10/ HOW TO MUCK UP A CHART
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How to Muck Up a Chart

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It doesn’t matter if you’ve been trading 10 years or 10 days, at some point you could make the same chart-reading boo boos traders have been making since Cro-Magnon man drew his first analysis in the dirt. Here’s a few common 21st-century errors and what to do about them.

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If ever there were a monster issue of thinkMoney to boast of, this could be it. But not because it’s double the content. (It’s not.) And not because there are monsters inside, or articles about monsters. (There aren’t.) It’s because when deciding what to put in issue #20 we wanted to include some really big ideas. Not your 10-cent article on how to place a trade mind you. Or 30-minute dinner recipes for ravenous traders. (Um, is there such a thing?) This is more of a recipe book of strategies for the discerning trader, who either wants to sharpen her skills or aspire to a new level of trader-dom.

For starters, we needed a good charting article on what not to do. Chart reading might be both art and science, but it’s also prone to monster mistakes by everyone—even you. In the cover story on page 10, “How to Muck Up a Chart,” we highlight four common chart-reading mind traps, and how to avoid them.

Taking it up a notch, many traders go for monster hits during earnings season, while taking on unnecessary risk. During one of the most volatile times in the market, earnings season will tempt fate for some of you by testing your ability to take decisive, disciplined action with an appropriate strategy. We can’t promise you a magic formula, but if you must trade earnings, “Don’t Get Skewed” on page 24 might help.

Finally, in the third installment of our four-part Special Focus on spread trading on page 34, we’ll give you the step-by-step on how to build monster strategies by combining verticals and calendars spreads together. There are probably at least 25 option strategies that typically make it to any respectable list of option strategies—the building blocks of which are verticals and calendars.

See? If you read thinkMoney, you really don’t have to be afraid of monsters. But that’s not to say that the one hiding under your bed since you were seven isn’t really there…

Happy Trading,
TD Ameritrade
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Transaction costs (commissions and other fees) are important factors and should be considered when evaluating any options trade. For simplicity, the examples in these articles do not include transaction costs. At TD Ameritrade, the standard commission for online equity orders is $9.99, online option orders are $9.99 + $0.75 per contract. Orders placed by other means will have higher transaction costs. Options exercises and assignments will incur a $19.99 commission.

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How to Muck Up a Chart

You might hail from the Palaeolithic times when drawing charts by hand was all the rage, or you may be a new trader looking at volume for the first time on your mobile charts. Either way, at some point you could make the same chart-reading BOO BOOS traders have been making since Cro-Magnon man drew his analysis in the dirt. Here’s how to stay very 21st-century.
In the world of trading, there are basically two types of approaches. Think of one as traditional and discretionary, where you manually execute trades using a set of indicators and inputs. You trade with your gut, while your emotions pose the biggest threat to smart trades.

The other approach is mostly mechanical. You use a bunch of charts and indicators in an attempt to get a handle on predetermined entry and exit points. Here, you’re not trading with your gut. But the greater concern is “input risk”—if one of your algorithms or assumptions is wrong, you could lose money.

Whatever your charting preferences, a number of cardinal sins could ruin a good plan at some point.

—1 DOING NOTHING

This is all about indicator overload (Figures 1 & 2). Open any charting program and take a look at available indicators. You’ll usually find a dizzying array—hundreds more than most on thinkorswim® in fact—ranging from simple moving averages to complex indicators like the Ichimoku Cloud with six different inputs. Both types of indicators do basically the same thing—they smooth price data to help you see the longer trend and recognize areas of potential support and resistance. It doesn’t make sense to use both since they do the same thing.

Oscillators such as the Relative Strength Index (RSI), Stochastic, and Moving Average Convergence Divergence (MACD) also use various permutations of price and time. They show you the same information from slightly different perspectives. But how many times have you seen charts that include two or more oscillators?

The net result of trying to track too many indicators is that you wind up not trading. Conflicting signals can keep you on the sidelines, catatonic in your comfortable ergonomic chair, paralyzed by indecision. If you want to use multiple indicators, it could make more sense to choose ones that utilize different types of data. For instance, if one indicator uses price and time, you may consider using a second one with volume, and a third with market breadth including new highs and lows, to give yourself a more complete picture.

Once you move beyond three sets of trading indicators, there tends to be too much information to help you quickly and easily track potential opportunities.

—2 DISREGARDING YOUR INDICATORS

Aviation experts tell us that a visual-flight-rules pilot (VFR) has an average lifespan of two minutes if the pilot gets lost in the cloud. Why? A VFR pilot must have the ground in sight at all times. If that reference is lost, the instruments can’t be interpreted properly or trusted. Pilots will then try to fly by the seat of their pants and this often leads to disaster. Although not life threatening, making the same mistakes in your trading behavior can be financially and emotionally disruptive.

Why do some traders ignore indicators? When a trade goes bad, some are tempted to believe that this time will be different, i.e. “I just hit my stop loss but the stock is acting better today so I’ll give it room.” Unfortunately, the trader realizes the error of this decision after many “Teflon” stops have been broken, and the trade has turned into a huge loser.

“Ignoring indicators or targets stems from the tendency to think positively,” says veteran commodity trader and trading teacher Larry Williams. Although
optimism may feel right at the time, it can be a serious trading buzz kill. When Williams enters a trade, he says he does so expecting to lose. That way he won’t be tempted to overstay his welcome when a stop loss or exit signal is triggered.

—3

IGNORING VOLUME
An old trader adage says it takes volume to move prices up. But prices can fall of their own weight. In real terms, price is what it costs you to buy a stock. But volume may be what fuels it.

Volume is a measure of the amount of “participation” and also provides liquidity. Without volume, trades may get more expensive due to widening bid-ask spreads. In the worst case, when volume dries up, trades can become pretty impossible. Few experienced traders would buy a stock that trades less than 5,000 shares a day. But how many of those traders ignore volume when doing their charts?

Volume is also a valuable chart-pattern confirmation tool. Choose any well-known chart pattern such as the Head & Shoulders, Cup & Handle, Wedge, Flag, or Pennant. Each one has a volume signature which is used to confirm the pattern. For example, one way to separate a bearish rising wedge from a true rally is volume (Figure 3).

In a rally, increasing volume is bullish. In a rising wedge, volume declines over the length of the pattern and that’s bearish. In a falling market, increasing volume is also bearish. Ignore volume and it could cost you plenty.

—4

ASSUMING ALL CHARTS ARE CREATED EQUAL
Many traders assume that stocks, indices, and exchange traded funds (ETFs) move the same way. But there can be a world of difference between them.

First, stocks can be more volatile, with the potential to make double-digit percentage moves in a day. This type of move is extremely rare in, say, a broad-based index.

Second, most stocks exhibit seasonal patterns based on their market or production. For example, a gold-mining company can be impacted by seasonal gold demand and production schedules. Since a broad-based index often tracks stocks across industries, the seasonal pattern may not be as obvious or easy to read because the trader sees a composite of all the companies involved.

Third, each stock has a kind of individual trading personality. And those who trade it represent a community which moves, based on the behavior and personalities of everyone in the group. An indicator or trading system that works well with a stock may prove worthless for trading an index-tracking security.

Be careful not to assume a system that works well in individual stock trading will automatically work when trading a basket of stocks.

WHEN YOUR CHARTS STOP WORKING
If you find your charting system is performing poorly, chances are the problem is between your keyboard and your seat. (Yes, you.) Tweaking your system now and again ought to be expected because markets are always changing. Adjust parameters such as look-back periods and moving-average lengths. Or perhaps improve or discard the logic, and start over. If your approach in the long term isn’t working, don’t hold onto it in the hopes that the market will one day cooperate again. As economist J. M. Keynes once said, “Markets can remain irrational a lot longer than you and I can remain solvent.”
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Love Notes

• Quips from the thinkorswim Chat Rooms

Photograph by
Fredrik Brodén

Got your own quip or pearl you’d like to share? Send your best prose to thinkmoney@tdameritrade.com.

• Can anyone give me one absolute truth about the market? I’m trying to build a 100% mechanical trading system.
  Jeb

• I had to walk to Swim Lessons four miles in the snow with no shoes on.
  Bob

• The market needs to slow down. I still sell too fast.
  Carl

• Failure is simply the opportunity to begin again, this time more intelligently.
  Belinda

• How does one predict a flash crash? Are there indicators for that?
  Heather

• When Woodchuck Granny Smith Apple Beer goes public, I’m all in.
  Missy

• The market is a daily waterfall of opportunity, no need to try and capture every drop.
  Reginald

• Let’s all file a complaint with the SEC. Stocks never do what we want them to do.
  Jackson

• Gold will always have value because the ladies don’t like tin.
  Mindy

• There may come a day when a cow and a lion will lay down together. But the cow won’t get much sleep.
  Angie

• Snakes hide in short weeds. Bears just hide in taller ones.
  Fred

• It is unreasonable to think that foresight will ever be as obvious as hindsight.
  Ken

• I’m not sure I’ve ever seen someone say they’re worried about lower volatility.
  Steve

• Mayan stone mason to supervisor: I only have enough room on this wheel to go out to December 2012. Supervisor: Well, that’ll freak somebody out someday.
  Benny

• There may come a day when a cow and a lion will lay down together. But the cow won’t get much sleep.
  Angie

• Snakes hide in short weeds. Bears just hide in taller ones.
  Fred

• Wisdom for traders from famous non-traders
  “When a fact appears to be opposed to a long train of deductions, it invariably proves to be capable of bearing some other interpretation.”
  Sherlock Holmes

• Important Information
  The comments above are excerpts of e-mails submitted by TD Ameritrade clients as their views and may not reflect those of TD Ameritrade, Inc. Testimonials may not be representative of the experience of other clients and is no guarantee of future performance or success.
A little Q&A with Nicole Sherrod, Managing Director, Trader Group at TD Ameritrade

Q: Hey Suit! How can I devote less time to trading, but still generate the same performance?
A: Replace the word “trading” with “work” and you and I will be trying to crack the same code. But what you really need to do is harness the power of alerts. We’ve made great strides over the last few months enhancing alerts as well as the delivery options.

In fact, in the coming weeks, we’ll be expanding our alerts to include time and event notifications. You want to be notified the day prior to an earnings announcement? No problem. Never want to miss a session of Swim Lessons with the fantastic, albeit vertically challenged, Don Kaufman? Sure thing. You can be notified via a pop-up on thinkorswim®, email, or SMS text.

Q: I’m worried about security. Are your mobile apps secure?
A: Our mobile apps are every bit as secure as our desktop technology. Your only risk would be that someone who gains possession of your phone might also know your TD Ameritrade password. Even in that case, they would not be able to remove money from your account through TD Ameritrade Mobile Trader. But that wouldn’t stop this person with an axe to grind from placing a losing trade in your account. So I think I have to turn the question back to you. Do you need to worry about whether our apps are secure? Or do you need to worry about associating with sneaky individuals who trade unprofitably?

The pros of mobile far outweigh any “perceived” negatives. But unfortunately, sometimes life happens, and we’re forced to sever ties with the thinkorswim desktop platform. I learned this the hard way when I found out there wasn’t wireless internet in the hospital when I was delivering Li’l Suit. Twenty hours of labor on the day of Apple earnings* and I can’t log on to thinkorswim? The horror. The good news is, staying plugged in has never been easier because of mobile. So if you haven’t already downloaded TD Ameritrade Mobile Trader, why are you still reading this?

*Security symbols displayed for informational purposes only. This is not a recommendation to trade any specific security.
Less is More... for Mini-Options

Words by Thomas Preston
Illustration by Joe Morse

Back in March the CBOE launched new “mini” options in five securities. They’re alike in nearly every respect to the standard options on those underlyings. Except they deliver only 10 shares of stock upon exercise/assignment as opposed to the standard 100, and the dollar multiplier is $10 per point as opposed to the standard $100. The CBOE picked those five symbols because one, they’re popular among retail investors, and two, they have relatively high prices.

Why do we need mini-options? A lot of retail investors out there can’t afford to buy 100 shares of AAPL* for $40,000, but who can buy “odd lots” of say, 10 shares. So the CBOE designed these options to let investors implement common option strategies, such as selling covered calls, against those 10 shares. If the investor sold an out-of-the-money “mini” covered call in say, AAPL for $7.50, it generates $75 of premium, less transaction costs, rather than $750 for the regular option. Cool, huh? But don’t fall in love quite yet.

Commissions on more complex option strategies on these mini-options can be prohibitively high compared to the potential profit. And while the margin requirements on something like a short vertical spread are lower in the minis, the margin for short verticals in the regular options is often lower than the margin on 10 shares of these stocks. The point is, these mini-options might make sense if:

—You intend to trade less than 100 shares of any of these stocks.
—You’re buying odd lots of stock and selling covered calls against them.

So, kudos to the options exchanges for designing products for the retail investor. Just make sure the commissions in the minis aren’t greater than the potential profit of the strategy.

Important Information
Trading options involves unique risks and is not suitable for all investors. Like regular options, you can lose the entire amount committed to a mini-options position in a relatively short period of time. Mini-options do not reduce the per share cost or price of options. A covered call strategy can limit the upside potential of the underlying stock position, as the stock would likely be called away in the event of substantial stock price increase. Examples above do not include transaction costs or dividends. See page 9, #4 for more on transaction costs. Be sure to understand all risks involved with each strategy, including commission costs, before attempting to place any trade. Supporting documentation for any claims, comparison, statistics, or other technical data will be supplied upon request.
THE BIG, BAD Q+A ON INDEX FUTURES

IF YOU’VE EVER WONDERED WHAT INDEX FUTURES ARE OR WHY YOU’D TRADE THEM, WONDER NO MORE.

WORDS BY MARK AMBROSE
PHOTOGRAPH BY FREDRIK BRODÉN
NOW, I KNOW WHAT YOU’RE THINKING. FUTURES?

Don’t those end up as truckloads of grain in your driveway? Don’t crazy people use futures to try and corner the global orange juice market? Maybe you’ve read about them in the press and they sound interesting but way too confusing and scary. Here you’ll get to know futures without the drama. They’re not for everyone, but they can actually be pretty useful in certain scenarios. In fact, an overwhelming majority of trades placed by your peers with TD Ameritrade accounts are index futures. And the best place to start is with stock-index futures, some of the largest benchmark indices you may already know a little bit about.

What’s an index future anyway?

Futures are contracts between a buyer and a seller, authorized by an exchange like the Chicago Mercantile Exchange, to deliver a product, or cash value, at a predetermined future date for a specific price. In the case of stock-index futures, they are cash settled—meaning they turn into cash when they expire in the value of the index price itself. And that’s important. Futures go up and down in price when the index on which the future is based, like the S&P 500 or NASDAQ 100, goes up and down as well. Consider the U.S. market’s four main equity-index futures:
1. S&P 500 futures (symbol /ES)
2. NASDAQ 100 futures (symbol /NQ)
3. Dow futures (symbol /YM)
4. Russell 2000 futures (symbol /TF)

Expire? You mean I can’t buy and hold index futures like stocks?

Unlike stocks, each index future has an expiration date when it stops trading and turns into cash. The dates for the four main index futures are the third Friday of March, June, September, and December. You can buy and sell the futures up to that date when trading stops for those futures in a given expiration. If you’re long a future that’s approaching expiration, and you want to maintain a position, you could “roll” the future into the next expiration by selling the future you own, and buying the future in the next expiration month.

How do I see the prices for these index futures?

Each future has a symbol that lets you see a live quote on TD Ameritrade’s thinkorswim® platform. They all have a “/” in front of them. Type the various symbols on the Trade page, the Charts, or a Watch list, and you’ll get a quote for that future.

Why is the S&P 500 futures price not the same as the S&P 500 index price?

Because of “cost of carry,” the E-mini S&P 500 future (/ES) is not the same price as the S&P 500 cash index (SPX). It would cost a lot of money to buy all 500 stocks in the S&P 500 index in the correct number of shares. And to get that money you’d likely have to borrow it and pay interest, or use savings and lose interest. Either way, owning all that stock costs interest. On the other hand, those stocks might pay dividends which might help offset some of the interest charges. The future doesn’t have any interest charges or receive dividends. So, if you have a choice of buying 500 stocks and paying interest and receiving dividends, or buying the future, you might prefer the future. That’s why the

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TABLE 1: The Four Biggies If you’re trading index futures, you’re probably tracking or trading at least one of these four. But not all indices trade alike. So be sure to understand the point value, minimum tick, and margin required for each before diving in. For illustrative purposes only. Not a recommendation of any security.
future is typically more expensive than the cash index.

The difference is the net between the interest cost of owning all the shares and the dividends. Traders tend to be willing to pay extra for the future to avoid the cost of carry. You can see this by comparing /ES to SPX, /NQ to NDX, /YM to DJIA and /TF to RUT, which are the symbols for the stock indices themselves.

How much stock do these index futures represent? If you think of an index like the S&P 500 as a portfolio, the value of the portfolio that the /ES future represents is $50 times its price. That $50 is the value of a $1.00 point in the /ES, and the point value of other futures is different (Table 1, page 20). So, if /ES is trading at $1,500, it would represent an S&P 500 portfolio worth $75,000. That may sound like a lot. But if you have a stock or fund portfolio with a high correlation to the S&P 500 that’s worth $75,000, your account would represent the same amount of value as one /ES future.

How is the profit and loss calculated on a stock index future? Like a stock, profit or loss is based on the difference in value between the price for which you buy and sell the future. But while options on stock are always $100 a point, index futures are not. For example, the E-mini S&P 500 future has a $50 point value. You multiply that point value by the difference between the trade price and the current price. If you bought a /ES future for $1,550.00 and now it’s trading at $1,560.00, your account would show $50 profit, less transaction costs, of course.

How do they come up with the margin requirements for stock-index futures? Like anything else, you need money to buy a future. But you don’t really “pay” for the future like you’d pay for stock. The money you put up when you buy a future is known as the initial margin, a sort of good-faith deposit. The margin covers a possible negative change in value of your futures position from one day to the next.

The margins are based on the exchange’s estimate of how much the one-day change in value of the future might be. For the E-mini S&P 500 future, the margin is $3,850 (Table 1). That’s the amount the CME feels would cover the potential one-day value change in the future, about 5% of the value of the /ES. Note that margins aren’t fixed. The exchanges can increase or decrease the margin requirements for futures at any time.

How do I use index futures to protect my stocks? Experienced traders often use index futures such as the S&P 500 (/ES) as a hedge against a large, diversified long-stock portfolio. If you’re concerned about a sell-off in the market, and you qualify for tier 2 option approval, you could consider using a short /ES future, for example, as a hedge. If the market does drop and your stocks lose money, the short /ES future might make you money to help offset the losses. Of course, if the market rallies, your short /ES would lose money and offset profits.

Also, index futures can be an efficient use of capital because they offer leverage. For the /ES, a $3,850 margin is a small amount of money with which to buy a future worth, say, $75,000. If you were going to buy, say, $150,000 of a stock portfolio, you might consider buying two /ES futures instead. There’s more to learn before you do this, however, like commissions, margin calls, and rolling through expirations. And don’t forget that while leverage can lead to greater returns, it can also lead to greater risk of loss.

AT THIS POINT, YOU SHOULD HAVE A GOOD handle on the basics of stock-index futures. You can see futures quotes but you need a futures account to trade them. To apply for futures trading at TD Ameritrade, you must have margin trading enabled, options trading tier 2 or higher and a minimum net liquidation value of $25,000 or more. When it comes to expanding your trading strategy, consider letting the future(s) be your guide!

Important Information Futures and futures options trading is speculative, and is not suitable for all investors. Please read the Risk Disclosure for Futures and Options prior to trading futures products. The information contained in this article is not intended to be investment advice and is for educational purposes only. Clients must consider all relevant risk factors, including their own personal financial situation before trading. Futures trading privileges are subject to TD Ameritrade review and approval. Not all account owners will qualify.
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When trading futures, it starts with what you know. Our free educational resources can help empower you with a strong knowledge base—so you can become a more informed, confident futures trader.

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- **CNBC “Futures Now”:** Get strategic insights from respected third-party traders on this live, streaming show
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Q. I’m learning about pairs trades, and I loaded up 30-year bond futures vs. 10-year note futures (/ZB - /ZN) on the thinkorswim® Charts. If the price on the chart goes from say, $14 to $15, what does that mean in dollars?

A. Whenever you’re looking at a pair of symbols on a chart, you’re looking at the difference in their prices. So, for the /ZB - /ZN chart, the price of /ZB minus the price of /ZN was $14. To figure out what a move from $14 to $15 means to calculate profit/loss, for example, you have to know what the point value is of the symbols you’re looking at. For both /ZB and /ZN, the value of 1.00 is $1,000. So, if /ZB rises 1.00 more than /ZN, or /ZN drops 1.00 more than /ZB, the difference will rise to $15. The 1-point change in that pair is equal to $1,000 of value. Now, if you’re looking at two stocks where 1 point is equal to $1,000 of value. Now, if you’re looking at two stocks where 1 point is equal to $1,000, a change in the pair from $14 to $15 would simply be equal to $100. And if you bought 100 shares of one stock and sold 100 shares of the other, the 1.00 would be equal to $100.

Q. Do you use trading days or calendar days in your calculations on thinkorswim?

A. In the calculations for the Greeks and probability numbers, for example, we use calendar days to expiration and 365 days in a year. That said, you might like to look at trading days to expiration and 262 trading days a year. The important thing is to use one approach consistently. Don’t go back and forth. If you do that, it will be much harder to estimate why a greek or probability number changed due to the stock price, time passing, volatility, etc. Incidentally, for you math nerds out there, the option formulas usually use the square root of time. The square root of 30 calendar days divided by 365 is .2866. The equivalent trading days of 20 divided by 262 is .2763. Practically speaking, that’s not a big difference.

Q: Can a long (debit) vertical spread ever have positive time decay?

A: When we think of long option spreads, we usually think of negative time decay (time passing working against you). If the debit of this type of at-the-money vertical is less than the intrinsic value of the long option, time decay is positive. The reason is that if the stock stays at its current price at expiration, the value of the vertical will be worth the intrinsic value of the long option. It will grow from its debit to the intrin-
TRADING EARNINGS ANNOUNCEMENTS CAN BE A FOOL’S GAME. WHEN VOLATILITY IS HIGH, TRENDS CAN BREAK RIGHT AFTER A COMPANY ANNOUNCES. BUT, HEY, IF YOU’RE GOING TO DO IT ANYWAY, CONSIDER A FEW TRICKS AND STRATEGIES.

Words by Thomas Preston
Photographs by Fredrik Brodén
Potatoe, Potahtoe

When earnings are announced, it’s binary. Something big can happen or nothing can happen without much in between. That’s not always the case. But stocks with very predictable (read “boring”) revenue and profit numbers aren’t the issue here. I’m focused on stocks where traders are battling it out in the options market. Some think the stock will move big up or down when the news arrives. Others think the stock won’t move nearly as much.

When options’ implied volatility is high, one group may be buying up options expecting a stock to rally or soon drop sharply. Other folks sometimes play chicken with the market and bet that the stock could move a little, but that the pumped up implied volatility will deflate.

A Tale of Two Strategies

Consider two strategies designed to take advantage of these earnings scenarios—one with little stock movement (non-directional), the other with some directional bias. Both strategies have risk, require capital, and demand your undivided attention in the minutes around announcements. The uncertainty around a stock’s quarterly earnings report can create high-volatility trading scenarios. Swings in price can be larger than average, and implied volatility in a stock’s options can pump up. Yet, you don’t really know what the stock will do when the report arrives. I wouldn’t blame you if you decided this all might be too risky. But there’s no harm in learning why some traders love the action.

Potatoe, Potahtoe

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A Tale of Two Strategies

Consider two strategies designed to take advantage of these earnings scenarios—one with little stock movement (non-directional), the other with some directional bias. Both strategies have risk, require capital, and demand your undivided attention in the minutes around announcements. Experienced earnings traders generally put options on a day or two before news hits—sometimes an hour or two before if the earnings come after the close of trading—and take them off for whatever profit or loss they have after the number arrives.

Going Sideways: The Short Strangle

If you think the stock will frustrate expectations, you could short a strangle by shorting a call and a put with different strikes (Figure 2, right). The call strike is typically higher than the put strike. The strategy is “naked” because there’s no hedge on either side of the trade to prevent unlimited losses from occurring.

First, the expiration month you might pick is the one where the implied volatility is highest. Go to the thinkorswim® platform and look at the Trade page and the option expirations. Along the right-hand side, you’ll see overall implied volatility for the options in each expiration—what I call the intermonth skew (See Figure 1). Is there one higher than the others, maybe 10 points higher or more? That higher implied volatility means the options’ time premiums are higher, relative to the other months’ options, and that can mean traders are buying options in expectation of a big earnings price change—either up or down.

When implied volatility is higher, the credit received for a short strangle is higher too. You get that credit in exchange for the extra risk of the stock making a big move, and it widens out the break-even points of the strangle, giving the stock more room to move up and down and still have the potential to be profitable.

You speculate that the stock might move on the earnings but not too much. You’d sell the put at a strike.

Figure 1: Volatility Skew

When implied volatility between months is notably different, as shown here—particularly between June and July expirations—we call it “skew.” The market calls it a possible time to slap a short strangle. Picture: thinkorswim. For illustrative purposes only.
below which you think the stock probably won’t drop. And sell the call at a strike above which you think the stock probably won’t rally.

Likewise, the short strangle has negative vega, or sensitivity to changes in implied volatility. If the implied volatility drops when the earnings come out, that would likely benefit the short strangle. Actually, the earnings uncertainty is causing higher implied volatility in a particular expiration month. Uncertainty typically gets reduced post-announcement, and the implied volatility drops back to roughly where it is in the other months. That skewed expiration month comes back into line.

That doesn’t happen all the time—volatility can increase after the announcement, particularly if there’s another simultaneous event that scares the market. And you never know how much the volatility might drop. Sometimes it drops a lot, a little, or not at all, depending on the stock.

The risk on a short strangle is unlimited. You don’t know how far the stock might drop or rally if you’re wrong. If the market gets surprised, the stock can move well beyond the strike prices of the strangle and cause large losses. For example, say the stock is currently at $100, and you think that it won’t move more than up or down five points on the earnings number. You might sell the 95 put and 105 call to create a strangle for, say, a $3.00 credit on options expiring in three days. That trade might make money if the price of the stock stayed between $95 and $105, and if implied volatility drops. But if the stock drops down to, say, $80, or rallies to $120, the loss could be at least $1,200, which is the difference between the higher strike price and the stock price, less the $3.00 credit received, not including transaction costs.*

That’s a lot of risk for the potential to earn a $300 max profit, which you might not fully capture if you buy the strangle back before it expires. And with three days to expiration in this case, there’s not a lot of time for the stock to move back to the profitable range of the strategy. That’s the tradeoff—you take a relatively large risk for a small, quick potential payoff. That’s why trading around earnings isn’t necessarily a bread-and-butter strategy, and why you’re wise to keep your position size small. With a short strangle, you take in the credit and keep your fingers crossed.

What about iron condors? Don’t they benefit from the stock not moving much and a drop in volatility? While you could sell an iron condor as an earnings trade on the same rationale as the short strangle, the nature of the volatility skew can reduce the credit you get for it. In many equities, the further out-of-the-money options have higher implied volatility. There are reasons for that, but the impact is that those options have relatively higher extrinsic value.

Selling an iron condor is selling a call and put that are closer to the current stock price, and buying a call and put that are further out of the money. The higher extrinsic value of those OTM options can mean the overall credit of the iron condor is reduced. That doesn’t mean that you’ll never find an iron condor candidate ahead of earnings. But the tendency is for iron condors to have much lower credits than short strangles when volatility is high. The tradeoff is that iron condors have defined risk, and typically lower capital requirements, than short strangles. Also, a 4-legged spread such as this can entail substantial transaction costs, including multiple commissions, which may impact any potential return.

**Trending: The Ratio Spread**

If you think the stock might move in a particular direction, but you still want to take advantage of the high
volatility, consider a ratio spread (Figure 3, page 25), which is buying one closer out-of-the-money option, and selling two further out-of-the-money options. The credit from the two short options offsets the debit of the single long option.

With the stock at $100, you might buy one 95 put and sell two 90 puts for, say, a $1.00 credit. This strategy would begin to lose money if the stock drops below $84.00, and has a maximum loss of $8,400 (not including transaction costs*). The max profit is $600 if the stock is at $90, but would make at least $100 (the credit received) if the stock rallies (not including transaction costs*).

Why not just short a naked call if you’re bearish, or a put if you’re bullish, instead of a ratio spread? You could. But the ratio spread offers a little more room for error. Selling the 95 put naked would be a losing trade if the stock drops to $90. The ratio spread can be profitable, although less profitable than the naked put if the stock rallies. (Keep in mind that a naked put strategy such as this includes a high risk of purchasing the corresponding stock at the strike price when the market price of the stock will likely be lower. Also, consider the effect of transaction costs on a 3-legged options trade.)

NOW YOU KNOW what some aggressive options traders do around earnings. But use your insight wisely, brave trader. Even if you just want to watch earnings battles from a safe distance, keeping an eye on the skew can benefit you in other ways. But that’s for another day!

Important Information
Options involve risks and are not suitable for all investors. The information contained in this article is not intended to be investment advice and is for illustrative purposes only. The spread strategies discussed above and other multiple-leg option strategies can entail substantial transaction costs, including multiple commissions, which may impact any potential return. These are advanced option strategies that often involve greater risk, and more complex risk, than basic options trades. A long call or put option position places the entire cost of the option position at risk. Should an individual long call or long put position expire worthless, the entire cost of the position would be lost. Clients must consider all relevant risk factors, including their own personal financial situations before trading. Supporting documentation for any claims, comparisons, statistics, or other technical data will be supplied upon request. Be aware that assignment on short option strategies discussed in this article could lead to unwanted long or short positions on the underlying security.

*For information on transaction costs, please see page 9, #3.
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“My wife was afraid of the dark…then she saw me naked and now she’s afraid of the light.”—Rodney Dangerfield

The first step to overcoming any fear is understanding what you’re dealing with. With short-naked puts, that means understanding the strategy as well as its risks.

To enter a short-naked put, you sell to open a put. It’s “naked” because there is no hedge. No spread. No stock. No nuthin’. Not having the hedge maximizes the premium you receive, but also the risk. Before you jump in, you might want to keep some key criteria in mind.

1) Be comfortable with the cost basis.
Cost basis is calculated by subtracting the credit received for selling any given put from the strike price of said put. Before selling that put, you need to understand it’s possible you could end up long the underlying at that price and be comfortable with that potential outcome.

2) Fear is your friend.
Even when the CBOE Volatility Index (VIX) is low, there are stocks with higher than usual “fear” priced into their options. Adding the Implied Volatility (IV) to a thinkorswim® yearly Chart will give you a quick glimpse at the vol range. (From the Chart, go to Studies → Add Study → Volatility Studies → ImpVolatility.) You may want to consider selling puts when vol is at or near the top end of the vol range.

3) Look for high return on capital (ROC).
Before entering a naked put trade, determine your minimum acceptable daily ROC as part of your goal-setting. Say your daily ROC number is 0.75%. In the thinkorswim® platform, simply add “Return on Capital” to your layout in the Trade tab. Then multiply 0.75 by the number of days left until expiration to see which strike provides your minimum acceptable ROC or better. Of course this number is never guaranteed, but consider it a goal post to run towards.

4) Time is on your side.
Because you’re short an option, time (theta) decay is a good thing for short-naked puts. The idea is that when the option premium deflates, you can buy them back at a lower price. Contracts with 50-65 days left until expiration typically have a sufficient amount of theta decay potential built in. Since they’re shorter-term contracts, they begin to lose more as each day approaches expiration.

5) Mind the buying power effect.
Naked puts can be a capital-intensive strategy due to the higher margin requirements, which all depends on the price of the underlying. Fortunately, margin isn’t hard to figure out in thinkorswim®. Once you’ve determined which put to sell from the Trade page, clicking “Confirm & Send” in the order screen will bring up the Order Confirmation Dialog box. This box contains the Buying Power Effect of selling any given put. It’s a good idea to acknowledge and accept the BP effect before committing to the trade.

SO THERE YOU HAVE IT. Getting naked doesn’t have to be scary, but as with any strategy, it you’ll need an understanding of the potential risks of what you’re doing and some hard-and-fast rules you set for yourself.

Nick Fenton is the founder of TickerTank. TD Ameritrade and TickerTank are separate, unaffiliated companies that are not responsible for each other’s services or policies.
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If you like to trade earnings, you need to do two things right after you read this article:
1/ Read the feature “Don’t Get Skewed” on page 24 about volatility strategies you can trade around earnings.
2/ Check out the Market Maker Move feature in thinkorswim®.

WHAT IT IS
When researching potential movers with upcoming earnings announcements, you can start your due diligence by going to the Calendar feature in the MarketWatch page of thinkorswim, where you’ll see what companies are up for earnings releases. Then view the Market Maker Move (MMM) to see which “swing for the fences” trade might carry the ball furthest.

Located in the upper-right-hand side of the Trade page when visible, the MMM is a measure of the expected magnitude of price movement based on market volatility. This doesn’t mean that it measures expected movement, but rather the implied move in dollars versus percent (to help the mathematically challenged) based on the volatility differential between the front and back month. This is useful in cases where an event (i.e. earnings) takes place in the front month and you would like to estimate the implied move due to that event between now and the front-month expiration.

HOW IT WORKS
The MMM looks at options-pricing models backwards. It uses current option pricing to “reverse engineer” an estimate of the potential daily price movement of an underlying instrument based on assumptions about implied volatility. How it’s calculated is our version of the Colonel’s Secret Recipe, so we can’t give it away. But broadly, we arrive at this calculation by using stock price, volatility differential, and time to expiration.

Now, you won’t always see the MMM quote. If the volatility differential is positive, the MMM will be displayed. If negative, it will not. In other words, if the near term expiration has greater volatility than the back month, the MMM value will show.

One caveat: notice we didn’t say that the stock would go up when the MMM is displayed. Only that it has the potential to move—up or down. So don’t go loading up on long calls just because the big yellow button appears when earnings happen to be around the corner. It’s not a crystal ball.

So do the work and figure out the best strategy based on what you can afford to lose, not what you expect to make!

A Coiled Spring Indicator

For earnings traders, the Market Maker Move clues you into potential movers.

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Mary Ryan is not unlike a lot of Millennials her age. As a recent college grad, she worked full time while going to school. Her life is digital. And she loves to shop. But don’t put Baby in a corner. She probably can trade circles around you, and she’s as familiar with TD Ameritrade’s thinkorswim® trading platform as its founders. What’s more, she’s helping bridge the generation gap between investing theory and trading reality by bringing thinkorswim to every college across the country—one campus at a time.

We sat down with Mary to chat about why TD Ameritrade’s college initiative—TD Ameritrade U—is going to lead the charge in breeding the next generation of traders.

Trading in college, huh? Why now?
Simple. I was sitting in finance classes at night, not getting anything out of it. But sitting at my trading desk at work, I was learning more about the real world. Then it hit me. I wanted to fill the void between financial theory and reality. Nobody was talking about what was actually going on. While you’re learning about how to get a mortgage someday, you should also be preparing for first steps in finance today—trading and investing.

What’s the current state of the typical trading class at the university level? Some universities have a trading curriculum, but they lack the technology. They have Bloomberg terminals, but you can’t execute trades on them, and you can’t take them home. Not so with thinkorswim’s paperMoney®. So TD Ameritrade U is more of a supplement to what’s out there to give the students the tools, technology, and education.

What’s something you’ve gleaned from trading that others can learn from? Parents are in the same state as students. There’s not a lot of places to grow your money right now, so how do you make your capital work harder? Trading is becoming more of an option. We need to help parents open up the conversation about finance. In high school, we all have the conversation about how to balance a checkbook, but how do you organize your finances for the rest of your life?

What’s the bigger goal for TD Ameritrade U? There aren’t enough people talking to young people. But these are future traders! The more we teach financial literacy at a young age, the more likely future investors and traders will succeed. First come the birds and the bees. Next comes trading and investing.

So Mary, you’re a trader. What’s your flavor? According to Mashable, the average person spends seven hours a month on Facebook. I’ll spend seven hours a day staring at a stock chart. That’s not normal behavior.

For strategy, I’m not allowed to tell you exactly, but let’s just say that one of my colleagues calls me the “Queen of Rolls.” And I’m not talking about the buttery kind.

Wow, that’s kinda hot.
Yeah, I know…

Important Information
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Security symbols displayed for informational purposes only. This is not a recommendation to trade any specific security.
IN EARLIER ISSUES, WE GAVE YOU VERTICALS AND CALENDARS—SPREAD STRATEGIES DESIGNED TO PROFIT FROM A TREND OR THE PASSAGE OF TIME.

BUT THERE’S MORE.

AND BLENDING THEM TOGETHER CAN OPEN UP NEW WORLDS FOR OPTION TRADERS.

WORDS BY THOMAS PRESTON PHOTOGRAPH BY FREDRIK BRODÉN
IN THE PAST TWO ISSUES OF THINKMONEY, we covered verticals and calendars—option trading’s foundational spread strategies. But what about other option strategies, like condors, diagonals, and unbalanced butterflies? It could take years of articles to cover them all, right? Maybe not. Just about all of the more complex strategies are built by combining verticals and calendars. So understanding them is more than academic.

IT’S COMPLICATED, BUT NOT THAT COMPLICATED*

When I started trading bond-futures options, I would accumulate long-and-short calls and puts at different strikes and expirations. This was before trading software. So to fix my position risk, I had to figure it out by hand, and found spreads from inside my whole position with relatively low delta—spreads like butterflies and verticals that probably wouldn’t change much in value even if bond futures moved up or down a point or more. The goal was to isolate the individual calls and puts, long or short, that didn’t fit into a defined-risk spread. Those leftover options represented my risk and I knew which positions I would need to close or otherwise deal with if bonds moved against them. And making, say, two decisions at 7:30 in the morning was easier than making fifty.

That was then. Now, I don’t have many overlapping positions. But I still use these techniques to understand complex spreads and better identify risky position components, or those parts sensitive to changes in stock price, time, or volatility. The goal here is to show you how to think about complex positions as a sum of their simpler parts.

VERTICAL MIXER

Warning: Math ahead. Grab coffee and a whoopie pie before proceeding.

First, recall what the risk profile of both a long and short vertical spread looks like (Figure 1, left & middle graphs). Note that in both cases, the spreads are designed to profit from the stock trending in at least one direction. In the case of the short vertical, the stock can stay the same, or even move against you a little bit.

Now let’s start by combining long and short verticals. All butterflies, condors, and other “wing spreads” are composed of combinations of long-and-short call, and/or put, verticals. Sum up the total of a single expiration’s long-and-short calls, as well as the long-and-short puts. If the sum is zero, chances are you can use verticals to evaluate a position.

Assume XYZ stock is trading at $50. Let’s revisit the basic long and short vertical spread.^

**The Long Vertical** - Think about the long 48/49 call vertical trading at .70 debit. This is a bullish position that makes money if XYZ is above its break-even point at $48.70 at expiration. It loses money if it’s below $48.70. The max profit is $30 if XYZ is above $49 at expiration, and the max loss is $70 if XYZ is below $48. That means XYZ can drop $1.00 from $50 to $49, and this bullish position can still make its max profit.

**The Short Vertical** - Now think about a short 52/53 call vertical trading at .20 credit. This is a bearish position that makes money if XYZ is below its break-even point at $52.20 at expiration. It loses money if it’s above $52.20. The max profit is $20, if XYZ is below $52 at expiration, and the max loss is $80 if XYZ is above $53. XYZ can rally $2.00 from $50 to $52 and this bearish position can still make its max profit.

**The Condor**

If we combine the long 48/49 call vertical as well as the short 52/53 call vertical above, we should have a position that shares characteristics of the two—the 48/49/52/53 long-call condor. (Figure 1, right graph) This condor has a debit of .50, which is the net debit of the long 48/49 call vertical, and the short 52/53 call vertical (.70 -.20).

How the strategy plays out at expiration depends on where the stock price ends up. If at expiration XYZ is:

1. **BElOW $48** —The long 48/49 call vertical loses $70, but the short 52/53 makes $20. The net is a $50 loss, which is the max loss of the long-call condor.
2. **ABoVE $53** —The long 48/49 call vertical makes $30. But the short 52/53 call vertical loses $80. Again,

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**FIGURE 1: The DNA of a Condor** Combining a long vertical and short vertical of the same type gets you a condor. For illustrative purposes only.
the net is a $50 loss, the max loss of the long-call condor.

3. BETWEEN $49 AND $52—The long 48/49 vertical makes $30, and the short 52/53 call vertical makes $20, for a net profit of $50. That’s the long condor’s max potential profit.

How the long-call condor makes and loses money is nothing but a combination of its two verticals, one long, one short. Why is this important?

If we understand the long-and-short call verticals that make up the condor, we can see that the 48/49/52/53 condor has a somewhat bullish bias. While the long 48/49 call vertical can still make money if XYZ drops $1, the short 52/53 call vertical can still make money, if XYZ rallies $2. That extra “room” on the upside gives this condor a slightly bullish bias.

Compare that to a long 46/47 call vertical, and a short 51/52 call vertical. That’s a long-call condor, too—the 46/47/51/52. But XYZ can only rally $1 to $51 before the short 51/52 call vertical starts to lose money. But, it can drop $3 to $47 before the long 46/47 call vertical starts to lose money. That condor has a bearish bias, even though it contains two call verticals, each with different directional biases. The condor verticals you choose determine position risk, and how far the stock can move in any direction before the condor starts to lose money.

**CALENDAR MIXER**

Still with me? Now let’s look at how verticals and calendars together can make up an inter-expiration strategy. First, recall how the risk profile of a calendar looks like in Figure 4, and note that the spread is designed to profit when the stock trades in a range, rather than trending. The diagonal changes the shape of the calendar to take advantage of both time and trend.

**The Diagonal**

When you combine a short-vertical spread with a long-calendar spread, you get a position that shares characteristics of the two—the diagonal.

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**Figure 2: The DNA of a Diagonal**  Combining a short put vertical and long put calendar of the gets you a diagonal. For illustrative purposes only.

Start with a short Sep 47/48 put vertical for a .35 credit in a $50 stock. That’s long the 47 put and short the 48 put for a net .35 credit, with a max loss of $65 if the stock is below $47, and a max profit of $35 if the stock is above $48, with a breakeven point at $47.65.

Now, add a long Sep/Oct 47 put calendar for a .20 debit, which is short the Sep 47 put and long the Oct 47 put. That calendar has a max loss of $20 if the stock is higher or lower than $47, and an undefined profit if the stock is right at $47. When you combine the short...
vertical and the calendar, the long 47 put from the short vertical is offset by the short 47 put from the long calendar. The resulting position is the short Sep 48 put and long the Oct 47 put, which is known as a “diagonal,” for a .15 credit. (See Figure 5.) Like a calendar spread, the greatest profit occurs at the short strike. Yet there is a slight bullish bias as a result of the short-put vertical.

So the diagonal is made up of one position that loses money if the stock goes to $47 (the short vertical), and one that makes money if the stock goes to $47 (the long calendar). But they’re not equal. The short 47/48 put vertical has more delta than the calendar spread, particularly as expiration approaches. If I have a diagonal on that’s losing money, it’s the short 47/48 put vertical component I look at first. What’s the vertical trading for now? How much additional risk do I face? If I continue to hold it, would the long calendar spread generate profits—or additional losses—if the stock stays at its current price? No right answer but lots of choices. Knowing that the diagonal is composed of a short vertical and a long calendar can make your choices clearer.

**DOING THIS “UNTANGLING” OF COMPLEX positions into verticals and calendars can help you see if adding new positions reduces or increases risk. Does a long vertical close out a short vertical embedded in an unbalanced butterfly? Or does it increase a condor’s directional exposure? Ultimately, you can extend this analysis to your whole portfolio. If you isolate where risk is concentrated by evaluating the risk of simpler components across various underlyings, you can make more efficient decisions about how to reduce risk.**

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**FIGURE 1: Analyze My Spread**  Thinkorswim’s Analysis tools will group together one or all of your positions to give you a hypothetical P/L curve for today, or anytime before expiration. For illustrative purpose only.

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**PART 3 How to...Analyze a Spread Portfolio**

All of your trades. One screen. One conclusion.

- A powerful feature on the Analyze page on TD Ameritrade’s thinkorswim® platform can help you understand how different spreads work together. It lets you see the overall profit/loss graph for an entire position, and then see profit/loss graphs for individual spreads inside that position. Here’s how:

1—Go to the Analyze tab, then the Add Simulated Trades sub tab.

2—Enter the symbol for a stock that has options on it. You’ll see the options appear in the Option Chain, just like on the Trade page.

3—Right-click on the bid or ask of one of the options to bring up the spread-order menu. Note these aren’t real trades—they’re simulated. So, if you make a mistake, you can delete. So, pick an expiration month and create a simulated out-of-the-money short-call vertical trade.

4—Now, go back to that same expiration month and create a simulated short out-of-the-money put-vertical trade. If you go to the Risk Profile subtab, you’ll see the profit/loss chart for the combined short-call and put-vertical position—an iron condor.

5—Next, create a risk graph. Here’s where it gets fun. Look at the top of the Risk Profile tab for the “plot lines” drop-down menu. It has “ + 1 @Expiration” by default. Click on it, and select “Single” from the menu. That
shows you the profit/loss graph for the position as of the Date in the lower right hand corner of the Analyze tab. So, for clarity, change that date to the expiration date of the options. You should see an expiration profit/loss graph for the iron condor.

Now, look carefully on the left hand side of the simulated positions. You’ll see check boxes next to each spread, and next to those, other boxes with faint squiggles. Click on the box with the squiggle and see what happens. You’ll see the numbers 1 and 2 appear in the boxes, and the Risk Profile now shows the profit/loss graph for the individual verticals, in addition to the iron condor. Uncheck the check boxes to take off the iron condor profit/loss graph to see only the graphs for the two verticals.

You can do this with any number of simulated and actual positions on the Analyze tab to see how the individual spreads combine to create the overall strategy.

Important Information
Options involve risk and are not suitable for all investors. The information contained in this article is not intended to be investment advice and is for illustrative purposes only. Spreads, condors, butterflies and other complex, multiple-leg option strategies can entail substantial transaction costs, including multiple commissions, which may impact any potential return. Investors should also consider contacting a tax advisor regarding the tax treatment applicable to multiple-leg transactions. Be aware that assignment on short option strategies discussed in this article could lead to unwanted long or short positions on the underlying security. Supporting documentation for any claims, comparisons, statistics, or other technical data will be supplied upon request. For more information on commissions and fees, see page 9, #3.
If you’ve been around the thinkorswim® universe, you might’ve heard of Monkey Bars. Funny name. Serious chart concept. Monkey Bars charts were built with futures traders in mind, and they show the price level where most trading action occurs over a particular time frame (the “Monkey Bar”) and the range where 70% of the trading action happens (the “Playground”). And with a liquid product, the chart ends up looking like a bell curve turned on its side.

BALANCED MARKET
As long as price action isn’t departing from what most other traders are doing, the market is balanced and orderly, and the boundaries of the Playground likely represent support and resistance (Figure 1).

In a balanced and orderly liquid market, as a short-term trader, you might feel okay playing the moves from boundary to boundary. Since the Monkey Bar, as the most-traded level, represents a virtual magnet that attracts price, you might look for directional trades entered near a boundary with a target at the Monkey Bar. On the other hand, if probability is your playbook, then build risk-defined spreads outside the boundaries and find areas unlikely to be touched by all trades but the statistical outliers.

UNBALANCED MARKET
Liquid markets don’t always stay balanced, and that’s the reality of trending prices. Just like on the playground of my youth, sometimes the game moves away from where you’re playing. You can stop playing, or you can move to where the action is.

Monkey Bars show when price is moving to a new area—i.e. a new playground. Breakout traders will recognize this as a resistance or support break. Because liquid markets require volume to experience significant price movement, institutional participation is likely taking price to a new Monkey Bar. This swing from bar to bar yields a skewed or sometimes double-bell curve (Figure 2). Look for directional trades entered as price moves outside the boundary of the Playground.

ACTIVE TRADING IS A LITTLE LIKE falling off the monkey bars of our youth. The best thing that could happen when playing on the monkey bars was to have lots of other kids below you. Why? They would break your fall if you slipped off the bar. Sure, you might get an elbow in the eye, but you’d be saved from a face full of gravel. Active traders deal with lots of other participants, and when playing inside a liquid market, yeah, you might get hurt, but hopefully there’s someone below you to cushion your fall.

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DELTA
• A measure of an option’s sensitivity to a $1 change in the underlying asset. All else being equal, an option with a 0.50 delta would gain 50 cents per $1 move up in the underlying.

THETA
• A measure of an option’s sensitivity to time passing one calendar day. For example, if a long put has a theta of 0.02, the option premium will decrease by $0.02 per day.

NEGATIVE VEGA
• Short options have negative vega or short vega—because as volatility drops, the strike is away from the underlying, price is lower, the time value is higher, the option will lose time value, and the option can be bought back cheaper or expire worthless.

SHORT CALL
• A bearish strategy with unlimited risk in which a call option is sold for a credit, without a hedge. The strategy assumes that the stock will stay below the strike or volatility from the outset.

SHORT VERTICAL
• A defined-risk directional spread strategy, composed of an equal number of short calls and long puts whereby a net credit is taken into the trade; the account will be closed at a debit for less than the credit received when it can be closed at a profit.

IRON CONDOR
• A defined-risk, short spread strategy, constructed of a short put vertical and a short call vertical within a certain range (between the strikes of the short options). You assume the underlying will stay within a certain range and/or volatility drops. The risk is typically limited to the largest difference less the total credit received. The strategy is profitable when it can be closed at a debit for less than the credit received.

CBOE Volatility Index (VIX)
• The de facto market volatility index, used to measure the implied volatility of S&P 500 index options. Often referred to as the “fear index,” it is used to gauge the level of fear or complacency in a market over a specified period of time. Typically, the VIX rises when volatility is increasing and option premiums gain, and vice versa. However, the market can move higher or lower in anticipation of a correction.

Implied volatility
• The market’s perception of the future volatility of an option’s underlying security, directly reflected in the option’s premium. Implied volatility is an annualized number expressed in percent (such as 25%).
Opportunities in Up and Down markets

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