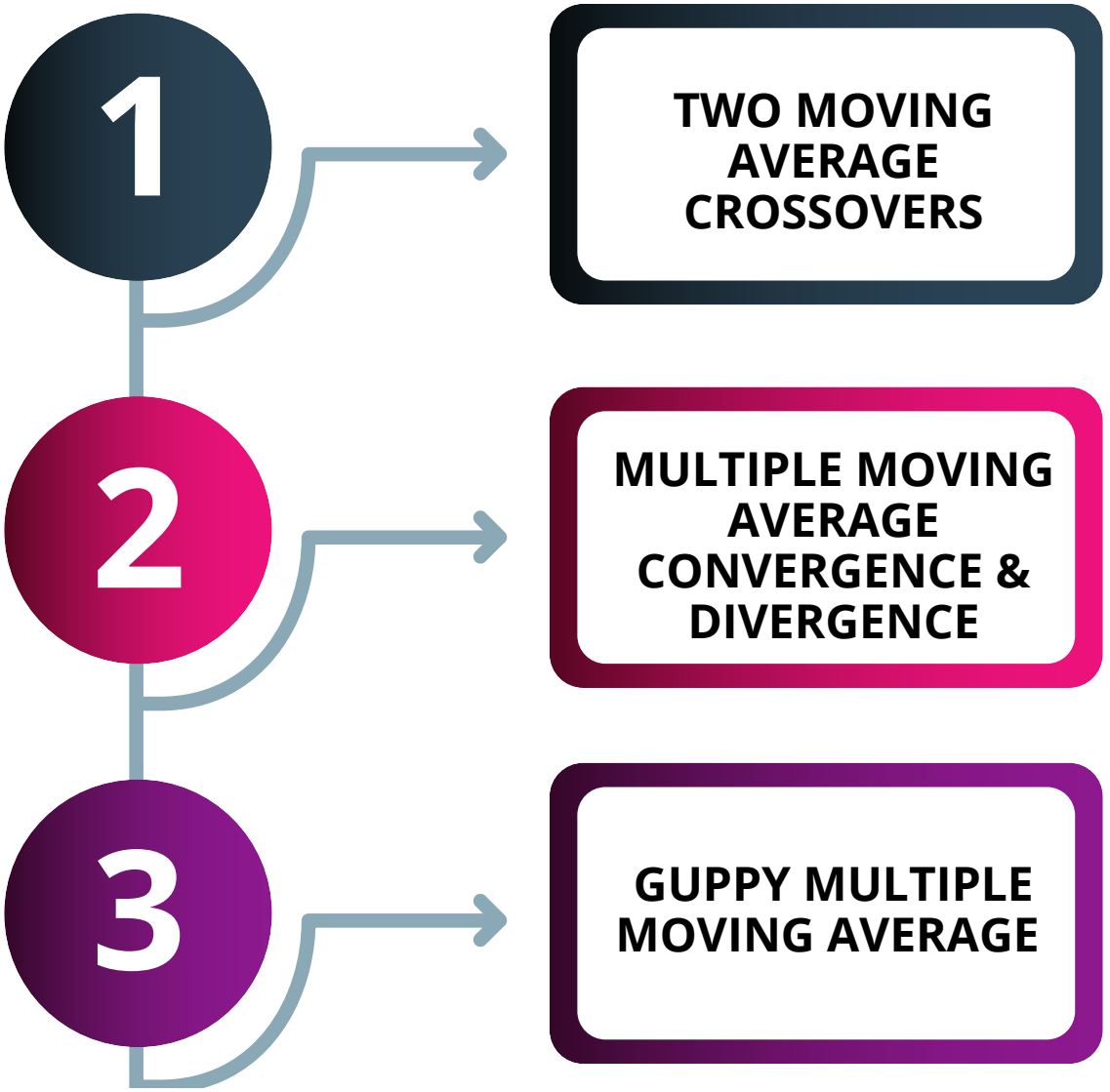
HOW DO WE USE MOVING AVERAGES?

We can use moving averages in more than one way to determine our entry and exit points in an attempt to create a system. We will mainly be using three methods:



1 TWO MOVING AVERAGE CROSSOVER

In keeping with this method, we will consider 2 different moving averages, one long term, and another short term. Whenever they cut each other, we will treat those points like entry and exit points.

The idea here is that the short term moving average follows the closing price closely whereas the long term moving average follows the closing price relatively slowly. As a result, when the short-term moving average is above the long-term moving average, we can say that in the recent past, the asset price has been more than the longer-term average and as a result, the asset seems to be in control of the bulls.

HOW TO USE THIS?

When a short term moving average, let us say 50 DMA cuts 200 DMA from the downside, that means the asset price is in an uptrend and the recent history it has averaged more than the long term. As a result, we will use this crossover, where a short term MA cuts long term MA as bullish crossover and this can potentially be an entry point for a trader.

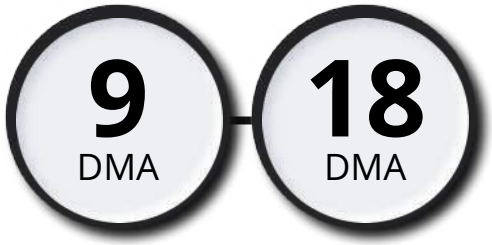
Conversely, when a short term moving average cuts long term moving average from the upside, then the asset price in a downtrend. Let us say 50 DMA cuts 200 DMA from the upside and now the long term average is higher than the short term average price of the asset. This acts as a sell or short signal for the trader. Such a crossover is called bearish crossover.

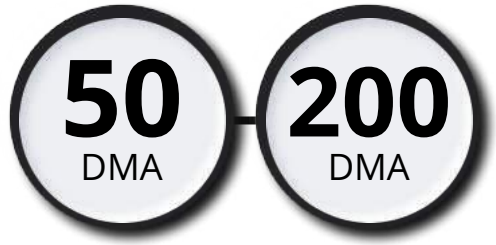
We can have multiple combinations of lengths of moving averages, for which we can experiment with crossovers to settle on one that works the best for a given asset. Some of the common lengths of moving averages are – 4DMA, 5DMA, 9DMA, 18DMA, 45DMA, 200DMA. We can try any permutation of these common ones and understand the price movements.

Some of the common lengths of Moving Averages are – 4DMA, 5DMA, 9DMA, 18DMA, 45 DMA, 200DMA. We can try any permutation of these common ones and understand more about how the asset price is performing. Some of the common moving average combinations for Crossovers are as follows.

The selection of the length of the moving average is based on the average holding period of trade that we generally submit. For someone who has a holding period of a week, a 4DMA and 9DMA might work better. For a month, 18DMA and 50 DMA might work. However, there are no fixed rules.

One of the most effective moving average crossover pair is 9DMA and 45DMA. However, there are so many others and a trader or learner is better off to experiment with the same and infer what works best for them.





HOW TO CHANGE SETTINGS ON CHART?

We will now talk about changing the length of different moving averages on TradingView and ChartInk. On ChartInk.com, we will select the moving averages option on the top left and then select the checkboxes to make them appear. Upon changing the parameters in the adjoining box, the numbers here will denote the length of the moving average. A parameter of 50, will mean a 50DMA and a parameter of 20 will mean a 20DMA.

Next on TradingView, we will go to functions where we can add indicators and oscillators. Here we can search and add moving averages on the chart. Once we have a moving average added to the chart, its details appear on the top left corner of the chart. Clicking on the small settings button at the top left corner of the chart will open a pop-up box where we can make changes to the length of the moving average.

LAGGING INDICATORS

Moving averages react to price changes with a delay as they require some time before they can catch the last closing price. As a result, with moving averages, we will see that a few pairs of moving averages produce delayed signals i.e. they act as lagging indicators. This is particularly the case with long term DMA crossovers, for instance with 50DMA and 200DMA.

Certain other pairs produce less delayed crossovers. As a result, it is an art for the analyst to create a system that ensures that the moving average pair in use does not produce delayed or lagging signals. An analyst should spend time experimenting with different time frames in moving averages and check if their crossovers create reliable signals for the time frame that they are looking to trade.

MOVING AVERAGES DO NOT WORK SIDEWAYS

Moving averages do not work in a sideways market and can lead to losses if we trade based on the same. Volatility in asset prices works well for trading using moving averages. As a result, we will avoid trading using moving averages in a sideways market.

It would be difficult to identify sideways markets until we have incurred losses. So, an analyst will have to work out a system that takes into account the volatility before initiating a trade. For instance, one could check if, in the last n number of periods, the moving average has occurred more than once. Here,n number of periods refer to the period of the long term moving average. Another method is to combine with some indicator that shows volatility. There is no right or wrong answer here. An analyst needs to get creative and then back-test the assumptions that they are making. This is where it takes a lot of time and effort to create a system that works.

Now that we have learned about moving averages in detail, let us now move ahead and look at examples for different crossovers.

This is an example of Moving Average crossover. We have used two EMA i.e. 9 day EMA and 45 Day EMA. Firstly, we can see how Moving Averages work. They stabilise the rough nature of closing prices across and instead produce a smoothened line. We see that whenever the 9 DMA crosses 45 Day EMA from bottom, it creates a Bullish crossover which is a Buy signal. When the reverse happens, it creates a Sell Signal.

This is another example of 9 DAY EMA and 45 DAY EMA. We get Buy and Sell signals using these. We can create an entry and exit strategy around these. We can use combination of any two moving averages and see what is working for the strategy that we are trying to create.

This is yet another example of 9 Day Moving Average and 45 Day Moving Average. In all the three charts that we have seen so far, the asset price has been in a trend and hardly in sideways movement. Let us see how the same looks when there is sideways movement in the asset price.

This is an example of sideways movement and the kind of pattern it creates using Moving Average Crossovers. We see that it creates a lot of frequent Buy and Sell signals. An analyst needs to create a system such that they can filter out such sideways movement of the asset prices. Moving Averages and Crossovers do not work well in such sideways market. Acting purely based on these will create multiple loss making trades in sideways markets.

This is another example of sideways market. Here again, we an see that the two moving averages have crossed 6 times in the marked time frame. This will create losses on each of the trade. As a result, a volatility filter will be very handy here to avoid such a market completely. An analyst needs to experiment with what works well for them and accordingly create an entry and exit strategy.

This is yet another example of sideways market. We see how Moving Averages and Crossovers work great in trending markets whether it be downtrend or uptrend. However, in sideways market, they do not work one bit and lead to losses. It is not always possible to identify sideways market when they are beginning. However, we will not repeatedly trade in the same and have multiple losses.

As we discussed earlier that we can have crossovers for any period of time in the moving average. Here we can see that we use two moving averages – 50 DMA and 200 DMA. These are relatively longer term moving averages. The crossovers of these also create buy and sell signals. So, an analyst should work on their trading style and strategy and accordingly decide on the length of the Moving Averages that they intend to use for crossovers. Also, we that the buy and sell signals on the chart are very delayed and as a result, if we take an entry and exit based on these signals, we will most probably incur losses.

This is again a 50 DMA and 200 DMA crossover chart. We see how Bullish and Bearish crossovers are occurring. We also need to notice that the signals created here are again delayed. That is in fact the case with 50 DMA and 200 DMA almost always that the signals are so delayed that we will end up buying way after the trend has reversed and at times even at the peak of the uptrend too. Because of the delay in taking the decision, we will incur losses unless there is a very strong trend in the asset price. As a result, it is very difficult to make such systems work if the signals are delayed.

This is yet another Crossover pattern. We see 9 Day EMA and 18 Day EMA crossover here. We see how it creates great entry and exit signals in trending markets. We also see that these do not work in sideways markets. We also see that the signals are not too delayed to act upon. As a result, we see that these crossovers are not not lagging. Now whether or not do they fit our trading system, we will back test the same and understand if it is systematically performing well or not.

This is yet another example for crossovers not working well in Sideways market. The false crossovers created in this phase, lead to poor returns. With this, we have discussed how we can use Moving Averages and Crossovers to create entry and exit signals. We also see that the key now is in experimentation and creating a system that works. It takes a lot of time and effort and practice. A beginner is better off putting as much time in practice as possible. This will make them fluent in spotting subtle parts of chart reading.