

Technical Analysis

Topics to be Discussed

Dow Theory
Barron's Confidence Index
Breadth of the Market
Odd-Lot Index
Charting

Dow Theory

Oldest of the technical theories

Created by Charles H. Dow

- ☛ "There is no way of telling when the top of an advance or the bottom of a decline has been reached until some time after such top or bottom has been made."
 - Major (Primary) uptrend (bull market)
 - Major (Primary) downtrend (bear market)
 - Secondary upward or downward trends
- ☛ Change in direction should be confirmed in some way

Barron's Confidence Index

Based on belief that differential between the returns on quality bonds and bonds of lesser quality will forecast future price movements

- ☛ Calculation

$$\frac{\text{Yield on High Grade}}{\text{Yield on Lesser Grade}}$$

- ☛ Theory
 - during periods of high confidence, investors invest more in lower quality bonds for the added yield
 - increased demand will decrease yield

Breadth of the Market

The more stocks participating in market trend, the greater the indication that decision makers agree on future market prospects

New Highs/Lows for Jan 6, 2006

The following is a matrix of stocks that have made a new high or low price today sub-categorized by exchange, volume and price.

	Over-all	NYSE	AMEX	Nasdaq	OTCBB	Vol > 100K	Vol < 100K	Price > \$10	Price < \$10
20-Day Highs	2132	1087	284	645	116	1212	920	1643	489
20-Day Lows	276	72	24	128	52	130	146	164	112
65-Day Highs	1231	608	189	368	66	768	463	993	238
65-Day Lows	86	16	9	34	27	42	44	35	51
100-Day Highs	941	437	158	303	43	605	336	779	162
100-Day Lows	76	15	8	31	22	38	38	31	45
52-Week Highs	712	345	123	218	26	488	224	622	90
52-Week Lows	44	9	4	17	14	23	21	17	27

NOTE: Over the Counter Bulletin Board (OTCBB) is a regulated electronic trading service offered by the National Association of Securities Dealers (NASD) that shows real-time quotes, last-sale prices and volume information for over-the-counter (OTC) equity securities. Companies listed on this exchange are required to file current financial statements with the SEC or a banking or insurance regulator. There are no listing requirements, such as those found on the Nasdaq and New York Stock Exchange, for a company to start trading on the OTCBB. It is important to note that companies listed on the OTCBB are not a part of the Nasdaq Exchange. The truth is, OTCBB stocks are not especially large or stable and are considered very risky. As a result, very few OTCBB stocks are successful in making the jump from this market to the Nasdaq or any other major exchange because they are unable to meet the listing requirements. Furthermore, because OTCBB stocks tend to trade infrequently, the bid-ask spread is larger.

Source: www2.barchart.com/newhilo.asp

Breadth of the Market (continued)

Trading January 6, 2006

Index	Volume	Last	Change
NYSE Composite	2,392,387k	8,031.66	↑ 87.60 (1.09%)
NASDAQ Composite	2,265,326k	2,305.62	↑ 28.75 (1.25%)
AMEX Composite	328,224k	1,604.46	↑ 22.84 (1.27%)

Index	Volume	Last	Change
Dow Jones Industr.	444,776k	10,999.31	↑ 77.16 (0.70%)
Dow Jones Transp.	36,729k	4,214.28	↓ 19.66 (0.47%)
Dow Jones Utilities	23,052k	415.15	↑ 4.24 (1.02%)
NASDAQ 100	1,052,120k	1,734.99	↑ 29.70 (1.71%)
S&P 100	1,097,211k	585.02	↑ 4.26 (0.73%)
S&P Mid Cap 400	370,940k	762.78	↑ 8.48 (1.11%)
S&P 500	2,334,558k	1,285.45	↑ 11.97 (0.93%)
S&P Small Cap 600	214,767k	362.30	↑ 3.41 (0.94%)
Russell 1000	2,909,831k	699.63	↑ 6.50 (0.93%)
Russell 2000	900,303k	699.39	↑ 7.62 (1.09%)
Russell 3000	3,810,134k	745.40	↑ 7.03 (0.94%)

Index	Volume	Last	Change
S&P Market Movers	990,587k	1,285.45	↑ 11.97 (0.93%)
S&P Large Cap	575,161k	585.02	↑ 4.26 (0.73%)
S&P Market Leaders	1,257,544k	1,285.45	↑ 11.97 (0.93%)
NASDAQ Internet	109,914k	1,734.99	↑ 29.70 (1.71%)
NASDAQ Market Makers	1,087,877k	2,305.62	↑ 28.75 (1.25%)

Source: www.marketvolume.com/content/products/mktsum/mktsum.asp

Odd-Lot Index

- ☛ Trading on exchanges done only in standard quantities (round lots)
- ☛ Round lot usually 100 shares
 - other quantities are used sometimes
- ☛ Shares less than round lot referred to as odd lots
- ☛ Odd lot trading is considered to reflect investment decisions of small investors
 - analysts consider odd lot investors to be wrong in the market

NYSE Daily Statistics

ODD LOT ACTIVITY	01/13/2006	01/17/2006
Purchases (shares)	15,470,318	14,804,896
Short Sales (shares)	2,925,188	3,495,781
Other Sales (shares)	11,860,745	13,608,691
Total Sales (shares)	14,785,933	17,104,472

Source: www.nyse.com

Charting

Observation of past performance of various factors to evaluate short-term trends

- ☛ prices
 - highs/lows/closes
 - volume
 - other information



Head and Shoulders Formation

Charting (continued)

In 1996, Shi Zhang wrote a program based on the description of the head-and-shoulders formation. Zhang's program looked for six points on a bearish head and shoulders pattern -- the right shoulder, the right trough, the head, the left trough, the left shoulder and "neckline" crossing. The time between points had to be at least five days and no longer than 180 days. Various distances were used to make sure that no patterns were missed. After running his computer nonstop for 10 hours, Zhang came up with seven patterns, which he then evaluated for profitability 1, 2, 3, 4, 5, 10, 20, 30 and 60 days out. The results appear below:

Number of days after neckline crossing

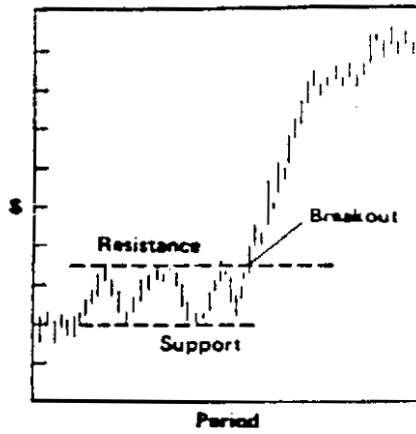
	1	2	3	4	5	10	20	30	60
Average profit/loss	0.3%	1.6%	1.2%	1.1%	1.3%	-0.7%	0.7%	-0.2%	-2.6%
Standard Deviation	0.01	0.03	0.01	0.02	0.02	0.02	0.02	0.04	0.1

We conclude that head-and-shoulders trading does not work either as a signal of a trend change or as a profitable strategy.

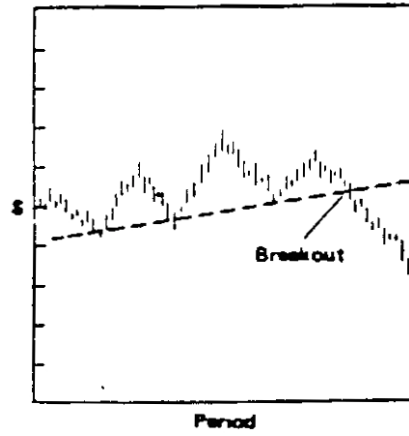
Source: MSN Money with Victor Niederhoffer and Laurel Kenner
<http://moneycentral.msn.com/content/Investing/Powertools/P79688.asp>

Charting (continued)

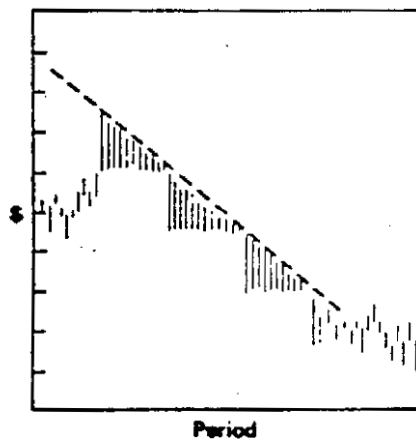
Panel A: Triple Top



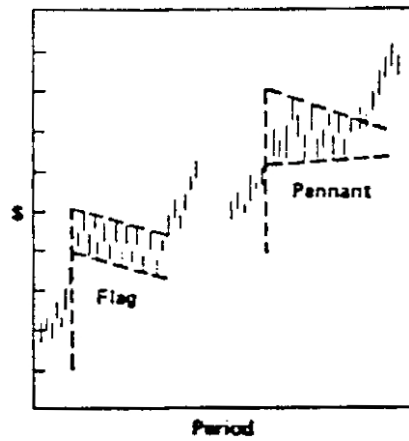
Panel B: Head and Shoulders



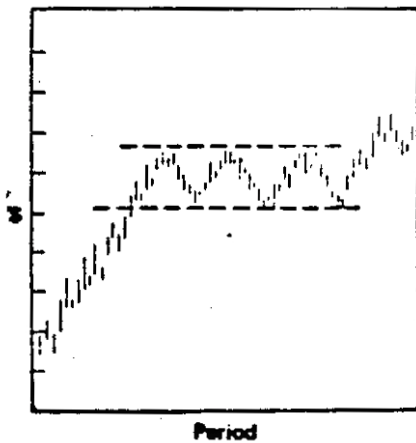
Panel C: Triangles



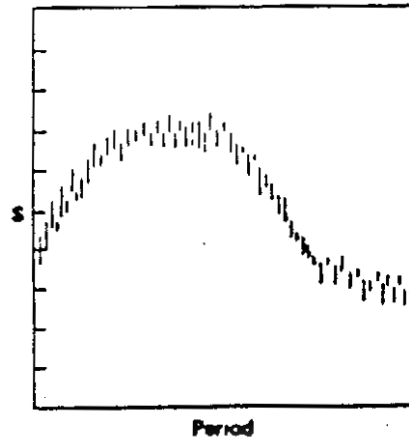
Panel D: Flag and Pennant



Panel E: Consolidation Triangles



Panel F: Inverted Saucer



Some Popular Chart Formations