# Technical analysis of Cryptocurrencies

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

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## Moving Averages

Moving averages is an important technical indicator in the traders' arsenal that helps to find price trends, support and resistance. Moving averages is really a wonderful way to know the trends by removing the fluctuation noise from the price data.

Moving averages can work as a support during an uptrend move in the price of an asset and can work as a resistance during a downtrend. Small averages work best in day trading while big averages like 200-day helps in predicting the price trends for a bigger time period.

**How moving averages are calculated**

With the help of charting tools like tradingview.com, you can apply any moving average on a chart. A moving average is calculated by taking the average closing price of an asset and then dividing it by the number of closing prices you have taken. A 10 moving average means you will take the last 10 closing prices of an asset in a given timeframe and will divide it by 10.

There are two main types of moving averages; simple moving averages (SMA) and exponential moving averages (EMA). Let's take a look at both to know in detail how they work and how beneficial they are.

**Simple moving average (SMA)**

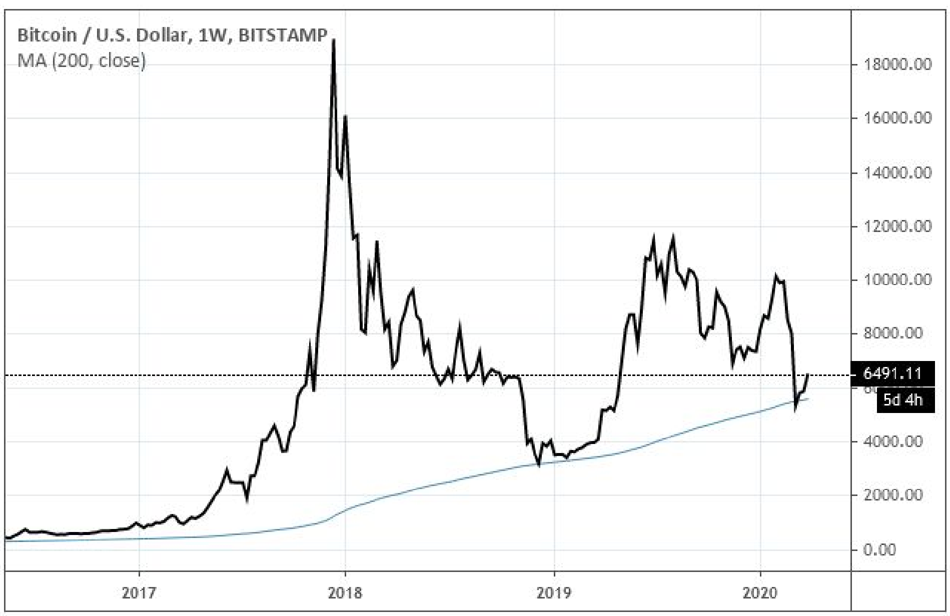
A simple moving average is a simple weighted average of an asset's price. A 5 SMA will be calculated by dividing the last 5 closing prices of an asset in a given timeframe and dividing it by 5. It will clear the noise in the price movement by giving you an average moving price of an asset. You can use it to enter or exit from a trade and can also determine the price trend.

**Popular simple moving averages**

Moving averages works in the same way as we read about Fibonacci levels. The more popular the SMA means the more chances are it will influence the price. If you will come up with some weird SMA like 37 it might work by chance a few times but it will not work most of the time. So we need to stick to the ones that are more commonly used by traders which are 10, 20, 50, 100 and 200. A combination of two SMA's like 50 and 100 works great to know the short term trend and long term trend.

A 5 SMA is used by scalpers while 10 and 20 SMA is commonly used by swing traders and day traders. 50-day SMA tells you about the mid-term trend of an asset while 200 SMA is used by long term or position traders. Although there are lots of technical analysis tools used by traders, long term stock investors wait for the price to cross above 200 SMA or drop to 200 SMA to buy the stock.

Below we have given the example of 200 SMA on the Bitcoin’s weekly chart. Where you can see after dropping from $20k, Bitcoin perfectly bounced back from 200-days SMA. And now you can see it again bounced almost from 200 SMA in March 2020 which proves the importance of 200 SMA for long term trades.




**Exponential moving average (EMA)**

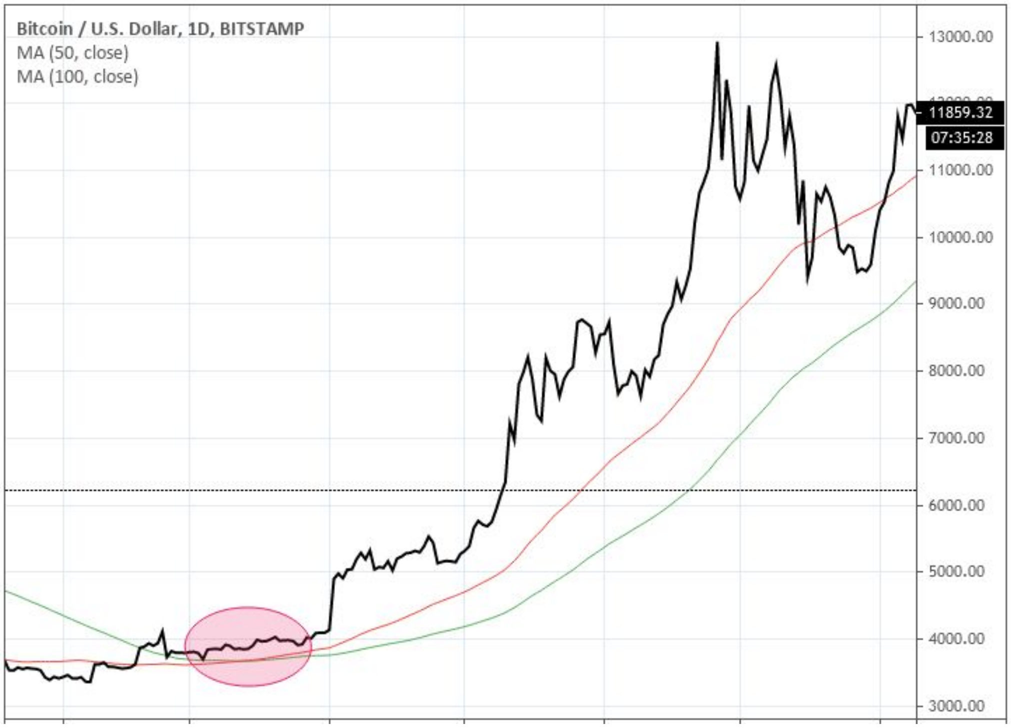
The EMA is another most used moving average after SMA. SMA gives equal weightage to all the prices included to calculate the average but EMA gives more weightage to the recent price in calculating the average based on the assumption that most recent price action makes a high impact on the future price movement.

The most used EMAs are 12-day and 26-day exponential moving averages for short-term trading while 50-day 200-day EMAs are used for long term trading.

**MA Golden cross and death cross**

Moving averages crossovers are one of the most commonly used trading strategies. A crossover happens when a short-time moving average crosses a long-term moving average. A lot of traders use 50-day and 200-day SMA for this. If the 50-day SMA breaks up the 200-day SMA then it is called the golden cross and if the 50-day SMA breaks down the 200-day SMA then it is called the death cross. Golden cross provides an opportunity to buy/long an asset while the death cross provides an opportunity to sell/short an asset.

Below we have given an example of a golden cross on Bitcoin's daily chart. the red line is the 50-day moving average while the green line is a 200-day moving average. The 50-day moving average broke up the 200-day moving average at around $4k price of Bitcoin highlighted with an oval in the chart. It provided a buy opportunity and price went up to almost $13k after that before making a significant reversal.




Moving averages can help traders to know the significant market moves and confirm their legitimacy when used in conjunction with other technical indicators. Better to not rely on one indicator as a combination of many will allow you to make a more confident decision in your trading.