

# 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 January 8, 2010**

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

	Overall	NYSE	AMEX	Nasdaq	OTCBB	Vol > 100K	Vol < 100K	Price > \$10	Price < \$10
<u>20-Day Highs</u>	1862	842	413	519	88	1005	857	1268	594
<u>20-Day Lows</u>	296	105	80	90	21	145	151	199	97
<u>65-Day Highs</u>	1050	488	262	262	38	586	464	816	234
<u>65-Day Lows</u>	106	15	51	32	8	42	64	62	44
<u>100-Day Highs</u>	904	423	238	215	28	509	395	731	173
<u>100-Day Lows</u>	89	10	46	27	6	36	53	54	35
<u>52-Week Highs</u>	797	374	228	177	18	449	348	663	134
<u>52-Week Lows</u>	56	5	41	6	4	16	40	41	15

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](http://www2.barchart.com/newhilo.asp)

## Breadth of the Market (continued)

Trading January 8, 2010

Index	Time ET	Last	Change	Volume
<b>Exchange Indexes</b>				
AMEX Comp.	1/8/2010 16:00	1,872.26	4.29 (0.23%)↑	160,769K
NASDAQ Comp.	1/8/2010 16:00	2,317.17	17.12 (0.74%)↑	2,028,143K
NYSE Comp.	1/8/2010 16:00	7,424.76	31.86 (0.43%)↑	4,436,097K
<b>DOW Indexes</b>				
DOW Comp.	1/8/2010 16:00	3,629.25	23.89 (0.66%)↑	926,944K
DJI	1/8/2010 16:00	10,617.51	11.11 (0.10%)↑	779,239K
DJT	1/8/2010 16:00	4,222.35	87.05 (2.11%)↑	102,114K
DJU	1/8/2010 16:00	396.27	0.50 (0.13%)↓	45,590K
<b>S&amp;P Indexes</b>				
S&P Financials	1/8/2010 16:00	205.09	1.04 (0.50%)↓	656,014K
S&P 100	1/8/2010 16:00	527.74	1.45 (0.28%)↑	2,115,980K
S&P 500	1/8/2010 16:00	1,144.95	3.32 (0.29%)↑	3,642,561K
S&P 400	1/8/2010 16:00	752.19	4.48 (0.60%)↑	489,863K
S&P 600	1/8/2010 16:00	341.52	1.17 (0.34%)↑	201,415K
<b>NASDAQ Indexes</b>				
NASDAQ 100	1/8/2010 16:00	1,892.59	15.87 (0.85%)↑	695,657K
NASDAQ Banking	1/8/2010 16:00	1,713.38	11.87 (0.70%)↑	133,014K
NASDAQ Biotechn	1/8/2010 16:00	863.27	4.79 (0.56%)↑	200,174K
NASDAQ Market	1/8/2010 16:00	127.12	0.98 (0.78%)↑	130,792K
NASDAQ Computer	1/8/2010 16:00	1,178.51	10.34 (0.89%)↑	536,811K
NASDAQ Finacial	1/8/2010 16:00	2,063.61	9.27 (0.45%)↑	158,375K

Source: [www.marketvolume.com/content/products/mktsum/mktsum.asp](http://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

Odd Lot Purchases	2,428,172
Odd Lot Sales	3,584,013
Odd Lot Short Sales	980,825
Odd Lot Purchases Dol Vol	\$139,344,297
Odd Lot Other Sales Dol Vol	\$97,486,268
Odd Lot Short Sales Dol Vol	\$36,346,678

Source: [http://online.wsj.com/mdc/public/page/2\\_3024-oddlottrades.html?mod=topnav\\_2\\_3000](http://online.wsj.com/mdc/public/page/2_3024-oddlottrades.html?mod=topnav_2_3000)

**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

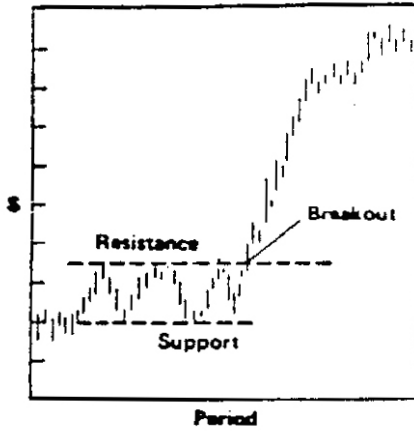
	1	2	3	4	5	10	20	30	60
Average profit/loss	0.3%	1.6%	1.2%	1.1%	1.3%	-0.7%	0.7%	-0.2%	-2.6%
Standard Deviation	0.01	0.03	0.01	0.02	0.02	0.02	0.02	0.04	0.1

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

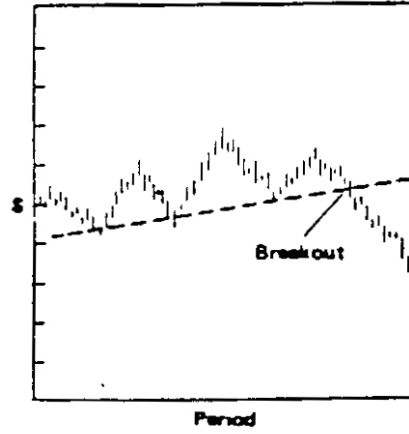
**Source:** MSN Money with Victor Niederhoffer and Laurel Kenner  
<http://moneycentral.msn.com/content/Investing/Powertools/P79688.asp>

Charting (continued)

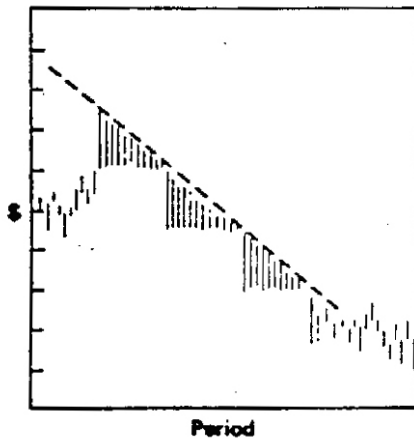
Panel A: Triple Top



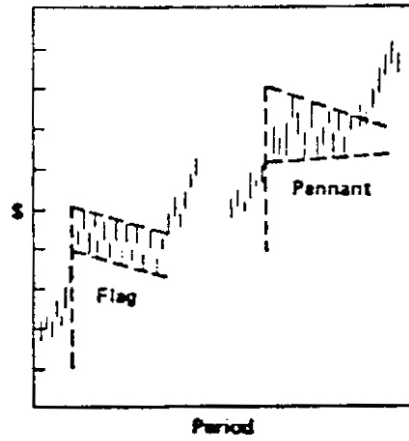
Panel B: Head and Shoulders



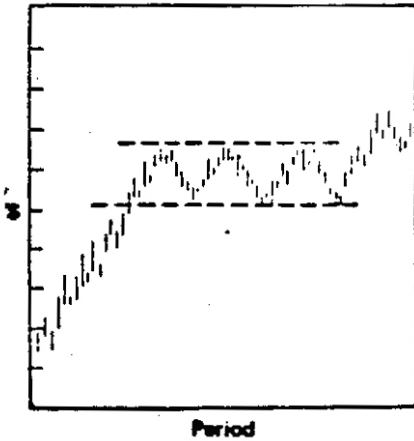
Panel C: Triangles



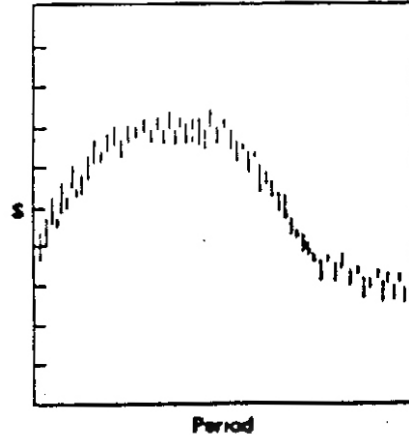
Panel D: Flag and Pennant



Panel E: Consolidation Triangles



Panel F: Inverted Saucer



Some Popular Chart Formations