

Determining Overbought and Oversold Conditions Using Indicators

Realizing returns in the forex market depends on successfully timing your trades with price movements. Fortunately, you can improve your odds of finding profitable trades by identifying overbought and oversold market conditions.

A currency is overbought when the price increases due to high interest from traders. When a currency is overbought, the price is overvalued and will soon fall. This period of overvaluation is a good opportunity for traders to sell the currency or take a short position.

Oversold describes the opposite situation. When a currency is oversold, the price is undervalued and will soon increase. Traders often use oversold conditions to cheaply buy the currency before the price rises.

Technical indicators like RSI and the stochastic oscillator can help you figure out when a currency or asset is at a good trading price.

Using the RSI

The relative strength index (RSI) is a [momentum indicator](#) used to measure the size of a specific price change relative to average gains and losses in price during a selected period. In other words, RSI shows traders how large a price movement is when compared to past changes.

Interpreting RSI

RSI is a value between zero and 100. Zero represents the maximum oversold condition. 100 describes a situation when the price is overbought to the point that the price will not rise any further. If the price movement is a large increase relative to the average price gains and losses, RSI will be near 100. Large price decreases cause RSI to be near zero.

The main guidelines for interpreting RSI are:

- If RSI goes above 70, the currency is overbought.
- If RSI goes below 30, the currency is oversold.
- If RSI is between 30 and 70, the currency's price is normal.

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FX:EURUSD, D 1.12172 ▼ -0.00017 (-0.02%) O:1.12189 H:1.12467 L:1.12098 C:1.12172



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The guidelines show us how to interpret this RSI chart. The RSI for Euro/ USD dipped below 30 in August, indicating that the currency was oversold. This moment was a good time to purchase Euros.

The Importance of Trends

It is important to note that setting the RSI bounds at 30 and 70 is a traditional suggestion that may need to be altered for your situation. The direction and strength of [trends](#) impact when we declare a currency to be overbought or oversold.

For example, bullish currencies that show a strong upward trend can remain overvalued for a long time. It is often appropriate to change the upper bound to 80 in bull markets. Likewise, you can change the lower bound to 20 in bear markets.

RSI is most effective when it is used along with trend indicators and tools, such as:

- Average directional index (ADX)
- Moving average convergence divergence (MACD)
- Moving averages
- Trendlines

You can also identify trends by setting a horizontal trendline at 50 on the RSI chart. When RSI falls below 50, the currency is in a downward trend. When RSI rises above 50, the currency is in an upward trend.

Identifying the direction and strength of a trend can help you set the proper overbought and oversold RSI boundaries for your trading situation.

Trading Decisions

RSI sends a buy signal when the value goes below 30 or the bear market boundary. Traders receive the signal to sell or short the currency when the RSI value goes above 70 or the bull market boundary.

Using the Stochastic Oscillator

The stochastic oscillator is another momentum indicator that can be used to identify overbought or oversold conditions. This indicator compares a closing price to the lowest and highest prices over a 14-session period.

It is calculated from this equation:

$$\text{stochastic oscillator} = \left(\frac{\text{closing price} - \text{lowest price in the period}}{\text{highest price in the period} - \text{lowest price in the period}} \right) \times 100$$

This equation creates a value between zero and 100. Upward trending currencies have high values. Downward trending currencies have low values. These results occur because the indicator assumes that upward trending currency closes near the highest price. Downward trending currencies close near the lowest price.

An example can illustrate how the math behind the stochastic oscillator works. Let's assume that the closing price for GBP/ USD is \$1.30. The highest and lowest prices for the period are \$1.35 and \$1.15, respectively.

The stochastic oscillator can be calculated as:

$$\text{stochastic oscillator} = \left(\frac{1.30 - 1.15}{1.35 - 1.15} \right) \times 100 = 75$$

The stochastic oscillator value is large since the closing price was near the highest price in the period. The value of 75 indicates that the price of GBP is trending upward.

Interpreting the Stochastic Oscillator

The stochastic oscillator can also show when a currency is overbought or oversold. A value below 20 indicates that the currency is oversold and undervalued. A value above 80 suggests that the currency is overbought and overvalued.

A stochastic oscillator chart has two lines. The first line is a plot of three-day moving averages of stochastic oscillator values. The other line is a plot of fourteen-day moving averages of stochastic oscillator values. The price of the currency is changing very quickly whenever these two lines cross. Traders often look for these moments when stochastic oscillator lines cross because they can signal a price reversal -- a good time to trade.

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In the chart above, you can see overbought signals at the end of August. Underbought signals are shown in August, October, November, and February. You can also see how the price of Euro/ USD reverses whenever the stochastic oscillator lines cross.

Trading Decisions

The signals suggest that traders should sell or take a short position whenever the stochastic oscillator goes above 80. Buy the currency pair when the value falls below 20. However, professional traders consider the direction and strength of trends before following a signal.

Trading against the trend is often a risky move. If the stochastic oscillator reveals an overbought condition during an uptrend, you are likely seeing a [false signal](#). Underbought conditions during downtrends should also be considered with close scrutiny.

Traders often buy when:

- The market is in an uptrend.
- Stochastic oscillator is 20 or lower.
- Other indicators support the signals.

Traders often sell when:

- The market is in a downtrend.
- Stochastic oscillator is 80 or higher.
- Other indicators support the signals..

RSI vs. Stochastic Oscillator

Both RSI and the stochastic oscillator are used to identify overbought and oversold market conditions. However, the indicators take different approaches to solve the problem. The mathematics behind RSI show us how *quickly* a price changes. Meanwhile, the stochastic oscillator simply tells us when a price closes near the highest or lowest point in the trading period.

The stochastic oscillator often gives false signals in trending markets where prices rise or fall for long periods. This happens because prices can continue to rise beyond the period's highest point in an uptrend. In this case, an overbought signal from the stochastic oscillator would be false. Alternatively, prices can continue to fall below the period's lowest point in a downtrend. This would lead to a false oversold signal.

Experienced traders understand that they need situational awareness to use indicators properly. In trending markets, RSI is a good way to identify overbought and oversold conditions. The stochastic oscillator is preferred in [choppy markets](#) where the trend is not obvious.

Using MACD

The moving average convergence divergence (MACD) is a [centered oscillator](#) that explains the average direction of price trends.

MACD can identify extreme overbought and oversold conditions, but the indicator is inaccurate because it does not allow traders to adjust the range of normal conditions. Instead, it has a signal line that separates buying positions from selling positions. MACD is also poorly suited for choppy markets.

MACD uses the exponential moving average (EMA), a type of average that gives high significance or weight to the most recent data. MACD is calculated by subtracting the 26-period EMA from the 12-period EMA. Typically, a 9-day EMA of the MACD values becomes the signal line.

Interpreting MACD

MACD is best used to identify the direction and strength of trends in a market. Here are some guidelines for identifying marketing conditions with MACD:

- Prices follow an upward trend when MACD is above the signal line.
- Prices follow a downward trend when MACD is below the signal line.
- A rapid rise across the signal line reveals an overbought condition.
- A rapid fall across the signal line reveals an oversold condition.

Trading Decisions

The MACD signals suggest that traders buy as soon as the MACD line goes above the signal line. A sell signal happens when the MACD goes below the signal line.



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For example, traders could sell Euro or take a short position in early August when the blue MACD line fell below the orange signal line. They could buy in mid-August when the MACD line rose above the signal line.

Traders should always check MACD signals against other indicators before making a decision.

Other Tools

RSI, the stochastic oscillator, and MACD are some of the most popular indicators used by traders to identify overbought and oversold conditions. Each of these indicators must be used in the proper situation to be effective. For example, MACD and RSI are less effective in choppy markets. Meanwhile, stochastic oscillators are unreliable in trending markets.

You need to pay attention to the strength and direction of trends to determine which indicator is right for your situation. Other indicators can help with this.

For example, the [average directional index](#) (ADX) can be used to confirm the strength of a trends. ADX comes in handy when you need to decide if your RSI bounds should be adjusted.

You can use MACD and [on-balance volume](#) (OBV) to confirm the direction of a trend. If OBV is falling and the stochastic oscillator shows a buy signal, you know that you are looking at a false signal. Ignore the buy signal and refer to other indicators before making a decision.

Being aware of trends and using indicators like RSI and the stochastic oscillator can help you find moments when a currency is above or below the normal range of prices. Time your trades with these overbought and oversold conditions to improve your chances of earning a positive return.

You can find more risk-minimizing strategies for forex trading in this [new guide](#).