

SIGN OF THE BEAR

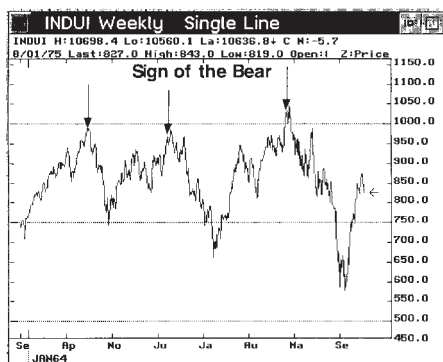
Peter G. Eliades

I view the art of technical analysis and research as an exciting adventure. I have often wondered what "Sedge" Coppock was looking for when he invented the Coppock Curve. What was Edson Gould researching when he discovered the precepts for his "Sign of the Bull"? From my own research, I have learned that serendipity, the aptitude for making desirable discoveries by accident, can play a big part in making meaningful technical discoveries. One of the fantasies that every serious stock market technician has probably entertained is that there must be some kind of indicator that will signal us when a major market top is being formed. There are some effective indicators for identifying market bottoms, but because market tops tend to be more diffuse, often occurring at different times for different indexes, the search for an effective tool to identify major market tops has been, for the most part, a futile one.

In November 1992, I was struck by the apparent lack of volatility in the daily number of advancing and declining issues on the New York Exchange. Over a period of 21 trading days (the number of trading days in the average month), the highest single day closing advance/decline ratio (simply divide up stocks by down stocks on the New York Exchange) was 1.84 and the lowest was 0.71. At the time, it seemed that was a very small range for a full month of data, so I decided to research further. Rather than use the observed 1.84 and 0.71 limits as a precedent for further research, the range was arbitrarily widened somewhat to 0.65 and 1.95. The first search of the computer database attempted to find other time periods of 21 consecutive trading days when similar "churning" occurred, i.e. when the highest daily advance/decline ratio was below 1.95 and the lowest advance/decline ratio was above 0.65. That might give a clue as to whether the pattern was significant in any way. The initial research went back to 1966 when the Dow made its first move towards the 1000 level. The results were stunning. Between 1966 and November 1992 when the pattern first caught my attention, a period of almost 27 years, there were only three other periods when the conditions for the pattern were satisfied. Here are the dates when those conditions were fulfilled:

January 25, 26, 27, 23	1966
October 17, 18, 21, 22, 24, 25	1968
December 6, 7, 8, 11	1972

Chart 1



The chart above depicts the resolution of the 3 initial patterns discovered that ultimately were named The "Sign of the Bear"

It appeared as if technical gold had been struck. Within an average period of less than a month, the pattern had preceded three of the most important stock market tops of the past several decades. Equally as important, there were no other instances of the pattern over that 27-year period.

Just how important were the turning points that were preceded by this pattern?

The first day of the 1966 pattern preceded a final market top on the Dow Jones Industrial Average on February 9th by 11 trading days. On an inflation-weighted Dow chart, the 1966 top lasted until 1995 as an all-time Dow high.

The first day of the 1968 pattern preceded a final market top on the Dow on December 3rd by 27 Trading days. That Dow Jones Industrial Average top also corresponded with a major top on the Value Line Composite Index, an unweighted index more representative of the average investor's portfolio. That index would go on to lose approximately 75% of its value over the next six years.

The first day of the 1972 pattern preceded a final market top on January 11th, 1973 by 23 trading days. That top led to one of the sharpest two-year Dow declines in history, almost 50 percent in less than 24 months. The high seen on January 11, 1973 would not be reached again until almost a decade later.

After reviewing those results, the feeling was that something very special had been discovered. During a period of almost 27 years, there were only three occurrences of the pattern and each occurrence led to a major market top within, at most, 27 trading days.

Over three decades of market research have made it clear that any pattern that appears to have predictive potential should be researched as far back as is practicable. Research of the period between 1940 to 1966 uncovered a total of nine "churning" patterns when the above conditions were satisfied, namely, the highest daily advance/decline ratio over a 21 day period was below 1.95 while the lowest ratio over that period was above 0.65. With the exception of the period from June 1963 to March 1965, the results were impressive, though not as uniformly dramatic as the post-1965 results noted above. Here are all the similar periods noted from 1940 through 1965 where the 21 day (or longer) churning pattern occurred, followed by the number of days in the pattern.

December 30, 31, 1952, January 1	1953	(23)
September 22, 23	1955	(22)
May 3, 6, 7, 8, 9, 10, 13	1957	(27)
December 8, 11, 12, 13	1961	(24)
June 7	1963	(21)
February 28 through April 23	1964	(59)
February 4, 5	1965	(22)
March 16-25	1965	(28)
May 11, 12, 13, 14	1965	(24)

For now, let's discard the period between June 1963 and February 1965 and observe the average results for the remaining six periods. The Dow Jones Industrial Average, on average, advanced 1.7% from the close of the 21st day in the pattern to the highest subsequent intra-day high after the pattern emerged. On average, it took 10 trading days to reach that high, and the subsequent decline averaged 15.2%. It would be convenient to somehow eliminate the three instances of the pattern between June 1963 and February 1965. We could say that the June 1963 and the February 1965 instances barely qualified because they had the fewest number of consecutive days (21 and 22, respectively), and that February through April 1964 was completely out of character with the other instances because it was more than double the number of consecutive days of any other instance, and eliminate those instances from our examples. But in a strict

sense, it would not have been a true reflection of technical history. In any event, even those apparent instances of failure were followed by almost immediate market declines. Those declines, however, were of a minor magnitude.

Overall, these results were deemed to be significant and impressive. If the research had ended there, there would have been sufficient evidence to identify the pattern as one that closely preceded market tops during the period from 1940-1973.

A market historian might note a remarkable commonality in all of the above periods. Almost without exception, each time the churning parameters were satisfied over a minimum of 21 trading days, the market was either at or very close to an all time high or a multi-year high. There is nothing apparent in the definition of the two limits required of the advance/decline ratio (greater than 0.65 but less than 1.95) over a one month period that would suggest such a result.

As noted initially, the characteristics of this pattern were first noticed in November 1992. The specific pattern which was unfolding then went on for 48 consecutive trading days from November 9th to December 17th, 1992. Between 1992 and 1998, four more instances of the pattern occurred. The updated record of instances of the pattern between 1972 and 1998 reads as follows:

November 9 to December 17	1992	(48)
August 20 to September 3	1993	(31)
January 18 to February 3	1994	(33)
April 25 to May 2	1995	(26)
September 12 to September 15	1995	(24)

By 1995, it became obvious that if the pattern was a signpost, a kind of footprint that preceded important market tops, the defining characteristics of the pattern would have to be refined. The purpose of the refinements would ideally be to arrive at a tool that was effective in identifying major market tops. At the same time, it was important to attempt to avoid the practice of curving fitting. Going back to the original three patterns that were discovered, dating between 1966 and 1972, I tried to identify characteristics that distinguished those three patterns that worked so very well from the patterns that were either apparent failures or patterns that marked only minor reversals.

One of the items that appeared significant was the length of the pattern before the consecutive streak is broken. Intuition would suggest that the longer the pattern, the greater its potential negative influence. History has proved otherwise. Once a pattern moves beyond 27-28 market days, it has far less a chance of being significant. The 1992 pattern can be eliminated because it was far too long and it did not fit the profile of prior patterns which saw the Dow going to either multi-year highs or all time highs as the pattern reached 21 days in length. It emerged at a time when the Dow was more than five months beyond and almost 6% lower than its previous all time or multi-year high. It just did not fit into the profile of prior churning patterns. The April-May 1995 pattern and the September 1995 pattern appeared at first glance to qualify as patterns that led to intermediate or long-term tops in the past. As successful predictive patterns of the past were further examined, however, a signature that accompanied all the successful pattern predictions of major market tops began to become apparent. One important consideration was how the pattern ended. In other words, when the churning streak ended, did it end with a high ratio (above 1.95) or a low ratio (below 0.65)? The initial three patterns that were discovered from 1966 to 1972, and that worked so remarkably well in identifying major tops, all ended their consecutive streaks with low ratios. In fact, in each of those three instances, the end in the streak was conclusive. Either the two day average advance/decline ratio or the three day average advance/decline ratio following the end of the streak was below 0.75. In other words, after at least a full month without one advance/decline ratio below 0.65,

there is a distinct and sharp change in the market's personality. Not only is there a day with a ratio below 0.65 that breaks the consecutive streak, but for at least two or three days after the streak ends, there is an average ratio below 0.75.

Enough data had now been compiled to formulate a general rule. The pattern would be dubbed, the "Sign of the Bear." There were three basic rules that were required to identify a "Sign of the Bear."

1. There must be a streak of 21-27 consecutive trading days where the daily advance/decline ratio remains above 0.65 but below 1.95.
2. That consecutive streak must end with a downside break, i.e. with an advance/decline ratio below 0.65.
3. The downside break in the streak must be confirmed with either a two day average advance/decline ratio or a three day average advance/decline ratio following the end of the streak being below 0.75.

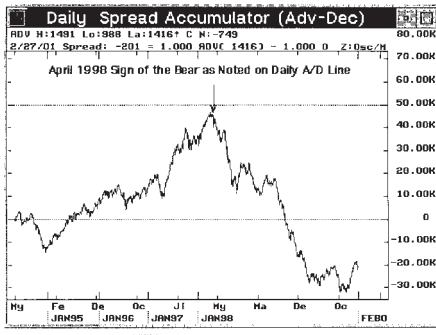
Just around the time the basis for these rules had been formulated, the advance/decline data for the period prior to 1940 became available. The data were examined with trepidation and with great anticipation. Remember, after the initial discovery of the pattern, the follow-up research went only back to 1940, the limit of our database at the time. There was not one instance of the pattern from 1940 until December 1952. Looking at the newly acquired data, I was again stunned by the results. There was not one instance of the pattern in the decade of the 1930s, just as there had been none in the 1940s. Working backwards from December 1952, take a wild guess when the first appearance of the pattern occurred. The dates were July 19 and 20, 1929. That's right! Just over six weeks before the most famous top of the 20th century, the pattern occurred and the three basic rules were met. A "Sign of the Bear" had appeared. It would not be seen again until December 1961, over 32 years later. Surely, this appearance of the pattern in a completely different time period would do away with any notion that there was "data mining" or curve fitting performed on the initial data that formed the basis of the research.

What is the rationale that explains why the patterns defining a "Sign of the Bear" should result in major market tops? I believe that searching for 21 day periods without one daily ratio less than 0.65 would obviously direct the computer to periods of market strength, periods where the market went for at least a full month without a big down day. At the same time, the computer is directed to periods of investor complacency - a full month without a meaningful day of selling. Now add the requirement that there also be no daily ratio higher than 1.95 and the computer would be directed to periods of market strength and bullish sentiment, but not the kind of upside breadth (advance/decline ratios higher than 2-1) which is usually required to sustain a healthy market advance. Voila! It's just the combination that a technician might look for at a market top. The final requirement is one that almost all technicians learn sooner or later. Require confirmation of your pattern. Unless there is a sharp turnaround to the downside as required by rules number 2 and 3, the pattern might be relatively innocuous. Once that confirmation occurs, history tells us the market is in trouble.

The final challenge was to test the theory in real time. There were several patterns in the 1990s, but until 1998, they all failed to meet the three requirements necessary for a "Sign of the Bear." Finally, on April 6, 1998, the 3 requirements were satisfied for the first time in almost 26 years. As this paragraph is being written in 2000, we know that April 1998 proved to be not only a major top for the daily advance/decline line of the NY Exchange, it was also the all-time high on the Value Line Composite Index (Geometric). That high has not been approached to this day, even though its sister index, the Value Line Composite Index (Arithmetic) has since gone to new all-time highs. It has long been our contention that the geometric Value Line is superior to the arithmetic one in giving a true picture of the average share of stock. The chart below shows the daily advance/

decline line of the New York Stock Exchange with an arrow pointing to the April 1998 “Sign of the Bear” signal. Once again, in real time, the “Sign of the Bear” gave a virtually perfect signal for a change in the market’s personality.

Chart 2

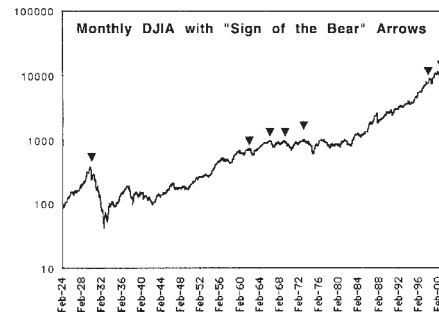


This chart depicts the April 1998 “Sign of the Bear” signal in relation to the Daily Advance/Decline Line of the New York Stock Exchange

On September 18, 2000, another “Sign of the Bear” signal was confirmed. It was only the second signal since December 1972. It came just 5 trading days from a new all-time high on the N. Y. Composite Index. There have now been two signals generated within 30 months of each other. The closest previous signals were the ones generated in January 1966 and December 1968, thirty-three months apart. There are not enough results to make a statistically informed judgment, but there is a suggestion from the prior signals that the “Sign of the Bear” is an indication of not merely a potential major top, but perhaps also an important secular change in the overall market from long term bull to market underperformance for many

years to come. It is difficult to understand how a simple pattern of only 1-2 months duration could predict the future course of the market for years to come, but examine the final chart below. The 1929 signal marked a Dow top that would not be exceeded for over a quarter of a century. The 1961 signal preceded a top and then the final run up of only 35% before the 1966 top which was not convincingly exceeded for over 16 years. The 1968 top, as was explained earlier, led to a decline of around 75% in the average share of stock or mutual fund, and the 1973 top led to one of the sharpest Dow declines of the 20th Century, a top that would not be significantly exceeded until a decade later. How will history judge the latest two signals? The April 1998 signal has already marked an almost 3-year top in the daily advance/decline line and the Value Line Composite (Geometric) Index. Only history will tell us whether the September 2000 signal will mark a secular market top of historic duration. Based on the prior history of the “Sign of the Bear,” there appears to be an excellent chance it will.

Chart 3



This chart shows all the “Sign of the Bear” signals since the late 1920s.