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TWO TOOLS FOR PREDICTING MARKET TURNING

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T- Formations and Angle Changes

By

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This article will present two techniques that are often helpful in predicting time and price objectives for market swings, well in advance of the completion of such swings. They may be employed with each other, with other market indicators, and in time frames ranging from intra-day to major term.

T-Formations -- A tool that Predicts When Turns Will Take Place --

T-formations, derived from theories relating to the cyclical analyses of price movement, may be employed to project *the time frames* (not the price levels) at which market reversals are likely to take place.

Chart 1 (T-Formations) illustrates the technique and its application. Here are the steps involved.

To project the time frame at which a market peak is likely to take place --

- 1) When it is possible to determine that a market low has taken place – prices no longer declining, turning upwards – measure the distance *in time* between the last market high and the low that has just been made. We will call this period of time A (previous high) – X (low).
- 2) Carry that measurement forward, creating a line, X – B, which is equal in length to the line, A – X. The next high should take place at the area of B.

To project the time frame at which a market low is likely to take place --

- 1) When it is possible to determine that a market high has taken place – prices no longer rising, turning downwards – measure the distance *in time* between the last market low and the high that has just been made. We will call this period of time A (previous low) – X (high). There is no problem, of course, if you prefer to use different letter designations for predictions of impending highs and impending lows instead of the same designations.
- 2) Carry that measurement forward, creating a line, X – B, which is equal in length to the line, A – X. The next low is likely to take place at the area of B.

In both cases, $A - X = X - B$. The T-formation is represented by a vertical line and by two equal horizontal legs.

Special note –

There are many occasions in which market highs take the form of double tops – two peaks at roughly the same price level, separated by a valley.

When you see this type of configuration, use the valley low as the center point of the T-formation rather than either peak. If you refer the Chart 1, you will see such a formation between May and June of 1981 and, again, between October and November of that year.

There are many occasions in which market lows take the form of double bottoms, two low points separated by a hump in between – the reverse of the double top formation. When you see this type of formation, use the hump high as the center point of your T-formation.

Mirrored market patterns –

T-formations may be employed not only for projections of significant market turning points but for projections of minor turning points as well, as more serious formations work their way out.

For example, in Chart 1, I have drawn in a minor term projection area (early October) that could readily have been established as the market worked its way towards the scheduled market peak in early November.

A useful exercise –

There are a number of possible T-formation turning points that I have not drawn in on Chart 1.

Perhaps you might try to create T-formations that I have not shown.

Caveat: T-formations tell you when, not where –

T-formations derive as a result of market cycles, the tendency of rising waves to be roughly equal in time length to falling waves. They tend to be most accurate during neutral market periods, during which climates they can almost seem uncanny.

T-formations, however, during strongly trended market periods, while still suggesting *when* market turns will occur, may not provide meaningful advance notice of *where* turns are likely to take place, though, of course, as you approach the due date, you will have a pretty good estimate.

There are times as well when expected turns simply do not materialize or materialize for only brief periods of time. For example, at an expected low point, prices might, on occasion, rally only briefly before declines resume. The cyclically scheduled reversal is often detectable on such occasions, perhaps in momentum oscillators, perhaps in a certain amount of price movement, but does not produce much to speak of in the way of advance. Such developments are referred to as “inversions” or as “cyclical failures”. The down move that was in effect prior to the failure often accelerates as the scheduled cyclical lows are violated. Similar action, in reverse, at projected market tops is usually bullish.

An inversion appears on Chart 1 at the start of 1982. You can see the start of what should have been a cyclically supported rally at the time, which failed, resulting in an accelerating decline instead. The next T-formation reversal area, however, took place right on schedule.

Angle Changes – A Tool That Predicts Where Market Turns Will Take Place --

T-formations are very useful in the determination of when market reversals will develop.

Formations that include measuring “angle changes” often have the ability to project not only where, in terms of price level, market reversals will develop, but often when.

Recognizing Angle Changes –

To illustrate this concept, I am employing a chart of the same time frame as Chart 1, but this time we are approaching the analysis of the time period from a different perspective.

There are times, when it is possible to recognize that a market move in progress is still continuing but at a modified angle of price movement. Sometimes, the thrust of the movement changes from more moderate (a lesser slope) to more aggressive (a greater slope). Sometimes the reverse takes place. A sharp move, up or down, continues but at a lesser rate or slope.

This change in slope generally takes place at a half-way point in the advance or decline, *as measured by the length of lines involved, not by the amount of point change.*

For example, we can see on chart 2, a market move that started in April of 1981 that continued into early August when it suddenly accelerated to the downside. There was no basic change to the bearish direction of the stock market. There was a definite change to the velocity of the move.

Securing Your Price Projections –

The technique is pretty straightforward.

Once you determine that an angle change is taking place, you measure the length of the initial angle leg (A). Project the length of line A in the direction of the new angle of movement (B). A and B are likely to be of equal length. (A = B.) The length of B provides a price objective as well as a time projection.

You can see the excellent projection that was made of the September 1981 low.

Once that low was made, the market rallied with a very steep slope (A), which moderated in October, the rise continuing along the slope (B), which provided a very accurate projection of the market peak.

Once the objectives of that line B were achieved, a new decline started, which provided an angle change measurement. Once again, the A = B rule worked out very well.

If you compare Charts 1 and 2, you can see that the market peaks in November and early December of 1981 were predicted by both T-formations and angle changes, as were the lows of September. A very powerful combination at times, indeed.

Major Term T-Formations and Angle Changes in the Nasdaq Composite –

Chart 3, a weekly based chart of the Nasdaq Composite Index, illustrates the use of these techniques in conjunction, over a longer term period, in more recent years.

I have marked off the A, B angle segments during both advancing and declining periods. There actually was a third segment, (C perhaps?) during the advance in 1999 which was very close to the lengths of A and B. The declining angle segments between 2000 – 2002 turned out to provide an excellent time and level projection for the end of the bear market.

Also marked on the chart are T-formation projections based on low points in the 1997 – 1999 period to the peak in March of 2000. As you can see, the lows of 2001 came in right on schedule.

As I write, the stock market is attempting to validate the lows that were scheduled to take place as year 2002 came to an end.

Final Suggestions –

I do suggest that readers experiment with both of these technical tools with charts of the time frames in which they usually trade as well as with charts of a somewhat longer time frame to provide the perspective of longer term trends. It is generally preferable to take shorter term trades in conjunction with longer term trends and projections.

T-formations and angle changes may be employed to confirm market junctures signaled by tools such as MACD, RSI and other market indicators as well as providing trigger tools for investors who prefer to sell during “overbought” climates and to buy “oversold” conditions.

Chart Notes

Chart 1 – T-Formations

Chart 1 illustrates the construction and methods of projection of market turning points based upon T- formations. The significant rule is that $A - X = X - B$, the right side of the T-bar is equal to the left.

Chart 2 – Angle Formations

Chart 2 illustrates measuring angles, price and time projections that can be made as slopes of advances and declines change. The significant rule is that segment B is likely to equal segment A.

Chart 3

The long term pattern of movement of the Nasdaq Composite between 1997 – 2002 conformed very well to the principles of T- formations and angle changes.

BIOGRAPHICAL DATA: Gerald Appel, the inventor of MACD, is the president of Signalert Corporation, which has been publishing Systems and Forecasts, a technically oriented stock market newsletter, since 1973. Signalert also manages approximately \$500 million in investor capital, traded in mutual funds and various other stock market vehicles on timing models devised by Mr. Appel and his research staff.

T-Formations

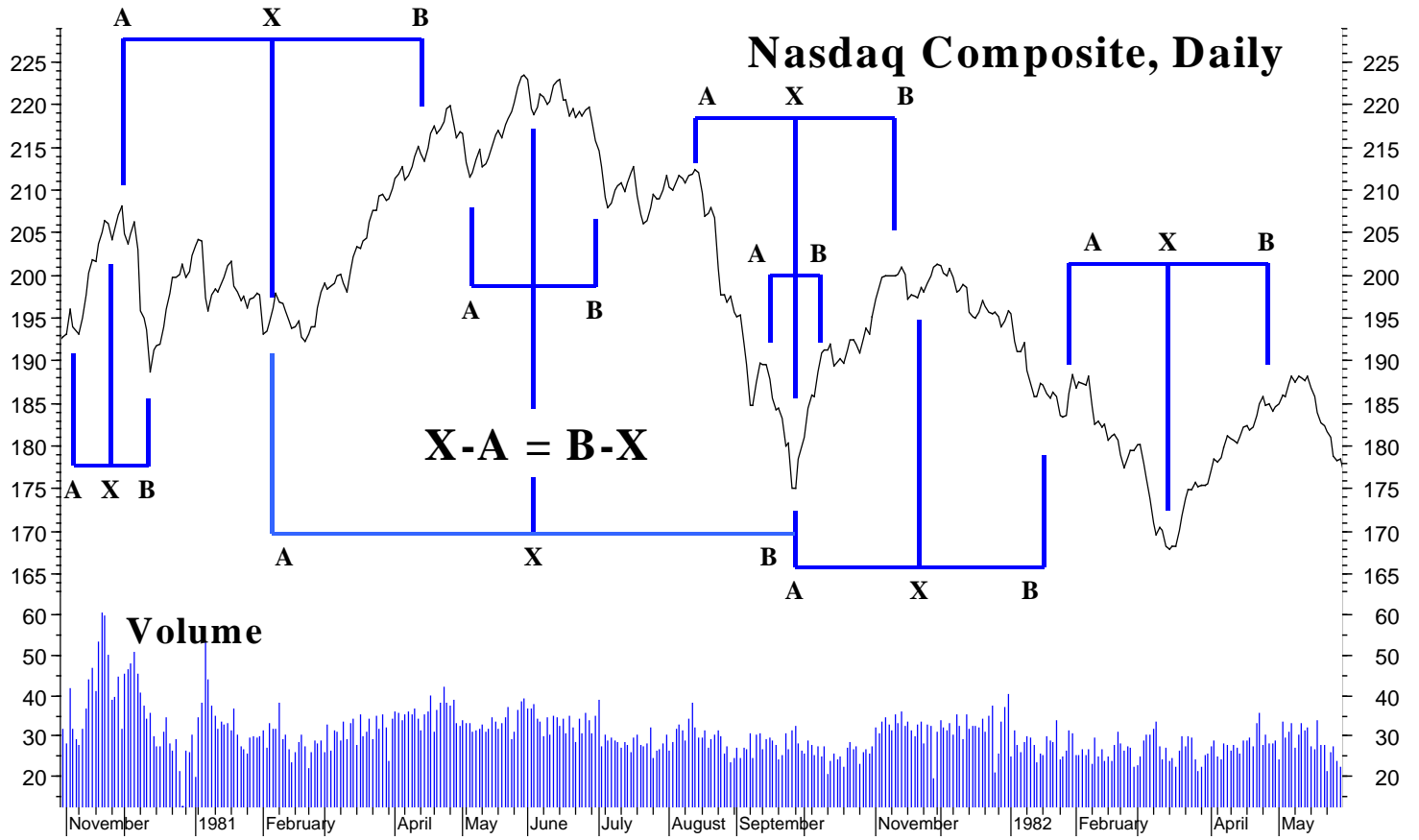


Chart 1

Nasdaq Composite T-Formation

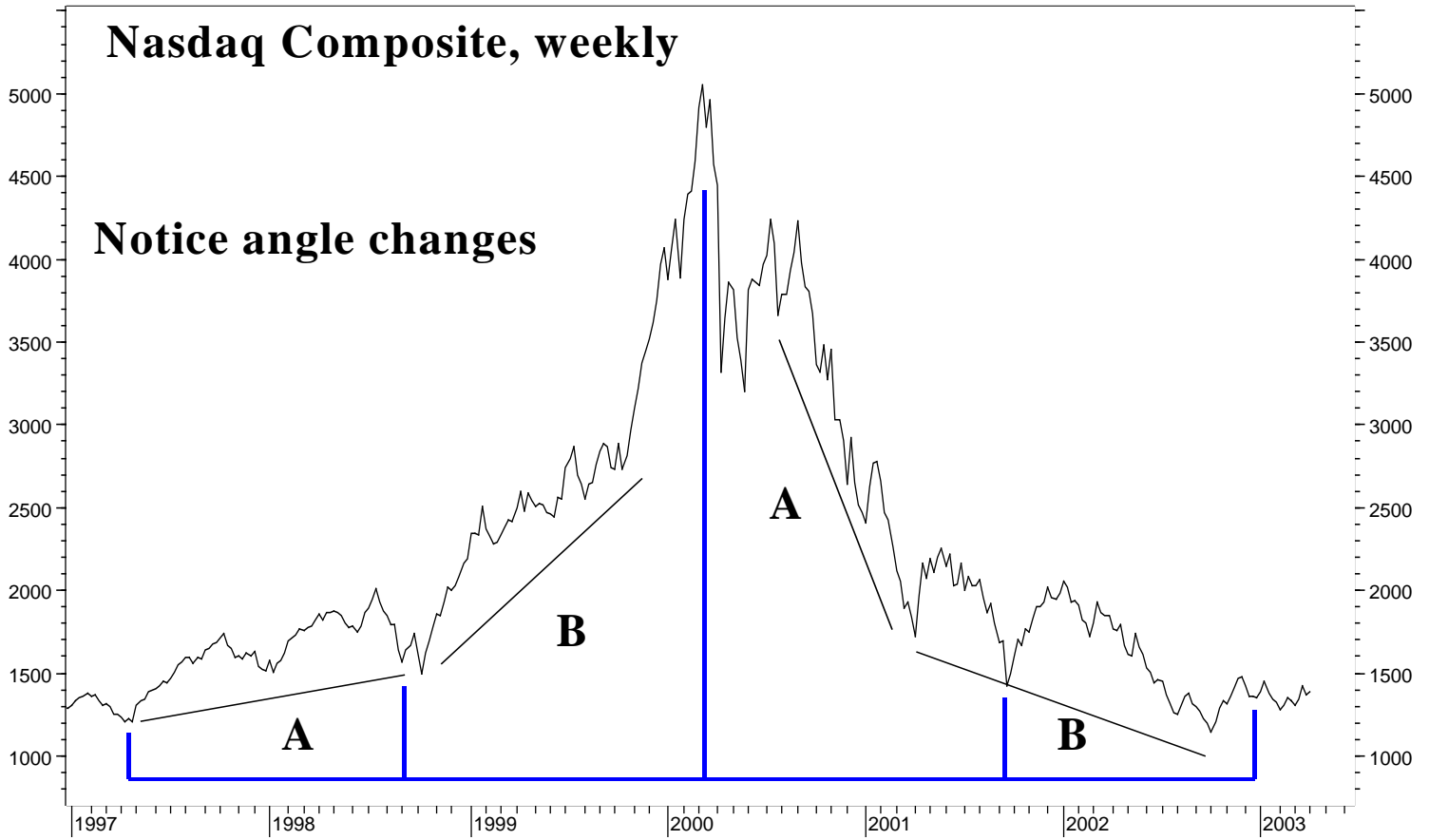


Chart 3