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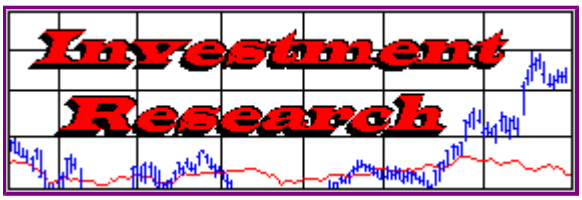

Introducing the MIDAS Method of Technical Analysis (7) by Paul Levine

This is the sixth article in a series. Click here to go to the **first**, **second**, **third**, **fourth**, **fifth**, or **sixth** article.

In the preceding six articles, it has been shown that the support and resistance levels associated with points of trend reversal in the price of a stock can be classified with respect to a hierarchy of theoretical curves. It is now appropriate to derive the simple algorithm giving rise to these curves from a consideration of familiar aspects in the psychology of the market participants. After all, it is precisely the dynamic interaction between the greed and fears of those who already hold the stock and those who wish to become owners that determines the price at which supply and demand find at least temporary equilibrium.

One can approach the problem from both the supply side and the demand side with remarkably similar results. First consider someone who already has a long position in a given stock. What will motivate this person (the "owner") to sell? If the stock is held at a profit, the more substantial this profit is the greater the temptation to take it. If - not having taken such profit - the owner sees the price has now dropped back almost to the purchase price, his propensity to sell is at a minimum because he is still in profit - albeit small - and believes the stock will at least partially retrace the higher prices of recent memory.

On the other hand, if the owner has been holding the stock at a loss, his overriding desire is to "get out even". Thus, as the stock price approaches from below the price at which he bought, his propensity to sell reaches a maximum. It is thus the purchase price which becomes either a support or resistance level for that owner; he either dumps the stock on the market or witholds it depending on the direction from which the market price is approaching his purchase price.

Now let's look at the demand side and consider the psychology of someone (we'll call him the "accumulator") wishing to take a substantial long position. He starts his buying and the price starts to rise attracting other buyers. Not wishing to "chase the stock", our accumulator holds off on future purchases until the price drops back to the average price at which he had assembled his position thus far. He can then buy more without substantially changing his aggregate cost per share. Thus, as the market price approaches from above towards his average cost, his propensity to buy reaches a maximum.

If his average cost happens to coincide with the average cost of the owner considered earlier, then it is little wonder that the price trend reverses at this point since the accumulator now starts to buy again while the owner has lost interest in selling. Supply and demand are maximally out of balance and the price must therefore rise sharply, i.e. "bounce".

In reality, of course, there are many "owners" with a corresponding spectrum of purchase prices. Similarly, while there may in fact be only a single "accumulator" in the initial stages of a bull move (e.g. a group of insiders, or a large institutional investor), as the move evolves distinctly different accumulators come on the scene (either traders attracted by the price action or other institutions recognizing the same fundamental "value" spotted by the initial investors). Each has their own time horizon, price objective, risk aversion, etc., and it is tempting to associate the hierarchal structure of S/R levels with such different groups of accumulators coming into the market at successive times.

To model this situation mathematically is quite complex. While one can certainly construct a purchase price spectrum from price and volume historical data, the decomposition of this spectrum into "owners" and "accumulators" would be tentative at best. Furthermore, at some point the psychology of the accumulator transitions into that of the owner. Above all, even if these complexities could be resolved, the modelling process would be multi-parametric (time horizon, risk aversion,

profit objective, stop loss points, etc.)

As a first approximation, we can restrict consideration to just the first moment of the purchase price spectrum - the mean. That is, we simply ask "What is the average price at which this stock has been bought?" during a specific interval of time. Once this interval has been specified, the computation is trivial. One simply averages the daily prices **("price"=.5*(high+low))** weighted by the ratio of the daily volume to the total cumulative volume over the interval in question. If we use brackets to denote a simple arithmetic average, then the average price [P] is simply **[PV]/[V]**.

We have not yet specified the interval over which the averages are to be taken. In fact, it is this CHOICE OF AVERAGING INTERVAL WHICH UNIQUELY DISTINGUISHES THE MIDAS METHOD. While even a casual reader of the earlier articles can already deduce the answer from the examples given, the rationale requires some discussion which is best left to the next article in the series.

Return to Investment Research

Paul Levine first became interested in technical analysis when he was a "runner" on Wall Street as a high school student. After graduating from MIT and gaining a PhD in theoretical physics from CalTech, he took a fresh look at the problem some thirty years ago and stumbled upon what has now evolved into the Midas method. Following retirement as Chief Scientist and a co-founder of Megatek Corporation in 1981, he developed further elaborations of the method and is now in his fourth year as a professional trader. He can be reached via e-mail at **WinMidas website**">winmidas@winmidas.com or visit the **WinMidas website**.
