Note: The following pages represent a reformatted, reprint from our May 13, 1992 TAP report (pages 11-17). References to pages within this section have been adjusted for this report.

TRADING INDICATOR
- EXCLUSIVE -

The Trading Indicator (TI) has always been our most "perfect" signal, and its near 100% success ratio reminds us to react immediately every time it is triggered. Unfortunately, every TI signal is not always followed by a corresponding TI reversal signal. This is why recently we endeavored to thoroughly investigate, study and measure the price and time reactions of the Dow Jones Industrial Average (DOW) (based on closing prices) in response to each TI signal. Fortunately, we maintained a log of the confirmed TI signals since 1969 and were able to retest its potential.

After a few presentations to clients we realized that they had many specific and worthwhile questions about how to most effectively utilize the TI. Overwhelmed with the task of calculating an answer to each question in a short period of time, we choose to begin by presenting clients with answers to some of the more important and general questions first. In the near future, we will update the list of specific questions and answers, but for now we are providing the following:

QUESTIONS AND ANSWERS

Q1 How many confirmed TI buy and sell signals have occurred since 1969?

A1 We have recorded 126 buy signals and 112 sell signals through April 8, 1992.

Q2 Which signal has been the most productive, TI buys or TI sells?

A2 Both are very productive, but the TI buy signals usually produce better results because the market's average initial reaction time lasts longer.

Q3 Has the TI ever given a confirmed signal that was completely unsuccessful?

A3 Yes, but rarely. Since 1969, there has been only 1 TI buy signal and 5 TI sell signals which produced losing results within a 10 trading day period after each actual signal was triggered. Calculating the same statistics assuming a client waited one more trading day until the signal was confirmed yielded 3 buys and 15 sells that were entirely unproductive. So at worst, TI buy signals have been 97% successful and TI sell signals have been 86% successful.

Q4 What is the expected average number of TI signals during any given year?

A4 Prior to the 1980's, there were fewer signals because our interest in the TI's potential was not as greatly focused as it is now. Based on the last 12 years, we would expect to receive at least 6 TI buy signals and 6 TI sell signals in any given year.

Q5 Does the direction of the Primary Trend effect whether there are more TI buy signals or more TI sell signals in a given year?

A5 Yes. In Bull or ascending markets, there is definitely a bias toward more TI sell signals. In Bear or descending markets, there is almost always a much greater number of TI buy signals than TI sell signals. This is the nature of the indicator.

Q6 In your TAP communiqués, you always list the conditions necessary for a TI signal's "confirmation". What do you mean by "confirmation day", and what is its significance?

A6 When a TI signal appears, the trading day of the signal is called the "actual signal day" (ASD). The next trading day is called the "confirmation day" (CD). The CD is significant because on that day the market's breadth reading must reverse relative to the breadth reading on the ASD thus affirming a bona fide TI signal. Specifically, the breadth reading on the CD must yield a value that is closer to zero than the breadth reading on the ASD.

Q7 How often does a TI signal setup and the next day breadth does not confirm, thus canceling or delaying a potential signal?

A7 Since we have only logged "confirmed" TI signals, it is not possible to provide the statistics at this time. However, our experience enables us to suggest that at least 3/4 of potential TI signals are confirmed within one trading day. The remainder of potential signals is usually delayed one or at most two trading days and few are cancelled.

Q8 Given that the "confirmation day" is critical in your statistics, when would you suggest a client executes a trade in response to a potential TI signal, on the "actual signal day" (ASD), or the "confirmation day"(CD)?

A8 Since there is no guarantee that a signal will be confirmed, it is safest to wait until the close on the CD. However, we have statistics that clearly indicate 2/3 of the time the ASD will provide better prices than waiting for the CD to execute a trade. Subjectively, we will often advise clients to divide their executions between the close on the ASD and the close on the CD, and to employ close stops.

Q9 Have you developed a mechanical objective set of rules or disciplines for optimizing your performance with TI signals?

A9 Yes, but we first need to be certain that you clearly understand our methodology for labeling and referencing each trading day that is influenced by a TI signal, (i.e. our "TI Counting Sequence").

EXPLANATION OF "TI COUNTING SEQUENCE"

(Refer to bar chart for visual assistance)

"ASD" means "Actual Signal Day" and it is referred to as "DAY 0"
"CD" means "Confirmation Day" and it is referred to as "DAY 1" (1 trading day later)
"DAY 2" always follows the CD (that is, 1 trading day later).
"DAY 3" always follows DAY 2 (1 trading day later), and so on until "DAY 10".

Example I:

A TI buy signal is triggered.
A client executes a buy order immediately on DAY 0 (the ASD) at the close.
The client holds a long equity position for 6 days and sells on DAY 6 at the close.

Example II:

A TI sell signal is triggered.
A client executes a sell order one day after DAY 0 (the ASD) on DAY 1 (the CD) at the close.
The client holds a short equity position for 3 days and buys (covers) on DAY 4 at the close.

OPTIMIZING THE TRADING INDICATOR'S PERFORMANCE

PREFACE Before we explain our rules for optimizing the TI's performance, we feel it is appropriate to explain the logical steps we took to arrive at our conclusions.

1. We compiled a list of all TI signals from 1969 through April 8, 1992.

2. We compared each signal with the Dow Jones 30 Industrial Average closing prices for up to 10 days after the ASD. This created an enormous table of statistics.

3. We thoroughly analyzed the statistics from many angles (and will continue to do so always).

4. We computed the Compounded Rate of Return for buy and sell signals separately. This was the key to determining the "Best Day" for "entering into" and "exiting out of" a long or short equity position, thus optimizing the TI's performance.

TI TESTING PROCEDURE

The graphs on page 6 are the results of separately compounding rates of returns for TI buy and sell signals. The page is divided into two sections; buy signals at the top and sell signals at the bottom. Both types of signals (buys and sells) were tested using two different Execution Days; the ASD (DAY 0) and the CD (DAY 1) (The reason for this was explained in Q&A #8). Clearly, for both types of signals, execution on the ASD produced greater returns than execution on the CD. Specifically, buy signals produced a compounded Rate of Return, which averaged 3% higher if execution occurred on the ASD rather than on the CD. Sell signals averaged 1.41% better results if executed on the ASD rather than on the CD. Overall, the results of the compounded testing were interesting and very revealing.

OPTIMIZING THE USAGE OF TI BUY SIGNALS

Notice how the two bar graphs increase steadily until DAY 6 (which was labeled "SAFEST") and then level off somewhat. Next we labeled DAY 8 as "BEST".

If a trader automatically bought the DOW at the close of the CD and sold at the close of DAY 6, then the trader would have achieved the following results for 126 trades:

104 winning trades (83% success)
22 losing trades (17% failure)
Average trade gained +1.73%
Standard Deviation = ± 2.31%
Compounded Rate of Return = + 9.70%

If a trader automatically bought the DOW at the close of the CD and sold at the close of DAY 8, then the trader would have achieved the following results for 126 trades:

100 winning trades (79% success)
26 losing trades (21% failure)
Average trade gained + 1.88%
Standard Deviation = ± 2.59%
Compounded Rate of Return = + 10.49%

NOTE: For TI buy signals, it is our opinion that selling on DAY 6 is the safest exit day for traders during most trends. However, depending on the Primary Trend of the market, a trader may choose to exit before DAY 6 in a Bear market decline, or after DAY 6 in a Bull market rally. It is also important to consider the position of other short-term and intermediate-term indicators at the time of each signal.

ADVANCED ALTERNATIVE METHOD FOR OPTIMIZING THE USAGE OF TI BUY SIGNALS

Since selling on DAY 6 is safer, but selling on DAY 8 produced better results, and DAY 8 had a greater chance for losing (and a greater standard deviation), we tested a mechanical method which combines the two for a better and safer compounded rate of return.

1. Assume that a trader buys at the close on the CD (DAY 1).
2. Assume that DAY 8 is the cut-off point or automatic stop-loss (i.e., no matter what happens the trader must sell no later than the close on DAY 8).
3. Next, the trader compares the DOW's closing price each passing day with the closing price of the execution day (the CD, DAY 1) to determine if the current day's DOW price is at a profitable level relative to the CD.
4. Each day that is profitable is tallied starting with DAY 2. If a day is not profitable (i.e., the current day's DOW closing price is less than the DOW closing price on the CD), then it is not tallied.
5. Now the trader has the criteria to follow a rule, which is to sell at the close on the fifth profitable day. This means no sooner than DAY 6, but no later than DAY 8.

Using the Advanced Alternative Method compared to the DOW, a trader would achieve the following results for 126 trades:

106 winning trades (84% success)
20 losing trades (16% failure)
Average trade gained + 1.74%
Standard Deviation = ± 2.24%
Compounded Rate of Return = 10.06%
66 times sold on DAY 6
23 times sold on DAY 7
37 times sold on DAY 8

NOTE: Notice the decreased number of losing trades, decreased Standard Deviation, and the substantial increase in the Compounded Rate of Return compared to selling on DAY 6 only or DAY 8 only. The most probable reason for these results is that when a TI buy signal is triggered, the market may not always turn up immediately. It may be several days before the initial market burst is evident. The same reasoning explains why 1/3 of the time, better prices occur on the CD (see Q&A #8). Remember, while the breadth may be improving, prices may still drift lower until a market reversal begins.

OPTIMIZING THE USAGE OF TI SELL SIGNALS

Notice how the two bar graphs display a steep steady increase until the peak at DAY 4 (which was labeled "SAFEST" and "BEST"), and then drops modestly to DAY 7, but only increases slightly until DAY 10. Without much analysis we determined that DAY 4 produced the best and safest results.

If a trader automatically sold short the DOW at the close of the CD and bought (covered) at the close of DAY 4, then the trader would have achieved the following results for 112 trades:

75 winning trades (67% success)
37 losing trades (33% failure)
Average trade gained + 0.54%
Standard Deviation = ± 1.43%
Compounded Rate of Return = + 2.50 %

NOTE: For TI sell signals, it is our opinion that covering (buying) on DAY 4 is the safest exit day for traders during most trends. However depending on the Primary Trend of market, a trader may choose to exit before DAY 4 in a Bull market rally, or after DAY 4 in a Bear market decline. It is also important to consider the position of other short-term and intermediate-term indicators at the time of each signal.

ADDITIONAL COMMENTS ABOUT TI USAGE

1. Occasionally the TI will trigger a buy signal, and then quickly within 1 to 5 days a TI sell signal will be triggered and reverse the market's direction. Under these circumstances we advise traders to reverse their equity positions in accordance with the most recent TI signal. The same advise applies for a TI sell signal that is quickly canceled by a more recent TI buy signal.

   In order to provide unbiased separate results for TI buy signals and TI sell signals, our statistical research did not consider "Quick TI Reversal Signals". Consequently, observing and acting on a quick TI reversal signal should yield additional performance.

2. When observing the DOW on a broader scope, we have noticed that TI signals (especially if 2 or 3 of the same type develop in close proximity) create a price barrier wherever they appear. Depending on market conditions, the barrier may be breached short-term, or it may have lasting intermediate-term implications.

TRADING INDICATOR

MARKET'S INITIAL REACTION TIME TO BUY AND SELL SIGNALS