

# 8 Day Intensive Course

## Lesson 5

### Stochastics & Bollinger Bands

#### A) Trading with Stochastic

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##### Trading With Stochastic

What is stochastic?

- Stochastic is an oscillator that works well in range-bound markets.[/i]

**What it does.** Stochastic is an oscillator – meaning it offers a measurement of the deviance of currency pair’s rate (price) from its normal levels. Like all oscillators, stochastic offers indications of when a currency pair is overbought/oversold. Accordingly, it works well in markets that are not trending, but rather just fluctuating back and forth between an upper level (resistance) and a lower level (support).

**Parameters.** Stochastic typically has three parameters that users must specify: %K, %D, and number of periods. Here is one commonly used setting for those parameters:

- *5 for %K*
- *5 for %D*
- *3 for number of periods*

%K is the fast moving line; it measures the relative strength of the asset, like RSI. %D is a moving average of %K, and hence is a much slower line.

**Different Inputs.** The fast stochastic only requires two inputs, which are normally 5 and 5. The slow stochastic requires a third input, which is the number of periods used in taking a moving average of the fast %D line. Unlike MACD (which commonly uses 12, 26, and 9) or RSI (which uses 14), Slow stochastic has a number of popular settings that can be used. 5, 3, and 8 is one commonly used setting. 15, 3, 3 is used by conservative traders who are interested in receiving less signals, while 8, 5, 5 and 5, 5, 3 are more aggressive settings for traders who are looking for fast signals. The tradeoff between accuracy and speed is something every trader must consider when choosing the inputs they will use in stochastics.

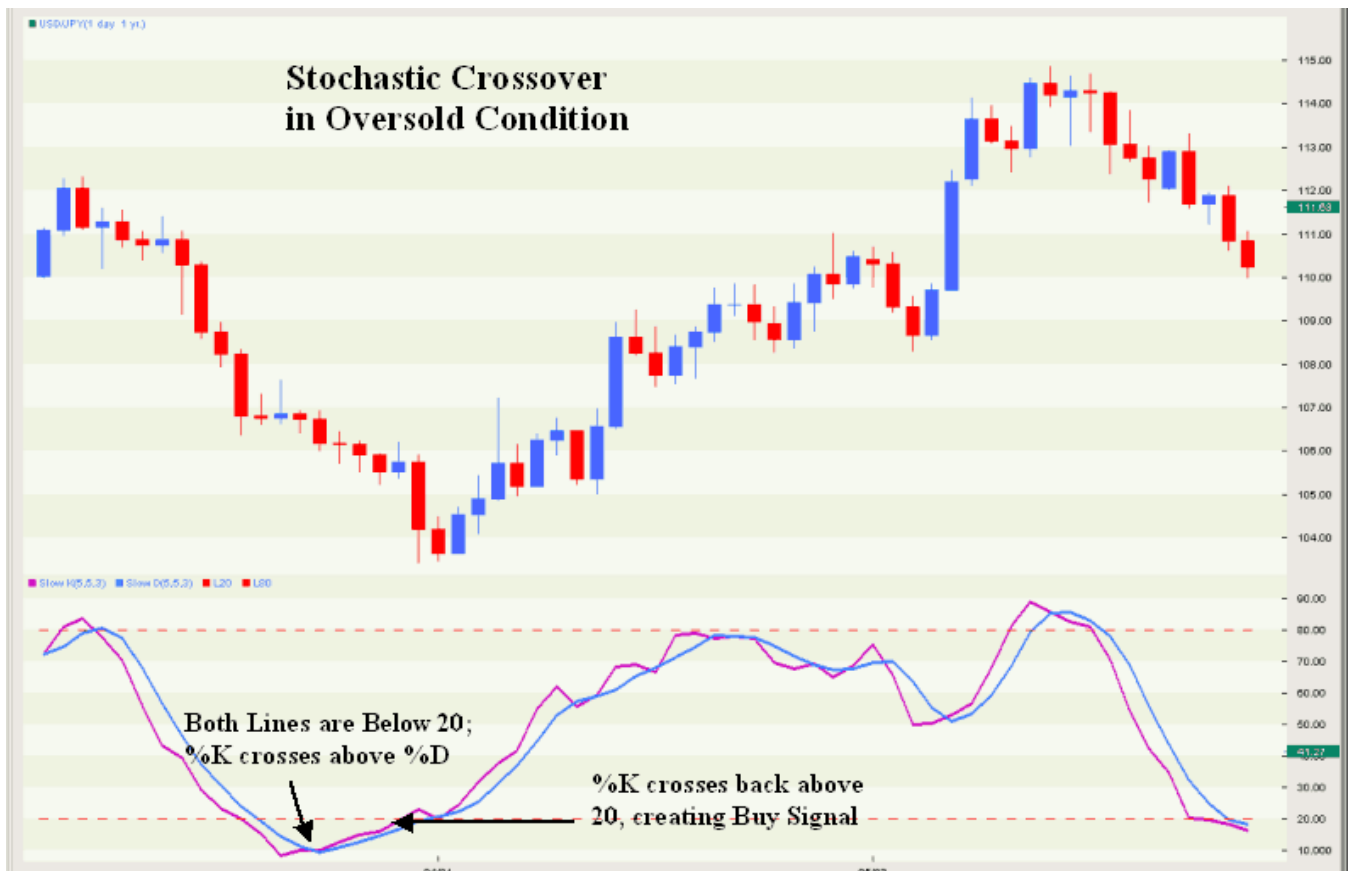
##### *How to Use Stochastic in Currency Trading*

- *Can be used to determine overbought/oversold levels, like RSI*
- *Can be used in a crossover fashion like moving averages*
- *Used to spot divergences, which indicate potential weaknesses in trends*

**Crossover.** When %K crosses %D (when fast crosses slow), it can be interpreted as a

trade opportunity. Traders can enter positions following the direction of %K.

**Overbought/Oversold.** Look for both %K and %D to be above/below the 20/80 levels. If they are both above 80, it may be a good opportunity to sell, as the asset is overbought and expected to return back to a normal level. Alternatively, if it is below 20, the asset is oversold – and hence it may be a prime buying opportunity, as a range-bound market would imply that the currency pair will head back to a more “normal” asset price.



**Divergence.** Stochastic can also be used to determine when NOT to enter a position. For instance, if a trend looks strong, traders can look to stochastic to see if there is any divergence between the movement of the asset and the stochastic lines. If, for example, a currency pair is headed upwards sharply and is making new highs, but the stochastic is not making new highs or even heading downwards, then this suggests that the trend is weak, and the prices may come back down. Conservative traders can use look for divergence as a caution not to enter a trade based on momentum, while more aggressive traders can use divergence as a signal to enter a position before the trend actually starts retracing.



**Slow versus Fast Stochastic.** There are two types of stochastic, slow and fast. Both display the same two lines, and both can be interpreted in the same manner for crossovers, overbought/oversold conditions, and divergence. The difference is that the %D line of the slow stochastic is smoothed out by taking a moving average of the %D line of the fast stochastic. This makes the slow stochastic more accurate in the trade signals it provides but somewhat slower to react to the changing market price.

## B) Stochastic: Historical Trades

### Stochastic: Historical Trades

Below are two examples of how stochastic could have been used to place a profitable trade. Note that the first chart uses crossovers for signals while the second chart uses divergence. Since divergence is not a precise indicator in terms of timing, the double top can be used for an entry point.





### C) Stochastic: Question of the Day

Stochastic signals a buy or sell when the two lines cross above 80 or below 20. How would you regard a crossover that occurs within this channel? Do you think it would be important enough to base a trade on? Keep in mind what the indicator is showing here when the fast crosses the slow line, and feel free to look at stochastic on as many charts as necessary before deciding.

### D) Stochastic: Quiz

Quiz: Stochastic Oscillator

Please test yourself on your knowledge learned from this lesson.

Complete the Stochastic Quiz at the Quiz Center.

<http://www.learncurrencytrading.com/quizcenter/>

## E) Stochastic: Animated Lesson

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The following link(s) illustrate how the various indicators can be used to identify the best times to initiate a position, keep losses relatively small, and take advantage of trading situations that may occur over the course of a trading day. Please feel free to pause each animation or replay it as many times as you wish. In addition, please turn your speakers on to listen to the audio segment as well.

Lesson 10: Stochastic:

<http://www.learncurrencytrading.com...ochasticIIM.swf>

## F) Bollinger Bands

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Bollinger Bands

### What are Bollinger Bands?

*· Excellent range-bound indicator that measures standard deviation from the moving average*

Developed by John Bollinger, Bollinger Bands consist of three lines:

- A moving average (Often omitted in most charting packages)
- A upper band two standard deviations above the moving average
- A lower band two standard deviations below the moving average

Bollinger bands are an excellent range-bound indicator – meaning they work best when the market is not strongly trending, but rather fluctuating between a high barrier (resistance) and a lower barrier (support). Bollinger bands operate under the logic that a currency pair's price is most likely to gravitate towards its average, and hence when it strays too far – such as two standard deviations away – it is due to retrace back to its moving average.

**Parameters:** Standard deviation of 2; moving average of 20 (usually omitted).

### How it can be used:

#### Range-bound market.

In range-bound markets, trading with Bollinger Bands is fairly simple: it essentially involves selling at the top band and buying at the bottom one. Note how the bands are nearly horizontal when the market is in an established range. This is when reversals at the bands are more effective.



### **Breakouts on Volatility.**

When the Bollinger bands contract (meaning grow narrower), this suggests that volatility is contracting, and that the pair is trading in a tighter range. Typically, volatility contracts right before the market makes a big breakout. Accordingly, contracting volatility – symbolized by tight Bollinger Bands – should be a sign to traders that the market may be ready to make a big break.



The chart above shows the bands have contracted to a very narrow range, preceding a breakout. Once the bands start to expand outwards, this is a signal to enter in the direction that the price is moving. So, as the chart shows, if the price is at the top of the bands and the bands start to widen, it is a signal to go long.

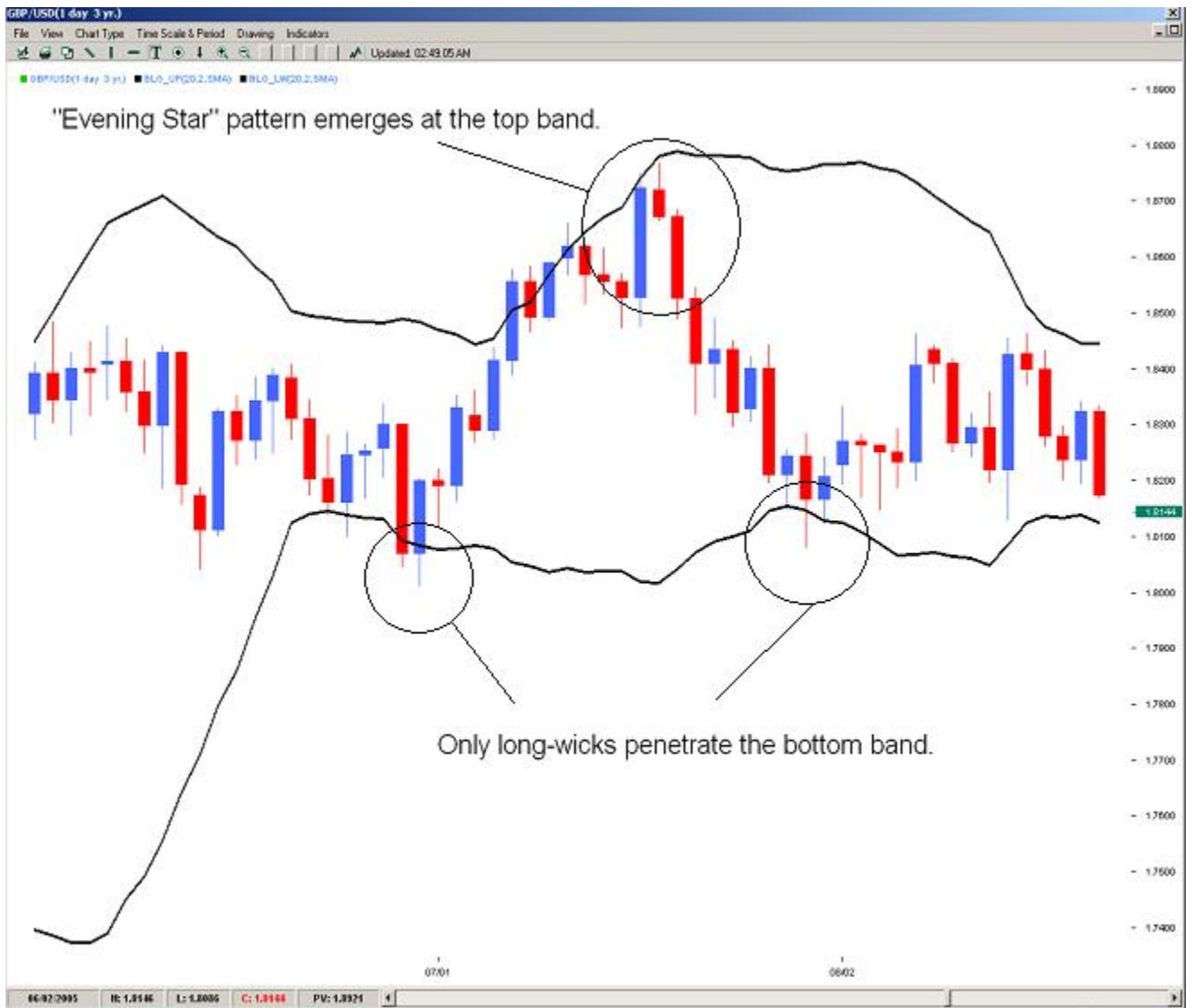
## G) Bollinger Bands: Historical Trades

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### Bollinger Bands: Historical Trades

Below are two charts showing how traders can use Bollinger Bands to effectively participate in range-bound markets. Note the importance of candlesticks in validating the reversal of the trend.





As the candlestick hits the lower Bollinger Band on this daily GBP/USD chart, we immediately see a rally back to the upper band. We also see a drop to the lower band as an Evening Star formation occurs at the upper band.



The Morning Star at the lower band of this USD/CHF chart precedes a reversal in price movement back to the upper band. Later, as the price hits the upper band, an Evening Star and Reverse Hammer precede a move back to the lower band.

## H) Bollinger Bands Assignment: Place a Trade

ASSIGNMENT: Place a trade based on the Bollinger bands indicator. Reply to this thread telling us about your trade and why you placed it. If you'd like, feel free to upload an image of the chart you were looking at to help convey to the class why you placed the trade.

## **I) Bollinger Bands: Quiz**

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Quiz: Bollinger Bands

Please test yourself on your knowledge learned from this lesson.

Go to the Quiz Center and take the Bollinger Bands Quiz.

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## **J) Bollinger Bands: Animated Lesson**

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Lesson 8: Bollinger Bands:

<http://www.learncurrencytrading.com...andslessonM.swf>