

Question

With three moving averages, exactly when is the signal given on the chart?

Answer

The first and most important thing to understand is that moving averages are usually calculated on the closing price. So, if you are using a daily, moving average, then the last price for the day (the “close”) is used. If you are using a weekly moving average then the last price for the week is used. This will be the close for Friday, if Friday is the last trading day in the week. If Friday is a holiday, it will be the closing price for which ever day was the last trading day.

It is possible to calculate moving averages on the high and low prices to get a type of moving average envelope and it is also possible to use the mid-point of the high-low range. There are also other possibilities, but they are rarely used – most people use the close.

The implication of this is that if you are trading when price crosses the moving average, you do not have a signal until you know the closing price. However, you could make a good guess if it is clear the price is most likely going to close below or above the moving average.

With the three moving average method, we take signals from the cross over of the moving average lines. To calculate them, we need the closing prices. Of course, you could do “what-if?” calculations based on where you think the close will be when you are expecting a signal. That might enable you to act during the day, rather than on the next day.

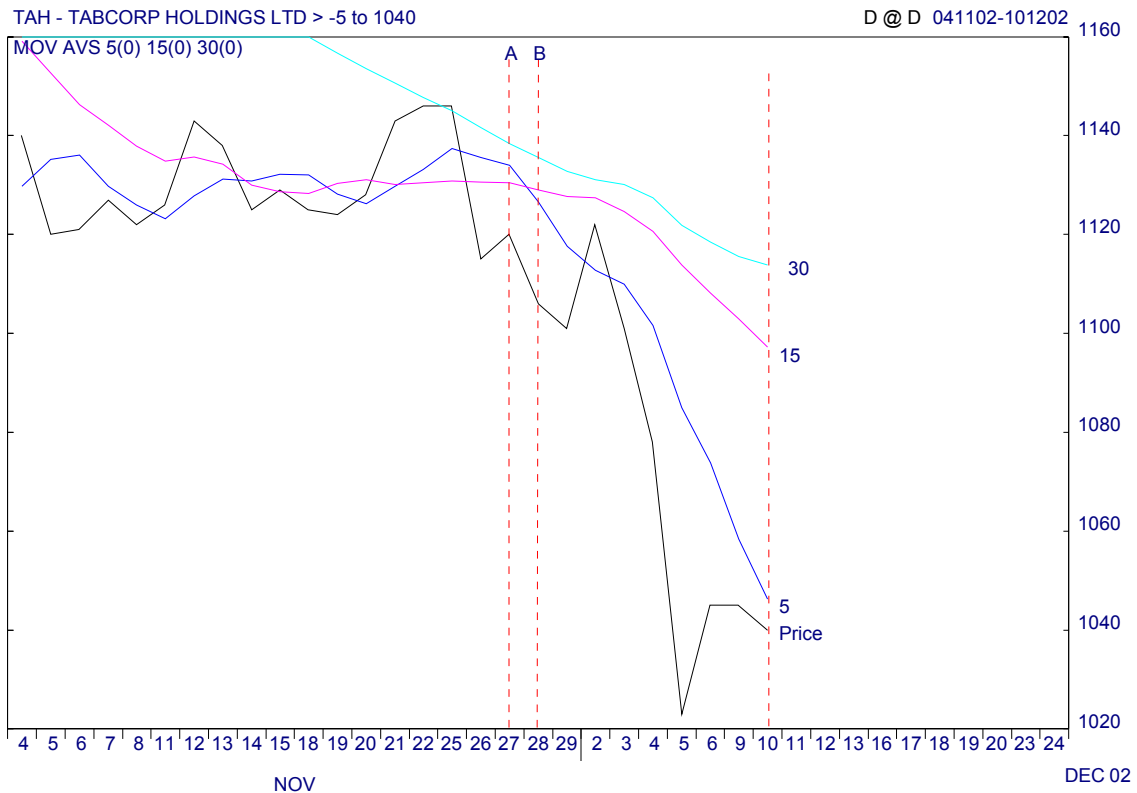
On the next page is a daily chart of Tabcorp Holdings (TAH) with a line chart of the closing price and the 5, 15 and 30-day simple moving averages. This is how they appear on my charting software, which is *Insight Trader*. Other charting software or spreadsheet graph modules may present the chart somewhat differently.

The right hand red dotted line shows the latest data points for the three lines. I have labeled the four lines. The plots are aligned in the centre of the scale marks on the horizontal or time axis. Some other charts may align the data points with the scale markings themselves.

The vertical dotted lines labeled A and B illustrate a signal on the three moving average method. At day A, the three lines are in neutral mode. However, at the next day, B, the 5-day moving average has crossed below the 15-day moving average, so that the three lines are now in sell mode.

Unless two of the moving averages have the same value on the day before the signal, the signal will appear to have occurred during the day. However, this is a

misreading of the chart, because the lines are not continuous, but plotted at the close each day and the line drawn from the last close.



The signals therefore are given at the closing price on the chart. If you are looking at the chart each day, the signal will be situated at the right hand edge, where each of the lines finishes. At the right hand edge of the TAH chart, the three moving averages are still in sell mode and the price is below all three lines.

Unless you make a guess at the closing price to make the calculations, the signal will occur at the close of the period of the chart and action would be taken on the next trading day.