

## Forex Strategy Corner: Bollinger Bands Techniques for Trading

Bollinger Bands have long been one of the most popular technical indicators across financial markets, and many forex traders use them regularly in their day-to-day trading. The key question to ask of any forex analysis technique is nonetheless clear: how effective is the Bollinger Bands indicator as a forex strategy? This article will take a closer look at one key Bollinger Band trading strategy on several forex pairs and explores one way to improve its effectiveness.

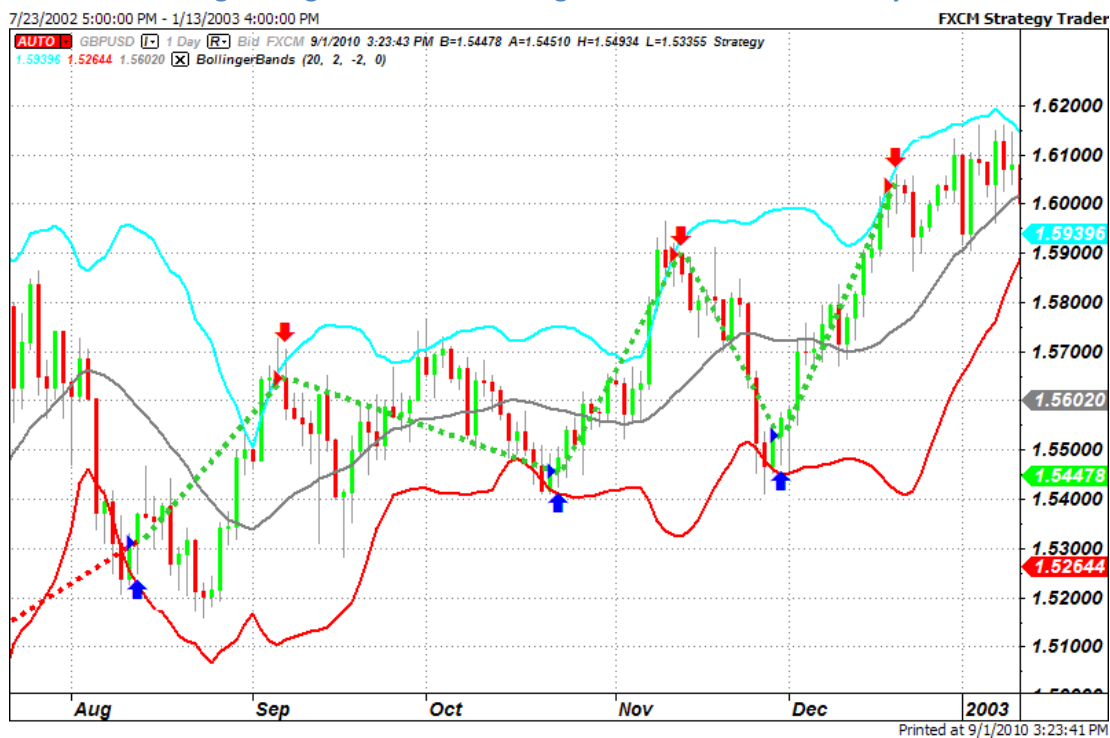
### Bollinger Bands: What are they and how do we use them?

The idea behind Bollinger Bands is relatively straightforward: take a simple moving average and put an upper and lower trading band around it. The indicator uses the standard deviation of the trading instrument to determine the width between the SMA and the bands—borrowing a popular statistical tool based on the normal distribution for random variables.

It is critical to stress that the upper and lower bands are not considered “confidence intervals” in the way that a trader might expect. That is to say, there is no numerical justification behind expecting price to stay within the Bollinger bands any specific percentage of the time. This being said, price tends to stick within two standard deviations the vast majority of the time, and we can use this to our advantage.

Thus we will use standard inputs for the Bollinger band indicator to subsequently develop a simple strategy and test the results.

Trading Bollinger Bands with Foreign Currencies: GBPUSD Daily Chart



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## Forex Strategy Corner: Bollinger Bands Techniques for Trading

### Forex Bollinger Band Reversal Strategy

**Entry Rule:** Wait until price falls below the lower Bollinger band or above the upper band. When price subsequently crosses back above the lower band and closes there, place a buy stop entry order at the last value for the lower band. When price crosses back below the upper band, place a sell stop entry order at the last value for the upper band.

**Stop Loss:** None

**Take Profit:** None

**Exit Rule:** The trade is taken out by the opposite signal. Thus if we are long due a cross above the lower band, a cross below the upper band would close the existing long position and establish a short position. The reverse is also true.

### Backtesting our Forex Bollinger Band Reversal Strategy

Using [FXCM's Strategy Trader](#) software, we will code a strategy based on this popular technical indicator and see the results. In doing so, we can easily test our concepts across the spectrum of currencies and time frames.

View a video guide on strategy backtesting and optimization in Strategy Trader here:

<https://admin.na6.acrobat.com/a205571165/p83928216/>

Download and install the [Strategy Trader platform](#), then import the following code example from the [DailyFX forex forum](#). Download the attached .zip file. Go to the directory under which you've unzipped the contents of the file. Open the "BollingerMAFilter.fxd" file and when prompted by the Strategy Language Editor, hit "OK" to import the file. Once you have imported the Strategy Advisor, open the "BollingerMAFilter.fxw" file included in the attached zip to see examples on how you may use this in your charts.

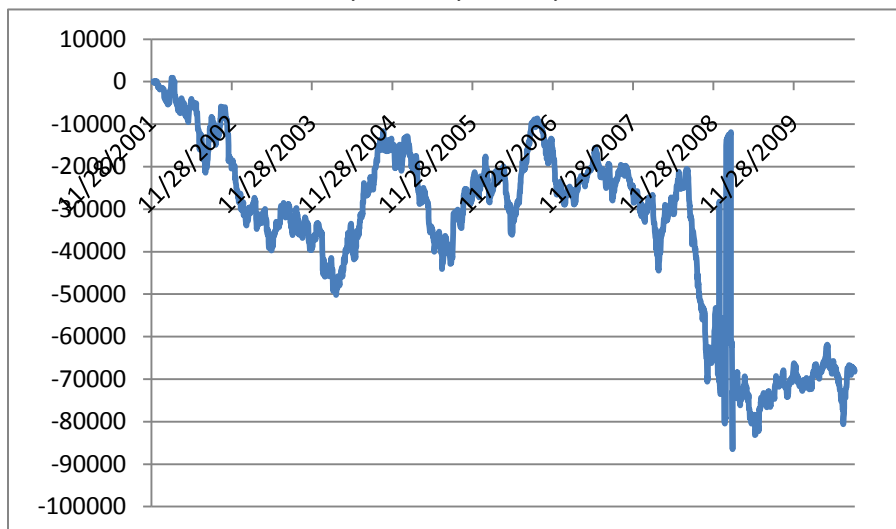
### Forex Bollinger Band Reversal Strategy

We ran this strategy using the standard Bollinger Band inputs on 60min charts on the four traditional forex market majors: EURUSD, USDJPY, GBPUSD, and USDCHF. We use Strategy Trader and assume a spread of 3 pips per round-trip trade on each individual pair. Hypothetical profit and loss is calculated on single standard lot trades using the aforementioned strategy rules. The resulting equity curve is a combination of four individual currency equity curves.

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### Hypothetical Performance on Bollinger Band Strategy from 2001-2010

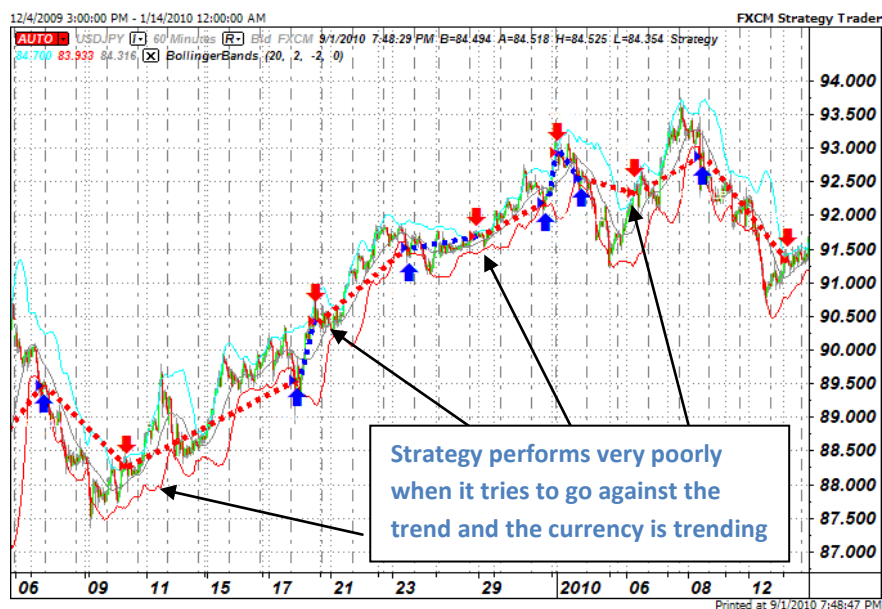
60min EURUSD, GBPUSD, USDJPY, USDCHF charts



Generated using [FXCM Strategy Trader](#)

The strategy shows extended periods of underperformance and indeed, hypothetically loses a great deal of money over the past 9 years or so of trading. Yet why is this indicator so popular among forex traders? To gain a better understanding of why this strategy may have lost through specific stretches of time, we can look at specific periods of underperformance for greater insight.

### Trading Bollinger Bands with Foreign Currencies: USDJPY 60min chart



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When we look more closely, we see a major reason for underperformance: the strategy tends to make a great number of losing trades when it attempts to go “against the grain” during a strong trend. If we can tell the strategy to avoid trading against the trend, then there is a reasonable chance that our performance will improve.

### Placing a trending filter on the Bollinger Band strategy

We will borrow insight learned through an earlier Forex Strategy Corner article on [moving average crossover](#) strategies and attempt to place a trending filter on our Bollinger Band trading technique. If we know that our system only works when it trades in the direction of the trend, a trending indicator may in fact keep us out of bad trades.

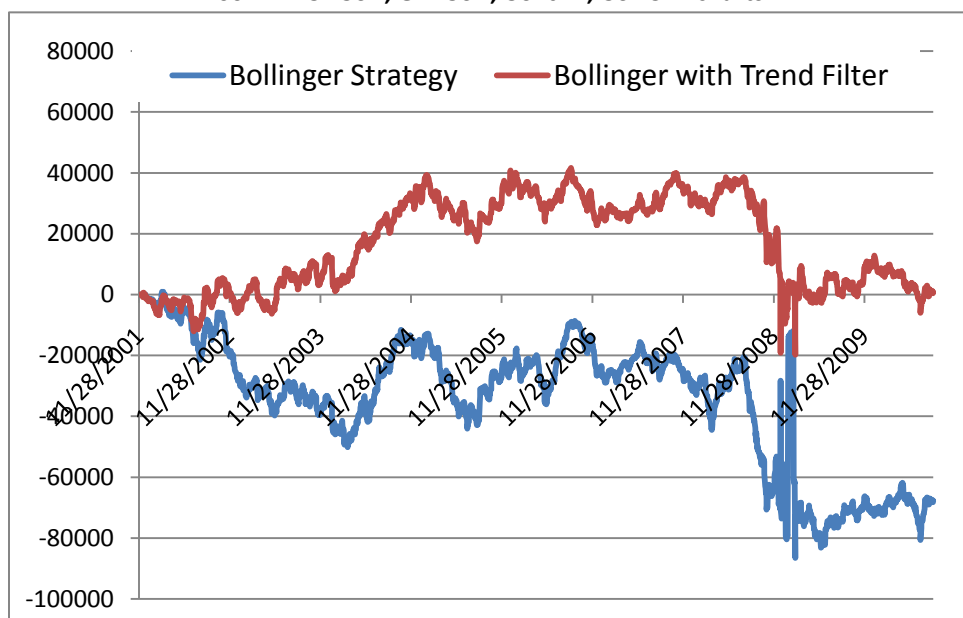
### Forex Bollinger Band Reversal Strategy with Moving Average Crossover Filter

**Entry Rule:** Unchanged from earlier strategy **EXCEPT** system may only take long positions when 100-period Simple Moving Average (SMA) is above the 200-period SMA. System may only take short positions when 100-period SMA is below the 200.

**Stop Loss, Take Profit, Exit Rule:** Unchanged from earlier strategy.

### Hypothetical Performance on Bollinger Band Strategies from 2001-2010

60min EURUSD, GBPUSD, USDJPY, USDCHF charts



Generated using [FXCM Strategy Trader](#)

## Forex Strategy Corner: Bollinger Bands Techniques for Trading

The hypothetical equity curve shows that our Bollinger Band Reversal strategy performance improved a great deal with the aid of our trend filter. Though past performance is never a guarantee of future results and there is admitted risk of over-optimization in this particular example, this idea holds promise. In fact, the performance on EURUSD and GBPUSD pairs in particular is substantially improved with this trend filter.

I encourage you to download the [Strategy Trader software](#), visit the specified forum thread and download the pertinent code and example workspace for this strategy. In changing the strategy inputs and examining different currency pairs, you can gain a better understanding for what has historically worked with this Bollinger Band Reversal Strategy and what has not.

### Applying our Analysis to Existing Forex Strategies

This is one example of a strategy that performs poorly in a specific type of market. Using a market conditions filter, we have improved the hypothetical performance a great deal. One can easily think of many other strategies that could similarly benefit from this particular filter or many others. In fact in an earlier article we highlighted specific [market conditions for the RSI and Moving Average Crossover strategies](#). In understanding what has historically worked, we can get a better sense for how to apply this in day-to-day trading.

If you would like to suggest ideas for this topic or any other forex strategy you would like to see in this series, feel free to e-mail author David Rodríguez at [drodriguez@dailyfx.com](mailto:drodriguez@dailyfx.com). **To be added to this author's distribution list, e-mail with subject line "distribution list"**

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