

# John Bollinger on consolidations

BY CURRENCY TRADER STAFF

John Bollinger on market cycles, overlooked opportunities and why a “consolidating” market may be just what the doctor ordered for a new breed of swing trader.

*The following discussion is taken from an interview with John Bollinger in the April 2003 issue of Active Trader magazine (“Relatively speaking: John Bollinger”), in which he touched upon using Bollinger Bands and how to understand and trade range-bound (rather than trending) markets. Although he was addressing the stock market, the principles he describes are applicable to all instruments, including currencies – especially considering the current speculation about diminishing trend moves and potential consolidation in the forex market this year.*

**CT:** *Where do you suggest traders conditioned to trade in long-term trends get started in terms of operating in range-type markets?*

**JB:** The tools that work the best are relative tools — those that let you get a grip on what's happening in relation to immediately prior history.

Of course, different traders will have different ideas about what "immediately prior" means. For some it will mean what's happened this morning, for others it will mean the past 20 days or the past six months or year. But the advantage of relative tools is that you can adapt them to your purposes.

Bollinger Bands, for instance, provide a definition whether prices are high or low on a relative basis (see "Indicator reference"). At the upper band, prices are high, and at the lower band, prices are low. If price tags the upper band, you know prices are high, so you can consult another tool to determine whether you believe that "highness" is sustainable or whether it's a potential reversal to be sold.

One of the problems I've seen is that people treat Bollinger Bands in the simplest way possible. They automatically think a tag of the upper band is a sell and a tag of the lower band is a buy. Nothing could be further from the truth. Some tags of the upper and lower bands are sells and buys, respectively, but not all tags are action points. Price can, and does, walk up the upper band or walk down the lower band, and often when this happens you get some of the most profitable trades.

With rare exceptions, it's not enough to use Bollinger Bands alone. You have to combine them with something else that tells you about sustainability. For me, that something else is volume indicators.

**CT:** *Just indicators? Do you ever look at raw volume numbers?*

**JB:** Both can work. Some people are able to look at volume, relate it to the price bars and intuitively understand the supply-demand relationship. Other people need to parse volume into an indicator to clarify the picture.

Older traders who grew up keeping charts by hand would probably be more comfortable with raw volume numbers. Traders who grew up with technology that could easily calculate and plot complex indicators will likely be happier with volume indicators. [It helps to] use a volume "clip" — normalized volume, or at least a moving average of volume so you have some idea of whether volume is high or low on a relative basis.

**CT:** *Can't volume be misleading, though? High volume can accompany reversal points or support trends, but it seems as if many volume-watching traders conveniently overlook the frequent occasions when volume gives "classic" signals and price does the opposite of what it's supposed to. And you can also find plenty of turning points where volume*

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## Indicator reference: Bollinger Bands

**B**ollinger Bands are a type of trading "envelope" consisting of lines plotted above and below a moving average, which are designed to capture a market's typical price fluctuations. Bollinger Bands were created by John Bollinger, CFA, CMT, the president and founder of Bollinger Capital Management.

The indicator is similar in concept to the moving average envelope (see Indicator Insight, *Active Trader* September 2002), with an important difference: While moving average envelopes plot lines a fixed percentage above and below the average (typically three percent above and below a 21-day simple moving average), Bollinger Bands use a statistical calculation called standard deviation to determine how far above and below the moving average the lines are placed. As a result, while the upper and lower lines of a moving average envelope always move in tandem, Bollinger Bands expand during periods of rising market volatility and contract during periods of decreasing market volatility.

By default, the upper and lower Bollinger Bands are placed two standard deviations above and below a 20-period simple moving average.

**Upper band = 20-period simple moving average + 2 standard deviations**

**Middle line = 20-period simple moving average of closing prices**

**Lower band = 20-period simple moving average - 2 standard deviations**

Standard deviation is a statistical calculation that measures how far values range from an average value — in this case, how far prices stray from a 20-day moving average. Statistically, 95 percent of values will fall within two standard deviations of the average value, which means 95 percent of price action should occur within the upper and lower Bollinger Bands.

Bollinger Bands highlights when price has become high or low on a relative basis, which is signaled through the touch (or minor penetration) of the upper or lower line. Put another way, price is seen as relatively high (overbought) on a touch of the upper band and relatively low (oversold) on a touch of the lower band.

However, Bollinger stresses that price touching the lower or upper band does not constitute an automatic buy or sell signal. For example, a close (or multiple closes) above the upper band or below the lower band reflects stronger upside or downside momentum that is more likely to be a breakout (or trend) signal, rather than a reversal signal. Accordingly, Bollinger suggests using the bands in conjunction with other trading tools that can supply context and signal confirmation.



*wasn't unusual one way or the other.*

**JB:** Well, first of all, I'm working with the relative definition of high and low price levels, so that lets me know when to consult volume.

For example, if price has just tagged the upper band, I know this is a point to see if volume is adding anything to the picture. I don't scan volume continuously, trying to make an ongoing stream of decisions based on the relationship between it and price. I only look at critical junctures.

What I've found, in this regard, is that it pays to wait. In other words, after I get a buy or sell signal, I wait for price

amount you're risking is relatively small, whereas the immediate target for the move is for price to get back to the lower band, which is much farther away.

**CT:** *What kind of risk-reward numbers do you operate with?*

**JB:** Here's one way to look at it: There are only two ways to improve your trading performance. First, you can increase your number of winning trades vs. losing trades. If you're batting around .500, you can try to add different timing information and indicators, and so on, and maybe get your batting average up to around .600 or .650. I think you're doing pretty well if you have 65 percent winners.

Second, you can increase the size of your winners vs. the size of your losers. Say your winners are twice the size of your losers — that's pretty good. If you get up to three times the size, I think you'll find the mathematics work very much in your favor. If you have 60 to 65 percent winning trades and your winners are two to three times the size of your losers, you'll find you're making money pretty quickly.

By using this relative trading approach, you can address both those risk-reward dimensions. You address the size of the winners vs. losers by having entry points with logical [stop] points nearby that let you know your trade was wrong. You address the number of winners by finding the right volume indicators to assess the type of trade and the vehicles you're using.

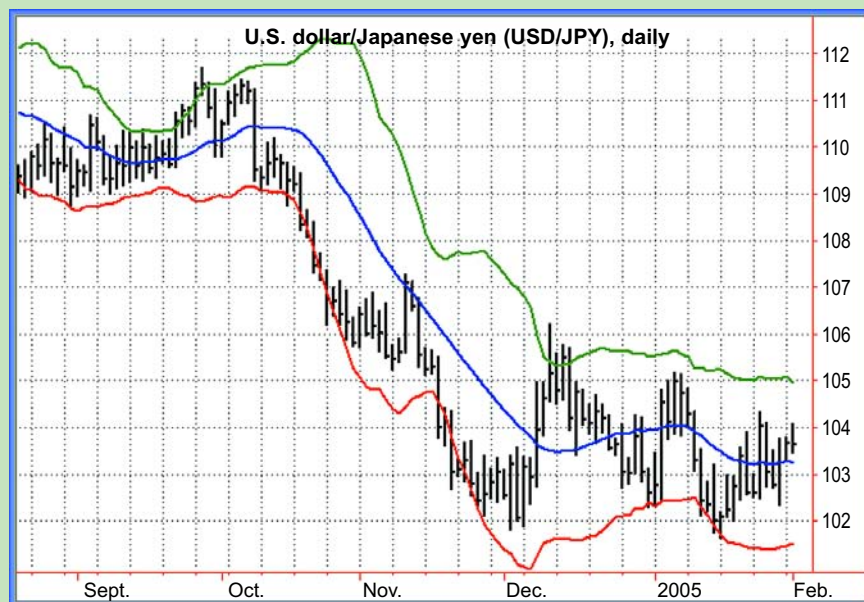
**CT:** *What about a trend component that's independent from what you're discussing now — independent in that it would probably be on a longer time frame?*

**JB:** I think the idea of biasing your trading in the direction of the greatest probability of success is very important. In a sideways market, you'll get fairly important intermediate-term buy signals near the bottom of the range and sell signals near the top. Those should absolutely dictate the direction of your trading. Clearly, if you can bias your trading in favor of the intermediate swing direction of the market, you'll go a long way toward improving the two key components of success.

In terms of time frame, if you're using Bollinger Bands, for example, rather than trying to adjust the time frame by changing the periods and width of the bands — 20 and 2 seem to work very well for most applications and are cer-

**FIGURE 1 — BOLLINGER BANDS: USD/JPY**

*Notice the many touches and minor penetrations of the lower band during the October-November downtrend; price never approaches the upper band during this period and only penetrates the moving average (middle line) once. The December-January trading range is characterized by much more even swings between the two bands. Finally, notice the contraction of the bands during the low-volatility September consolidation vs. the expansion of the bands as volatility increases in October.*



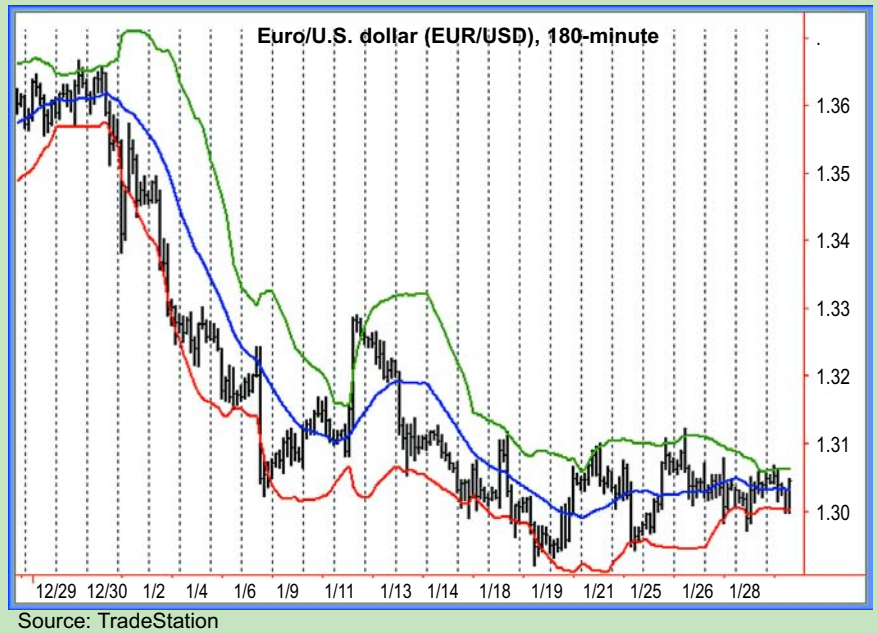
Source: TradeStation

action to confirm that signal. If price tags the upper band and a volume indicator — say, 20-day on balance volume (OBV) — is in negative territory, you can treat that as a warning or alert because the combination suggests this is a potentially unsustainable situation. Then, if there's evidence of a decline, you can act, because you know a proper setup was in place.

The other thing you have going for you in this kind of trade situation is knowing whether there's a good risk-reward relationship. If price tags the upper band and turns down, you can place a stop just above the entry point, knowing if price goes back up and violates the stop, your setup is broken. And that stop will be fairly close by, so the

## FIGURE 2 — BOLLINGER BANDS: INTRADAY PERSPECTIVE

This 180-minute chart actually shares many characteristics with the daily chart in Figure 1, including the transition from a trend period (which is preceded by a notable contraction in the bands) to a trading range.



tainly a good place to start — try using a different bar length. If you're using daily bars and you want a shorter-term view, you might switch to hourly bars. If you want a longer-term view, try switching to weekly bars. That's a good way to get an idea of what's happening in different time frames.

**CT:** Working on the assumption that a market may be in a consolidation environment for an extended period, what time frame would you begin your analysis on?

**JB:** It depends on what you're trying to do. If you're trying to get a handle on the market's intermediate-term activity as background information, I think you can estimate the swings will be three to six months at a minimum and six months to a year maximum — that's a typical pattern that's occurred in the past. Weekly bars seem to be the appropriate way to visualize that information.

When you get down to the shorter-term — actually executing trades in individual stocks or indices — I recommend daily bars. That's my bias. I've looked at charts for years and I'm comfortable in that time frame. For even shorter-term trades, hourly bars are quite useful.

There's obviously that subset of traders who are going to trade within much tighter parameters — people who are using five-minute bars and tick charts. But the concepts really remain the same, regardless of the time frame: knowing what's happening on the longer-term time frame so you can correctly bias your operations in the shorter time frame.

If you get a nice entry signal for a long trade and the market is in an upswing, you probably want to take that a little more seriously than you would a nice entry signal for a short. The principles we're talking about are fractal in nature — they exhibit the same kinds of patterns and characteristics at different levels of magnification, whether it's 10 minutes and hourly, hourly and daily or daily and weekly. The same types of setups and trading patterns are evident.

**CT:** It's surprising how many people don't buy into that, because it seems pretty apparent if you just look at charts for a while.

**JB:** I remember there was a fellow by the name of Sam Kachigan who designed a trading system called the Lennox system. One of the basic elements of the system was that trades had to be confirmed in three time frames. There was the long-term setup, then you looked for a similar setup on the intermediate time frame and, finally, the same thing on the shorter time frame, which is where you executed the

trade. It's the same old idea — having all the parts and pieces pulling in the same direction. 📌

## Related reading

"John Bollinger: Focus on the markets"  
(*Active Trader*, January-February 2001).

John Bollinger talks about developing Bollinger Bands and what his career has taught him about markets and traders.

"Relatively speaking: John Bollinger"  
(*Active Trader*, April 2003).

In this interview, Bollinger discusses market cycles, trading consolidations rather than trends, and other topics.

"Volume indicators revisited" by John Bollinger  
(*Active Trader*, March 2002).

John Bollinger reviews the origins of volume indicators and explains how traders can benefit from understanding these tools.

"Indicator Insight: Bollinger Bands"  
(*Active Trader*, July 2003).

A primer for understanding and using Bollinger Bands.

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