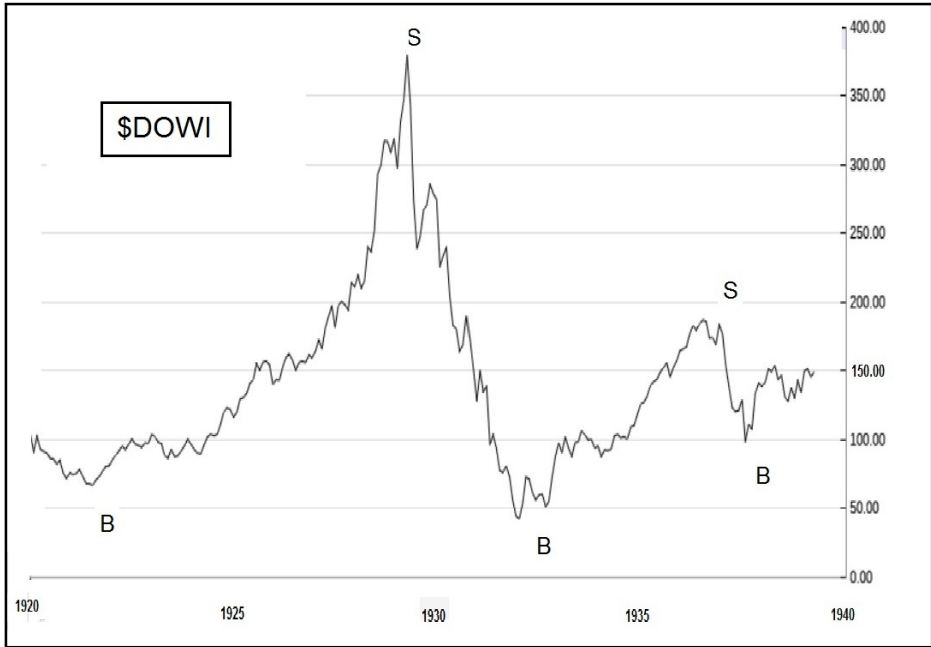


ONE HUNDRED YEARS OF BUY AND SELL SIGNALS FOR THE DOW JONES INDUSTRIAL AVERAGE

In the previous article on this web page we discussed how one can determine buy (B) and sell (S) signals for stocks, bonds and commodities using lag curves. Such curves allow one to ignore short term price fluctuations in order to detect underlying trends in price movement. It is the purpose of the present note to apply the procedure discussed there to the Dow Jones Industrial Average using five 20 year packets to determine uptrends and downtrends in price $P(t)$ of the DJI for the last 100 years beginning in 1920 and ending at the present. The raw historical data is obtained from **barchart.com** and has been modified by us to show longer term buy and sell signals.

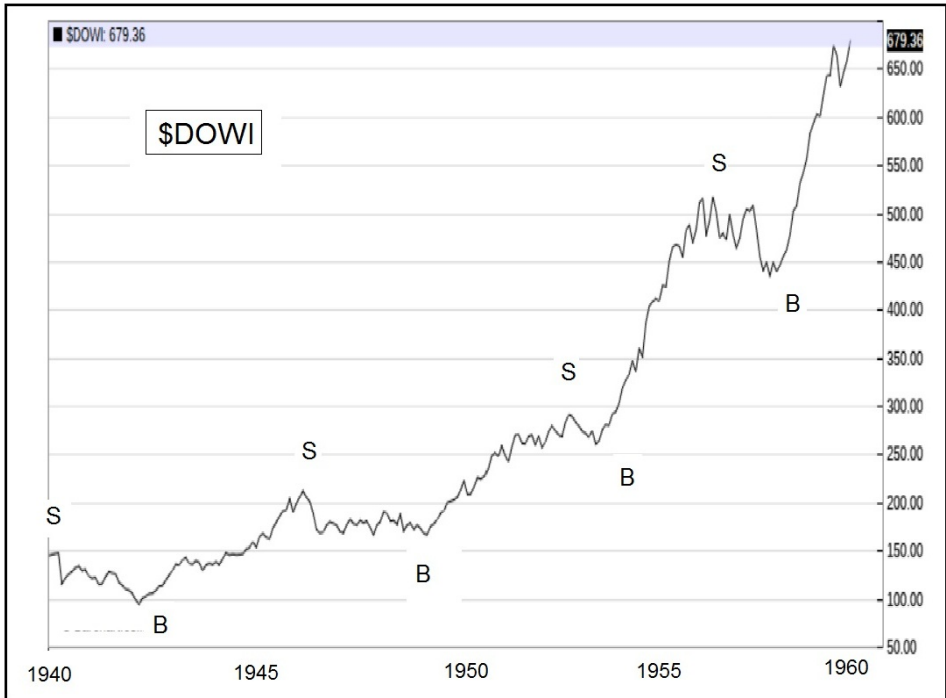
We begin with the five charts of twenty year length each starting in 1920. Here they are in chronological order-

DJI BEHAVIOR FROM 1920 TO 1940



(data source barchart.com)

DOW JONES INDUSTRIALS-1940-1960



DOW JONES INDUSTRIALS-1960-1980



DOW JONES INDUSTRIALS-1980-2000



DOW JONES INDUSTRIALS-2000-2020



Note that we have not drawn in the lag curves. Where they cross the price produces the buy(B) and sell points(S). The patterns goes B-S-B-S-B-S...with **bull markets** beginning when B first appears and **bear markets** when the S first appears. This action is consistent with the basic law of all investments which is to **buy low and sell high**. Optimum profits occur if one acts shortly after a B or S signal has been given. In an uptrend market one should be long a stock, or better an ETF, and in a downtrend market one should be short. **No one knows beforehand how long a trend will last** but one can ride it until a reversal occurs. Never fight a trend by dollar averaging, the outcome could be disastrous. Just remember what happened to Enron or Bear Sterns or the earlier price of gold and silver.

We next discuss the five 20 year price packets in more detail. Beginning with the 1920-1940 period we see that there was a major bull market from 1922 to 1929, followed by a major bear market from 1929 to 1932. After that the market went up again until 1937. The price then dropped for a year to a buy in 1938. Unlike most investors, we (had we been alive) would have sold our long positions at the S signal in September of 1929 before the October 1929 crash. The second graph for the DJI from 1940 to 1960 was mostly an upmarket with the DJI going from 100 in 1942 to 650 by 1959. The third graph covering the time period 1960 to 1980 shows a wildly fluctuating market with six buy signals and five sell signals. During the entire two decades the DJI stayed between 550 and 1000. The 4th graph covering 1960 through 1980 shows strong growth taking the DJI up by a factor of ten. The final graph covering 2000 through 2020 shows four buy and four sell signals. Things started with some longer term fluctuations followed by a steady uptrend over the last decade from the end of the great recession where the DJI was valued at 7000 to 28000 today. At the present the DJI is in an uptrend and hence in a bull market. We do not know how long this trend will last, however, the quick S-B behavior last year suggests that the bull market has away to go. Possibly to DJI 30,000.

We have shown via the above five twenty year long term price trends of the Dow Jones Industrial Average that one can predict with some certainty when a buy(B) or sell(S) signal first appears. Riding such trends, which typically last a few years each, can lead to profitable results. The approach also works for other types of equities, bonds, real estate, art, etc as long as one has available long term price charts for the particular item under consideration and acts on them at the indicated buy and sell points.

U.H.Kurzweg
November 18, 2019
Gainesville, Florida