A LOOK AT DIFFERENT MEASURES OF SHORT-TERM INFLUENCES ON PRICES

By John Bajkowski

While the long-term investor with an open position can treat short-term supply and demand disruptions as market noise, the profitability of a given trade can be strongly influenced by short-term supply and demand imbalances.

Over the long term, company fundamentals dictate the price people are willing to pay to purchase a stock or demand to part with their holdings. However, in the short run, supply and demand disruptions can have a significant impact on stock prices and help to push prices out of whack.

The principles of supply and demand drive stock prices. Prices adjust to match buyers and sellers. Any time more shares are put up for sale than purchase, the price will drop, bringing more investors to the table to buy at a more appealing price. This article examines some of the more prominent measures of short-term sentiment and supply and demand influences.

TRACKING TRADES

Traders have long studied the ticker in an attempt to measure the sentiment of market participants and identify possible stock price trends. The ticker indicates the price and quantity of every trade, thereby providing the investor with a map of how a stock's price has traveled.

This historical record is not to be confused with a real-time quote. A current price quote provides the price of buying a security—the ask—and the price at which you can sell the security—the bid. The difference between the market's best offer to buy a stock (bid) and the best offer to sell the same stock (ask) is known as the inside spread. The price and quantity of each tick on the ticker does not directly indicate if the trade represented the purchase at the asked price or a sale at the bid price. However, if the trade price was higher than the previous trade, it is an uptick. Downticks are trades executed at a price below the previous trade.

Given the high volume of transactions today it is simply not practical to directly study every tick (trade) going across the wire. Fortunately, software programs and Web services allow investors to analyze tick-by-tick data.

THE TICK

One of the most sensitive measures of overall market activity, minute-to-minute, is the tick. The tick is calculated continuously and is the number of stocks trading higher than their previous trade less the number of stocks trading lower than the previous trade. A positive tick—more stocks are trading higher than lower from their previous trade—is bullish, and a negative tick—more stocks are trading lower than higher from their previous—is bearish. A large plus tick (greater than 200) indicates that the short-term direction of the market is up, and a large minus tick (less than a negative 200) is an indication that the market is trending down.

Since the tick is computed continuously, it is very changeable, giving up-to-the-minute readings on the market mood. The market averages may be up, but the tick can turn negative, indicating that the trading trend has reversed. The Wall Street Journal reports the closing tick for each of the exchanges, providing some insight into the ending market sentiment. Many Web sites providing quotes will also allow you to get the current NYSE tick. $TICK is

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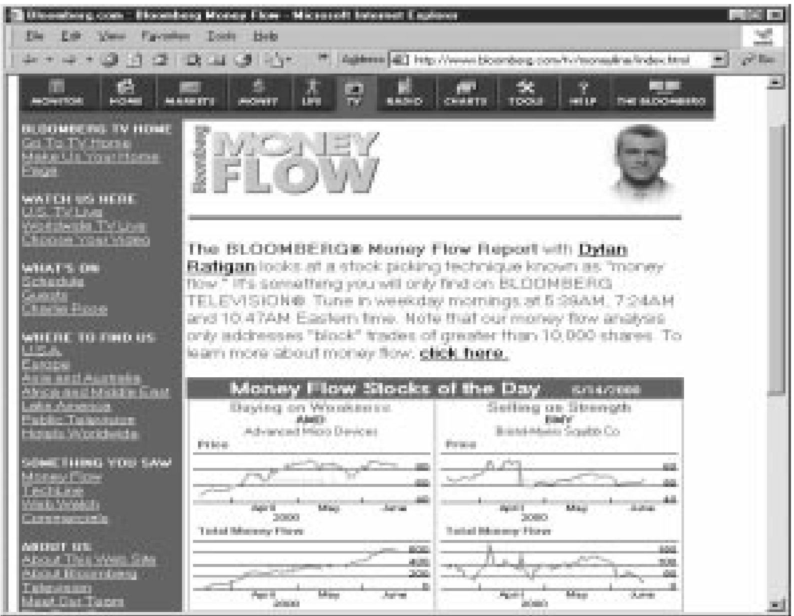
FIGURE 1. TRACKING MONEY FLOW AT BLOOMBERG.COM



the ticker symbol for the tick on the AAII Web site.

MONEY FLOW

Money flow analysis closely examines every trade in an attempt to measure the amount of money buying a stock compared to the amount of money selling a stock. Money flow considers both the volume and tick of each trade. An uptick on 10,000 shares is considered more bullish than an uptick on 100 shares. Money flow considers the net value of the money moving into or out of a stock.

If a stock's last trade was at $50.00 and the next trade consists of 1,000 shares at an uptick to $50.25, then the trade represents positive money flow. If the next trade is 100 shares at $49.75, it is considered negative money flow because it traded on a downtick. On the surface the stock price is down a quarter point from the original $50, but it has actually experienced positive money flow because 1,000 shares were purchased on an uptick while only 100 shares were sold on a downtick. There has been net buying of 900 shares (1,000 – 100). The money flow is calculated by taking the cumulative sum of price times volume on upticks minus price times volume on downticks. Normally, zero (unchanged) ticks are ignored. For our example, the money flow is calculated as (1,000 × 50.25) – (100 × 49.75), which is equal to $45,275.

Theoretically, as a security is dropping in price, money should be flowing out of it. However, in the short term it is possible for price action to diverge from the money flow. For example, large blocks of a stock may be purchased on a series of upticks, while small blocks may be purchased on a larger number of downticks. The price chart may show a downtrend, but money flow has been positive. Traders look for divergence between price charts and money flow as an indicator of a possible price reversal. It is important to look at money flow on a relative basis and compare its current level to historical norms. One should also look for past patterns of stock price tracking the money flow. If stock price tends not to track money flow for a given stock, then the stock is not a candidate for money flow analysis.

Bloomberg is a well known source for money flow analysis. Every day it reports on significant divergence between price activity and money flow. Stocks featured in "Buying on Weakness" have positive money flow and falling prices, while "Selling on Strength" stocks have negative money flow and rising prices. You can find this information at www.bloomberg.com/tv/moneyline/index.html. Figure 1 highlights the positive money flow of Advanced Micro Devices (AMD) through mid-June, while its stock price was showing some recent weakness. The site provides a historical record of the highlighted stocks along with their performance.

The Web service BigCharts (www.bigcharts.com) allows users to plot money flow indications for any stock, but simplifies its analysis to look at trading day by day. It does this by assuming that when a stock closes higher than its open, all volume associated with that trading period results from buyers. It further assumes that when a stock closes lower than its open, all volume associated with that trading period results from sellers. Although these assumptions are overly simplistic, the charts provide an overall indication of buying and selling pressure on a stock (Figure 2).

BLOCK TRADES

Large block trades help to indicate the participation of large institutions in the market. These are single trades of a stock consisting of at least 10,000 shares. Block trades are tracked for the overall market or a given exchange, looking at the number of block trades on up ticks, down ticks, and without change. This information is an indication of whether the buyer or seller was more eager to complete the trade. An increasing number of block trades with upticks indicates an increasing interest in the market by the institutional marketplace and

FIGURE 2. BUYING & SELLING PRESSURE AT BIGCHARTS.COM

tends to track a rising market. The Stock Market Laboratory within Barron's does a nice job of presenting this data.

The Thomson I-Watch Web site (www.thomsoninvest.net/iwatch) provides a number of useful tools to track both institutional and retail trades. Thomson tracks messages sent between institutional investors and broker/dealers indicating the intention to buy or sell securities. Total buy and sell figures are provided for both non-binding messages and more explicit advertising of big block buy and sell opportunities with the exact price and size of a proposed trade.

Reports are available for the market as a whole, broad and narrow industry segments, and individual companies. Graphical reports provide quick clues on major money flows during the course of a trading day.

OVERHANG

The Thomson site provides a short commentary on stocks showing strong institutional buying or selling. Overhang describes the intention to sell a large number of shares for a given stock. Patient sellers may exhibit a willingness to wait for slightly better prices or upward movement from buyers in order to avoid pushing down the stock price too much. This overhang creates a resistance for price uptrends, even if company fundamentals are positive. Traders look for repeated large block transactions on the ask side of a trade as a sign that institutional investors are using rallies as selling opportunities. The supply must be absorbed before significant upward price movements are possible.

The significance of a given overhang varies from stock to stock. The greater the normal trading activity at a given company, the greater its ability to absorb a large overhang in a reasonable amount of time without a strong price decline.

SHORT INTEREST

While most investors buy a stock with the hope of selling it for a profit at a later date, some investors reverse the process. Short sellers hope to profit from stock price declines by borrowing stock, selling it first and then buying the stock later at a lower price, and returning the borrowed shares. Brokerage firms have the ability to lend out shares held by the broker in margin accounts of other customers.

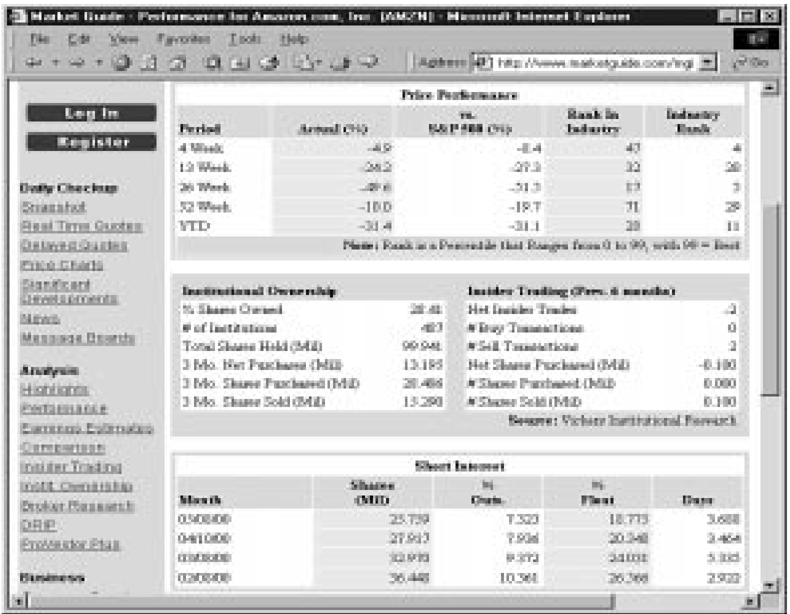
The traditional process of buying first and selling later is referred to as going "long." A "long" position indicates a belief that the stock will increase in value. When you sell a stock hoping to buy it back later at a lower price, you are "shorting" the stock. When you buy back the shares you "cover your short position."

Short sellers represent some of the biggest risk-takers in the market. When you buy a stock long, your loss is limited to the original investment. Even if the company goes bankrupt and shares become worthless you cannot lose more than what you paid for the shares. The potential gain, however, is infinite. The stock price can rise to many times the original purchase price.

With a short trade the risk-return profile is reversed. If the stock price drops to near zero, a short trader can reverse the short position (cover the short) and will have gained nearly 100% on the original investment. However, if the share price goes up, the loss can conceivably be infinite. For example, if you sell short 100 shares of a $100 stock, your broker will credit $10,000 to your margin account. (Note that most individual investors do not receive interest income on proceeds of the short sale. The free use of this money is a profit opportunity for the broker.) If the stock price drops to $50, the short seller can cover the position with a buy order for 100 shares and pocket a $5,000 gain. However, if the stock price goes up to $200, the short seller will need to pony up $10,000 to add to the $10,000 from the short proceeds to buy 100 shares at $200 dollars and cover the short position.

Beyond the risk of an unlimited loss, short sellers may be caught in a short squeeze if a stock price increases strongly. Brokerage firms

FIGURE 3. SHORT INTEREST HISTORY AS GIVEN AT MARKETGUIDE.COM



reserve the right to call the borrowed security back at any time. If a large number of short sellers are forced to cover their short positions through the purchase of shares, they can actually push the stock price even higher.

Many traders track short sale statistics to measure sentiment for a given stock and gauge the possibility and impact of a short squeeze. Short positions are reported monthly through most stock information services. Market Guide provides a four-month short interest history with its company performance report on its Web site at www.marketguide.com (see Figure 3). Short interest is the number of shares short, but not yet covered. The figure is normally compared to the average daily volume and shares outstanding to gauge the significance of the figure from company to company.

Amazon.com had 25.759 million shares sold short as of May 8, 2000. This represent a significant decline from 36.448 million shares on February 8, 2000. Amazon has 351.77 million shares outstanding, so 7.3% of its outstanding shares were short as of May (25.759 ÷ 351.77). So even though both the stock price and short interest have declined since February, many investors still think that the share price is likely to fall.

The short interest ratio relates the short interest to the average daily volume. Dividing short interest by the average daily volume indicates the number of days it would take to cover the short interest if trading continued at the average daily volume for the month. High ratios indicate strong negative sentiment against the stock. Amazon's short interest ratio for May was 3.688 days. This figure is up from its February figure of 2.922, indicating that trading volume has slowed down even more strongly than the decrease in the short interest. However, when working with the short interest ratio, it is important to take seasonal trading patterns into account. Volume often slows down during the summer months and peaks around the year-end.

Short interest is helpful in gauging market sentiment toward a particular stock. Many traders use it as a contrarian indicator, treating high short levels as an overly pessimistic view. In whatever way the short-interest data is used, you should keep in mind the potential price uptick from a short squeeze and the vocal attempts by short sellers to highlight company weaknesses to push down a company's stock price. Message boards are full of short sellers actively talking down stocks. Trading-Ideas.com (www.trading-ideas.com) presents lists of stocks with the largest short-interest ratios broken down by exchange.

CONCLUSION

While the long-term investor with an open position can treat short-term supply and demand disruptions as market noise, the profitability of a given trade can be strongly influenced by a short-term supply and demand imbalance. This can have significant impact on stock prices and strongly influence the profitability of given trade. As the old Wall Street adage goes: Don't fight the tape. ◆