Tips for Traders | 10/6/2008 9:54:00 AM

Exploiting Price Data Variations in Everyday Trading

Besides being a professional trader for the past 37 years, I have the privilege of mentoring some wonderful traders of varying degrees of experience. I happen to mentor a pair of gentlemen that run their own very successful CTA, and besides working with them on Median Lines, I have also helped them really master the concept of using structures in the market as areas to hide your stops. They have also seen the importance of my innovation, Energy Points (areas where lines of opposing force meet), and use this concept successfully in their trading.

Recently, we were both stalking the same market on the same time frame: the crude oil futures. Crude oil futures are notoriously volatile and obviously have become more so in the past two to three years. There are many times when you see a bar unfold and look at it in disbelief, certain that the bar extreme range of the bar was caused by an incorrect price that will later be corrected by the exchanges; sometimes you are right and it was an incorrect price, and sometimes you are wrong and it is a wild, wide-range price bar. But there is no way to tell as each tick unfolds. Perhaps the exchange transmitted the wrong price, perhaps your computer got disconnected from the price server for a moment and that caused a corrupt data point, or perhaps the price was real.

I recently spoke at The Forex Trading Expo in Las Vegas, and one of the reasons many of the panelists (including myself) gave as a reason why they liked the data delivered from the exchanges better than the data delivered in the cash FX market data feeds, for example, is that it is cleaner, more reliable, and every single transaction is recorded and transmitted in the order it was executed. In the cash FX market, there are at least fifteen different “major” data feeds, and if you look at their data, you’ll see they all have different daily highs and lows, and the highs and lows of each of the bars are slightly different from feed to feed. In short, while they represent the market, they do not represent an accurate tick-by-tick picture of the market. When you compare them to the electronic contract feeds from the exchanges, the difference is night and day. But there is a dirty little secret here: in “real time,” even the exchanges sometimes transmit ticks that are incorrect, although they do go back and re-transmit the correct data. If your charting package reloads historical data automatically and or allows the exchanges to refresh tick historical data, you’ll probably never notice any errors unless they are blatantly out of the current range.

Let’s take a look at a gorgeous trade in the crude oil that two of the gentlemen I mentor and I took in the crude oil futures market.

Looking at the chart above, you can see that price was in a steep down trend, and then after a very wide range bar, began to make higher highs and higher lows, a sign of a change in behavior. This made all three of us start stalking a potential long set up in the crude oil market, since it had fallen more than $50 per barrel from its highs.

Our eyes were drawn to several Energy Points above the market and we monitored each one, looking for a high probability trade set up with an acceptable initial stop loss to enter a long position. You can see that price got dragged to the Energy Points (a key attribute of Energy Points) and then finally at the sixth Energy Point, we saw what we were looking for: a high probability trade set up that I teach and trade all the time (in this case, a test and re-test) with an acceptable initial stop loss order area that was hidden below market structure. Hiding our stops under market structure is key, because other traders will have limit buy orders near or at that market structure (in this case, a prior swing low) and their limit buy orders will act as protection for our stop loss orders.

We checked our orders and put them in the market and our entries were filled on the next bar. You can see our position was never in any danger of being stopped out after the second bar closed and then we simply had to manage the stop profit and limit sell orders as price unfolded—As I say over and over, you spend the majority of your time when trading doing the tedious work: moving orders, checking details, and waiting, waiting, waiting.

Price finally met the Upper Median Line and took us out above 105 a barrel and we obviously made a great deal of money per contract on this trade.

But there's a problem: While this trade unfolded on the charting package we were using exactly as you see on this chart, if you look carefully before price turned higher, I marked a wide range bar with the term "Incorrect Bar High." In reality, the high of this bar was nowhere near as high as initially reported by the exchange. In fact, the high of this bar was actually about three dollars per barrel lower than it was initially reported. It's difficult to know what caused the initial tick to be reported that high: It may have been a glitch at the exchange, it may have been a glitch at the data server farm at the firm we get our data from. But in any case, it is a phantom high—it never traded anywhere near that high! Our charting programs generally go back and correct small tick errors, but this error was so far out of the range that the normal tick filtering mechanism in our charting program didn't flag and replace it. It stayed at that high level.

Yet we made our money using that phantom high as one of our pivots. This leads me to point out that you can't spend your day worrying about the validity of each tick as they unfold—you have to trade what you see and trust you are seeing a representative picture of the market.

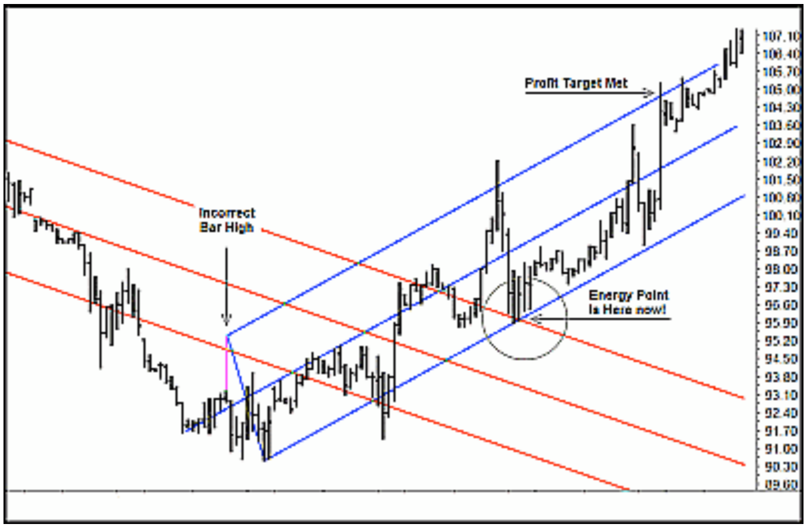
How did I find this "phantom tick?" I regularly do a type of homework on two of my charting platforms after the market closes. They have the ability to replay price action from a number of days at thirty times the speed that price actually happens in "real time" during the day, so I can practice looking for set ups in "sped up" time over and over in a number of markets whenever I wish. I find this tool very valuable and am always surprised that more traders don't use this tool to practice after the markets close.

Several days after this trade was closed, I was doing my replay homework on a charting package that we had not used when making the crude oil trade. As price unfolded before my eyes, I began to recognize the market and paid strict attention, looking for a change in behavior. Let me show you what I saw on the "other" charting package:

I marked the range of the "phantom bar" in pink to make it easy for you to see. Without the incorrect extreme high that was originally reported, the slope of blue Median Line set was changed dramatically, and you can see there were no Energy Points up at the area where we entered our position using this data. There may or may not have been a long entry near the lows of the move right before it began to move higher, but this chart certainly looks completely different than the one we used when making the crude oil futures trade.

And yet, trading what we saw in front us, using solid money management tools that we have mastered, and a solid risk:reward ratio, we made a great deal of money per contract.

Let me readjust the data on the second charting package, giving the phantom tick the same high as on the original charting package:



Here's the second charting package with the "phantom tick" added back in. Now you can see the Energy Points are right back where we entered and the two charts match again.

What's the bottom line? Data is not clean, it is not exact and there is no "Holy Grail" of data. As a professional trader that trades billions of dollars at a time, I do the best I can with the data in front of me. I don't spend time worrying over each tick. Instead, I trust that my methodology, which has been around for nearly 100 years, my surgeon-like money management, and my reliance on high risk:reward ratios will allow me to make money the majority of the time, even when "phantom ticks" appear. I do the best with the tools I have. That's all anyone in any profession can do.

I hope this example of data integrity has been interesting and shown you that sometimes you can trade on something that never really happened and still make money if you've mastered yourself and your tools.

Best,

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