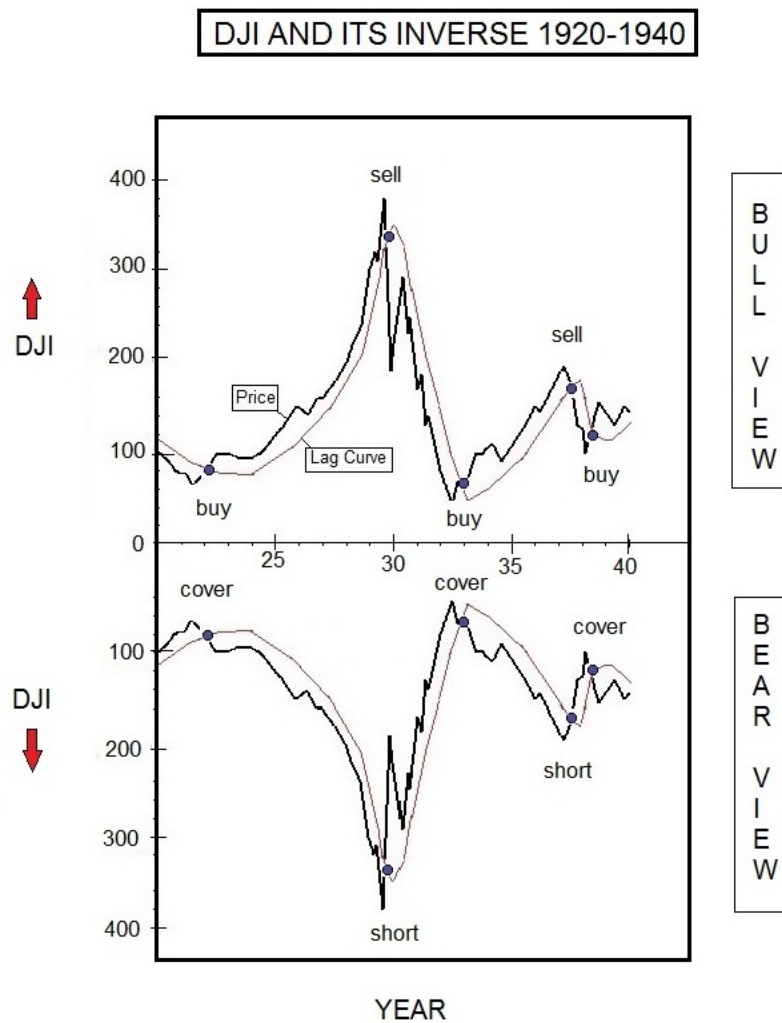


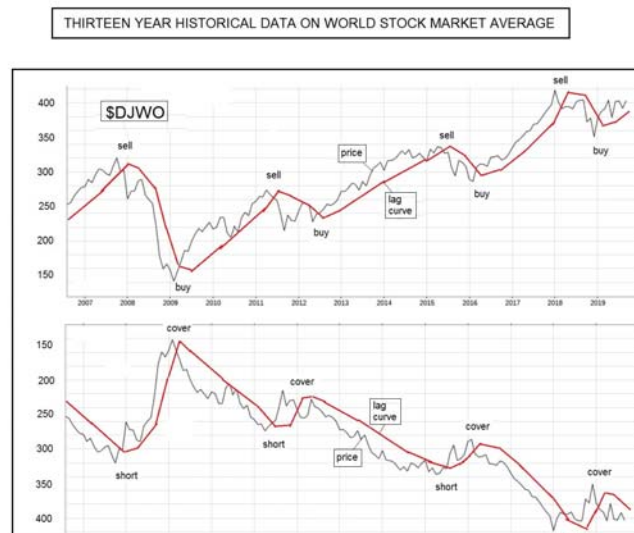
## PRICE CHANGES FROM BOTH A BULLISH AND BEARISH VIEWPOINT

All commodity prices  $P(t)$  be they stocks, bonds, real estate, raw materials , farm products, rare paintings , coins , and many more, vary over time. They may momentarily be in an uptrend (bullish), neutral, or in a downtrend (bearish). These directions can change quickly and in an often unpredictable manner. Most investors and speculators make use of price  $P(t)$  versus time  $t$  charts but typically only look at price and not the inverse price as a function of time. This fact causes them to fail to grasp the big picture which shows through time that commodities will rise as well as fall. Both sides (bullish and bearish) of a market must always be considered. The best way I have found to do this is by use of two simultaneous graphs one applicable to a bullish point of view and the other to a bearish view. To demonstrate this observation I present you here with a dual plot of the Dow Jones Industrial Average over the time period 1920 through 1940 which includes the 1929 market crash-



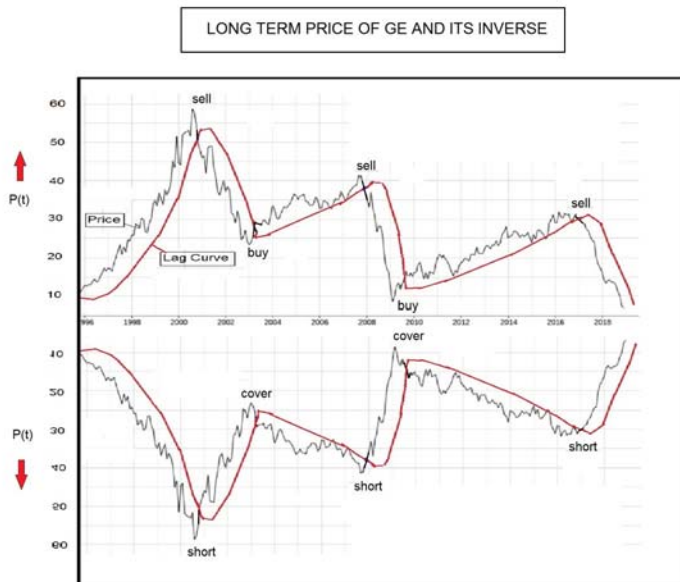
If you look at only the graph on top then our lag curve approach indicates where a person should buy and sell. At the same time one has an inverse price curve for individuals with a bearish outlook. Such inverse curves are constructed by simply performing a vertical flip of the upper graph, so that the two curves actually contain identical price data. However very few speculators make use of the inverse curve as shown. It gives a very clear picture of where the DJI should have been shorted and when this move should have been covered. According to this dual graph one sees that the bulls had a field day from 1923 until 1929 and the bears an equally profitable return from 1929 to 1933. Only by looking at both graphs can one determine with some confidence the type of market one is in at the moment.

Such dual price curves exist also for any stock average and individual stocks. Here is an example of where we have taken the thirteen year historical record of the Dow Jones World Stock Average and recast into a dual chart-



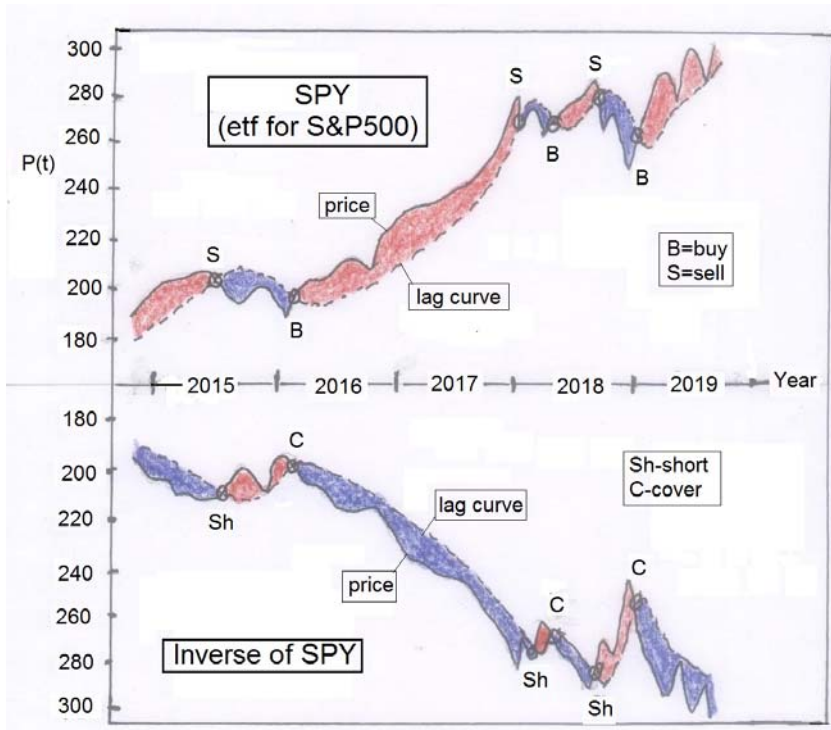
One clearly sees when one should be long or short this average. At the moment we are in a buy mode for world stocks but this could change anytime.

Our dual graph approach works equally well for individual stocks such as GE as shown-



Excellent returns on both the long and short side of the market could have been made over the last twenty years despite of the fact that General Electric has been in a long term downtrend.

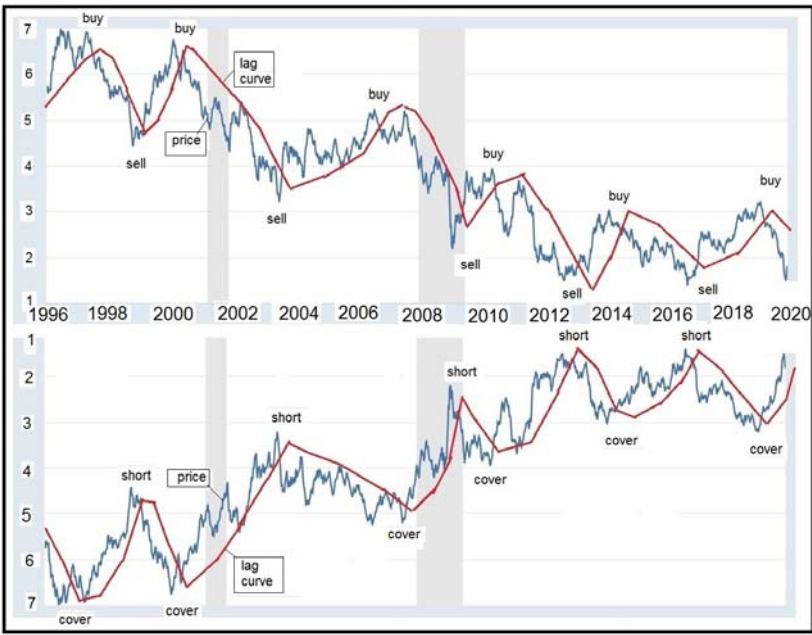
In the 1st decade or so I have been interested mainly in ETFs as far as stocks investing is concerned. These Exchange Traded Funds represent a group of many different stocks and so are less volatile than individual stocks and also they have very low service charges making frequent trading profitable. One of the best and highest volume ETF is SPY. It mimics essentially the S&P500 stock index. It is an ideal vehicle to own during bull phases of the market but should be avoided in bear phases. Here is a dual graph for SPY over the last five years-



The dual chart indicates that at the moment we are still in a bull market but a sharp reversal could occur at any time. When it does you will see the price drop below its lag curve on the upper graph and observe an upward spike on the lower graph. There are also available ETFs which short SPY such as SDS. These become useful during bear phases of the market.

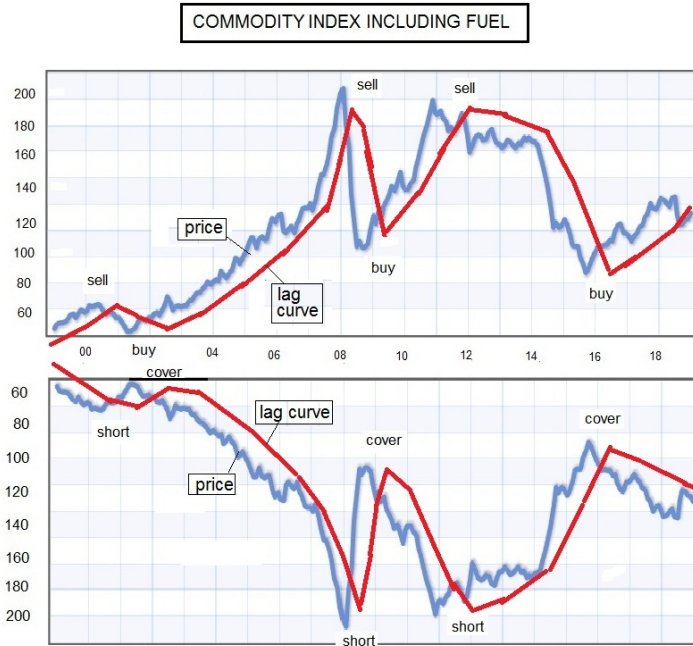
We next examine bond prices and in particular thirty year graph of the 10Year US Treasuries. One has the following picture-

TEN YEAR US TREASURY BOND YIELD IN PERCENT



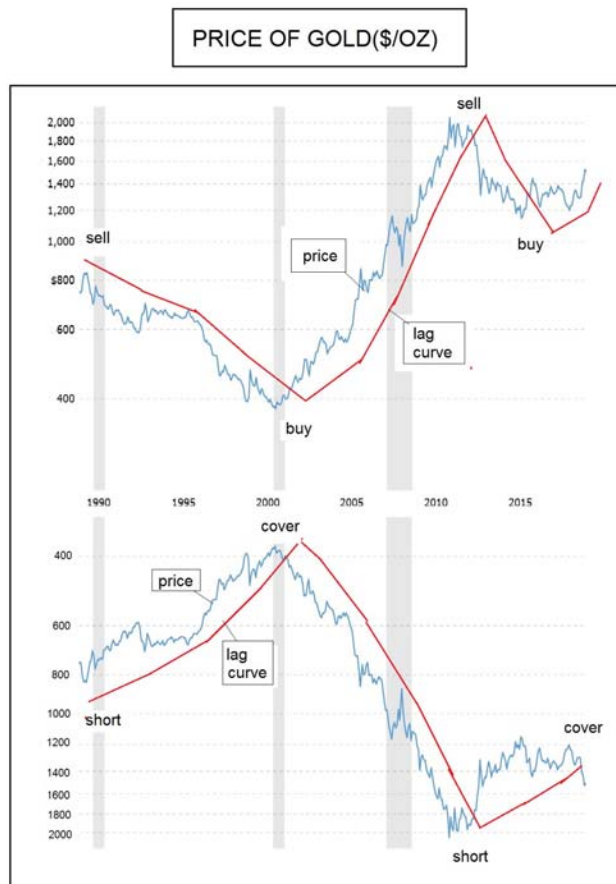
It is seen that the yields on average have been falling over the last thirty years. One wants to buy these bonds at the beginning of a price uptrend and hence a yield downtrend. At the moment the bond prices are in an uptrend with yields possibly heading to zero as is the case already with many European countries. Remember for any bond the yield and price act in opposite directions. One wants to hold bonds long when yields are dropping and should be shorted if yields are rising.

We next look at commodity prices including metals, energy and farm products. All of these can be grouped into one composite index([www.indexmundi.com](http://www.indexmundi.com)). Using their data over a twenty year period produces the following dual graph-



There was a big upswing in commodity prices from 2004 to 2008, a fall in prices occurred in 2009 and one from 2012 through 2016. At the moment commodity prices are rising but are likely to change course shortly because of our new trade war with China and the vulnerability of the Saudi oilfields .

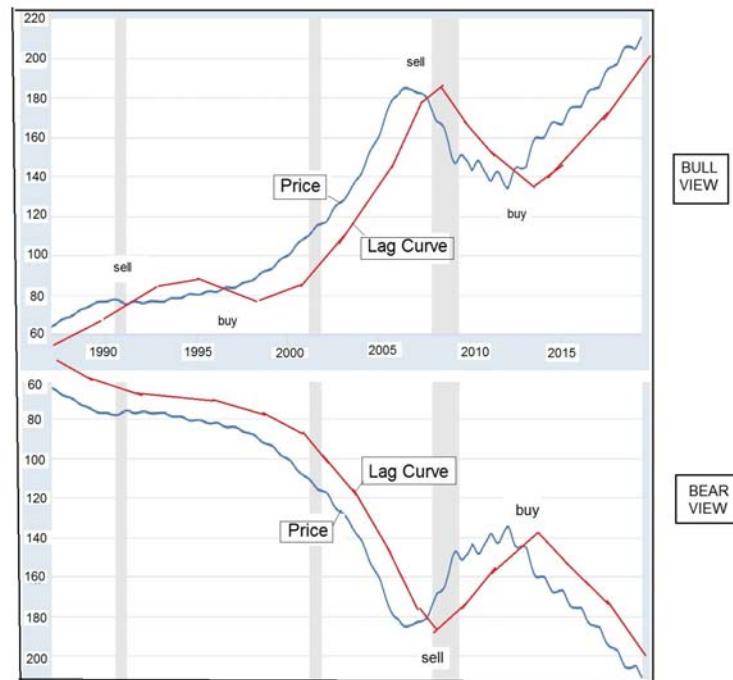
Looking at gold as a special commodity one can get some idea of its price trend by looking at the following 30 year dual graph-



Gold was in a definite downtrend from 1990 to 2000 followed by a ten year uptrend from 2000 until 2010. Lately it is showing a weak uptrend.

Dual graphs can also be constructed for non-stock commodities such as home prices. A good measure of the phase this market finds itself in is the Case-Schiller Index which represents a twenty city composite of home prices in the US. Here is the graph over the last 30 years-

## CASE-SCHILLER HOME PRICE INDEX



There was a strong uptrend(sellers market) in prices from 1995 to 2008 followed by a sharp downturn(buyers market) from 2008 through 2013. After that there was a recovery with the uptrend continuing up to the present time.

We have shown via the above examples that the trend in prices can be either up or down with a lag curve for both  $P(t)$  versus  $t$  and its inverse giving a good indication of when a commodity is in an up or down trend. Using a dual map allows one to more easily identify up markets(bullish) from down markets(bearish). Money can be made on both sides of a market.

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Gainesville, Florida