Technical analysis of Cryptocurrencies

This is the Seventh part of our training lesson on cryptocurrencies trading that gives insight about technical analysis of cryptocurrencies.

Technical chart indicators

There are several chart indicators that help a lot in making trading decisions like entering or exiting a trade. We will take a look at a few important ones here.

Relative strength index (RSI)

Relative strength index is one of the commonly used chart indicators. RSI is a price oscillator that shows the changes in the strength of an asset's price. RSI indicator is shown in a graph form and can range from 0 to 100. If RSI is below 30 it means that asset is oversold and there is an opportunity to buy the asset and if RSI is above 70 then it means that asset is overbought and gives a signal to sell/short the asset.

It also helps in knowing the price trend of an asset. If RSI crosses the 50 centerline from down to upward it means asset price is gaining strength and price can move to 70 RSI. While on the other hand if it crosses down the centerline it means that the price of an asset is losing strength and it can further go down.

Let's take a look at RSI example on Bitcoin 4 hour chart:

You can see in the chart above, Bitcoin price bounced up when RSI went below 30 which gave a perfect buy opportunity to investors and the price moved down when RSI crossed the 70 level; giving a sell opportunity to the investors. Currently, RSI is above 50 centerline which indicates that price is still strong and it can bounce back from here. But a drop below 50 centerline can make the price drop further.

RSI can be a good addition to your trading strategy but should not be used alone as dependency on one indicator can lead to wrong decisions.

Moving Average Convergence Divergence (MACD)

MACD trading indicator helps you to identify the strength, momentum, direction and duration of a trend in an asset's price. MACD indicator's basic usage is to identify the next price trend and it is a relationship between two moving averages of an asset's price. It is calculated by subtracting the 26 EMA from 12 EMA. Then another 9-day EMA is plotted on top of the MACD line which is called signal line.

Let's dig into it further before discussing its use. There are three numbers that are used in their settings.

- The first one is the fast moving average which we usually use 12 which means 12 previous bars.
- The second one is the slower moving average which we usually use 26 which means 26 previous bars.
- The third one is the number of bars that are used to calculate the moving average of the difference between 26 and 12 EMA.

In the chart below, the blue one is the fast moving average which reacts to the price movement more quickly while the orange one is the slower moving average. When the two moving averages move away, the histogram gets bigger which means that divergence is happening as the fast moving average is diverging from the slower moving average. On the other hand, when fast and slow moving averages get closer to each other the histogram gets small which indicates convergence, as the faster MA is converging the slower MA.

As the fast line react faster to the price movement it crosses the slower line which indicates that a new trend has been started. In the chart below you can see when blue line which is

fast MA crosses the slower MA which is orange, it gives an emergence to the new trend and the price moved from $8k to almost $14k. Then again the blue line crossed down the orange line and it confirmed the new trend and at the end again blue line crossed up the orange line gave the confirmation of the new trend.

MACD confirmation comes a bit late in comparison with RSI but it has its own uses and provides a strong indicator of a trend reversal.

Stochastic indicator

The stochastic indicator indicates the oversold and overbought zones of price like RSI. It was developed in the 1950s and is more sensitive to momentum of price rather than absolute price.

Like MACD it also has two lines. One line is called the slow stochastic line and the other one is called the fast stochastic indicator. Like the RSI indicator, it also has a score from 0 to 100. When stochastic lines cross the 80 score it is called the overbought zone which gives you the ability to short or sell the asset and on the other hand when stochastic lines are below 20, it means that price is in oversold zone and you can buy/long the asset here.

Let's take a look at a perfect example of a stochastic indicator on the Bitcoin chart. When the Bitcoin price dropped to $4.5k area stochastic lines dropped below 20 which is an oversold area and gave investors the opportunity to buy it. After that Bitcoin price went up to $7.1k area and again dropped down. At that point, stochastic lines were already in the overbought zone and gave investors the perfect opportunity to sell the Bitcoin there. As the blue line is the fast stochastic line it crosses the red line when the trend is changed.