

Lesson 7

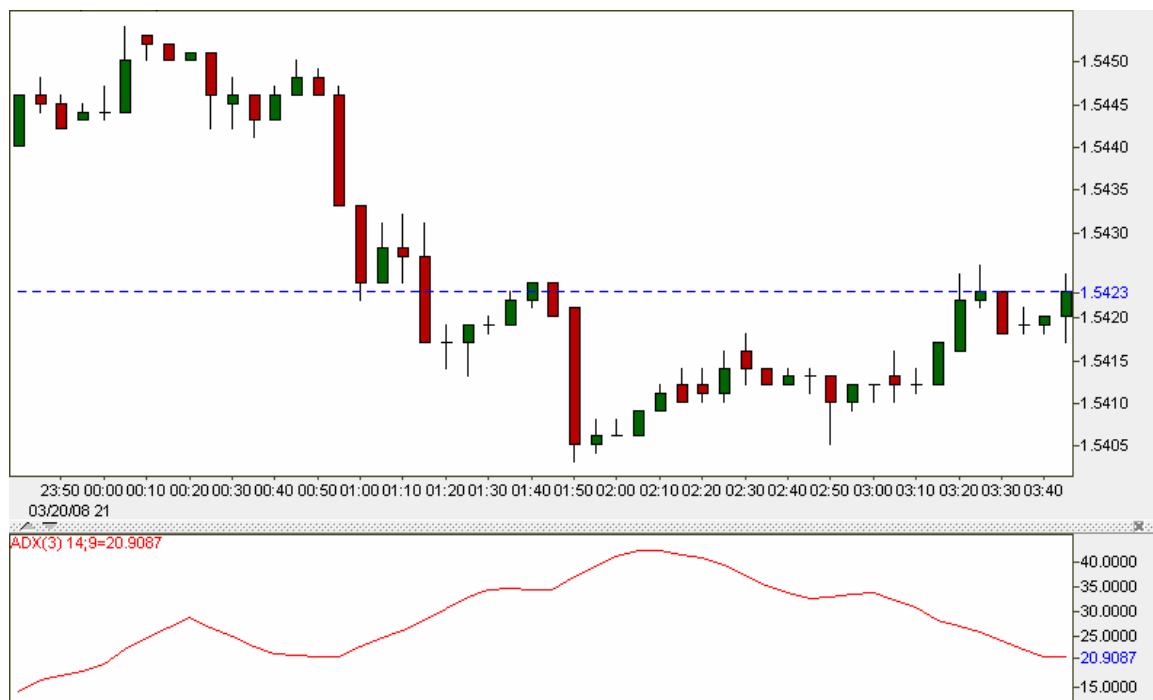
Indicators, part I: The Trend Followers

An *indicator* (sometimes also called a *study*) is a tool which helps you analyze price movements. There are two groups which most indicators fall into – *trend-following* indicators are the most useful when price is trending in one direction or the other, meanwhile *oscillating* indicators can be helpful when price is consolidating into a range. It is important to know which group the indicator you are using falls into, and to choose the correct indicator for each situation.

Some common trend-following indicators include:

ADX

The *Average Directional Index* is a special type of trend follower which can also help you decide whether a trend follower is, in fact, the best tool for the job at that particular moment. Trend-following indicators will function best when the ADX is over 30. When it is below 30, then an oscillating indicator may be a better choice.



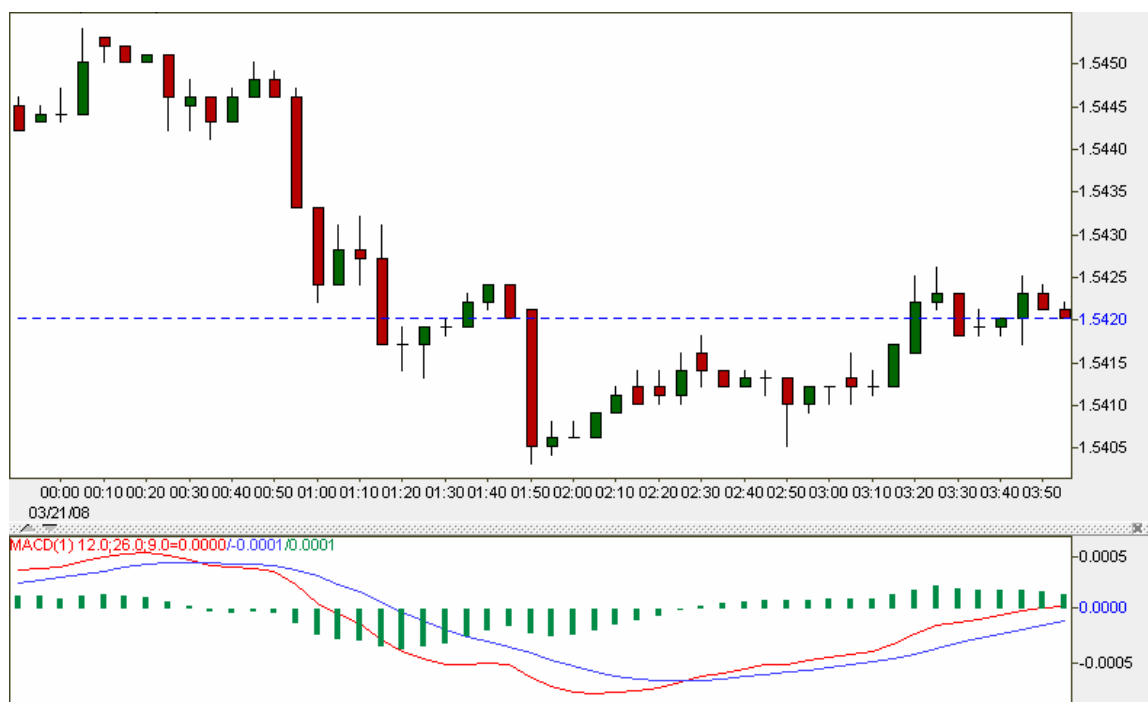
When the ADX is rising, this indicates that the trend is gaining in strength, and when it begins declining it is a sign that the trend is losing steam and a trading range may soon develop. Likewise, when ADX begins rising again it indicates that price is breaking out of its range and a new trend may emerge. The ADX does not, however show which direction the trend is going (up or down), only its strength.

In the example below, note how the ADX starts off low as price is trading within a range near the left side of the chart. Then, as price begins dropping, the ADX rises above 30 to indicate a trend is in progress. The ADX also confirms that the trend is over by beginning to decline once again. And when it finally drops below 30 we find ourselves trading once again in a tight range.

MACD

Moving Average Convergence Divergence measures the difference between a short-term and longer-term moving average. When the red line crosses above the blue line it indicates an up trend, and when the red crosses below the blue it indicates a down trend.

Additionally, the green bars (called the *MACD histogram*) give us an indication of the trend's strength or weakness. And, unlike the ADX, they also show us the overall direction of the trend. Longer bars indicate increasing strength, and shorter bars indicate decreasing strength.



In the above example, we see the red MACD line fall below the blue one as price begins its move downward. The green bars in the histogram are increasing in length as well, indicating that the down-trend is gaining momentum. When price reverses momentarily to head up, the histogram reflects a loss of downward strength. Downward strength resumes as the next long red candle posts on the chart. However it is important to note that while price made a lower low, the histogram did not make it quite as far down. This is known as a *bullish divergence*, and indicates that the trend will soon end and be followed by a reversal.

Momentum

The *momentum* indicator measures the rate of change in closing prices, and functions very similarly to the MACD histogram. It is often useful in identifying likely reversal points due to its ability to detect trend weakness.

In the example below, the moment indicator perfectly identifies the point at which the down trend ends and the new up trend emerges. As we near the end of the down trend, the momentum indicator begins tracing a bullish divergence. When momentum is below zero and turns sharply upwards following a bullish divergence, it can signal a long entry. Similarly, when it is above zero and turns sharply downwards following a bearish divergence, it can indicate a potential short entry. As we near the right edge of the chart, we see that momentum is indicating that the up trend is nearing an end and a reversal may be imminent.



Linear Regression

Linear regression is a special kind of moving average which is more responsive to price changes and with less delay. When price makes an extreme move away from its linear regression line (the red line in the chart below), a quick counter-trend trade can sometimes be taken as price snaps back to “normal” – with the same linear regression line acting also as the target for taking profits.

