# **Imbalancing Acts**

CLOSING IMBALANCES CAN PROVIDE USEFUL INFORMATION

By Dennis Dick, CFA

If you were watching the trading action in Johnson & Johnson Inc. near the close on 21 March 2014, you would have noticed the stock had a significant run-up into the 4:00 p.m. EST close. But shortly after 4:00 p.m., the stock continued to move higher, gapping up over a dollar on the NYSE closing print. What happened to cause such a large spike in the stock price at the end of the day?

The cause of the large spike in price was a large closing buy imbalance on the NYSE.

### WHAT CAUSES IMBALANCES?

To understand the impact of imbalances, it helps to understand the underlying exchange mechanisms. Throughout the day, the designated market maker (DMM) on the

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Such situations can create opportunities for vigilant, knowledgeable traders.

Because information about imbalances has potential value, various providers now offer tracking services.

floor of the NYSE continuously gathers all the MOC (market on close) and LOC (limit on close) orders for the stocks on their post.

MOC orders are orders that are to be executed on the NYSE closing print regardless of price. LOC orders are to be executed on the NYSE closing print if the closing price is at or better than the limit price designated in the order—making them marketable on the closing print. These orders need to be sub-

mitted by 3:45 p.m. EST (15 minutes before the close). After this time, these orders cannot be cancelled.

At 3:45, the regulatory imbalance is publicly disseminated to the market, showing the disparity between the MOC and marketable LOC orders to buy and the MOC and marketable LOC orders to sell on each individual stock. For example, if stock XYZ has 85,000 shares to buy MOC and 15,000 shares to sell MOC, the posted imbalance would be 70,000 shares to buy on that stock.

Some days, these buy and sell imbalances can be very large and can have a significant impact on the closing price of the stock. A large buy imbalance may push the stock price higher, and a large sell imbalance may press the stock price lower.

In the JNJ example already described, the buy imbalance that pushed the stock price up over a dollar was more than 6 million shares, a very significant amount considering the average volume in JNJ for the entire day is usually under 10 million shares.

#### **OFFSETTING INTEREST**

The reason for publicly disseminating imbalance data at 3:45 is to attract offsetting interest. Unlike regular MOC or LOC orders, any MOC or LOC orders offsetting the regulatory imbalance can be sent until the 4:00 p.m. close. For example, if IBM has a buy imbalance of 100,000 shares, there might be an institutional trader that is looking to sell some stock. In some cases, they might send an MOC sell order for 100,000 shares, which would completely offset the 100,000-share buy imbalance as the MOC buy order and MOC sell order are then paired off.

In other cases, there might not be enough offsetting interest to pair off the buy orders, and this situation can lead to a significant move in the price of the stock on the closing print.

"The imbalances can offer a good opportunity to get into a position at a really good price, but you need to have your ducks in a row. I make sure that there is no news on the stock or in the sector," says Greg Burnett, a 22-year trading veteran on the floor of the Pacific Stock Exchange, now a retail trader, who has traded these imbalances for years. "I make sure the technicals are lining up, and I keep an eye on the overall market. If everything looks good, then I may look to fade the closing print." He uses this approach because moves driven by order flow and not fundamental information are often retraced the following day. In the case of JNJ, such a trade would have worked out well for any trader selling short the closing print because the stock opened down a dollar the next morning.

It is not always so simple, however. "What is displayed in the imbalance feed does not always give the full picture because it doesn't include floor broker interest in it and it doesn't include DMM interest in it," says Jonathan Corpina, senior managing partner at Meridian Equity Partners, who works institutional orders from the NYSE floor.

In some cases, the designated market maker might sell some stock from his own account on the closing print to help offset the imbalance. In other cases, a floor broker might step in at the last minute.

"There is a human interaction component in the price-discovery process," says Corpina. "A floor broker can verbally express their interest; they don't always have to enter it electronically into the feed. For example, the imbalance feed might be showing 200,000 to buy, and everyone thinks it is going to close up, but I'm standing in the crowd and I've got 300,000 to sell. As the close approaches, I can say to the DMM, 'Hey, how's it looking?' The DMM says, 'It's looking up 60 cents.' So I say, 'Great, I've got 300,000 to sell,' and the stock ends up closing down."

Traders relying solely on the data from the imbalance feed would be missing this information. "Crowd interest changes everything," says Corpina. "The most reliable information still comes from a floor broker because they can read a seller in the crowd."

Floor brokers also have some special tools at their disposal. One of these tools is the D-quote, which is a discretionary quote order. Unlike normal MOC or LOC orders, which have to be submitted by 3:45 (unless they are offsetting the regulatory imbalance), these D-quotes can be submitted up until 3:59:50. "These orders can also be cancelled and modified, which gives the floor trader much more flexibility," says Corpina. D-quote data do not show up in the imbalance feed until 3:55 p.m., which can cause a significant change in the imbalance data at this time.

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#### **EARLY LOOK**

Floor brokers have always been able to get an early look at the imbalance data by speaking with the DMMs on the floor.

Joe Benanti, managing director at Rosenblatt Securities, recalls his days from trading on the NYSE floor. "In the past, you'd have a customer interested in the imbalance information on a specific stock," he explains. "So we'd walk out to the post to ask the specialist (now known as the designated market maker) and then give that information back to the customer. Today, it's a lot different; the floor broker handhelds receive this information directly."

And with that information, Rosenblatt has created a product for its customers called the Rosenblatt Imbalance Tracker, which gives an early look at some of the biggest names on the NYSE.

Beginning as early as 2:30 p.m., the Imbalance Tracker begins to populate with an early dissemination of NYSE imbalances for the 87 stocks in the S&P 100 and a few other selected issues. "Our NYSE floor trading team manually inputs

and updates the data until 3:45 p.m., when the electronic feed is disseminated from the floor," says Benanti.

Gordon Charlop, managing director and partner at Rosenblatt Securities, helped to create the Imbalance Tracker. According to him, a number of different types of market participants are tracking imbalances for a variety of different reasons.

"The close is such an interesting liquidity event because market

## KEEP GOING

"Frequency Jamming: Can Investors Outsmart High-Frequency Traders?" *CFA Institute Magazine* (September/October 2014) [www.cfapubs.org]

"Pipe Dream: Access to Multiple Platforms via One Integrated Pipe Comes with Tradeoffs," CFA Institute Magazine (November/December 2014) [www.cfapubs.org]

"How Effective Is the Low-Volatility Anomaly in Trading?" Enterprising Investor (8 May 2014) [blogs.cfainstitute.org/investor]

participants face it from so many different angles," he says. "You've got prop traders trading into it. You've got volatility guys that are looking for aberrational pricing. You've got traders trading against option positions, institutional traders doing VWAP and trying to figure out how much to slice into that last print."

#### AGGREGATE DATA

Because imbalances can be an indicator of overall direction, Rosenblatt's Imbalance Tracker also aggregates the data and breaks it up into different sectors to give the user an overall feel for the direction of the market or specific sectors.

Other products also aggregate the data. A product called the Market Imbalance Meter (MIM) starts aggregating the data an hour before the close. "The meter aggregates the imbalance data from 250 NYSE stocks that give a good representation of the overall market," says Danny Riley, a 37-year floor veteran and president of Mr TopStep, LLC, which produces the MIM. According to him, users include hedge funds, proprietary trading firms, and investment banks. The data can help with decisions about the market direction going into the close. Riley offers an example in which the imbalance to buy is 200 million to buy at 3:00 p.m., 300 million at 3:15 pm, and 500 million at 3:30 p.m. With such a trend, he says, "there is a good chance that we are going to have a strong close."

Another aggregator is Hamzei Analytics. "Any number over \$500 million is significant and potentially market moving," says Fari Hamzei, founder of Hamzei Analytics and also a quantitative index futures trader. "If I were short S&P futures, I may look to cover if there is a significant amount of orders to buy on the close."

But Hamzei considers other factors as well, including the day of the week: "Is it a Friday before a holiday weekend? Is it an options expiration? Is there an index rebalance?" On these days, there are a lot more fundamental traders who are very active on the close.

"The imbalance data is big on quarterly rebalances," says Riley. Index traders need to buy the stocks that are moving into the index and sell the stocks that are coming out of the index. One of the most important days is the day of "the Russell Rebalance," which happens on the last Friday in June. The large numbers of index traders can really push the closing prices around. "Things have to happen on a rebalance, it's just a matter of when," says Corpina.

What is clear is that closing orders can sometimes have a significant impact on the price of the stock. Thus, watching the closing imbalance feed may provide important information for a variety of participants, whether an institutional trader, a prop trader, or even a part-time retail trader.

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