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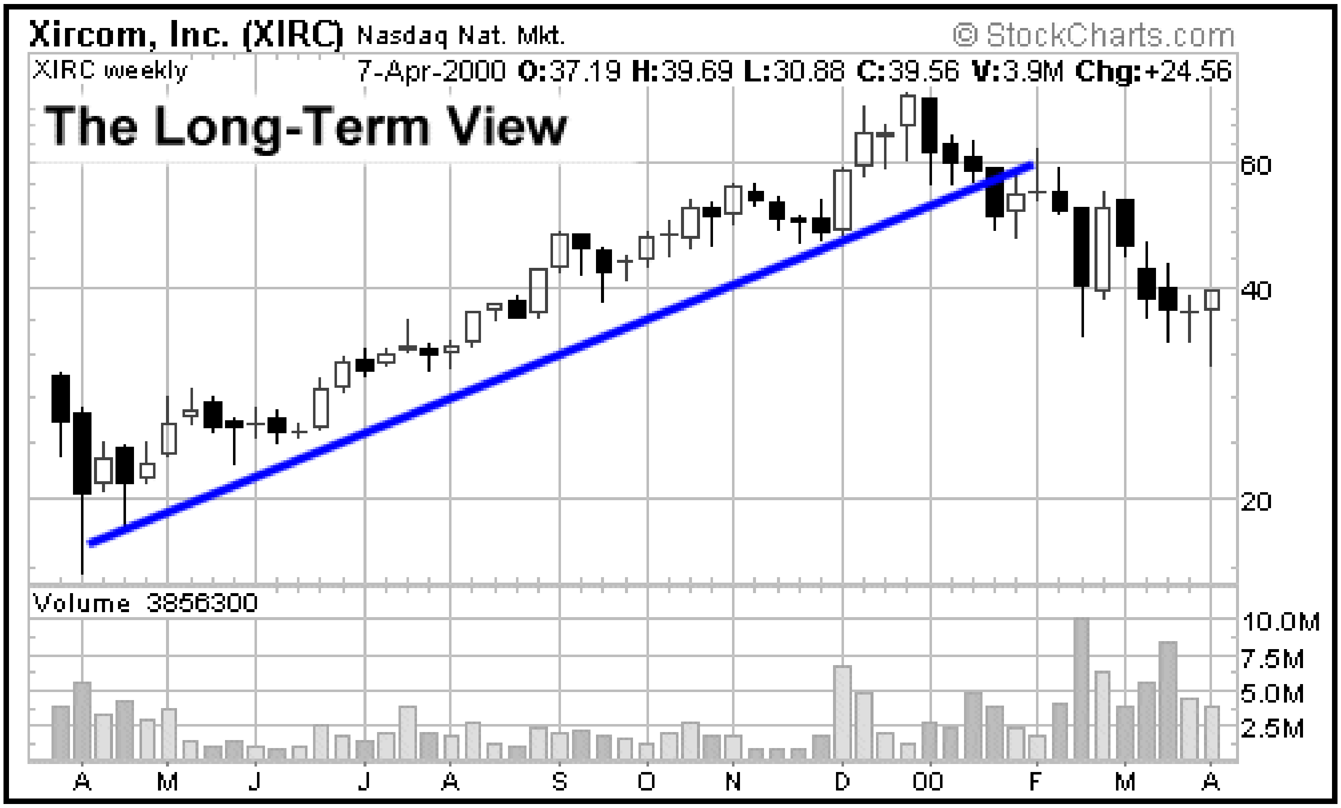
Chart School

Technical Analysis - Part 1

What is Technical Analysis?

Technical analysis is the examination of past price movements to forecast future price movements. Technical analysts are sometimes referred to as chartists because they rely almost exclusively on charts for their analysis.



(Current Chart for Xircom)

Technical analysis is applicable to stocks, indices, commodities, futures or any tradable instrument where the price is influenced by the forces of supply and demand. Price refers to any combination of the open, high, low or close for a given security over a specific timeframe. The time frame can be based on intraday (tick, 5-minute, 15-minute or hourly), daily, weekly or monthly price data and last a few hours or many years. In addition, some technical analysts include volume or open interest figures with their study of price action.

The Basis of Technical Analysis

At the turn of the century, the Dow Theory laid the foundations for what was later to become modern technical analysis. Dow Theory was not presented as one complete amalgamation, but rather pieced together from the writings of Charles Dow over several years. Of the many theorems put forth by Dow, three stand out:

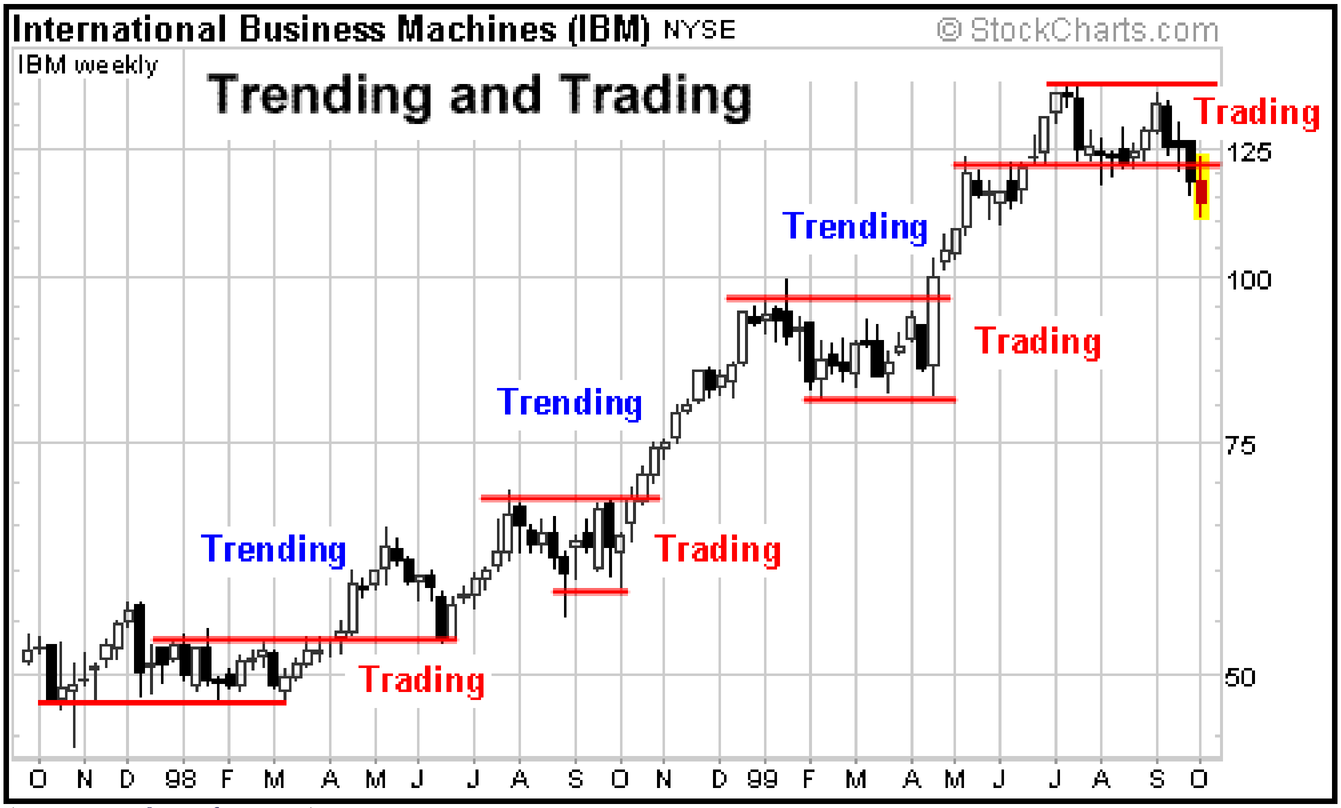
- Price Discounts Everything
- Price Movements are not Totally Random
- What is More Important than Why

Price Discounts Everything: This theorem is similar to the strong and semi-strong forms of market efficiency. Technical analysts believe that the current price fully reflects all information. Because all information is already reflected in the price, it represents the fair value and should form the basis for analysis. After all, the market price reflects the sum knowledge of all participants, including traders, investors, portfolio managers, buy-side analysts, sell-side analysts, market strategist, technical analysts, fundamental analysts and many others. It would be folly to disagree with the price set by such an impressive array of people with impeccable credentials. Technical analysis utilizes the information captured by the price to interpret what the market is saying with the purpose of forming a view on the future.

Prices Movements are not Totally Random: Most technicians agree that prices trend. However, most technicians also acknowledge that there are periods when prices do not trend. If prices were always random, it would be extremely difficult to make money using technical analysis. In his book, Schwager on Futures: Technical Analysis, Jack Schwager states:

> "One way of viewing it is that markets may witness extended periods of random fluctuation, interspersed with shorter periods of nonrandom behavior. The goal of the

chartist is to identify those periods (i.e. major trends)."



(Current Chart for IBM)

A technician believes that it is possible to identify a trend, invest or trade based on the trend and make money as the trend unfolds. Because technical analysis can be applied to many different timeframes, it is possible to spot both short-term and long-term trends. The IBM chart illustrates Schwager's view on the nature of the trend. The broad trend is up, but it is also interspersed with trading ranges. In between the trading ranges are smaller uptrends within the larger uptrend. The uptrend is renewed when the stock breaks above the trading range. A downtrend begins when the stock breaks below the low of the previous trading range.

What is more Important than Why: iIn his book, The Psychology of Technical Analysis, Tony Plummer paraphrases Oscar Wilde by stating, "A technical analyst knows the price of everything, but the value of nothing". Technicians, as technical analysts are called, are only concerned with two things:

1. What is the current price?
2. What is the history of the price movement?

The price is the end result of the battle between the forces of supply and demand for the company's stock. The objective of analysis is to forecast the direction of the future price. By focusing on price and only price, technical analysis represents a direct approach. Fundamentalists are concerned with why the price is what it is. For technicians, the why portion of the equation is too broad and many times the fundamental reasons given are highly suspect. Technicians believe it is best to concentrate on what and never mind why. Why did the price go up? It is simple, more buyers (demand) than sellers (supply). After all, the value of any asset is only what someone is willing to pay for it. Who needs to know why?

General Steps to Technical Evaluation

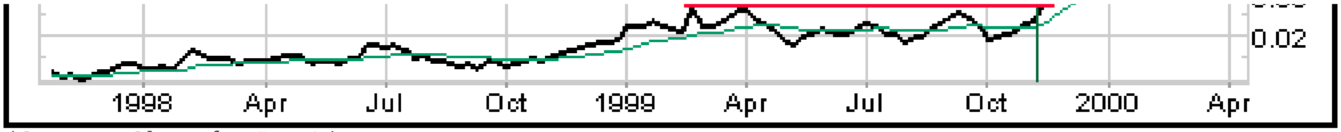
Many technicians employ a top-down approach that begins with broad-based macro analysis. The larger parts are then broken down to base the final step on a more focused/micro perspective. Such an analysis might involve three steps:

1. Broad market analysis through the major indices such as the S&P 500, Dow Industrials, Nasdaq and NYSE Composite.
2. Sector analysis to identify the strongest and weakest groups within the broader market.
3. Individual stock analysis to identify the strongest and weakest stocks within select groups.

The beauty of technical analysis lies in its versatility. Because the principles of technical analysis are universally applicable, each of the analysis steps above can be performed using the same theoretical background. You don't need an economics degree to analyze a market index chart. You don't need to be a CPA to analyze a stock chart. Charts are charts. It does not matter if the timeframe is 2 days or 2 years. It does not matter if it is a stock, market index or commodity. The technical principles of support, resistance, trend, trading range and other aspects can be applied to any chart. While this may sound easy, technical analysis is by no means easy. Success requires serious study, dedication and an open mind.

Chart Analysis

Technical analysis can be as complex or as simple as you want it. The example below represents a simplified version. Since we are interested in buying stocks, the focus will be on spotting bullish situations.



(Current Chart for Intuit)

Overall Trend: The first step is to identify the overall trend. This can be accomplished with trendlines, moving averages or peak/trough analysis. As long as the price remains above its uptrend line, selected moving averages or previous lows, the trend will be considered bullish.

Support: Areas of congestion or previous lows below the current price mark support levels. A break below support would be considered bearish.

Resistance: Areas of congestion and previous highs above the current price mark the resistance levels. A break above resistance would be considered bullish.

Momentum: Momentum is usually measured with an oscillator such as MACD. If MACD is above its 9-day EMA (exponential moving average) or positive, then momentum will be considered bullish, or at least improving.

Buying/Selling Pressure: For stocks and indices with volume figures available, an indicator that uses volume is used to measure buying or selling pressure. When Chaikin Money Flow is above zero, buying pressure is dominant. Selling pressure is dominant when it is below zero.

Relative Strength: The price relative is a line formed by dividing the security by a benchmark. For stocks it is usually the price of the stock divided by the S&P 500. The plot of this line over a period of time will tell us if the stock is outperforming (rising) or underperforming (falling) the major index.

The final step is to synthesize the above analysis to ascertain the following:

- Strength of the current trend.
- Maturity or stage of current trend.
- Reward to risk ratio of a new position.
- Potential entry levels for new long position.

Top-Down Technical Analysis

For each segment (market, sector and stock), an investor would analyze long-term and short-term charts to find those that meet specific criteria. Analysis will first consider the market in general, perhaps the S&P 500. If the broader market were considered to be in bullish mode, analysis would proceed to a selection of sector charts. Those sectors that show the most promise would be singled out for individual stock analysis. Once the sector list is narrowed to 3-4 industry groups, individual stock selection can begin. With a selection of 10-20 stock charts from each industry, a selection of 3-4 of the most promising stocks in each group can be made. How many stocks or industry groups make the final cut will depend on the strictness of the criteria set forth. Under this scenario, we would be left with 9-12 stocks from which to choose. These stocks could even be broken down further to find the 3-4 of the strongest of the strong.

Written by Arthur Hill

Part 1 | Part 2

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