Trendlines: Supporting the Price Movement

By Ng Ee Hwa

An important concept in technical analysis is the determination of the trend of the market. In last month's technical analysis article titled 'Determining the Direction and Strength of a Trend', we have looked into how to determine the direction and strength of the trend using an indicator called ADX. This article will further elaborate on this important facet of classical technical analysis with a detailed study of trendlines.

In addition to helping to identify the prevailing trend, trendlines offer clear indicative support and resistance levels to the price movement. As a trader or investor, identifying those levels of support and resistance are key ingredients to successful trading. A support level is a price level that has strong buying strength that can absorb all the selling strength leading to an arrest to further declines in price. On the other hand, a resistance level is a price level where sellers are so abundant that it prevents further increase in price. For an effective trading strategy, such support and resistance levels must be determined. This article will discuss the construction of trendlines, use of trendline in support and resistance analysis, and extended trendlines.

Figure 1: Drawing an uptrend and downtrend line

CONSTRUCTION OF TRENDLINES

Trendlines are straight line drawn by connecting two or more price points on the price chart and extending the line to show its support of the price movement in either an uptrending or downtrending market. The methodology of drawing trendlines in an uptrending market where prices are generally moving upward and a downtrending market where prices are generally moving downward is different. To draw a trendline in an uptrending market, first identify two nearby lows where the second low is higher than the first low (this will be true for an uptrending market), then connect these two lows by drawing a straight line and extending it to the right. To draw a downtrend line, identify two tops where the second top is lower than the first top (again, this will be true for a downtrending market), then connect these two tops by drawing a straight line. The lines obtained are referred to as an uptrend line and a downtrend line respectively. Figure 1 shows how trendlines are drawn for the two different types of trend.

USE OF TRENDLINE IN SUPPORT AND RESISTANCE ANALYSIS

Having learnt how to draw trendlines, we will now show why they are so important in technical analysis. Trendlines not only show the direction of the trend, but also importantly they indicate what the levels of support and resistance are. An uptrend line that is drawn by connecting the lows supports the price movement and during an uptrend, we expect the price to be moving above the uptrend line. On the other hand, a downtrend line that is drawn by connecting the tops provides resistance to the upward
movement of the price and here we expect prices to move below the downtrend line. Any breaking of either the uptrend and downtrend line indicates a possible change in trend, thereby warning the trader to adjust its position accordingly.

With the above understanding of the support and resistance provided by the trendlines, a simple strategy can be devised by buying near the uptrend line and selling or shorting near the downtrend line. This increases the odds of a successful trade because a strong support or resistance level requires more effort by the sellers to break in the former and buyers to break in the latter. Hence, we expect those levels to hold more often than not. A second strategy centres on cases where trendlines are broken successfully, which signals a possible and likely change in the sentiment or price momentum. When an important uptrend line is broken, the trader may decide to sell part or all of his holdings or take a short position. Similarly, the bullish signal generated by the breaking of a downtrend line may invite a long

Figure 2: Trendlines and the concept of support and resistance

position to be taken.

While the above strategies are simple, their effectiveness relies very much on identifying strong and dominant trendlines. On any given chart, multiple trendlines can be drawn. A simple rule of thumb to identify the most important ones is the line that have the most contact points (line touching most number of lows or tops) and that extend over a longer timeframe. Those important trendlines provide very good indication whether a trade has a good risk-reward ratio. Figure 2 shows how trendlines provide support and resistance to the price movement. Notice how the breaking of the important trendlines indicates a turnaround in the market sentiment.

Figure 3: Extended trendline

EXTENDED TRENDLINES

When trendlines are broken, such lines should not be discarded as they retain much importance in future price movement. Extending a broken trendline to determine future levels of support and resistance is termed extended trendlines.

Figure 3 shows such an example of extended trendline. With the two lows in October and December 2005, an uptrend line was drawn. Having been tested numerous times during the period May to October 2006 with the sellers unable to break the uptrend line, this line has become an important and major trendline. When it was finally broken in November 2006, we extended the trendline with the extended trendline briefly resisting upward price movement (shown by the red arrows). When the prices again went above the extended trendline, the line is once more providing support to the price movement. This chart of Tat Hong illustrates why it is important to extend a major trendline with the line initially providing support to the price movement, then resistance and then support again. Hence, if prices of Tat Hong were to drop to the extended trendline in future, we can expect very strong support to be provided by this extended trendline.

The use of trendline is a very important component to build a successful trading strategy. While some traders use trendlines alone to trade the market, it is advisable to combine the use of trendline with other facets of technical analysis such as price and volume indicators to determine the price momentum and money flow when prices are near the trendlines or when a trendline break occurs. Charting softwares such as ChartNexus have drawing tools that let you easily draw trendlines and add annotations to the charts. **SI**

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