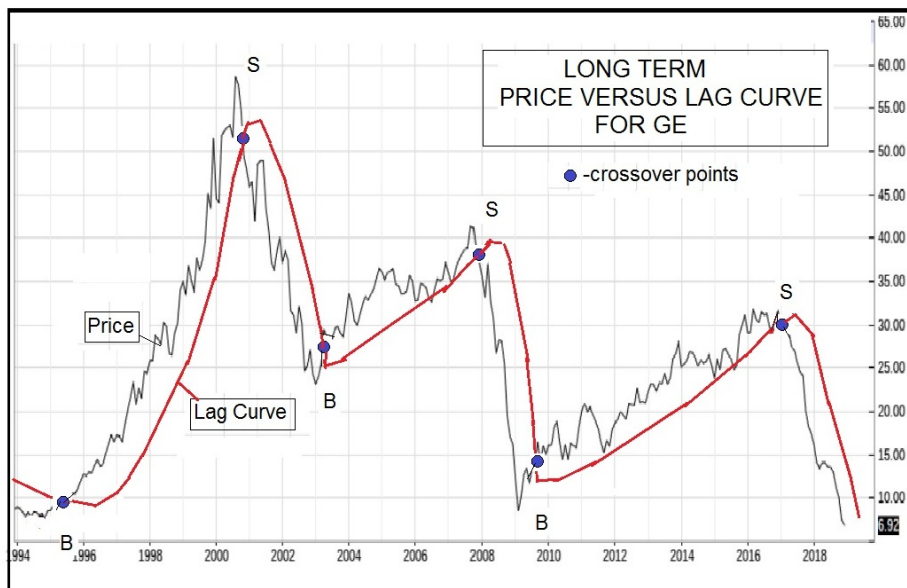


HOW ARE EQUITY TRENDS DETERMINED USING LAG CURVES AND CROSS-OVER POINTS?

In several earlier articles on this web page we have shown how one can use long term price charts to determine trends in market averages such as the S&P500 and thereby reap profits on both the long and short sides of markets. We wish here to show how the rules used there can also be applied equally successfully to individual stocks, commodities, real estate and other forms of investing.

We begin by looking at a 24 year historic chart of General Electric GE-



One notices that the price has numerous short term fluctuations of an unpredictable nature plus some longer term uptrends and downtrends. These longer term trends, some lasting years, are recognized by drawing a lag-curve relative to the short term smoothed stock price. This lag curve is drawn in by eye and typically lies within plus or minus 10% of the stock price. This lag curve resembles a shifted function $f(t-dt)$ relative to a smoothed short time curve $f(t)$. It somewhat resembles a moving average but unlike such an average reacts much faster at turning points. We call these trend changing points the cross-over points and designate them by small blue circles in the graph. It is at these points where the most profitable transactions on both the long side(B) or short side(S) of the market should be taken.

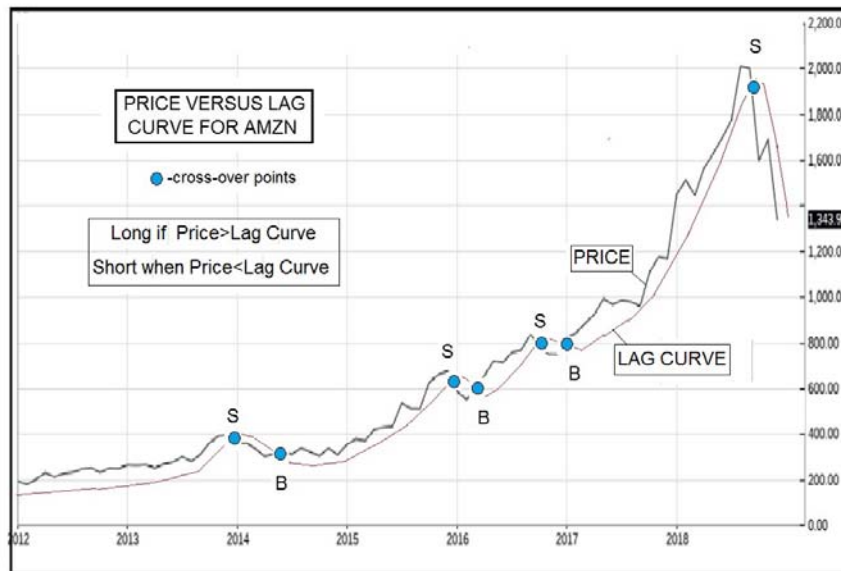
According to its long term price chart and the drawn in lag-curve, GE should have been bought(B)in 1995, 2003, and 2009.It should have been shorted(S) in 2001,2008, and 2017. This would have resulted in an excellent return on ones investment far exceeding a buy and hold strategy. The latter would have yielded zero net gain over a twenty-three year holding period from 1995 through the present. The simple rules for profitable investment in GE stock is -

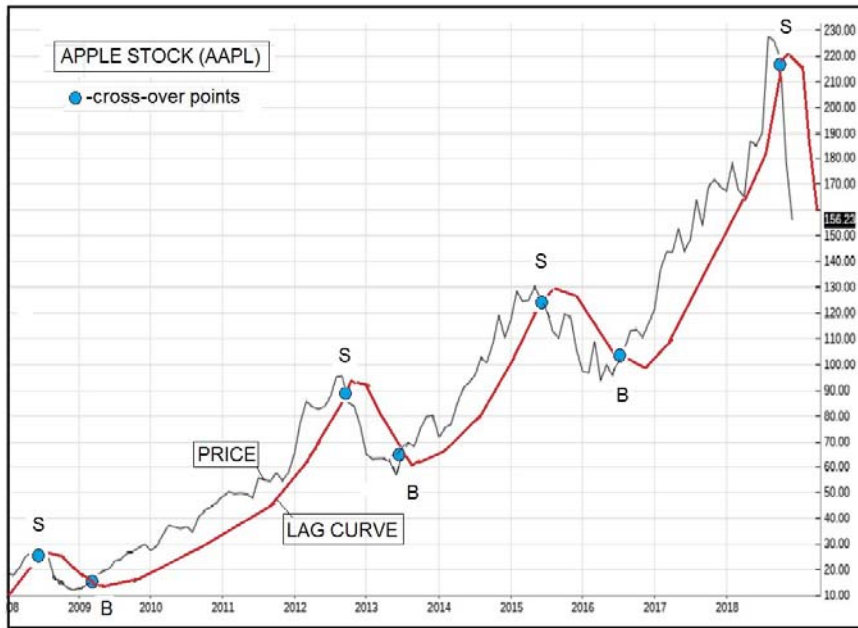
Hold Long if the Price > Lag Curve Be Short when the Price < Lag Curve

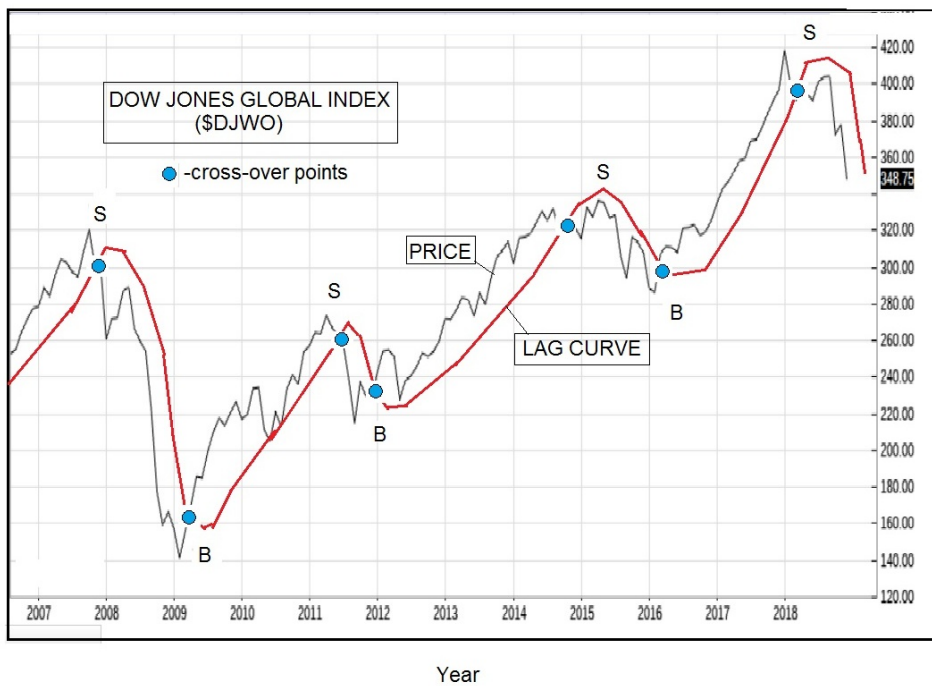
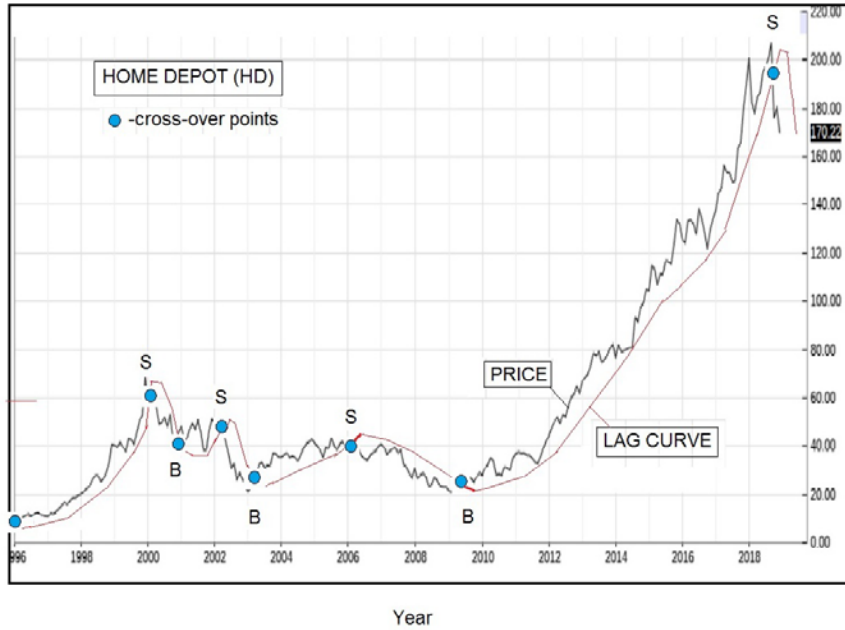
These rules allowed me to sell several thousand shares of inherited GE stock in 2001 at about \$54/sh , thus saving me tens of thousands of dollars compared to any one who held onto the stock until now when the price is down to just \$7/sh.

The price of GE stock is observed to closely correlate with the behavior of stock averages such as the S&P500. An exception occurred during this latest downward move for GE which started in 2017 while the market averages remained in an uptrend until October of this year. This suggest that although trends for market averages give an indication of what one would expect an individual stock or commodity to be doing, it is that each stock or commodity has its own unique price-lag curve for determining the type of trend the stock finds itself in.

To confirm the power of our price-lag-cure approach for trend spotting and hence successful investing, we look at several additional stocks and also the Dow Jones World Index, starting with AMZN and continuing on with MCD, AAPL, HD, and \$DJWO. The long term historical price data can be obtained at barcharts.com. The lag curves shown in red have been drawn in by us as are the blue circles indicating cross-over points. Here are these five additional stocks and the DJI world average in the order presented-



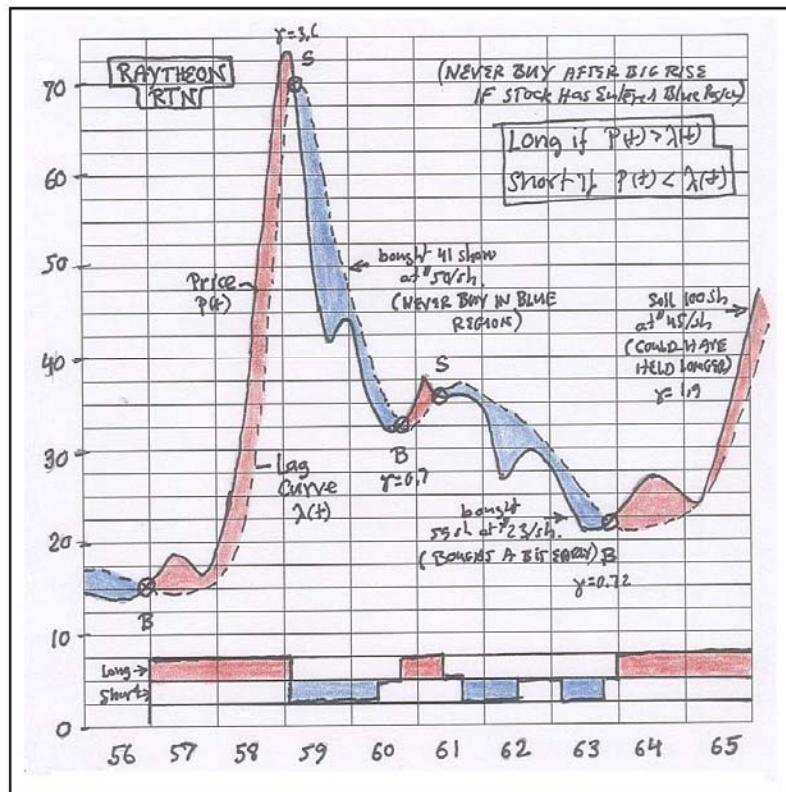




In all cases these charts show a definite downtrend starting in early October of this year. The previous buy range from the fall of 2016 through January of this year was what I have called the Trump uptrend market do to his November of 2016 victory over Hilary Clinton. It now seems to have stalled and turned into a bear phase. Note that in drawing our lag curves we also make use of the rhythmic wave-like motions in time of the price trends. We can look forward to a longer term buy signal coming next. Exactly when this will be is anyone's guess. It will not be recognizable until a B point is reached. In the meanwhile one should stay away from making any long purchases of stocks, especially for the former high flyers.

I learned my lesson years ago of what happens when one fails to follow the B or S signals at the cross over points. It was back in 1968, when I had just started graduate school at Princeton University, that I noticed that the electronic defense firm Raytheon (RTN) stock had increased dramatically in price by a factor 3.6 during 1958. However, by the summer of 1959 it had dropped from a high of \$72/sh to \$50/sh. I thought (naively) that this was a good time to buy some RTN since surely it would go back to \$72/sh. So I bought 41 shares of RTN for \$50/sh in the summer of that year. (In those days a \$2050 investment was a lot of money for a poor student like myself living on fellowship and scholarship support). To my surprise the stock kept falling and I was not able to get out of it until some six years later with a small profit. The only reason there was some profit at all was that I bought 59 more shares at \$23/sh in 1963. This yielded a net downward averaged price of \$34/sh. This second purchase was made just before an uptrend was signaled although I did not realize this at the time. Clearly the initial purchase was made during a downtrend part of RTN stock in violation to my presently used approach of never purchasing during a downtrend, no matter what the temptation might be to do so. The following gives a summary of RTN price over a ten year period from 1956 through 1965-

MY EARLY EXPERIENCE WITH RAYTHEON STOCK



In those days we had no PCs and so all my early charts like this one were done by hand. The major lesson from this graph is to never buy a stock if it finds itself in a time interval where the price is less than the lag curve. At the same time one should be long whenever price > lag curve.

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Dec.31, 2018
Gainesville, Florida
Happy New Year