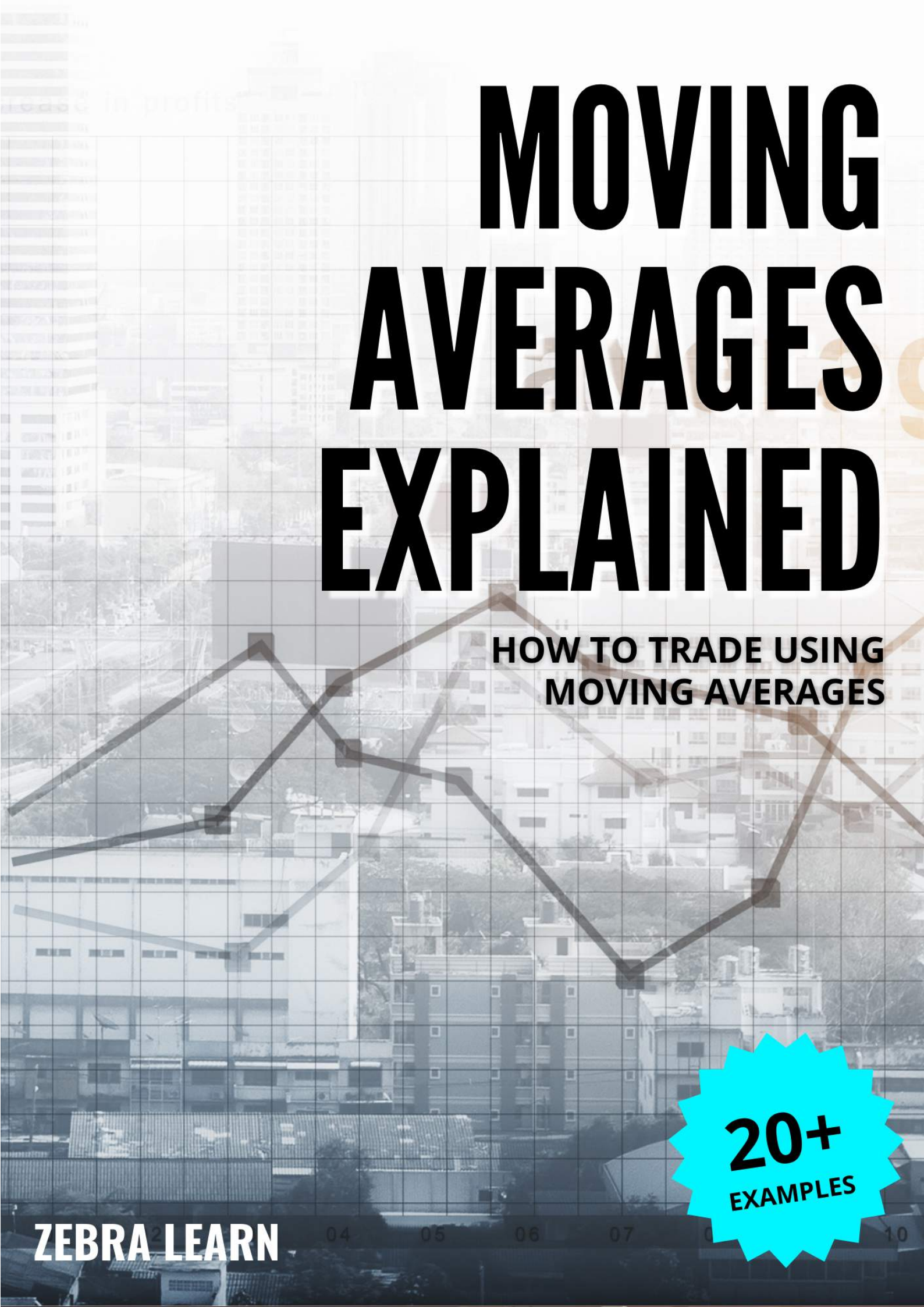
MOVING AVERAGES EXPLAINED

HOW TO TRADE USING MOVING AVERAGES



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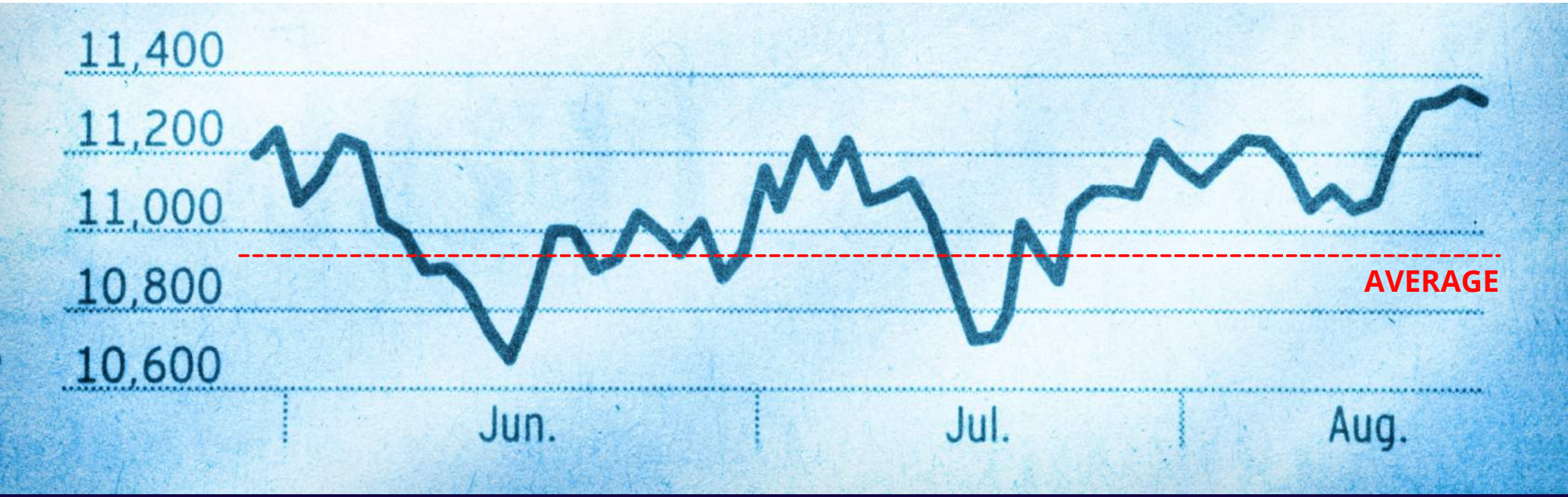
MOVING AVERAGES

INTRODUCTION

The next analytical toolset that we will be talking about is “Moving Averages”. We will learn to use moving averages to conduct technical analysis and to create trading strategies.

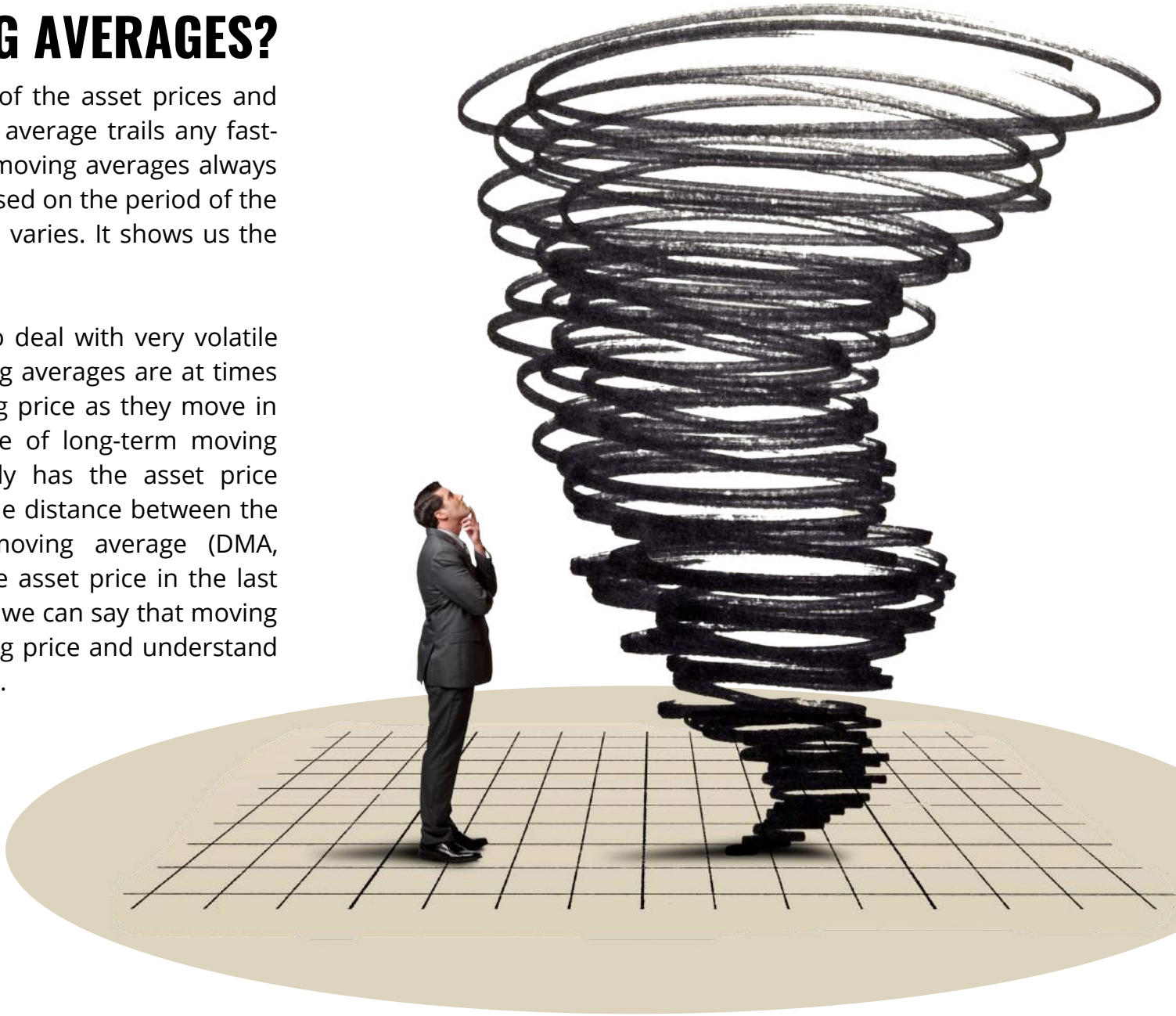
The new entries keep on adding themselves automatically and the last entries keep deleting themselves and hence, the name ‘moving averages’. For instance, a 10-day moving average is an average of the last 10 days' closing price. Now, when a day passes, a new closing price is added and the 10th days’ closing price is removed from the moving average. This means it is a rolling average of the last n number of periods. We can have a moving average for any number of periods. We can have moving averages for 4 periods, 9 periods, 20 periods, 50 periods, and so on. The ones that we will use depends on our typical holding period for that asset.



WHY DO WE USE MOVING AVERAGES?

Moving averages smoothen the volatility of the asset prices and give us a stable line to deal with. Moving average trails any fast-moving trend on either side. As a result, moving averages always try to catch the latest closing price, and based on the period of the moving average, the speed of catching up varies. It shows us the trend in the asset price.

Without moving averages, we will have to deal with very volatile closing prices of assets. Short term moving averages are at times used as an alternate for the actual closing price as they move in line with the closing price. We make use of long-term moving averages to understand how significantly has the asset price moved in the time period. For instance, the distance between the actual closing price and a 200-day moving average (DMA, henceforth) denotes the movement of the asset price in the last 200 sessions i.e. approximately a year. So, we can say that moving averages are used to smoothen the closing price and understand the trend of the asset price in longer terms.



TYPES OF MOVING AVEREAGES

SIMPLE MOVING AVERAGE

SMA is a moving average calculation method where each observation or closing price is given equal weightage. This means, for a 10-day moving average, each day is given equal weightage. It is the traditional method to calculate simple averages and it gives a true picture of the existing trend.

WEIGHTED MOVING AVERAGE

WMA is a moving average calculation method where the recent closing prices are given higher weightage than the older ones. Assigned weights increase linearly. This means, in a 10-day WMA, day 1 will have 10 times more weightage than day 10. Weighted moving average moves faster and it can follow the closing price at a faster pace.

EXPONENTIAL MOVING AVERAGE

EMA is a moving average calculation method where the recent closing prices are given more weightage than the older ones. Assigned weights increase exponentially. This means, in a 10-Day EMA, day 1 will not just be 10 times more weighted than Day 10 but much higher. The difference is exponential. EMA moves the fastest and can follow the closing price at a much faster pace.

Now we have to figure out the one to be put to use. We will rarely be using WMA and will majorly rely on SMA and EMA. The difference between EMA and SMA is sensitivity. EMA reacts much quicker to price changes as compared to SMA. As a result, it is relatively more volatile whereas the SMA is much more stable.

Traders will develop their preferences going ahead and choose between SMA or EMA. As a general rule, for short term holding period, we will use exponential moving averages as they handle volatility better and for longer-term holding period (more than a week), we will use simple moving averages. However, these are random suggestions and no fixed rules and a trader will develop their preferences going ahead.

SUITABILITY

Moving averages are suitable for all kinds of assets – indices, large-cap, mid-cap, small-cap, currency, commodities and many more. However, trading decisions purely based on moving averages shall be restricted to indices and large caps because small-caps and the mid-cap trend can be at times managed by promoters and significant investors.

We will combine moving averages with other analytical tools too to create positive signals about the same. If used well, moving averages is a really powerful way to conduct technical analysis for assets.

INDICES

LARGE CAPS