

Direct Access and Why It Is Important

When I started trading on the floor of the Chicago Mercantile Exchange (CME) in the early 1980s, I was advised by the established traders that the exchange required all new members to stand in the center of the trading pit. I was told that it was the best place for me to work on my trading techniques and the best vantage point from which to watch the successful traders operate. This, of course, was nonsense—the exchange had no such rules and I was free to stand wherever I liked—but I did what I was told, hoping that it would ease my acceptance into the group. Still, I had an uneasy sort of feeling; like a victim on a bad episode of *The Twilight Zone*. Had I somehow been transported back in time to high school where the seniors get to push around the new students? I wasn't entirely sure of the agenda, but I was certain that those "advising" me on this matter had little interest in my welfare or career advancement. I was right about that.

Trading in the center of the pit was like being told by your co-workers, after the entire box of donuts is eaten, to "help yourself to the holes". After only a few days of screaming bids and offers at the traders on the higher steps and with little to show for it but a raw throat, sweat-stained trading jacket and a handful of unprofitable trades, I was almost ready to call it quits. I saw how jealously the top-step traders allocated the most lucrative customer orders for themselves and knew that if I didn't figure out a way to get up there, my career as a trader would be notable primarily for its brevity. Whatever camaraderie I felt with the traders who were now ignoring me or desire I had to please them had been replaced by feelings best left unexplored. I was exhausted, my throat felt like I had swallowed a pound of broken glass and most of all I was hungry. I wanted my donuts.

In fairness, there was a practical reason for this caste-like discrimination. It was the veterans who were best equipped to handle the crush of orders executed on the top steps of the pit. They were better capitalized and knew how to provide the liquidity that the customers demanded. Granting a novice trader access might actually infringe on the ability of

the more experienced traders to accommodate the order flow and create liquidity. While the needs of the marketplace were certainly met by such an approach, it was hardly altruism that served as the foundation of the pecking order. Generally, the top step traders cared little for the welfare of the customer. What they did care about, desperately, was their own physical proximity to the orders those customers were sending to the pit. They knew that the closer one was situated to order flow, the closer one was to the best trading opportunities.

Meanwhile, in the center of the pit, I tried to make the best of a bad situation. Occasionally, a few trades filtered down, allowing me to join the fray with the more active traders on the steps above. Each day I made a few more trades than the day before and through hard work, patience and careful risk management, I began to see the equity in my account grow and with it my self-confidence. One day, I came to work an hour early and planted myself on the top step of the pit and waited for the rest of the traders to show up. As you can imagine, they had no intention of welcoming me into their neighborhood. In fact, they did everything they could to force me out, from calling me names to elbowing me in the head, ribs and kidneys. Whenever it got busy and we were pressed tightly together, one trader took to “accidentally” writing on my collar with his pen, which happened to be an indelible laundry marker. I took it all: the nasty language, the sharp elbows and even the ruined shirts, because from my new top-step location, I began to make some real money. I figured my ego was strong enough to take the insults, my elbows were as sharp as anyone else’s and, now, I could afford to buy all the new shirts I needed. At some point, the other traders stopped trying to intimidate me. To be sure, each one had followed a similar course to their respective positions in the pit and knew that I had earned the right to my upward mobility. As my volume and stature in the pit grew, I realized I could have whole boxes of donuts if I wanted and that I’d never be left with the holes again. Before long, I was counseling new traders on the importance of learning how to trade in the center of the pit; although as some moved up over time I spared them the verbal and physical abuse. The point of this story is at the heart of

what you will learn throughout this book: *a trader will always be more successful with direct access to order flow.*

Defining Direct Access

It's important to define direct access and it is interesting to note that the definition is applicable for both electronic and non-electronic markets:

Direct access is the ability to participate on the current bid and offer with other market participants and to be able to see and have access to the order book and other useful market information.

Probably the most profound change that technology will bring to the futures markets is that direct electronic access will soon be available (and in some markets is already available) to anyone who is willing to pursue it. The cost of achieving direct electronic access is far lower than the cost of buying a seat on an exchange and then paying dues while trying to establish a physical presence in the pit. Also, direct electronic access is *better* direct access; it is available to every market participant from the instant that they have logged on to trade. In the pit, there is always a "best spot"; it's the area in which the majority of the customer orders are executed and, of course, can only accommodate a finite number of traders. In an electronic marketplace, by contrast, there are an infinite number of best spots. More specifically, if we define every PC with direct access as a spot, we can say that every market participant is in an equally good spot. This is an extraordinary leap forward from the days when I fought for a top step position on the floor of the CME. It means—for the first time in the history of the futures exchanges—that everyone can profit from direct access to the order flow, without ever having to throw an elbow into another trader's head.

Types of Direct Access

Direct access—broadly defined—encompasses different types of technology and connectivity. One can, for instance, obtain direct access by connecting directly to the

exchanges and their electronic platforms. This type of connectivity is indispensable to those who want to trade the market actively. It is common to find this type of access in professional trading rooms. On the other end of the spectrum, one can log onto the website of a broker that is itself connected to various exchanges. While this is a form of direct access, it is actually direct access to *the broker rather than to the marketplace*. This is an important distinction. By allowing the broker to act as an intermediary, the electronic trading process slows down. It is quite similar to the difference experienced currently in the open outcry system between sending an order directly to the trading floor and “flashing” it into the pit—traditionally the quickest way for a customer to enter an order into the market—or calling a broker in an office who records the order and then calls the trading floor to have it flashed into the pit. The basic principle is the same; intermediaries and intermediate steps *always* slow the trading process and ultimately add to the cost of making a trade.

That does not necessarily mean the faster approach is the only acceptable method or even that it is better for every trader. In order to know which approach is better suited for you, it is necessary to determine what type of electronic trader you hope to become; what your expectations are and how much of a financial commitment you are willing to make to technology. Generally the more active one is, in terms of numbers of transactions and total volume, the more critical it becomes to trade using the fastest, most direct access to the market. To the extent that one is not so active, it may be less imperative to seek out and pay a premium for the most direct access.

Direct Access and the NASDAQ Electronic Market

Direct access in the securities industry began, for all practical purposes, in January of 1997, when far-reaching rule changes facilitating direct access to the NASDAQ electronic marketplace went into effect. Prior to that time only broker-dealers and marketmakers could obtain direct access. The rule changes, however, allowed non-market professionals to have direct access to what is known as NASDAQ Level II information for the first time. Immediately,

individuals and groups of electronic day traders in trading rooms across the country took advantage of this new found direct access and began to trade actively, placing their bids and offers on the inside market, just like the broker-dealers and marketmakers.

Initially, the professionals decried this turn of events. Like the established traders I encountered who encouraged me to stay in the center of the pit, broker-dealers and marketmakers were reluctant to share the order flow with these new market participants. But the rule-makers who mandated the changes and the technology providers who created powerful electronic trade matching systems, called electronic communication networks (ECNs), ensured that the effect on the market was immediate and profound.

While it is not the intention of this book to examine in great detail the development of direct access in the securities markets, there are some lessons we in the futures industry can learn from the growth of electronic securities trading. In order to appreciate those lessons we need to understand the technological infrastructure that supports electronic securities trading and how the various market participants communicate with each other when they want to make a trade.

Fragmentation and the Central Limit Order Book

Transactions in stocks listed on the NASDAQ can take place in a number of different ways. Orders can be sent to: the Small Order Execution System (better known as SOES); the SELECTNET system, which allows traders to specifically “preference” or chose a particular market-maker on the Level II system; or an ECN, such as *Island*, *Instinet* or *Redibook*. In order to understand how this works, imagine that every message (e.g., a bid, offer, rejection or an actual transaction) sent on any of these systems is a car on the entrance ramp to a highway trying to merge. If every car/message tries to enter in an orderly way, following a common set of rules, traffic will flow smoothly. But if cars try to enter wherever, whenever and however their drivers wish, with little regard for the other cars on the highway, there will be chaos; or,

in the parlance of the marketplace, *fragmentation*. Each of the millions of SOES, SELECTNET and ECN messages sent during a trading session is like one of those cars trying to speed ahead of the others onto the execution highway, making NASDAQ trading as stressful an experience as being caught in an endless rush hour traffic jam. Because it lacks a *Central Limit Order Book* (CLOB) or, to use our analogy, a place where all cars would head on a single entrance ramp and from which they would return when they wanted to come home, trading is inefficient, unstable and frequently breaks down. Joey Anuff, the author of *Dumb Money: Adventures of a Day Trader* (McGraw Hill, 2000 page 105), tells a story about what it is like to be caught in a NASDAQ traffic jam:

I learned that the mechanism of a trade was almost indecipherably complex...I could hit a posted bid or offer and pay the spread if I wanted to but I could also post bids or offers of my own and let other traders hit me. I could choose between routing my orders to a private ECN like Archipelago or Island, or I could send it to the NASDAQ market makers via SelectNet. It was all a matter of timing. And hand coordination. And something else. Some magic. Some mojo. Time and again my trades were tangled in execution snafus.

One morning I noticed a new issue had debuted. APLN, priced at 14, opened somewhere around 15, dropped to 14 and made a lame run to hair above 16. Getting in was easy. Instinet (an ECN) showed 1000 at 16 1/8 and I took the whole offer. It looked like a good trade and the price moved right up. For a second. Then Instinet came back with 1000 more shares. At 16 1/16. What the hell was I doing here? I made to get out. As I plugged in a sell order at 16, I recalled seeing a warning come over the wire that SelectNet was down. Which was a problem because SelectNet was my best way of selling all 1000 shares to the market maker on the bid at 16. Maybe SelectNet is back up, I reassured myself as I pulled the trigger and entered a world of pain.

The sell order wasn't rejected. It just didn't go anywhere. Somewhere, perhaps on my broker's network, maybe on a NASDAQ server somewhere in New York, my order sat stalled in a frozen queue as I watched APLN dip below 16. My cancel orders went unaccepted. I tried to sell again, but since my last order was still pending the automatic order processing system assumed I was trying to go short. And you can't short an IPO. My new sell orders were rejected. Now APLN was at 15 7/8. Online brokers have backup customer service representatives sitting by the phone for just such emergencies as this. My broker picked up the phone on the second ring. I tried to explain the situation. He promised to check into it and call me back. Five minutes later APLN was at 15 5/8. I called back and got somebody new and tried to explain again. They transferred me to the trading desk and I got disconnected. APLN made a leisurely retreat to 15 3/8. Back on the phone a third person listened to my story and asked me whether I wanted her to sell my position for me. "Well, I'd rather just have the 1000 shares in my account so I can sell them myself", I answered. I was still watching the screen. Hello, 15 1/8. But "barring that", I added smoothly, "yes, I suppose you should sell, sell, SELL!"

Sold at 15 1/16. The price tag for this three minute fiasco: \$1,053 plus commissions.

There are many reasons why NASDAQ does not utilize a CLOB and probably never will. That part of the subject is not particularly relevant to our study. The key point for us to recognize is that *every electronic futures system operates with a CLOB*. As a result, while no electronic system is foolproof, futures platforms tend to be quite stable and far more efficient than that of NASDAQ. Most importantly, trading in a system with a CLOB ensures that all market participants are treated as equals. It is upon this foundation that we can begin to build a formula for trading futures successfully.