and make VIX calls quite expensive. For instance, with one week prior to expiration, the VIX October 35 calls are priced according to an implied volatility of 143. On the other hand, the VIX March 35 calls are priced with an implied volatility of only 56.

As is often the case with VIX options, the question becomes whether to pay the outrageously expensive premium for the possibility of capturing an expected VIX spike or to fade the consensus and bet that whatever volatility pattern develops, it will be less than what the record contango had anticipated.

Here it may be helpful to consider that just as the implied volatility of the S&P 500 index has a history of exceeding realized volatility, the VIX futures have a tendency to overestimate future volatility.

If there is any one overriding theme that should permeate one's thinking about VIX futures and options, it should be mean reversion. I believe than many traders of VIX futures and options could dramatically improve their performance if there were to limit their trading in VIX products to perhaps 25% of the year. The majority of the trades would consist of perhaps 15% of those days in which the VIX has the largest departure above various short-term and long-term means. Additionally, traders should also be active on an additional 10% of those days in which the VIX diverges sharply below those means.

The beauty of the VIX futures term structure is that it spells out exactly how much mean the reversion the market is pricing in for the VIX, as well as the timetable during which that mean reversion is expected to take place. Traders looking for an edge should consider that the market frequently underestimates both the speed and degree of mean reversion that eventually unfolds. Given an entire term structure on which opportunities may present themselves, a trader with a six-part VIX futures analytical framework and a reasonable well-developed volatility forecasting methodology should not have too much difficulty turning those ideas into profits. EM



Death Squads

Mark D Wolfinger

A death squad is an armed military, police, insurgent, or terrorist group that conducts extra-judicial killings, assassinations, and forced disappearances of persons as part of a war, insurgency or terror campaign. These killings are often conducted in ways meant to ensure the secrecy of the killers' identities, so as to avoid accountability.

Despite that definition, the term has appeared in American political debates and has nothing to do with the military. An alternative term is: death panel.

Attack from the Right

The new definition: government employees who issue a cease and desist order, preventing doctors or hospitals from dispensing medical care, and especially costly medical care, to patients.

When used by the political right, the phrase is used to suggest that bureaucrats will replace doctors in deciding who gets to live and who doesn't. The suggestion is made that the government will decide whose life is worth saving and whose quality of life will be so poor that it's not worth saving.

One U.S. Senator even went so far as to suggest that the new health care reform bill could be used to 'euthanize seniors.' In the vernacular, the threat is that death squads may 'pull the plug on Granny.'

When used by the political left . . . Oops, my mistake. The political left does not use the term and (so far) missed a golden opportunity to fight ignorance. Choosing to create a battle over this issue was a huge error by the right. But it has gone unpunished due to the incredible cowardice of the left.

One former vice-presidential candidate was quoted: "The America I know and love is not one in which my parents or my baby with Down Syndrome will have to stand in front of Obama's 'death panel' so his bureaucrats can decide, based on a subjective judgment of their 'level of productivity in society,' whether they are worthy of health care. Such a system is downright evil."

I don't believe that anyone disagrees that this would be evil. However, there is nothing in the bill that remotely suggests the possibility exists, or is likely to exist within the foreseeable future. Of course, we cannot know what lies ahead, and it's possible that at some point in time, each patient may be allowed only so much medical care before the 'system' stops paying. This is no problem for the wealthy, who can finance their own health care.

What more could Obama and the Democrats want than a statement such as these from someone is running for President?

The True Death Squads

Death squads already exist in the form of health insurance companies. And they are aided and abetted by a cowardly Congress. Insurance policies (prior to the new bill) allowed insurers to place lifetime limits on health care policies. This is exactly what the right claims to fear.

These panels only influence the lives of those who are too young for Medicare. In this case we are talking about pulling the plug on Mommy instead of Granny.

Death squads already exist in the form of health insurance companies. And they are aided and abetted by a cowardly Congress.

I believe that in today's world, anyone who requires any costly treatment should receive proper care, as long as the doctors believed that the treatment was appropriate.

What annoys the conservatives is that there may be a point in time when cost becomes a consideration. At that time, it is possible that government employees may decide that the procedure is too expensive, that this person has already used several million dollars worth of treatment (without success), and that there is little than can be done to make this patient any better.

But today, it is more than a possibility. The death squads are here, but conservatives don't care. If a profitable business uses death squads, there are no objections. The hypocrisy is beyond belief.

Today's death squads would never pull the plug on Granny. Granny and Mommy are prevented from seeing the inside of a hospital in the first place. They deny coverage based on the probability that this patient would be a money-losing proposition for them to insure. Mommy cannot get a diagnosis, let alone treatment.

Let's not ignore one other practice of the insurance companies. When treatment is costly, insurance companies have teams of employees whose job it is to find a reason to cancel coverage. That delays treatment while the case runs through the courts. If the appeal process takes long enough, Mommy dies before insurance is reinstated. I hear no right-wing objections to these occurrences.

It's a crime that so many people cannot buy insurance. Imagine this: people who lost their jobs also lost health insurance. It's a matter of decency. The insurance companies earn billions of dollars of profit out of the system as CEOs become billionaires. The cost is that Americans are put to death systemically by being unable to get insurance. There is no stoppage of treatment. Instead, there is denial of treatment. "Pulling the plug" is a great public relations term. The voting public can see the image.

The left should be fighting this battle. Instead, they act as cowards and do nothing. EM