

It is a commonly held belief among Forex traders that there are no useful volume studies that can be performed in the spot Forex markets. Todd Krueger discusses how to use tick-based volume figures in place of actual traded volume numbers to identify the supply/demand imbalances that cause the markets to move.

ince the spot Forex markets do not have a centralized exchange, we cannot receive actual traded volume numbers to use in our chart analysis. For this reason, it is a commonly held belief among Forex traders that there are no useful volume studies that can be performed in these markets. This article will introduce you to an entirely new trading methodology called 'Wyckoff Candle Volume Analysis' (WCVA) and show you how to use these price/volume/pattern techniques to base your trading decisions. I will discuss how to use tick-based volume figures in place of actual traded volume numbers. When you have finished reading this article, you will have a new groundbreaking tool to add to your trading toolbox.

In order to understand the Wyckoff Candle Volume Analysis, it is important to include a brief history of a pioneering trader from the early 20th century named Richard D. Wyckoff. Mr. Wyckoff made many important discoveries in the field of technical analysis. Specifically, he revealed how the interrelationship between price and volume could expose the likely positions that the smart money was holding. He proved that the large, smart money traders were in charge of all markets and by following their activity on the charts the retail trader could trade in harmony with these professionals.

One of the important charts that Wyckoff utilized in his analysis was what he called the 'vertical price chart,' it is better known today as a bar chart. He used 4 pieces of data from the bar chart - the high, low and closing price of each bar along with its corresponding volume.

From this information, he learned how to read the footprints that this collective group must imprint on a price chart. They trade with such size that their trading activity creates supply/demand imbalances that are the true cause of price movements. Wyckoff revealed the four market phases that all markets go through – accumulation, mark-up, distribution and mark-down and how the professionals trade in each phase. Smart money traders try to conceal their true market intentions but they cannot hide their trading activity from a properly trained chart reader.

It was not until the late 20th century that candlestick charts were introduced to the Western world. In Wyckoff's trading days, he had no knowledge of this charting methodology or the enhanced clarity of market sentiment that it provides. The Wyckoff Candle Volume Analysis methodology greatly expands on Wyckoff's original work and further enhances the ability of the properly trained chart reader to identify the very supply/demand imbalances that the markets move from.

In using this new methodology, we are adding 2 additional variables to Wyckoff's original methodology – the opening price and the corresponding candlestick pattern.

These additional variables incrementally enhance the power of

analyzing just the high, low and closing price of a standard bar chart and greatly improve the reliability of standard candlestick patterns.

I am certain that if Wyckoff had lived in a world where candlestick charts existed, he would have been the founding father of Wyckoff Candle Volume Analysis instead of me.

Let's take a look at a Wyckoff Candle Volume Analysis pattern on the price chart to the right. As you look at Chart 1, please notice the near perfect hammer pattern that is identified on the chart. I say 'near perfect' because the upper shadow is just a little

too big to fit the textbook definition of a hammer.

The hammer must have a small real body. The body is the shaded area on each candle representing the area that the opening and closing price occupies. A green shaded body means that the close is higher than the open and a red shaded body means that the close is lower than the open. The shadow must be at least 2 times larger than the body. The upper shadow should not be greater than 10% of the overall range of the hammer.

This is where this example does not meet the textbook measurements of a classic hammer. In my world, this candle is close enough to a hammer to analyze it as a hammer.

The hammer can only occur on a chart after a down move has taken place - price moved nearly 300 pips down on this daily chart of the AUD/USD from the high just 2 days prior. The hammer is known as a one bar reversal pattern yet it has varying degrees of success when traded as a pattern all by itself.

Now, we need to bring Wyckoff volume analysis into the mix to confirm the reliability of this potential reversal pattern. Look below the hammer and notice the height of the volume histogram. I have coded the volume histogram to color green if the current candle has greater volume than the previous candle and red if the current candle has less volume than the previous candle. You will notice that this hammer pattern has less volume than the 3 previous candles - this will become an important distinction soon.

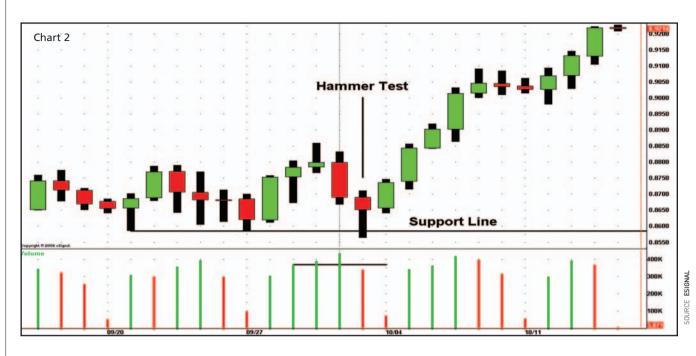
Before we get to the importance of how much volume is occurring on a given candle pattern, it is important to describe to you exactly what this volume histogram represents. We already know that we cannot receive the actual traded volume figures in the spot Forex markets, so what exactly are we looking at here? We are looking at tick-based volume that in essence, tracks the changes in



price for a given time period. In this example, we are looking at a daily timeframe.

Through my almost 25 years as a trader, I have found that there is a very high correlation between the amount of trading activity shown on a tick-based chart to that of actual traded volume. If there is a great deal of activity shown on a tick-based chart, it shows that there was a significant auction going on between buyers and sellers - this would also show up as a great deal of actual traded volume on a contract that allowed us to view actual volume. The reverse is also true.

If there is lower tick-based volume, we would also expect to see lower traded volume numbers. While it is true that we can never know how much actual volume traded on a particular timeframe, we can see if there was a lot of trading activity, which you will soon see is equally important.



"The large, smart money traders are

in charge of all markets, and by following

their activity on the charts the retail

trader could trade in harmony with

these professionals."

et's take a closer look at the hammer pattern that we have identified and put it into Wyckoff terminology. Please refer to Chart 2 above and notice the horizontal support line that I have drawn on the chart. Do you see how the hammer's lower shadow trades below this line? In Wyckoff terms, the price is being driven down below this support line to determine if more sell-

ers will enter the market as price breaks below recent support. This is called a test and this candle is testing the market to determine if there is latent supply in the market. Since this test bar forms a near perfect hammer the correct Wyckoff Candle Volume Analysis term is called a 'hammer test.'

It is important to recognize two important characteristics of this hammer test. First, the volume on this candle is roughly 23% less than the previous candle and is also less than the previous 3 candles. This greatreduced volume signifies that there is no

selling interest from large professional traders.

The second important characteristic of this hammer test is that price comes back to close above the halfway point of the range of the candle. This hammer test proves that on this day, with the price probing below recent price support, there are no large interests of potential sellers to take this price lower. If there were, how could price dip below the support line only to come back and close above the midpoint on reduced volume?

It is also important to note that this hammer test still closed below the previous day's closing price with reduced volume. This is another market tell that there are no large sellers coming into the market at these price levels. We can see that there are no sellers to stop the price from advancing, there is a demand imbalance in the market and the market must now auction up until higher price attract sellers.

As we look at Chart 3 on the opposite page, I have included more candles on the chart to provide even greater perspective. We can see that this hammer test comes down to kiss our upward sloping trendline. This is what we would expect to happen in an up trending market. We can see the convergence of the trendline

> and the support line right where this Wyckoff Candle Volume Analysis pattern occurs. This alerts us to the fact that the smart money has respected this support level and higher prices

are to be expected. It is interesting to note that just a few days later.

the Reserve Bank of Australia raised their official interest rates up to 3.25% from the previous level of 3.0%. This goes to show that the smart money may have been anticipating this as prices rocketed higher from a low of .8564 on the hammer test to a high of .9223 as of the writing of this article on October 15, 2009. That is a move of 659 pips in a matter of 10 trading days that occurred because of the lack of supply (active sellers) creating an imbalance of demand dictating that price must move higher.

I often hear from retail Forex traders that it is not possible to ana-

lyze volume in the spot Forex markets. I also hear from these same traders that the Forex markets are too big to be moved by the smart money. I understand why these beliefs persist and I hope that this article helps to provide some clarity to these false assumptions.

In this article we used a daily timeframe. I look at this timeframe to identify large imbalances of supply/demand that will cause big market moves - the kind of trades that can make a huge difference to your trading account. These techniques work in all timeframes and multiple timeframe analysis should be employed to quantify the level of the supply/demand imbalance to achieve the greatest results.

It is also important to position your trades from valid support/resistance levels to achieve the highest probability trades. There is no greater skill to possess as a trader than the ability to successfully read a chart to determine which side of the trade the smart money is on so that you can confidently ride their coattails. When you can trade with their wind at your back, you will find that trading becomes less stressful and more fulfilling, not to mention more profitable. TFJ

Todd Krueger is a professional trader, educator and creator of Wyckoff Candle Volume Analysis. He is the founding President of Traders Code, LLC a company that provides professional trading tools and education to empower the retail trader.

For more information, visit www.traderscode.com or email at todd@traderscode.com

