WHEN IS THE TIME TO BUY AND THE TIME TO SELL A STOCK OR ANY OTHER COMMODITY?

INTRODUCTION:

There are two well known adages found in the literature. They are-

FOR EVERY SEASON THERE IS A TIME TO SOW AND A TIME TO REAP
(Bible, Ecclesiastes 3:1-8)

and-

KNOW WHEN TO HOLD THEM AND KNOW WHEN TO FOLD THEM
(Kenney Rodgers,"the Gambler" 1978)

These bits of advice apply equally well to investing in commodities including stocks , bonds, real estate, art, and antiques Here we have the equivalent aphorism-

KNOW WHEN TO BUY AND KNOW WHEN TO SELL

The most important consequence of this action is to-

BUY LOW AND SELL HIGH

Unfortunately this adage is easier to state than to actually carry out successfully. There is no known way one can consistently say when a stock or commodity has reached its high or low point <u>until after it has happened.</u>

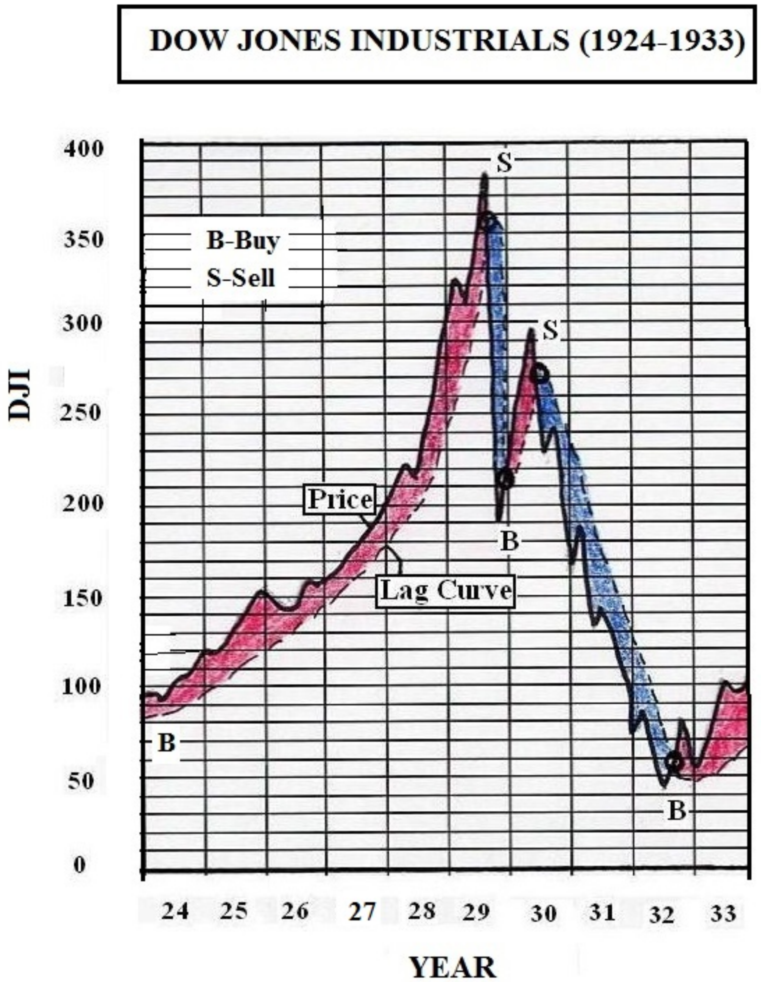
My purpose in this article is to show how I time markets using nothing but long term chart patterns and use of lag curves. The method has been refined over what is now a sixty year investing period during which I have managed to stay comfortably ahead of the game following the simple technical rules described below.

TIME BERHAVIOUR OF STOCKS AND OTHER COMMODITIES:

It is well known that all commodities vary in price over time. This is clearly demonstrated by just looking at a longer term price chart. There are times during which the price rises (Bull Markets) and when they fall (Bear Markets). Also, as first pointed out by Charles Dow in 1883, markets and stocks tend to mainly move in unison. That is they rise during bull markets and fall during bear markets. As to which type of market one is in is most accurately measured by the behavior of a long time price curve and a moving average. Her is a graph of the S&P500 market average over the last twenty years plus a 1.5 year moving average-

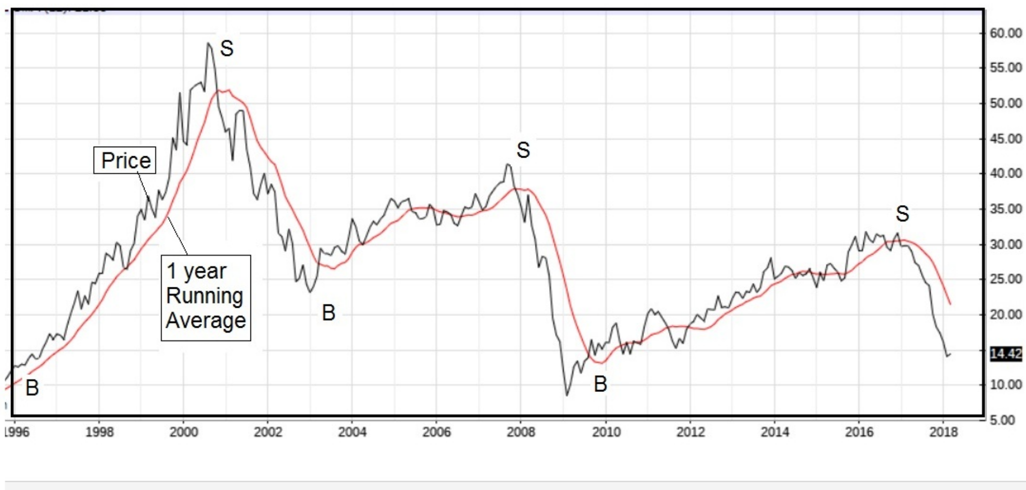
20 YEAR S&P500 INDEX AND ITS 1.5 YEAR RUNNING AVERAGE

The chart clearly indicates price up-trends where the price P(t) is greater than the running average λ(t) and price down-trends where the reverse holds. A transition from a bull to a bear phase and visa versa is indicated by the indicated buy B and sell S signals. There has been a sudden price reversal during the last six weeks which is not yet shown in this chart based on monthly averages but one which is likely to change the bull trend (in effect since the election of Donald Trump in Nov.2016 as president) to a bear trend. Historically had one stayed with the indicated signals being long in bull markets and short in bear markets the return on stock investments would have been substantial. In the past decade I have stayed during bull phases only with broad market average ETFs such as SPY and QQQ for my investments. This reduces the likelihood of unwanted large price swings often associated with individual stocks. The present approach has produced some phenomenal returns over the last two years. Had I lived back during the 1920s I would have followed the bull trend up from 1924 through 1929 and then gotten out by September of 1929. I would have ridden the bear markets indicated in blue down by being short and also have been able to take advantage of the short lived dead-cat bounce occurring in 1930. A bull market phase did not begin again until early 1933. Here is the chart-



Similar bull and bear trends exist for individual stocks and other commodities. Take for example the price of General Electric over a twenty year period. This looks as follows-

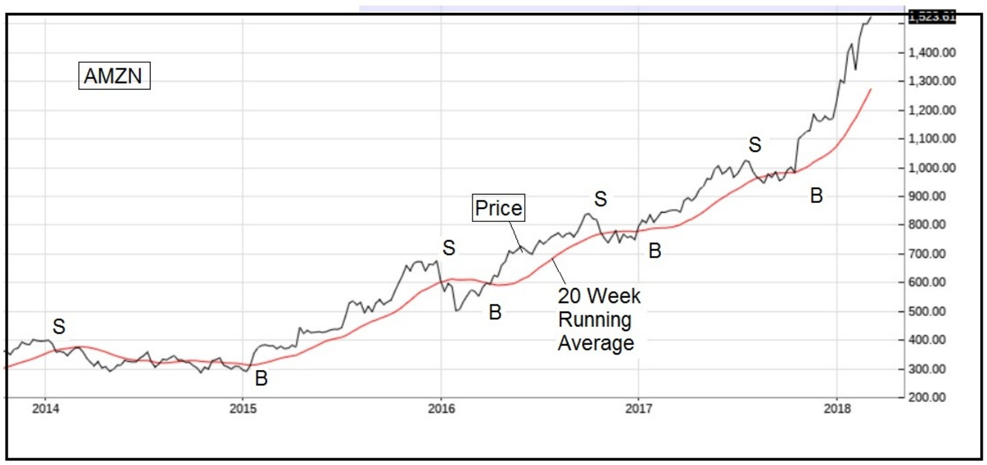
TWENTY YEARS OF GENERAL ELECTRIC STOCK PRICE



We can clearly see in this graph that the stock has experienced both up-trends and downtrends over the time period $\tau(t)$=20 years shown. Starting in 2000 GE began a longer term downtrend reaching just $14/sh recently. From a fundamental standpoint the company is doing poorly (due in part to shoddy products including their stove tops, refrigerators, and dish washing machines) but this does not mean that money can not be made on their stock during indicated bull and bear trends. Note, with the exception of what has been happening to the GE stock price lately, the correlation of GE stock price with the overall S&P 500 Stock index has been excellent. The divergence between the two we are seeing early this year(2018) indicates to me that the overall market for stocks will also be declining soon or there is something terribly wrong with GE of which the public is not yet aware.

At any given moment in time there are stocks and other commodities which show spectacular rises and falls over the past year. On the bullish side we have in particular stocks such as Amazon (AMZM), Apple (APPL), and Google (GOOG). They are hitting all time highs far exceeding what is justified by their fundamentals. Yet they and the S&P500 are still in a bull phase so that one should never set shorts on such stocks until the trend has changed. Here is a historical view of AMZN over the past five years-

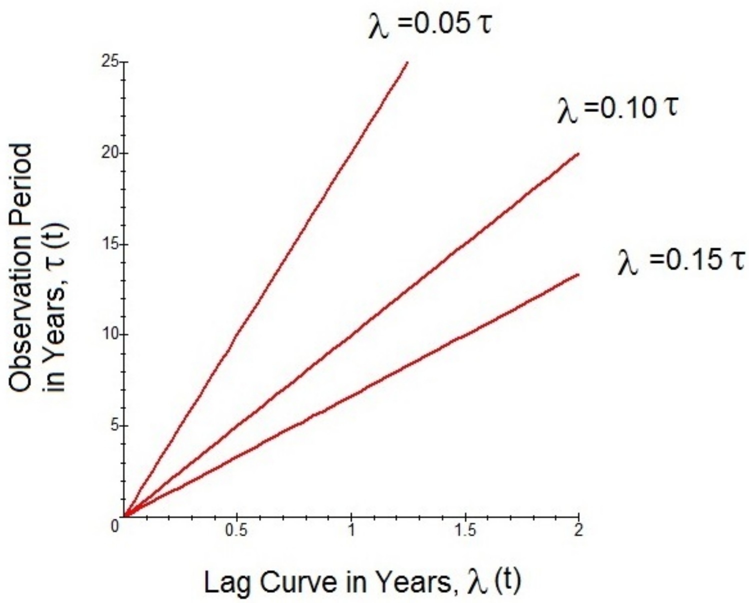
AMAZON STOCK PRICE



The five year time period τ(t) of this chart is too short to make a good comparison with the 20 year history of the S&P500 price behavior given earlier. However, there is no doubt in my mind that if we go into a prolonged bear market the price of AMZN will also be negatively affected. One should not yet set a short on the stock since it still in a bull phase despite the fact that it has essentially doubled in price over the last year without any justification as far as earnings are concerned.

Overall the answer to the above question of when is it time to buy and when is it time to sell a stock or commodity depends upon the timescale of an investor's interest. For a typical investor this should involve a ten to twenty year price graph P (t) and the use of a running average time period λ(t) based upon 5 to 15% of the observation period τ(t) of the stock. A graph of τ versus λ follows-

RUNNING AVERAGE VERSUS OBSERVATION PERIOD



Thus for judging any GE holdings using a twenty year time period one should employ about a 12 month running average. For the longer term investor where one looks at a twenty year plus window, the lag curve $\lambda(t)$ should about 1.5years. This is the running average time we use for judging the S&P500 index. A day trader whose observation period is only a few days should use a running average time of about one hour.

CONCLUDING REMARKS

We have shown that one can use a technical approach based on price history and an appropriate length moving average to buy and sell stocks and other commodities. We have a –

Bull Market when $P(t)>\lambda(t)$

and a-

Bear Market when $P(t)<\lambda(t)$

Acting accordingly brings consistent positive returns on both the long and short side of a market. Unlike a hold forever strategy that many individuals and their investment advisors follow, the present approach will never lead to large losses or long waits before things will recover when an extended bear market appears as it did in the 1930s.

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