PRICE,TRENDS, AND LAG CURVES FOR STOCK TRANSACTIONS

The German-Jewish born London banker and speculator Nathan Mayer Rothschild (1777-1836) was asked one day by an acquaintance how he got so rich. His heavily accented reply was that "I buy sheep and sell deer". This response, after recognizing that by sheep he meant cheap(or inexpensive) and deer meant dear(or expensive) , captures the essence of the basic law of all successful investing , namely, to **buy low and sell high**. The problem with this law however is that no one can predict in any consistent manner when the price for a stock is low or when it is high. Thousands of partially successful attempts have been made in the past to develop systems which offer consistently accurate predictions for the future trend of stock, bond, and commodity prices using both fundamental (earnings, breaking news, etc) and technical(charts,trend lines, etc) approaches. We want in the present article to discuss our own approach to determining when the price of something (and in particular stocks) is dear or cheap. We use a strictly technical approach relying only on long term historical price data and running lag curves. My sixty plus years of successful investing have allowed me to develop a high degree of confidence in this technical approach.

We begin with some general observations concerning stocks. These are-

(1)-There is a good correlation between the price of most stocks and the overall stock market averages. Thus a stock will usually rise when one is in a bull market as indicated by a stock average and down when the averages indicate a bear market. Exceptions do occur but not often.

(2)-There is a good correlation of world stock indexes with each other. This means that uptrends of stocks in one country and those in other countries correlate well. Again a few exceptions can occur but not many.

(3)-Short term price fluctuations are random and have no value in predicting longer price trends . They must be considered as noise, which upon elimination, gives an indication of the actual trend either up or down.

(4)-Positive and negative returns will increase with the degree of leverage and hence risk being taken. Puts and Calls and other high leveraged transactions can be used to advantage if one recognizes the risk involved and does not put all of one's eggs in one basket. Betting on perceived short term trends represents essentially gambling and will lead to eventual ruin. This applies to day traders.

(5)- Never bet against a price trend. Doing so may trap one into a loosing position if the trend continues for any length of time. Dollar averaging works only as long as prices for a particular stock will eventually go back up again. There are many examples were this failed to happen for many years such as for stock market bulls in 1929 , 2000 and 2008. Also there was no recovery for stocks like Enron (2001) and Bear-Sterns (2007).

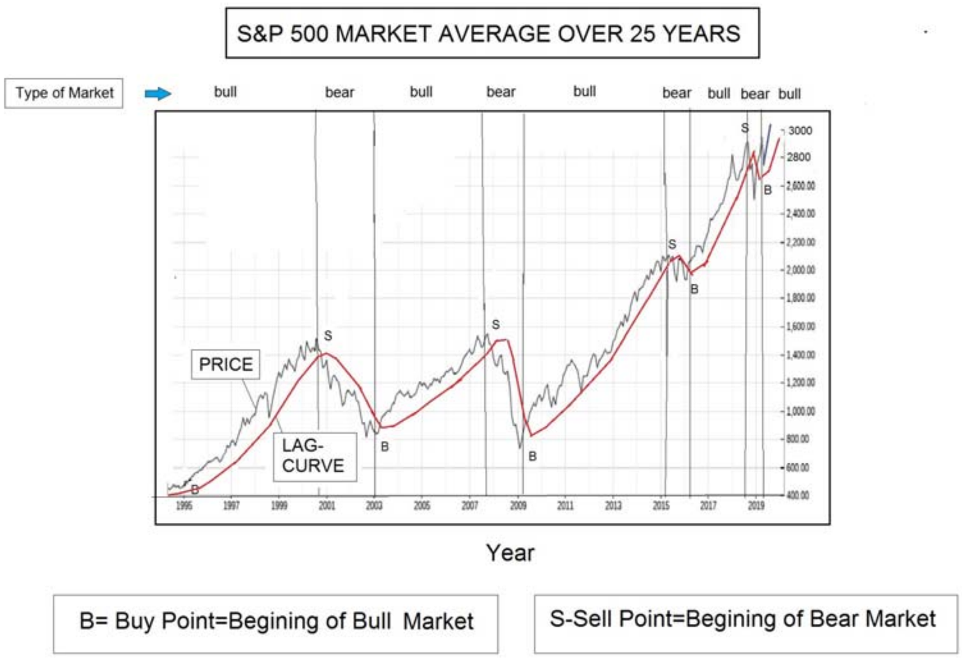
With the above observations in mind, we now go back to the Rothschild's famous aphorism and try to determine when a stock is cheap and when it is dear. For this purpose we begin with a 25 year historical graph of General Electric(GE) as obtainable from **barchart.com –**

We have added a few things to this data including placing optimum buy(B) and sell(S) points and adding a lag curve show in red. The Lag curve is drawn in by eye at typically 10-20% above or below the price. It is faster in reacting to a trend change than a standard running average. The Bs imply the stock is inexpensive and an uptrend will follow, while the Ss indicate points where downtrends will follow. A change in trends occurs at the place where the price and lag curve first cross. These points are marked by small blue circles. There is no way anyone can predict how long a trend will last so that one must be prepared to react immediately when the trend changes. From the graph there where times(2000,2008,2017) when it was good to be short and times(1995,2003,2010) when a long position should have been taken. At the moment (2019) GE seems to have entered an uptrend phase so that a long position is justified.

One can generalize the above results of using 10 to 30 year price data for any given stock, bond, or commodity. The rule for buying low and selling high any equity becomes-

BUY when the Price P(t) lies above the Lag-Curve λ(t)
SELL when the Price P(t) lies below the Lag-Curve λ(t)
Do this as soon as possible after a new trend has been established. Be long when P(t)>λ(t) and short when P(t)<λ(t)

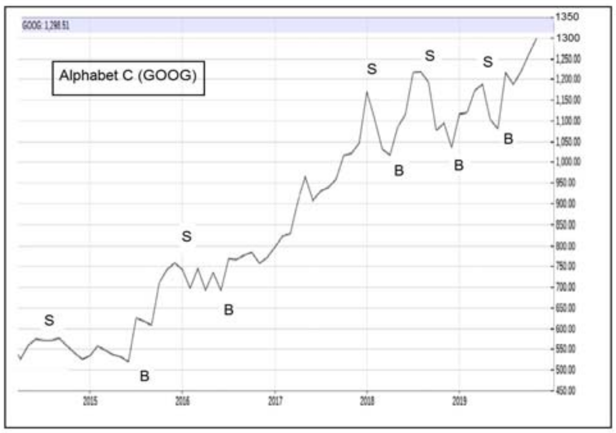
The type of market one is in at the moment is simplest to recognize by looking at the long term behavior of the stock market averages such as the S&P500 or the Nasdaq100. Following the same format as we did for GE, we get the following graph for the S&P500-



Here the Ss predict a downtrend (Bear Market) while the Bs predict an uptrend (Bull Market). We have marked in the graph which type of market one is in at the moment. We are presently in an uptrend. It is not known, however, how long this trend will last with many investors predicting a coming recession and a poor outcome of the Chinese trade war. Notice that GE pretty much followed the market average until 2017 when a divergence occurred. This tells one that price trend behavior of a stock in question trumps all other signals such as market averages. Market averages may however be used to advantage in buying or shorting certain Exchange Traded Funds which are designed to mimic a market average. Prime examples of such ETFs are SPY for the S&P500 and QQQ for the Nasdaq100. At the moment both SPY and QQQ are strong buys from a technical point of view.

A few more stocks showing ten to thirty year historical data follow. To these we have added buy(B) and sell(S) points indicating when the stock is inexpensive and expensive, respectively. Note that we have not drawn in lag-curves for these cases to find the B and S points as these are already obvious from the long term historical data given. Here are historical graphs of MSFT, GOOG, COST, APPL, and AMZN-


MSFT: 146.18
MICROSOFT(MSFT)
S
S
S
B
B
B
B


GOOG: 1,298.51
Alphabet C (GOOG)
S
S
S
S
S
B
B
B
B
B


COSTCO WHAREHOUSE
(COST)
S
S
S
S
B
B
B
B

Note that they all follow the same rhythm going as B-S-B-S- . According to their historical graphs we can make the following statements about the immediate future prices of the above which may be reached before a trend reversal occurs-

GE-is in an uptrend going to 25
S&P500-is in an uptrend going to 3400
MSFT-late in uptrend going to about 160
GOOG-late in uptrend possibly going to 1350 before reversing
COST-late in up-trend possibly going to 320
AAPL-late in its uptrend, it may reach 300 before reversing
AMZN-a downtrend is in effect possibly taking price to 1500

The above discussions have shown how stocks and stock averages reach points in time where they are buys and when they should be sold and shorted. The trend indicators should be followed to the letter without exception for profitable returns.

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