NEW TECHNIQUES

Trading The Trend

Here's a volatility indicator, presented here with simple trend rules for trading various markets.

by Andrew Abraham



ew traders quickly become familar with two adages: "The trend is your friend," and "Let your profits run and cut your losses." Many of us, however, have learned the hard way that these things are easier said than done. Why *is* that? One reason is lack of recognition, since the trend itself is rarely clarified and defined, let alone where it

starts and ends. So we need a clear explication of what a trend is as well as where its beginning and its end are.

SIMPLE ENOUGH

Simply, if the trend is considered up, then the trend of prices are composed of upwaves and the downwaves are countertrend movements. Downward trends are the opposite, seen as downwaves with countertrend upwaves. Using several tools and functions, we can design a quantifiable approach to defining these waves. My favorite is the volatility indicator, which is a formula that measures the market volatility by plotting a smoothed average of the true range. The true range indicator originates from the work of J. Welles Wilder Jr. from his *New Concepts in Technical Trading Systems*. The definition of the true range is defined as the largest of the following:

- The difference between today's high and today's low
- The difference between today's high and yesterday's close, *or*
- The difference between today's low and yesterday's close.

The calculation uses a 21-period weighted average of the true range, giving higher weight to the true range of the most recent bar. The final value is then multiplied by 3.

The volatility indicator is used as a stop-and-reverse method. Let's say the market has been rising, then the volatility indicator is calculated each day and subtracted from the highest close during the rising market. The highest close is always used, even if there has been a series of lower closes since the highest close. If the market closes below the volatility indicator, then for the next day, the current reading of the volatility indicator is added to the lowest close. This step is followed each day until the market closes above the trailing volatility indicator.

We now have a definition of the trend. An upward trend exists as long as the volatility indicator is below the market and a downtrend is in force if the volatility indicator is above the market. To visualize these waves, we color-code the uptrends blue and the downtrends red (Figures 1 and 2).

In addition, we can add a basic description of trends for trading. We will say that uptrends are made up of waves of higher highs, with prior lows not being surpassed. Conversely, downtrends are composed of waves of lower lows and prior highs not being surpassed. For sustained moves, the upwaves during uptrends will be larger than the countertrend downwaves, and in downtrends, the downwaves will be larger than the countertrend upwaves. Therefore, we want to only trade with the trend and buy upwaves in an uptrend and sell short during a downtrend.



FIGURE 1: CHASE MANHATTAN BANK. Use the volatility indicator to signal the direction of the trend. Here, uptrends are in blue, and downtrends are in red.

For example, as can seen in Figure 1, for Chase Manhattan



FIGURE 2: CORN. The trend is down during November, switches direction in January, and returns down in March.

Bank, the upwave has higher highs and the prior downwave was not surpassed, so the market is in an uptrend; look to buy only the upwaves. In Figure 2, in the corn market, the opposite situation exists and the same concept is applied, except in this case, the concept is in reverse because it is a downtrend. During November, the volatility indicator reversed trend, and the prior low was broken. This was our signal to go short. Our exit signal will be the volatility indicator turning positive.

The position was closed in January 1998, and since the rally's high beginning in January did not surpass the highs of October, our second definition of an uptrend was not met. As a result, we went short again when the volatility indicator went negative. In March, the position was closed with a small loss, and again, the highs of this upwave did not surpass the highs of January, so we had a signal to go short again when the volatility indicator went negative and the lows of February were broken.

THE TENETS OF GOOD TRADING

Now we are developing the tenets of good trading. We are trading with the trend and locking in profits. But in that case, how do we know the trend might be ending?

As stated, an uptrend is intact until the previous downwave in the uptrend is surpassed. A downtrend is intact until the previous upwave is surpassed. We will use the lowest low while the volatility indicator signals an uptrend for our low point. This is just an alert that possibly the trend might change. We would still take the next trade in the direction of trend (in a confirmed uptrend, we take all upwaves, and in a downtrend, all downwaves).

Our next step is to confirm whether the trend has ended. This is confirmed on our next wave. If we are in an uptrend, and if our last downwave went below the prior downwave, we are on alert. If the next upwave surpasses the prior upwave, our trend is intact and our alert turned off.

In Figure 3, which shows a chart of

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FIGURE 3: SWISS FRANC. The downtrend from September to March was a smooth decline.

the Swiss franc, we went short in April 1997 and closed the position in June 1997 with a nice profit. Because the highs of the prior upwave were not surpassed, we know we are still in a downtrend and went short again in June 1997. This trade did not work, however, and the next blue upwave surpassed the prior blue upwave; thus, we are on alert the trend might be changing. We went short again in September 1997.

MULTIPLE TIME FRAMES

To enhance our performance in this strategy, we can use a dual time frame. We look to a higher time frame to identify the trend and only want to trade in that direction. In Figure 4, we can see we are in a downtrend as well as a downwave on the five-minute chart of the Standard & Poor's 500 index, so we only look to take trades to the short side on the one-minute chart (Figure 5). We are short from approximately 11:30 in the morning to the close. The trader looks to the lower time frame to actually find the trades in the same direction of the higher time frame.

On the one-minute chart, we are looking to trade only from the short side because the five-minute bars are in a downtrend from a little after noon. In our diagram, we see we had three trades. Two of them worked and in the one that didn't, our loss was relatively small. If one-minute bars are too short of a time frame, then consider trading five-minute bars; the trader would look at the 15-minute chart to determine the trend.

For example, if on the 15-minute chart he is in an uptrend and identifies blue upwaves, he would go down to his fiveminute chart, identify a red downwave and prepare a buy-stop to pull him in the market if an upwave becomes present. The same applies just in reverse for going short.

The time frames can be anything from a 10-tick or 25-tick to a daily and a weekly. There must be substantial differences between the two frames. Some ideas would be 15-minute versus 60-minute, daily versus weekly, weekly versus monthly. Neither we nor anyone else has developed a Holy Grail system or an infallible trend indicator, but through diversification of



FIGURE 4: S&P 500 FIVE-MINUTE BARS. Midway through the trading day, the trend was down

FIGURE 5: S&P 500 ONE-MINUTE BARS. There were two profitable short sell signals, based on the trend of both the five-minute and one-minute bars.

noncorrelated markets and also a diversification of time frames, the probability of success can be obtained.

SUMMARY

Trading should be a simple application of a trend indicator, such as the volatility indicator, and a trading plan with rules. To enhance your profitability, consider using two different time frames, one for the trend and a lower time frame to signal your trades.

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FURTHER READING

- Krausz, Robert [1996]. "Dynamic multiple time frames," Technical Analysis of STOCKS & COMMODITIES, Volume 14: November.
- Wilder, J. Welles [1978]. New Concepts in Technical Trading Systems, Trend Research. S&C

†See Traders' Glossary for definition