IT TAKES TWO TO TANGO
And the tango – or pairs trading – strategy is useful in volatile markets

INTERESTINGLY, we have the Pules magazine in Singapore, devoted to investments, finance and trading strategy. Seeing that word “pulses” got the first author into a deep, reflective mood, and he asked himself: How are pulsations possibly related to the world of finance? That meditation resulted in this exploration of pulses, tangos and portfolios.

Looking at the beginning bars of the musical score from the first author’s recent composition, Sustaining Momentum, you’ll find these rhythmic musical pulses. That is, a pulse is a note and a whole string of pulses, or pulsations, leads us to a song. Perhaps a particular share is simply a song!

The word “pulsation” leads us to “tango”, and from there, to “pairs trading”. In our opinion, given the very difficult market conditions, investors should reconsider market-neutral trading strategies, and in the process investigate if there are viable “tangos” to be exploited. Let us briefly explain the history and background of pairs trading.

In 1985, a team of “quants” at Morgan Stanley, headed by Nunzio Tartaglia, created a software to exploit arbitrage opportunities, that is, through buying and selling stocks in pair combinations. Discovering “tangos” proved to be highly profitable. The group made a profit of US$50 million in 1987. The group disbanded in 1989 and this led to the details of the trading software being trickled down to the investing community. Conceptually, pairs trading is actually based on a simple concept.

Firstly, identify two stocks that display similar historical price movements. Secondly, watch these stocks and when their price patterns diverge, buy the underpriced stock and sell the other that is overpriced. Just as in the dance of tango, the pair of dancers will return to each other. Thus, thirdly, when the prices converge, unwind and take in lucrative profits.

Can such a contrarian strategy based on past price dynamics really generate handsome profits? We cite here two stories extracted to argue for its probable significance in today’s market environment.

One, the trading software led the US Securities and Exchange Commission (SEC) to utilise technology for identifying potentially illegal price movements. In other words, the power of technology was illustrated via pairs trading software. Next, the buying and selling strategies of Morgan Stanley in the 1980s — buy what’s weak and sell what’s strong — attracted the specialists. They began to embrace the approach.

Over the years, pairs trading has evolved to become part and parcel of the “market-neutral” investment strategy. Though it endured for many years as a remarkably successful approach, the details of the technique remain proprietary and have not been widely publicised.

The US, once the world economic powerhouse, is now reeling from the adverse effects of the sub-prime crisis and stock markets worldwide are taking a major beating. The free-falling stock markets have shocked investors, while countries such as Iceland, Russia and Indonesia had to resort to draconian actions, including suspending stock exchanges. The intriguing question is: Can such volatile markets lead to the resurgence of pairs trading?

Clearly, pairs trading as a strategy is not limited to stocks. It may be applied to other price trends such as commodities, options and indices. For our discussion here, we focus on stocks. The fundamental of pairs trading is to identify pairs of stocks with a “dancing” or a measurable relationship.

Typically, traders will compare either the average or mean spread price of two stocks over a particular period of time in selecting a pair that tangos. Ideally, the stocks in the pair-trade should be positively correlated (preferably close to +1). For an identified pair, the trader can test for the tradability of the pair.

The more careful traders will have had looked up recent news on the pair. And more important is to anticipate what other news may be forthcoming. Why? To ensure that news does not rock the pair’s relationship. Litigation or a major management restructuring may cause a fundamental shift in the relationship of the chosen pair.

Essentially, systemic risk is reduced in a pairs trading strategy. Sophisticated traders often use the betas of the stocks to determine the exact proportion to buy and sell. The reason is that major movements in the stock market do not affect substantially a portfolio’s value, since a loss in one is offset by a gain in the other. Thus, this is likely to be a useful tool in our highly volatile markets.

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