

TRANSCRIPT

Technical analysis for volatile times

Colin Songer: Thank you, everyone, for joining us here today. My name is Colin Songer, along with my colleague James from the Trading Strategy Desk here at Fidelity.

To start off, let's talk about what we do on the Strategy Desk. So our desk is designed to have a discussion where we focus on education and coaching self-directed investors through a process of challenging and refining their approaches to their trading strategies. Our focus is mainly with our online classes, where our coaching sessions range from topics of technical analysis, concepts, as you can see here, options strategies. We also have our four-week courses that you could take advantage of, as well, which does include homework, and it's one hour a week for four weeks, where we cover topics of options, we have a class in technical analysis, but we also have a class for Active Trader Pro and trading basics. So if you are interested, certainly you can go into our Learning Center and you could sign up for any one of these classes that we have available.

But today, our focus is going to be on technical analysis for volatile times, and we're going to go over a few indicators that can help create and make your approaches to trading more mechanical and less emotional. That is, indeed, the goal, because emotions can certainly cost us money.

Before we get started, let's talk about some disclosures. Any screenshots, charts, and company symbols mentioned are provided for illustrative purposes only. These should not be considered an offer to sell, a solicitation of an offer to buy, or a recommendation for the security. Investing involves risk, including risk of loss. Technical analysis focuses on market action, specifically volume and price. Technical analysis is only one approach to analyzing stocks. When considering which stocks to buy or sell, you should use the approach that you're most comfortable with. As with all your investments, you must make your own determination as to whether an investment in any particular security or securities is right for you based on your investment objectives, risk tolerance, and financial situation. Past performance is no guarantee of future results.

So this is actually part two of a four-part series that we have. So with Getting Started we go over the fundamentals that really goes behind and understanding what we're trying to look at when we read a chart. Today we're

going to be going over indicators, which is analyzing past price data, and will give us a way to be able to make our trade process more mechanical, and then identifying chart patterns. So specific chart patterns can help lay a groundwork for entering and exit into our trades. And then, lastly, and probably the most important, is managing risk, which is our job as traders. That's our priority, which is to manage the risk on the trade so we can come back to trade another day.

A lot of the content that we're going to be covering today was inspired from Charles Kirkpatrick, and his book *Technical Analysis: The Complete Resource for Financial Market Technicians*.

We're really looking to cover six basic areas that we're going to discuss. The first one's going to be the basics behind technical indicators. Then we're going to be diving into trend indicators, followed by momentum, then volume, dive into that volatility piece, and then we're going to wrap it up with a bow with the support and resistance indicators.

Let me pass it over to my colleague James so he can introduce himself and get us started with the basics.

James Savage: Thank you very much for that, Colin. Yes, good afternoon for some; (laughs) good morning to others. So let's go over, right, some of the technical indicator basics, beginning with, well, technical analysis, and what are technical indicators. So technical analysis, to put it in, I think, as few words as possible, it's the study of market data to form an outlook, right? To form an outlook on price. Now, technical analysis uses two common forms, chart patterns being one and technical indicators being another, right? A technical indicator is often going to be based on mathematical calculations of price or volume.

Now, as we just talked about, there are five types of technical indicators that are being used here, and these are going to be the ones that we're going to be covering today. They're going to cover those pillars of technical analysis with trend, momentum, volume, volatility, and price. We've actually saved support and resistance to be kind of our proxy for price and what price is telling us.

Now, with all these indicators you're not going to necessarily need to look at them all, because, as you can see, in each category we've got quite a few, but these are going to be telling us really the same, we can say, overall idea,

whether that's trend or momentum, and each of these different indicators that are listed here are going to be using different calculations to get there.

So now that we've kind of covered, and I've (laughs) gotten the chance to introduce myself, Colin, let's go into our first trend indicator, I think one of the most common ones that everyone's heard.

Colin Songer: Yeah, by far, I'd have to agree with you there. So we're going to dive into that first one, and this is our first pillar. So top priority being price, which is just looking at a chart. That's the primary tool of a technician. That's going to be, really, the one that's going to be leading the way for all the indicators, just looking at price. A lot of times we put too much dependence on indicators and lose sight of price, and I'm hoping that going through today everyone realizes that these indicators are helping us analyze price to determine our outlooks and make our trades as mechanical as possible.

First one, the most common of the trend indicators, is the Simple Moving Average. And all this is really doing is it's calculating the closing prices over a specific period of time, adding them all up, and then dividing by that amount of time that we're covering. And it's plotted it on the chart, giving us a value. Now, how triggers utilize this has a couple of ways.

So, first off, it helps us analyze a trend, which would make sense because (laughs) it's a trend indicator. First off is the slope of the Simple Moving Average. If it's sloping up, the trend is up; if it's sloping down, the trend is down. So that can give us insight on what trend we're dealing with. Next, we can modify these Simple Moving Averages over different time periods to help us with evaluating different trends, because there are trends within trends, and that's something that we covered in the fundamental piece.

So the first one, I would probably say, probably the most referenced, is the 200-bar Simple Moving Average. Now, this provides a proxy for long-term trends. Now, we say "200-bar." That's a reference to the frequency on your chart. So if my chart is set to a frequency of daily, this would represent 200-day Simple Moving Average, and that's probably the most common that you'll hear out in financial networks, television. There's usually reference of this, but there's also reference to another one, which is that 50-day, or 50-bar, Simple Moving Average, which is a proxy to gauge intermediate trends. Lastly, there's that shorter-period Simple Moving Average. I would say that when people evaluate these shorter-term moving averages, they might utilize something like a 20-day moving average. This is a way to be able to make a determination on the different timeframes of trends. I would say that's probably the most

overlooked value that people have is looking at the different timeframes when looking at charts. So when we look at charts, most people that I speak with -- traders, as well as colleagues -- a lot of times we get fixated on certain timeframes on our chart, when in seconds we can look at a longer time period and get a much bigger picture.

As an example, if I look at a three-month chart, because I only look at short-term or these intermediate trends, and that's usually all I trade, well, the problem is that in seconds I can click on one button and expand it to a two-year or a five-year chart, and in seconds I can click to a ten-year, or a max chart, which gives me a lot more time to be able to evaluate to see where this trend is in the broader picture, or the broader trend. And, even more so, I can get to minuscule details and reel it into intraday to be able to help with my timing with my intraday trends. And these are just different ways you can utilize.

One way you can use these as generating signals for a trader is the price relationship to the moving average. So when the price crosses from below to above that moving average, some traders would consider that a buy signal. When that price crosses from above to below, some traders would view that as a sell signal. But because it's so quick, and it could happen based on the

timeframe we're looking at, you might get false signals and be tricked out of a trade, we'll say, (laughs) getting head-faked out of your trade.

So they might utilize a signal that might be a little bit slower. Well, that's where something like a moving average crossover comes into play. So they'll use a shorter-term moving average, and utilize a signal when it crosses over that longer-term moving average. As an example, when the 50-day moving average moves from below to above, traders would view that primarily as a buy signal. It also has a fancy name that I know you've heard on television, the golden cross. Now, when that 50-day moving average crosses from above to below that 200-day moving average, most traders would view that as a bear signal, or a sell signal, and that also has a fancy name: it's called the death cross. Very interesting names, which have given it celebrity status that it has.

Let's now take a look at an example. I'll show you about the relationship of price sensitivity to the timeframe that it evaluates. So as you could see here, this is the chart over on the right that shows us a 20-day moving average, a 30-, a 40-, and a 50-day moving average on a chart. As you can see, that price in the middle starts falling from there. The first one that really starts to slow down and change direction is that 20-day moving average, and, as you see, as price continues to pull these moving averages down, you'll see that the 20 does

cross each one of those moving averages. The last one to turn down is the 50-day moving average. As you could see, it's much slower to turn around and react. Now, you can see over on the right-hand side price starts to rally, has a pull back here, cross. Now it moves back above the 20, back above that 30, and finally above that 50, and as it does that, it starts pulling that 20-day moving average up with it. Eventually, that 20 crosses back above that 50-day moving average.

So what this is telling us is a real important lesson about, yes, the shorter term becomes much more sensitive, gives you a much more quicker signal, but that doesn't come without risk, right? With every reward there's a risk. But the problem is you might get more false signals and, indeed, get faked out of the trade, where a longer-term you could be much more confident that that signal is not a head-fake, but you're also getting into that trade much later, compared to the shorter-term. So as you could see, it's kind of an advantage/disadvantage type approach when evaluating which one you would like to use for your particular trades.

We talked about the most common, which is Simple Moving Average, but there's yet another moving average that has, we'll say, really gotten a lot of attention.

James Savage: Absolutely, Colin. So there is another moving average that can be overlaid on the chart, and this is going to be referred to as the Exponential Moving Average, or EMA for short. So what this is it is a moving average, so you're going to see some similar characteristics of the Simple Moving Average; however, the difference lies in the calculation. Now, what's happening in the Exponential Moving Average is that it's adding more weight to data that is current, instead of spreading it evenly, like the Simple Moving Average. So what that is going to do is that it's going to make this actually behave somewhat faster than a similarly-period Simple Moving Average. So, because of that, we are able to identify trends faster. However, just Colin used the basketball reference a few times here, that head-fake, this is more apt to do so, as well. A faster signal could give us more false signals.

Now, how it works, a lot of the same rules apply to the EMA as they do the SMA that we just covered. It can tell us trend direction, depending on where the line is going. It can also help us with support and resistance, as well, in the same way that Simple Moving Average can. However, you know, I want to actually show you the differences so you can get an idea, because a lot of the concepts are going to be very similar, such as price crossing, right, trend direction, and support and resistance.

So when we're looking at the chart here, there's two lines: one of them is the Exponential Moving Average, and the other is the Simple Moving Average. And they both represent 30 days. The darker line here is our Exponential Moving Average. And if you were to look at that big drop right in the middle of the chart that's probably getting your attention, well, what do you notice? The darker line actually falls faster. It falls sooner. And when do they start to turn around? What turns around quicker? It is that darker line. So the EMA reacts faster in the first pullback and the subsequent rally. So it doesn't mean one is better than the other, but they both have their positives and negatives.

Now, the reason why we wanted to cover also the Exponential Moving Average is it helps with another trend indicator that we have, and this is the Moving Average Convergence/Divergence. What a mouthful there, I know. That's why we like to call it the MACD, for short. Now, this is a momentum oscillator. I want to get you familiar with that term; we'll be covering it often. It is a momentum oscillator, primarily used to trade trends. The reason for this is the MACD calculation actually is based on subtracting the value of a longer EMA from a shorter EMA, typically the 26 and the 12, and then adding another EMA line based on that. So we're left with what's called the MACD line, which

is that primary difference between the two Exponential Moving Average, and then what's called a signal line that's based on that.

Now, we've got three points on here related to how it works, and that helps us determine bullish or bearish, but you're going to see a similar theme. I want to take it to the chart, because on the chart I can show you kind of those three points kind of illustrated out in four different ways.

So A and B are going to be bearish, so take a look down there at I guess we'll say the bottom kind of left corner. That's where our MACD is located, below our price action. A is going to give us our first bullish signal. We've got that red line, which is the MACD line, crossing from below through and above our green signal line. This is considered bullish. The further below that flat blue line there, the further below the stronger the signal is considered.

As we move over to B, another bullish signal is generated with MACD, crossing from below through and above that zero line, that flat blue line there. Again, another bullish signal. And you can see, based on the price action on the chart, they kind of gave almost like a warning that bullish signals were being generated.

Moving over to C and D, these are our two bearish symbols. When we see our red MACD line crossing from above through and below our green signal line, this is our first bearish signal. Likewise with the A, except reversed: the higher above the zero line, the higher above that blue line, the stronger the signal is considered. As we move over to D, the second bearish signal that we're having here, this is when that MACD line crosses from above through and below our zero line. So this is yet another, we'll say, bearish indicator here.

So what if, though, you were looking at this, and you were looking at some of the trends, but you may want to have an idea of, well, is the trend strong? I can see there's this trend. Or is it weak? Well, there is another indicator based on trends that can actually help us with the strength of the trend, as well.

Colin Songer: And that's where we bring to light the Average Directional Movement Index, and this can help us gauge that overall strength of the trend. So let's go over how we can incorporate this as traders. How does this indicator help with my analysis of price? So the basics, and the real value, the strength of this indicator, is that ADX line. So that Average Directional Index line helps me gauge how strong a trend is. Because it's gauging the strength of the trend, it's not indicating direction, and that's probably the number one misconception or mistake people make with looking at this indicator. The ADX

line is just showing us that there's a strength in place, or there's not a trend in place. So if the ADX line is above 25, there's a trend in place. If the ADX line is below 20, there's no trend present.

Another part of this indicator is, well, is the ADX line declining or is it rising? If the ADX line is declining, then it could mean that that current trend is weakening. If it's rising, it could mean that that trend is strengthening.

Now, there are two other components that come along with this indicator: there is the Positive Directional Indicator, also known as the +DMI, and then the Negative Directional Indicator, -DMI. This helps us determine the direction of the trend. So if the +DMI is above the -DMI, and the ADX is above 25, it's an uptrend. If -DMI is above +DMI, and ADX is above 25, it's a downwards trend.

Let's briefly take a look at an example here. This is the chart, and as you could see on the left-hand side of that chart, it seems that just kind of prices just jumping around here. And as you can see here from ADX, it's confirming that, right? It's below that 20 mark, showing that there's no trend present. As we start maneuvering to the middle of the chart, price seems to be really getting its footing, and start pushing its way up. And at that same time, you could see that the +DMI is moving above that -DMI. Now, remember, it's not a trend

until we move above that 25, which, as you could see, as price keeps pushing up, the ADX line finally pushes above that 25, showing us that there is a trend present, and you can see what the chart says for the rest of that story. So not only is it gauging strength for us, but also it can help us with analyzing the trend, as well.

Now that we've covered some trend indicators, you know, James, you talked about some oscillators earlier. I think it might be a good opportunity to dive into some of those.

James Savage: Yeah, Colin. Let me jump in for the topic on oscillators, because when we're going over oscillators we're typically talking about momentum indicators. And, now, before we kind of jump into them, again, I just want to sneak in here, I want to talk about some of just the general concepts of momentum indicators, which are going to be based on, at least for today's discussion, overbought and oversold in oscillators.

So momentum indicators are commonly referred to as, we'll say, or at least the ones we're talking about, bounded indicators, that are also called oscillators. Now, what a bounded indicator means is that there is a limit to either how high or how low the points can reach. Now, within these, we'll say, areas, from,

again, an extreme low and an extreme high, there are parts that we want to classify as a zone that is either considered overbought or oversold. And it is within these special zones, these overbought and oversold zones, are where a reversal could be imminent. Now, the signal is generated when the index itself, the index value that our oscillator is producing, is going to exit this zone.

Now, it's important to understand that in strong trends the oscillator will remain in the zone and give many false signals on the corrections to that trend. That's why sometimes it can be helpful looking at something such as -- what did Colin just talk to us about? The Average Directional Movement Index, the ADX. That can help us determine whether the trend is strong, and let us know if some of these momentum indicators can be helpful. So, again, in a strong trend it typically does not work as well, but where is it going to excel? In a trading range, when there's no strong trend present.

So hopefully I was able to kind of cover about that little sneak peak of oscillators that I mentioned earlier, when going over MACD, but let's go into the first one, because we've got two great ones, common ones, and let's start off with stochastics.

Colin Songer: So when we look at stochastics, once again, it's a momentum

indicator. And how this works is it's trying to show or visualize the location of the close relative to the high-low range over a certain set period. Now, as James alluded to earlier, the stochastics bases its indicator on a range of zero to 100. Now, this is most effective in a trading range, or when there's no trend present. It identifies these overbought and oversold versions by identifying above 80 as an overbought region and below 20 that oversold region.

Now, a lot of you are probably saying, well, when it enters 80, I guess that means to sell. Actually, that's not the typical way that it's utilized to identify the sell signal; it's when it crosses into the 80 and then crosses back below that 80 that is what triggers the typical use as a sell signal. On the opposite side of that, when that oscillator enters below 20, and then exits back out by crossing back above that 20, that's where traders would typically use that as a buy signal.

Now, as a trader, you could be a little bit more aggressive and utilize a signal when those two lines cross, and I'll show you an example of that, because it has two lines. It has the actual stochastic, and then the smoothed-out stochastic that act as an initial signal line, just sort of like the MACD but a little bit different, obviously different calculations. You could be more aggressive

and use that as a signal, but I use that more as a -- and this is a way traders view it -- as something to monitor from that point forward.

Now, another different way -- and you're going to hear this theme throughout - - is this idea of divergences. When we talk about divergences, it's the idea that price makes a new high, but the oscillator doesn't; it makes a lower high. And from the trough side to a price makes a lower low, but the oscillator does not; it makes it high or low. And we'll show you some examples right here.

As we're diving into this chart here on the left-hand side, you could see that the stochastics line went below that 20 line and then turned around and moved right back above that. Now, that is where traders would typically use as a buy signal. It does run up, and then you hit above our 80. It enters in. Now, remember, that's not our sell signal; we actually wait until it exits back out, and that's where we would get our sell signal. Now, as you could see, it prevents from the full loss of that selloff that happened. Now, it pushes back down below that 20, and then rises back above it, giving us that buy signal, where we're catching this little run-up in price that we're seeing in the middle of the chart.

Now, here's a very important piece about this: as price is pushing further and further up, it looks like it's really starting to gather and continue almost generating the trend, I guess, as you could see, notice how stochastics wavers in and out of that overbought range. So a good example: when price isn't a strong trend, this indicator is not going to be as reliable.

Now, on the right-hand side -- this is really interesting -- you see that price creates that new high. Look what that stochastic's doing: it's creating a lower high, and this is a bearish divergence. Now, divergences are warning signals. They're not... That's why we use this with other indicators. It's not going to be 100 percent guaranteed that these are going to be accurate, so remember with any one of these indicators it's not the magic bullet, right? These are just ways for us to analyze data, and with these divergences, these are warning signs. We might want to monitor much closer.

Now, if you look at this stochastics and say, "You know what? For me, this isn't as easy to follow. Maybe I need to try a different momentum indicator, a very popular one that also does a very similar approach, is the Relative Strength Index.

James Savage: That's right, Colin. That's why we're not just going to leave everyone (laughs) with one indicator for each, remember, pillar of technical analysis. Another popular one, very commonly heard of and used, is the Relative Strength Index, RSI for short. Love using those little acronyms there to simplify everything here.

Now, where the stochastics, the calculation is based on a location of a close relative to a high-low range, the RSI is actually a calculation based on the speed and change of price movements. So, again, little different calculation, still meant to show us momentum.

Now, unlike stochastics, as well, there's another difference. The zones that are considered overbought are a little different. Traditionally, overbought is when the level is above 70, and oversold is when it is below 30. Now, these can be modified. We even give some suggestions. If the stock is, for example, in an uptrend, or bull market, it may be helpful to adjust the RSI zones. Right, we give the example of 40 to 90, but, again, it could be based on what you feel is most appropriate. Likewise, in a down trend, it may be possible and useful to adjust the oversold zone, as well, to account for that strong trend.

Now, what we want to look for, again, just like stochastics, is exiting one of those overbought and oversold ranges to give us a signal. Another thing is we want to look for divergences with price. You're going to see that a lot. I'm going to be talking about divergences quite a bit here. Now, let's go and take a look at it on the slide, because that's always one of my favorite things. I want to see it in action. I want to see it used.

So what we have down at the bottom is our RSI index. Our price is above.

We're actually highlighting the first circle, the beginning of a divergence.

Now, that divergence in question, let's look at the lines on price, first. What do we see? A downward-sloping line. The reason for that is we are seeing price making lower lows. However, move down to the RSI. We see an upward-sloping line, because despite price making lower lows, we are actually seeing higher lows on our RSI. Now, the differences between the direction of those lines -- one sloping down, one sloping up -- is our divergence. Now, this is actually giving us a bullish signal. Shortly after it, take a look at price. What does it do? It moves on an uptrend there. It moves upward. That was our bullish warning, and price followed suit.

We have two other circles, as well, again, just to show those two other ways that we can use RSI, the exiting of those zones -- in this case overbought. We

can see price did follow along the warning signs that RSI gave, as price went from above through and below the 70 levels on both occasions, we can see price also followed with that, as well. So in this case, RSI confirmed what price was doing.

So two very commonly-used momentum indicators Colin and I just covered. Hopefully you're going to be able to find useful ways to apply this to your trading strategies. But to continue with the different pillars -- right, we talked about trend, momentum -- let's go into volume indicators. And, Colin, definitely I think you should explain some of the general rules of theory, because that's very helpful, because a lot of folks, I think, think, volume, oh, simple. Well, there's a little more to it, isn't there?

Colin Songer: Yeah, so they've actually looked at volume theory, and there's been some slight changes to that recently with the studies that they've done with it.

Now, one of the first pieces that we're going to be covering here is that increasing volume reinforces the trend direction, which just makes sense. You know, a lot of times, when we look at a lot of our indicators, at the same time that we see some kind of breakout from a chart pattern or, you know, initiation of a breakout from a trend, or a reverse in a trend, we are hoping to see some

volume behind that, right? Gives us more confirmation, more confidence that that trend will continue.

Now, declining volume is really diminishing our confidence in that trend direction. Now, initially, the thought pattern was if there was declining volume, this is a potential reversal point. Well, after they did some backtesting they noticed that that's not necessarily the case; it's more of a warning signal than an actual change of a trend direction. So that study has kind of adjusted the approaches or the views of that.

Now, an interesting point here is the price peak or a price trough on ultrahigh volume is often an important reversal point in a trend.

Now, with these theories in place, let's talk about one of the indicators. Now, obviously the first indicator is the volume bars themselves. That is a way to analyze volume. But if we start looking at indicators that can help us with analyzed volume, I would say probably the most popular is On Balance Volume.

James Savage: Absolutely. So I think, Colin, this is going to be probably sometimes maybe a person's first kind of break from that traditional way to measure

volume, which is just those bars that are automatically there at the bottom of ATP charts whenever you first open one up. Now, what On Balance Volume is, this is what's referred to as a cumulative indicator. What that means in this case is that it is going to add to a specific number, so this cumulative number, on days when there's up days. We'll say it's going to add to the volume on up days. And it can be on different frequencies, but we'll use days just for the example here. And this cumulative number is subtracted by the day's volume on down days, right? So if there is an up day of, we'll say, a thousand shares, or a million shares, (laughs) well, then that thousand or million gets added to the number. Likewise, on a down day, with a thousand shares traded, or a million shares traded, then we subtract it by either a thousand or a million, whatever that day's volume is.

Now, the value of this is not important; it is going to be the direction that matters. And just like how we used momentum, when we looked for divergences, we're going to be looking for that, as well. So divergences are going to be one of the key things that we're going to be scanning for.

Now, as you know, my favorite thing, let's take it to the chart, everyone.

(laughs) Let's see the difference. So right now we have price above, and just like some of our momentum indicators we have the OBV, On Balance Volume,

down below. Now, hopefully, I have a feeling everyone in the audience here is getting better at looking for divergences, because what are we seeing up at the top? Price continue to make higher highs, as outlined by that upward-sloping line. What about down there at the bottom? What's OBV telling us during that same period of time? The highs get lower and lower, right? Now we've got a downward-sloping line. So this price divergence with OBV, right, as price goes up, actually, the selling days, the down days, have more volume. That's what's bringing that OBV value down. Now, this divergence is actually giving us a warning. It's giving us a warning that there could be a bearish activity going forward. And what does price do shortly after? It follows suits and begins a decline. So, again, keeping that theme of divergences is going to be absolutely crucial for using On Balance Volume for your trading.

Now, let's say you want to kind of, again, try to mix and match. We've got another indicator on volume that kind of blends a little bit of RSI that we talked about, and this is referred to as the Money Flow Index.

Colin Songer: Yeah, so this indicator does just that, right? As James alluded to, it's related to the Relative Strength Index, and it takes volume and incorporates that momentum piece in it over a specific period of time. This is how traders would typically view it. So oversold levels typically occur below 20, and

overbought levels are usually above 80. Now, these levels may change depending on the particular market conditions. As we saw with RSI, right? Where we adjusted the overbought and oversold levels. But it's generally not the reason enough to buy or sell, and this really gets to a very pivotal point with technical analysis, which is the idea that we should consider additional technical analysis or research to confirm the security's turning point. That's why we incorporate that and validate it with other indicators, right? We use them together to get... I'm going to use it. I know Brian in days past have always used this, and I made fun of him for it, but it's so true: a preponderance of evidence to help us make a decision on trades. We incorporate with a trend indicator. This one gives you momentum and volume, so we're putting these pieces together to help us make a decision on our trades.

Now, if the underlying price makes a new high, and it's not confirmed by Money Flow Index, acronym MFI, this is known as that divergence that James keeps talking about. So let's dive into it. Take a look. On the chart here you can see as price makes a newer high in the middle of that chart there, notice what happens on the index, the Money Flow Index: it actually creates a lower peak. Now, that is a bearish divergence -- as you see, price sells off from that point. But look what happens to the right of that, right? All of a sudden price

creates a lower trough. But Money Flow Index creates a higher trough, right? And that's the bullish divergence. Now, that doesn't mean it always works out that way, but it gives us that signal, whether to monitor from a risk standpoint or even look for potential trade opportunities. Either one of those we want to incorporate with other indicators to help give confidence of entry as well as exit.

But now that we've discussed the Money Flow Index, there's actually one more volume indicator that we could utilize.

James Savage: Yeah, Colin, and, you know, I picked up on the type, a cumulative indicator. Let me show everyone another cumulative indicator that we have, and this is -- (laughs) it's even in the name -- Accumulation/Distribution. So what this is going to be looking at is a little bit different. Instead of adding volume and subtracting on up and down days, what this one does is it looks at the proximity of closing prices to their highs and lows. Again, just like OBV, On Balance Volume, the value is not important; it's going to be the direction that matters.

Now, if price and the AD, for short, are making higher peaks and troughs, well, the uptrend is likely to continue; this is volume confirming price. If price and

the AD are making lower peaks and troughs, well, then the downtrend is likely to continue again. The volume is confirming price. But just as a similar theme, with many indicators, we need to also look for divergences between price and direction. And where can we best sometimes see that? (laughs) Of course, on the chart, on the example.

So if we're taking a look now, just like a few of the others we've got price on top. We've got the volume on the bottom. And similar theme, right? We're showing negative divergence. I bet everyone now is a lot more familiar with divergence, as they can see this and spot exactly where the warning signals are. You're probably getting a lot faster. We see price, right, getting higher highs, as identified by that upward-sloping line, that upward trend line, but down at the bottom the highs keep getting lower and lower on our Accumulation/Distribution. So this divergence, right, with the separation of the direction of the lines, is giving us a warning. It's giving us a bearish signal right now. And, again, in this example, what happens? The warning turned out to be correct, and price followed suit, and continued on that downward movement.

So three volume indicators. I would implore everyone to try it, take a look, maybe change up a little bit from the volume bars that you may be used to and

see if these are helpful for your trading. But to continue on with the pillars, we've got our second V pillar: we've got volatility, one of the main themes of today's webinar today. Now, I know the first one that we have for everyone is one of Colin's favorite ways to graphically represent volatility, so let me pass it to you, Colin. Tell everyone one of your favorites here.

Colin Songer: (laughs) Yeah, so we're going to be diving into volatility, and, if you haven't noticed, markets have gotten pretty volatile recently. (laughs) I'm sure everyone is well aware. So let's talk about how you can measure that volatility. One of the first ones was designed by John Bollinger, which was the Bollinger Bands. Now, this is a type of price envelope. When I say "price envelope," it's overlaid on top of the price, so you can see both of them. And it's plotted at a standard deviation level above and below a Simple Moving Average of the price.

Now, Bollinger Bands help determine whether prices are high or low on a relative basis. Now, when I discuss about the defaults to this, the defaults for a Bollinger Band is its two standard deviations. So for those who remember statistical class, this'll be a refresher. For those who slept through your statistical class, this might be something new. So two standard deviations is 95% of the closing prices, and how far it is away from its mean, which is that

Simple Moving Average, which is a 20-day Simple Moving Average. So that's your defaults. It's two standard deviations and a 20-day Simple Moving Average.

Let's talk about how we use this to help us with our trading. So, remember, this is a visualization of volatility. Now remember, volatility is not directional. I think of it as magnitude of move, right? So if there are larger movements, there's more volatility. If there's less or smaller movements in either direction, it's going to be much narrower. So as you could see here, because of that fact, when the bands start tightening around that price it's during periods of low volatility, when you see that price kind of chopping around. We'll look at an example in just one moment. But that also raises the likelihood of a sharp price move in either direction, right? It's like a spring. You keep coiling that up, eventually it's going to pop in one direction, right?

Next is the idea when the bands separate by an unusually large amount, that means volatility has increased, and that an existing trend might actually be potentially ending.

Another way that traders will utilize these bands is when it breaks out. And when we talk about breaking out, you're going to hear terms of riding the

band, so riding the upper band or riding the lower band. And this is when price pushes through those bands, and then starts continuously pushing on that band to continue to move in that direction, to break out from those bands.

Yet another way to use these bands is actually just the opposite, when it just balances (laughs) from the upper band to the lower band, utilizing those as potential profit targets. Obviously, the risk of doing that is -- just what we stated before -- when it breaks out outside of those bands.

Let's take a look how you can view this on a chart. And look at it: this is a busy chart right here. On the left-hand side, off the side here it looks like there was a big price movement that happened, and that's because the bands are really expanded wide. Now, notice how price starts just chopping along here. It really doesn't seem to be moving a significant amount in either direction, and those bands just start squeezing in around the price. But as you could see that it starts trying to push on the upper Bollinger Band, it fails to do so, falls back inside, but then it does rally and push above, as you could see in the middle here, it pushes outside that upper Bollinger Band, and then just starts riding it as it continues to push to the upside. In the middle you'll see that it does finally fail and falls back inside that Bollinger Band. And where does it go? You got it: to that lower Bollinger Band. And look how the price reacts to it,

and that's the important piece that we're trying to get across, is the idea that we're reacting to price movement, not predicting. And these indicators are just helping us as a way to react.

So as it bounces off here, if I believe this, with support this is where I can start looking at opportunistic trade where it's going to oscillate between these bands, and potentially use these as profit targets, but also, if it breaks outside of the band in the opposite direction, a way to manage that risk and close out. So as you can see here, it continues to bounce, hits that upper band, then pull back down, and then falls to that lower band. So you could see how it oscillates from one band over to the next, and this is a way that someone who thinks trading between the bands could give them that potential ability to set up their trading process based on that.

Now we've gone through a chart example of looking at Bollinger Bands on a chart. This isn't the only volatility indicator that are out there. There's also one called Average True Range.

James Savage: Yeah, Colin, and I think Average True Range can definitely be a useful indicator for a lot of folks, and it's not very commonly used. I think Bollinger Bands is commonly looked at, but Average True Range, I think, is

something that a lot of traders should at least consider some of the benefits that it has to offer.

So what is it? So Average True Range is really just the true ranges over a specified period and frequency. Now, it does take into account gaps in price movement, as well as just the normal high and low that can be generated within a day.

Just to explain a little bit about it, when the ATR -- right, the Average True Range -- value is increasing, it indicates increasing volatility in the market. Now, it could indicate both selling and buying, since high levels are an indication that there are large movements in the stock price, which can be both up and down. It's very important that Colin said -- I hope everyone caught that, right -- volatility is not just something that increases when the price goes down. We commonly see that -- I think sometimes you see that on the news -- but that's really not the case. Volatility, it can be both on up and down days, right? We're just showing the magnitude of these movements relative to their mean.

Now, one way that ATR can actually help you with your trading is with what's called volatility stops. If you're long, you may have used a stop before,

something like a stop-loss. It's based on maybe a price, such as a dollar or percent value. But with ATR you're actually going to be using a multiple of what the typical volatility is. Now, there are many different multiples that someone may use -- there's no right or wrong one -- but it can at least help you with setting a stop when it's based on the ATR value. You will now be stopped out of these abnormal moves in volatility, and just normal moves based on the volatility aren't going to be getting you out of the stock. So I've got another idea, possibly, of an exit strategy, the ever-important exit plan.

But, as always, I want to take a look at the chart. So if we can see Average True Range on the chart, down at the bottom is where we can see the value. When we see the price take that steep decline and then rapid increase, before that large, large, big, red candle bay, what do we see with ATR, right? It's expanding. Large candles are going to be increasing that value. You may think of them as these baseball bats, as opposed to little baseballs, which is an analogy from one of my colleagues here on the desk that I'm a fan of.

Now, what do we see on the far right? We see not these baseball bat candles, not these large candles, but we see a huge gap. And, again, Average True Range does take that into consideration, so we're not missing anything on large-gap days.

So two volatility indicators. Hopefully you can find use. Especially, if you're interested in these, right, this is what we're here for. Do one of our coaching sessions. We're going to look at live charts, and we're going to show even more examples of all these types of indicators. So we've covered now this second V pillar, but we've got kind of our last pillar, which is going to be related to price. We've used support and resistance as a way to kind of help define that. And, Colin, why don't you kind of kick us off in the ever-important price section?

Colin Songer: When we take a look here, one of the more common, let's say, Fibonacci Retracements that are out there is based on -- Fibonacci was an Italian mathematician, and he noticed patterns, right? Patterns in nature, patterns in architecture. And, to him, he saw that they were all related, based on this golden ratio. Well, these Fibonacci Retracements are based off of that ratio, and it's plotted percentage retracement lines based on the mathematical relationship within the Fibonacci sequence.

Now, how these retracement lines are utilized -- think of it as a visual of potential support/resistance levels moving forward. Now, how it works is by applying these percentages to the difference between the high and the low

price of that period can create these potential price objectives. I like to say it's more of a viewing area for how price reacts to those levels. Now, depending on the direction of the market, up or down, prices will often retrace a significant amount of their previous trend. Now, these countertrend moves tend to fall into certain parameters, and that's what we are referring to as these Fibonacci Retracement levels.

Now that we've discussed kind of the baseline, as always, I know James is a huge fan of looking at charts, so I might as well hand it back to him. (laughs) Take a look at how it looks on the charts and how you can utilize it.

James Savage: Yeah, Colin, of course. Take us over to the charts, because I've got two examples that I want to show, and I think they help answer a lot of questions. First, what are the levels, and how can I draw it? Well, within your Active Trader Pro you can draw these Fibonacci Retracements. In our first example, we are actually drawing this from absolute peak to absolute trough. Now, these levels do get added automatically. So, again, just to round everything to zero, 23, 38, 50, 61, with 50 being based on Dow theory. You don't have to remember these. These are going to be automatically put in here. And, again, what we're looking for is these types of levels acting as support and resistance, as places where buyers and sellers -- where the

demand meets, and there may be some unknown events that could be taking place, right? We don't know if anything's going to be changed.

In our example, again, of this downtrend line, we can see when price finally hit that bottom and it started to rise, what was one of the first major corrections? What was one of the first roadblocks along the way to recovery? It was at that 61 percent level, that 61 percent level. That is something that if traders were using this they may not have known it was going to reverse there, but it would have been on their radar, because, again, these patterns in nature, more often than not, will tell us that there can be some type of price movement that is significant at these levels.

But let me show you the other example now, because that was right from absolute peak to trough. We can do Fibonacci Retracements in reverse; we can go from the trough to the peak of price movements. In this case, we've got an upward-trending line, from the bottom on the way up. Again, these levels were put automatically for us within Active Trader Pro, and let's take a look. If we were wondering where this downward movement could find support on the retracement, it did, in this case, at that 38 percent level. One might argue just looking at this -- and this brings back that subjective kind of nature in technical analysis, where it's a bit of an art form (laughs) as much as it

is a science -- well, I would actually say it kind of starts hitting some congestion around that 23 percent level. Yes, it broke through, but we didn't see those big red bars that we saw leading up to that first level. But, as we can see, it did find the support at the 38 percent level. So, again, as a trader, it's not that we're using this to predict where things are going to reverse. However, it can give us zones or areas where we may want to pay focused attention on, again, based on this sequence, based on these patterns that we've found in nature.

So this was a way to kind of tie in price when we're analyzing price, and we're using kind of some of the tools that we have within Active Trader Pro. Because as you can see, as we've covered quite a few indicators today, these are very easily added on to our charts. We can modify them easily. We can change them easily. It is quite, I would say, helpful knowing that we've got this much power within our charts, within Active Trader Pro. We can really customize it to what's important to us.

If anyone's interested in learning more about this, right, if you want the platform, charting, we always want to advise you, take a look at the Fidelity Learning Center. This is what it's here for. We've got other prerecorded webinars, such as this. And, of course, right, Colin and I are from our Trading Strategy Desk. We advise you to join us. We're going to go with our live

coaching sessions and our live four-week classrooms. We look at charts in real time, and it gives us the ability to take topics from you, take symbols, take, you know, securities that you're looking at, at the time, and we can help kind of diagnose them through technical signals, looking at technical indicators, looking at chart patterns along with you. So we're here for you, and please feel free to use our services. We are happy to see you in any of our coaching sessions that we have.

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