AVERAGE TRUE RANGE INDICATOR TRADING STRATEGY [PDF]

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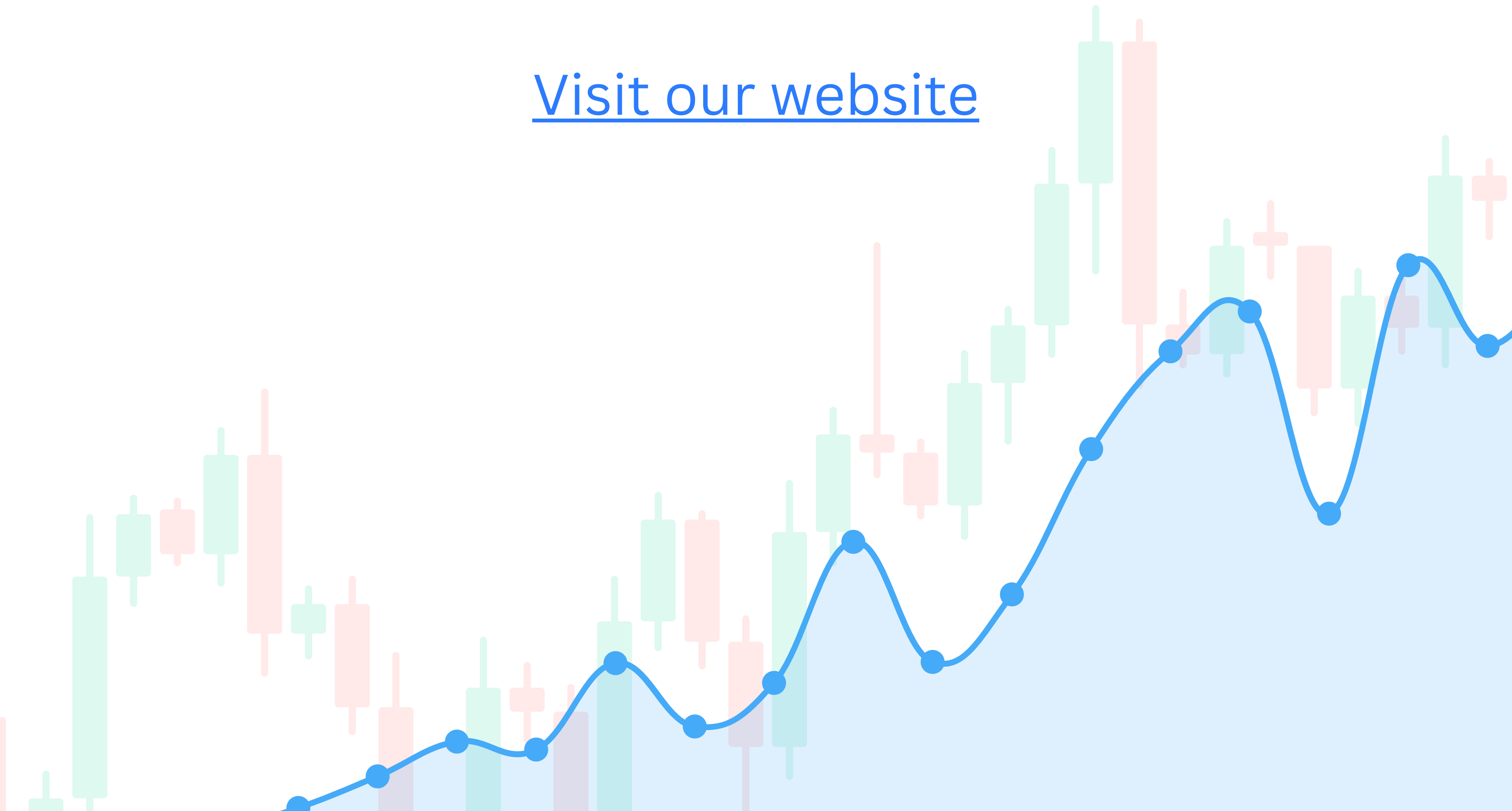

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Average True Range Indicator Trading Strategy

The Average True Range indicator is a technical analysis tool that measures the variability, fickleness, and volatility of asset's price movements. It evaluates how much price moves in specific periods over a total number of periods and determines the level of price fluctuation of an instrument in the market.

Let's delve deeper into the ATR trading strategy pdf, where you learn the basics of the trading instrument and how to apply it to your trading strategies.

What is the Average True Range (ATR) Indicator?

The Average True Range (ATR) technical indicator is a technical analysis tool that differs significantly in functionality compared to many others. While many indicators analyze the direction and volume of price action, the ATR evaluates the volatility. It is, therefore, among the most popular indicators, especially for day traders, and those looking to trade options trading strategies.

On a price chart, the ATR is displayed as a sub-chart below the main chart:

Indeed, observing how much the price moves is possible by merely looking at the chart. However, there are instances where a trader requires the quantitative and actual values of these fluctuations in the market for further decision-making, and the ATR comes in here.

Note that this market volatility indicator does not provide buy and sell signals directly. As such, the ATR should be used in conjunction with other technical analysis tools to determine entry and exit levels. Still, the measurement of volatility obtained by the indicator provides a different perspective on market dynamics that could significantly enhance your trading decisions.

How Does the Average True Range (ATR) Indicator Work?

To understand how the Average True Range indicator works, let us closely examine the formula that forms the indicator. First, determine the number of periods to evaluate. By default, this is 14 periods. The ATR calculation for this number of periods is thereby given as

$$\left(\frac{1}{n}\right) \sum_{i}^{n} \mathrm{TR}_{\mathrm{i}}$$

Where:

TRi = Specific Period's True Range.
n = Number of periods.
The indicator uses the formula above to evaluate the first ATR for the considered asset. It uses a different and less complex formula for subsequent periods as follows.

$$\frac{Previous\ ATR\ (n-1) + TR}{n}$$

Where:

n = Number of Periods
TR = True Range

The True Range (TR) is the most significant value of any of the following three evaluations;

- **High minus Low:** This measures the range between the highest and lowest prices in a period. (H-L).
- **High minus the previous close:** This captures the difference between the current period's highest price and the last period's closing price. (H-Cp)
- **Low minus the last close:** This reflects the price gap from the previous close to the current low (L-Cp).

A high-value ATR means price fluctuations are high and rapid. Conversely, a low-value ATR implies relatively stable price changes, which is mainly observed when the market consolidates.

Take note that a rising ATR does not suggest that the price is trending upward. ATR can also rise on the chart when price action dumps. This means that the ATR strictly measures market volatility, not trend direction. A high ATR suggests high volatility and a low ATR suggests low volatility.

How to Use The Average True Range Indicator in Trading

The ATR is very applicable for setting stop-loss levels. The idea is to use a certain ATR level, or a multiple of it as your stop loss. You can also do the same for your take profit. So, if you have a current ATR reading of 100 on the EURUSD, you can use this value to set your stop loss 100 pips away from your entry, and your take profit will be 150 pips (1.5ATR) or 200 pips (2ATR) away from your entry.

Bear in mind that the most important fac tor in using the ATR indicator is the value presented by the indicator and not the ATR line movement. This value shows the average pips on the market you trade on over the last 14 candles (if that's your default ATR setting). So, the higher the value, the more volatile the market, and vice versa.

Another way to apply the ATR is to determine the appropriate position size for your trade. Since the ATR helps you understand the volatility levels in the market, it can help you determine how much capital you should invest in your trade by considering ATR values and your risk tolerance level. This use is especially popular with day trading strategies.

For instance, if you are trading a very volatile instrument indicated by a huge ATR value, reduce the amount you invest to avoid excessive losses. Otherwise, you may wish to increase your trading position size if the ATR value is small.

Average True Range Indicator Trading Strategy Tutorial

Now, let's close in on a step-by-step procedure for trading financial assets withan ATR forex trading stratetegy. In this example, we look at the application of the ATR indicator in a breakout strategy. After that, we use the same ATR as a trade management system to trail our stop loss and place take-profit orders for as long as the trade allows.

Trade Management With ATR

When using the ATR, you determine your trade entry using any other indicator or technical analysis tool at your disposal. But when you want to set your stop loss, you pull out your ATR and note its value at the time of your entry.
In the EUR/GBP chart below, for instance, we use two EMAs (Exponential Moving Averages) with periods 21 and 9 to generate our trading signals. Once the EMAs give us a bullish signal, we take note of the current ATR value. Remember, the ATR indicator measures the volatility in pips when trading forex and in any other unit of change for other instruments. In our example, when entering the trade, the ATR shows 78 points or 7.8 pips.

However, because the price has been somewhat volatile recently, judging by the three strong bullish candlesticks before the formation of the EMA signal, we might need to set our stop loss a little far away from the entry.

As a result, we chose 2ATR as our stop loss, which is 15.6pips away from the entry. And, if using a standard risk-reward ratio of 1:2, then our take profit can be double that, at 31.2 pips away from the entry.

Note that there is no mechanical way to know what multiple of the ATR to use, as this would depend on the trading strategy being traded. However, with constant [backtesting and the use of your trading strategy], you'll find what works for you.

To sum up, the chart below shows what your trade would look like using the ATR indicator, with a stop loss and take profit target.

Average True Range (ATR) Indicator – Pros and Cons

The Average True Range indicator is one of the few indicators that give insight into the volatility of price action in the market. It provides a quantitative evaluation of price fluctuations that help traders determine stop loss, trade risks, and sometimes trade entries. Yet, it has limitations you need to keep in mind when using it. We discuss some benefits and limitations of the ATR below.

Benefits of Using the Average True Range Indicator

Clearly, determining the price volatility of an instrument helps to understand better and predict future price fluctuations.

This is especially useful when managing stop loss and trading risks. And that's the main benefit of using the ATR. Unlike other indicators, the ATR serves a good purpose for managing trade risk management and to protect profits. Some benefits of the ATR are highlighted below.

Pros

- The ATR helps traders gauge market volatility in various market conditions.
- It is helpful for setting stop loss levels and position sizing
- It can also easily be used on various timeframes and trading instruments
- The ATR provides a quantitative measure of risk for the stock market, the forex market, and any other financial market.

Limitations of the Average True Range Indicator

The ATR exhibits certain limitations that make it imperative to only consider it as a component of a wholesome strategy rather than a stand-alone indicator. Some of these limitations are highlighted below.

Cons

- The ATR does not provide information on the direction of price movement. Neither does it give entry and exit signals.
- It may also not be effective in a low volatility market such as a ranging, consolidating market.
- Like any other indicator, the ATR is not foolproof and should be used with other technical indicators and analysis tools.