IPREO

Special Report: High Frequency Trading

Gauging the impact on your stock

March 2010

It would be difficult to name a market issue that is garnering more attention than what is now commonly referred to as "high frequency trading" (HFT). The financial media, politicians, regulators and market participants are debating the pros and cons of this complex and not fully-understood practice. Proponents of HFT point to investments in technology, liquidity enhancement and transparent price discovery. HFT critics, on the other hand, see the practice as nothing more than market manipulation by unregulated traders that creates volatility and increases systemic risk with no benefit to investors. Terms such as "flash orders," "co-location," "internalization" and "predatory algos" have entered into the investor relations lexicon seemingly overnight. The attention that high frequency trading has received through the large number of articles and white papers addressing the issue have given us a better understanding of its mechanics, the players involved, and the market structure that allowed it to flourish. However, all of the written and verbal pontifications on this topic don't address the questions that most investor relations professionals have in regards to high frequency trading: 1) Is it prevalent in the trading of my stock?; and 2) If so, how is it impacting the ownership of my stock?

The answers to these two questions can be found in the well established process of trade settlement and a relatively new measurement of quarterly activity by long-term institutional investors that we at Ipreo call "Institutional Capture Rate".

Institutional Capture Rate (ICR)

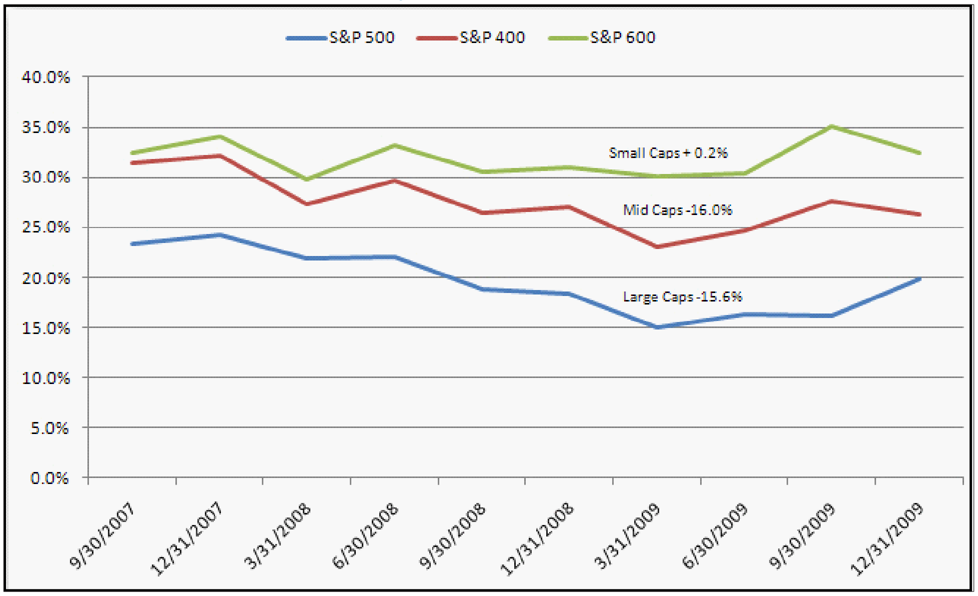
Ipreo has developed the "Institutional Capture Rate" (ICR) metric to approximate the total amount of trading in a security that is driven by institutional activity. ICR attempts to measure the percentage of trading volume in a security that includes a long-term institutional investor on either side of the trade. ICR is calculated by dividing the sum of the total quarterly institutional share increases and the absolute value of total quarterly institutional share decreases by total quarterly trading volume of the security. Thus, the ICR "captures" the percentage of trading volume that is the result of long-term institutional movements with the balance being attributable to HFT and other fast money investors. In essence, the ICR is also an inverse indicator of high frequency trading. A lower ICR percentage indicates less trading volume coming from long-term institutional investors and more trading volume emanating from short-term traders, including high frequency outfits. For example, an ICR of 10% indicates that roughly 90% of that stock's trading volume is bought and sold within a three month period. The ICR, however, is not meant to be an exact measure; but when viewed over time and in context with your peer group, it is worthwhile indicator of trends and will help you understand the dynamics of trading in your stock.

A Broad Market View of ICR

Ipreo ran ICR percentages on a quarterly basis for all U.S. securities, grouped by their membership in the S&P 500 Index, S&P 400 Mid Cap Index, and S&P 600 Small Cap Index in an effort to gauge the impact of HFT on various market capitalization classifications.

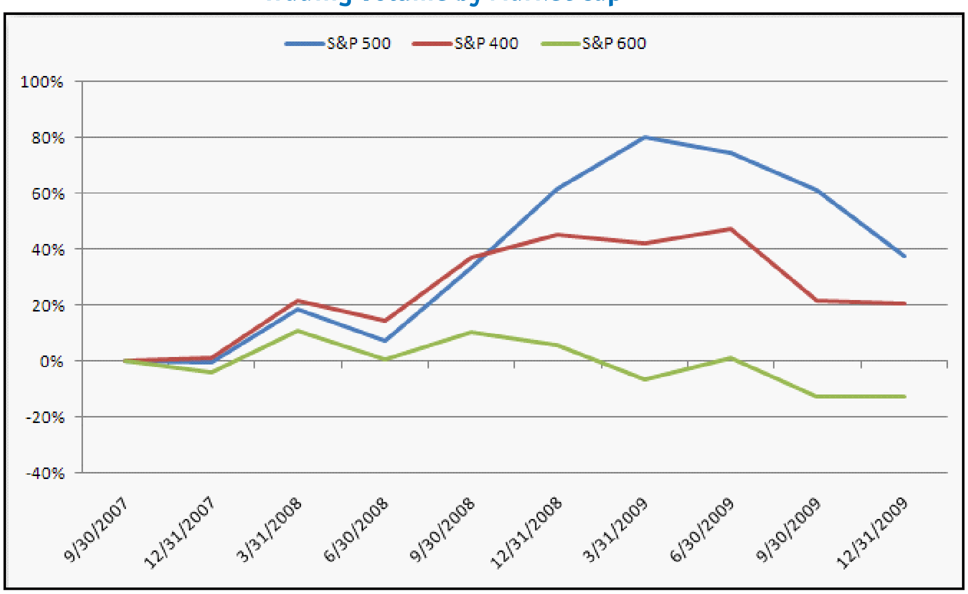
As the chart below illustrates, ICR has been on a noteworthy decline across all market caps since September 2007, particularly with large cap stocks. Since September 2007, the ICR for the S&P 500 has fallen from 24% to 20% as of December 2009, a 17% decline. The low point for the S&P 500 came in the first quarter of 2009, when volatility and short-term trading amidst the depths of the global financial crisis came together as powerful market forces bringing the ICR down to just 15%. Over the same period, the ICR for mid caps declined 16%, while the ICR for small caps basically remained flat. Small cap stocks are the least impacted by high frequency trading with an overall ICR of 32%.

ICR by Market Cap



The lower ICRs across large and small caps can be attributed to the growing presence of HFT activity. The chart below tracks quarterly trading volume growth by market cap since September 2007. From September 2007 through March 2009, trading volume in large caps increased 80%, while volume in mid caps increased 45% and small cap volume moved lower. Since March 2009, trading volume has declined across the board along with the volatility of the market. Lower volatility provides less opportunity for HFT activity.

Trading Volume by Market Cap



The case that HFT is impacting large-cap stocks to a greater degree than mid-and small-cap stocks is clear. Large caps have the lowest ICR score, have experienced the steepest decline in ICR percentage and have seen the largest increase in trading volume since September 2007. Increased liquidity is often touted as the primary benefit of the presence of high frequency traders in the marketplace. While that is true for mid- and large-cap stocks, the segment that needs increased liquidity the most, small caps, do not seem to be benefitting from today's market structure.

Always Settle

The second question that IR professionals need to get answered is how high frequency trading is impacting the ownership of their stocks. Fundamentally, the primary mission of a stock surveillance firm—to identify changes to your shareholder base on an ongoing basis—remains firmly in place. One of the biggest changes in the equity marketplace brought on by Regulation NMS and the growth in high frequency trading is the decline in the average trade size and lower incidence of block trades. Institutions that formerly showed their hand with 1 million-share block trades can now easily and anonymously execute the same move with 10,000 100-share trades. Gone are the days of using block volume as a proxy for institutional activity. Watching the tape will no longer give you a strong signal as to what type of investor—institution, algo trader, hedge fund or retail investor—is driving volume. What hasn't changed, however, is the way shares settle three days after a trade (T+3). Analysis of the settlement records provided by the Depository Trust Company (DTC) remains the bedrock of effective surveillance. Here's a straightforward example of how settlement records capture the trading in the market and aggregates all of those small transactions into something bigger.

Mutual Fund A is set on building a 1 million-share position in your stock, which has ample liquidity. Mutual Fund A's buying takes place in the market over a period of two days. The transactions are handled in a variety of venues and the largest share amount of any one single transaction is 500 shares. Monday morning arrives. Your surveillance analyst settles down at her desk with a cup of coffee and begins the DTC settlement analysis process. There it is. On Thursday, 600,000 shares moved into The Bank of New York Mellon's DTC position followed by another 400,000 shares on Friday. It is now on the analyst to identify the buyer!

In T+3, those small transactions of 100 or 200 shares, almost invisible on the tape, are now showing themselves as a significant purchase by an institutional investor. Settlement tells us the story.

Of course, the same volume patterns that point us toward identifying our new Mutual Fund buyer will not be very different than the volume patterns left by the HFT firms establishing and divesting positions within the same trading day. The key to understanding the difference in volume is once again through the settlement process. If high frequency trading is prevalent within a certain day, the number of shares that we see settle amongst DTC participants will represent a smaller percentage of the trading day's volume than we would see if longer term investors were involved.

Conclusion

There is not much that any of us can do to impact the direction of today's market structure. While "flash orders" may soon be a thing of the past, "dark pools" and other private platforms will be competing and collaborating with the major exchanges in a pitched competition to gain trading volume market share. In this environment, technology-driven HFT shops will continue to grow their presence in this mix. The buy-side has quickly adjusted to this new paradigm by taking advantage of every channel available to them when building and divesting positions. For investor relations professionals, it is important to understand your own stock and how it fits into the high frequency trading world. ICR is one measure that you can utilize to gain this understanding, while stock surveillance remains the most effective route to continually track your most important constituency—long-term institutional investors.

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