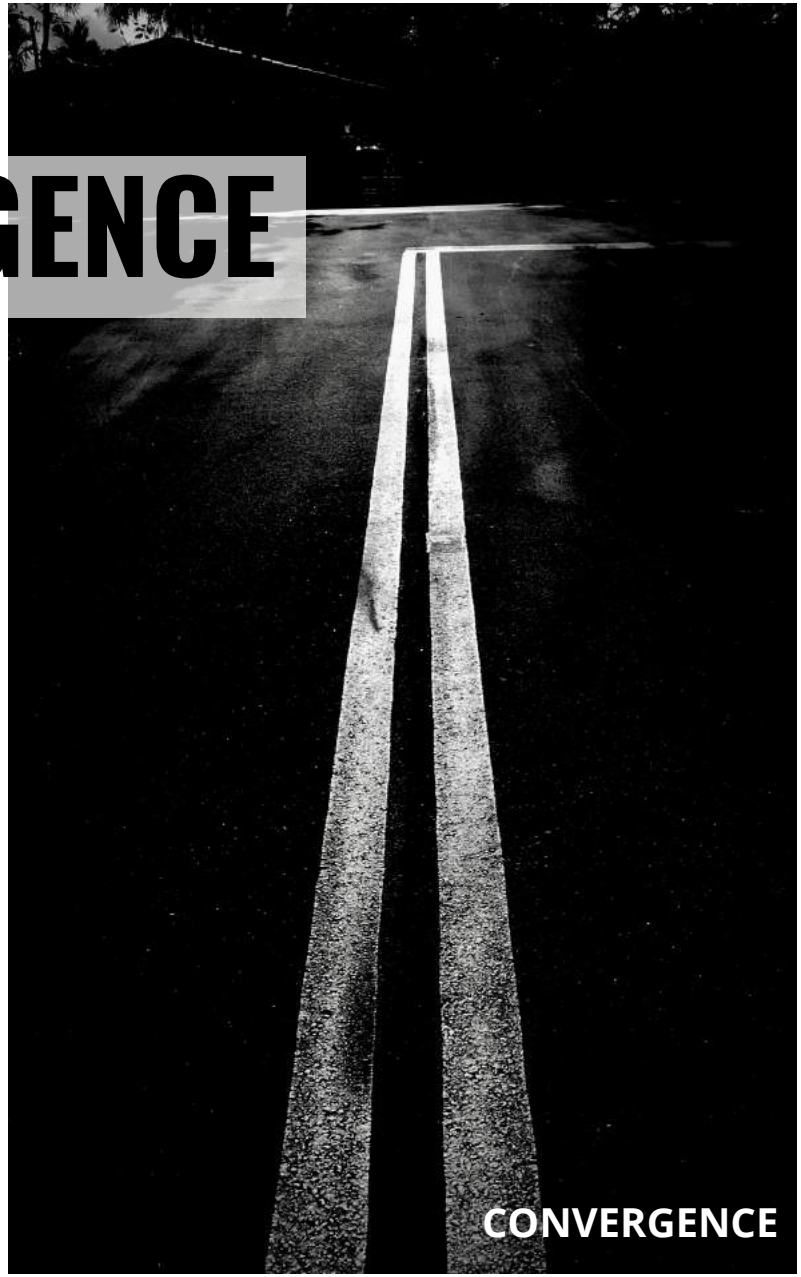
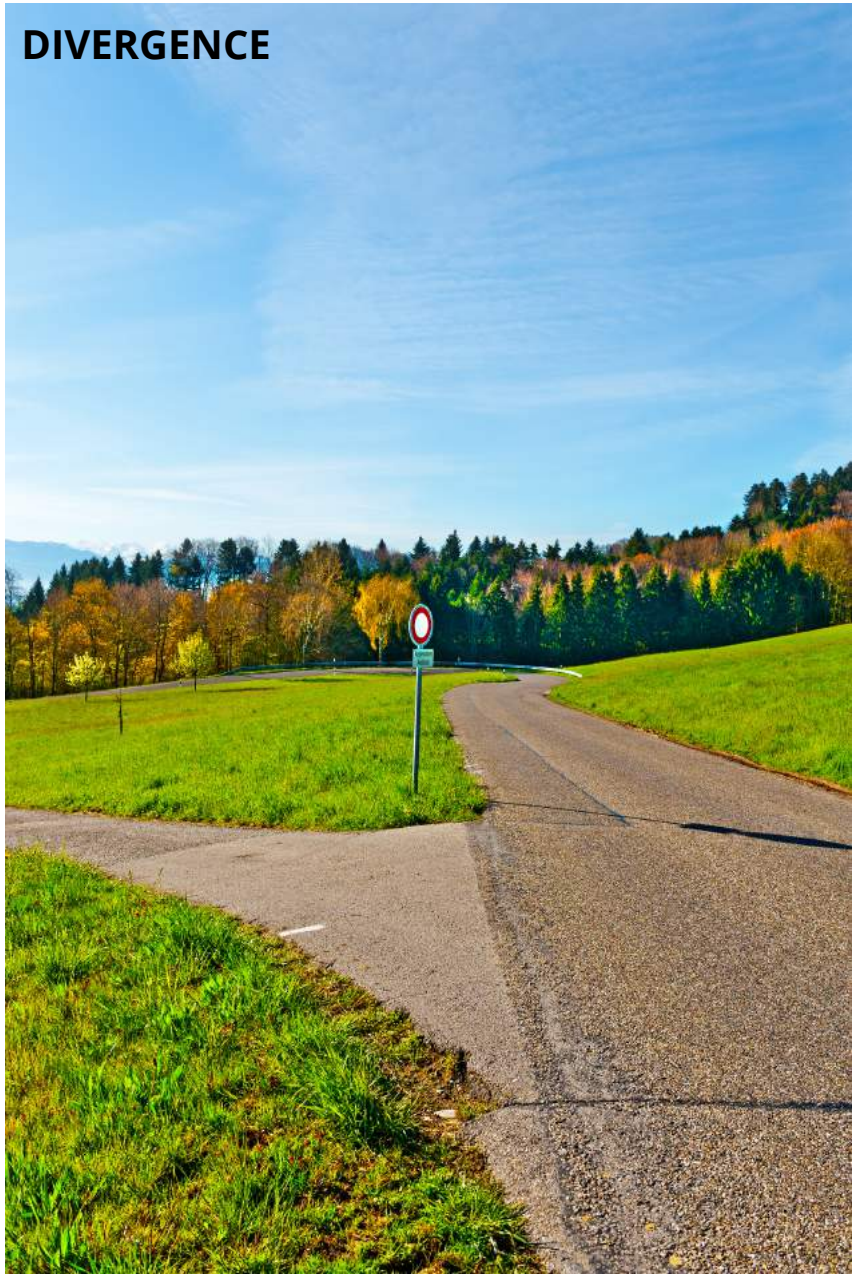
2 MULTIPLE MOVING AVERAGE CONVERGENCE & DIVERGENCE



With this, we come to the next method of using moving averages i.e.moving average convergences and divergences, based on which we will generate trading signals.

We will take multiple moving averages in the likes of 5DMA, 9DMA, 18DMA, 50DMA, and 200DMA. We will see that in periods of sideways markets (a sideways market, or sideways drift, occurs where the price of a security trades within a fairly stable range without forming any distinct trends over some period of time), all these moving averages come together and the gap between each of them is very minimal. We can say that all the moving averages 'converge' together. When such a pattern occurs, it is called a convergence of different moving averages. At times, 200 DMA will not be a part of this and all other moving averages will come together and be a part of the same. Such cases are also an example of moving average convergence.



Convergence can be seen as the first step before the asset makes a move in one of the directions. Whenever the asset price makes a big move in any particular direction, the short-term moving averages start to follow the same whereas the longer-term moving averages take time before they react. As a result, the distance between short-term moving averages and long-term averages begins to increase and they 'diverge' from each other. This is called a moving average divergence. Such divergence means a big move by the asset price in either direction.

As a result, whenever moving averages converge, we will keep a keen watch on that particular asset and look for early signs of divergence. We can recognize the early signs of divergence when the short-term moving averages start to break away from the convergence and move in either direction. If they start to run away on the lower side of convergence, we can see that as a short signal whereas we see divergence on the upper side of the divergence as a long signal.

We will also see that convergence and divergence will create a lot of false signals which will lead to small losses. However, these shall be met by the profits made in case of actual divergences. Also, systematic back-testing will make sure that we check if the system is working or not.

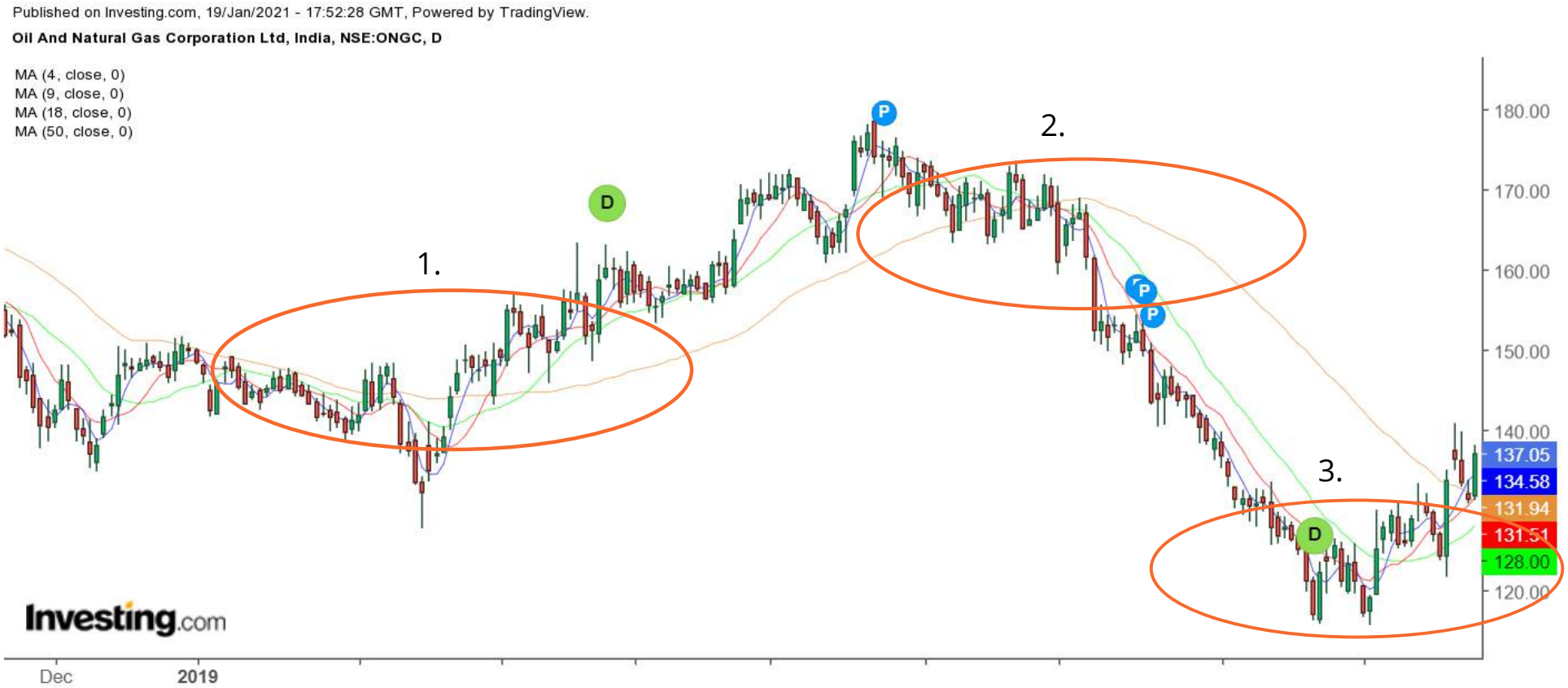
A major drawback of convergences and divergences is that it does not present any specific entry point like crossovers. We enter the trade whenever we gather enough conviction that this is a divergence that is playing out. But, divergences do not give an exit signal. As a result, we will combine this with other indicators and tools to design an exit strategy.

This is typically how moving average convergence and divergences work. We see that during the sideways movement, all the different moving averages come together i.e. they converge. On spotting this, we will closely monitor the asset price and when the shorter-term averages started to move away, we could see that as a divergence. In this case, the divergence was towards the lower side, so it created a sell or short signal for us. This is the systematic way of the functionality of convergences and divergences.

This is another example of convergence and divergences. We have used 4 DMA, 9DMA, 18DMA, and 50 DMA here. We see that same play out in multiple phases.

1. Beginning June, all the asset prices start to come together i.e. converge with one another.
2. The short-term moving averages start moving upwards creating a false divergence signal. We might have gone long here as the move is significant and ended up with a small loss since the trend reverses.
3. The moving averages again come back together and create convergence. This is then followed by divergence on the upside and we would have gone long at this divergence too and this time we would have booked profits.

This is how we see false moves that can create small losses at times here as well. We do not need to be afraid of losses if it is part of a systematic approach. In this case, it was systematic and that is why this fine.



1. We see a convergence here when multiple moving averages are coming together. We see that the shorter-term averages are breaking out on the upside and as a result, this is a bullish divergence.

2. We see the moving averages again coming together. This time they are breaking out on the lower end and as a result, this is a bearish divergence.

3. The moving averages are again converging and then they are diverging on the bullish side. This is a good sign to go long as the shorter-term moving averages are moving upwards. If this is a false move, we will end up with a small loss but if this is truly a divergence, we will have a bigger profit in the trade.

1. The convergence as all moving averages are coming together. We can short the asset when the short term averages start to move down. We also see that there is no such clear exit strategy and as a result, we will have to figure one out.

2. This is again a convergence and then the asset seems to be forming bullish divergence. This is real-time and when such a pattern is formed, we can consider going long the asset.
If the move is a false move, we will have a loss.