

THE SEC'S ASSAULT ON ELECTRONIC TRADING

by Dale A. Oesterle

NEW INFORMATION TECHNOLOGY is bursting through the regulatory framework Congress designed more than six decades ago for the United States's securities trading markets. The signs are everywhere. Alternative computer trading systems continue to proliferate and grow, threatening the dominance of traditional exchanges. And several of the smaller stock exchanges are merging—the National Association of Securities Dealers Automated Quotation System (NASDAQ), the American Stock Exchange (Amex), and the Philadelphia Exchange plan to combine—to effect radical change to more electronic trading. The Chicago Board of Trade (CBOT) has instituted electronic trading in financial futures in direct competition with its historic open outcry trading pits that dates to around 1850.

In this context, the Securities and Exchange Commission (SEC), the federal agency empowered by Congress to regulate and oversee national securities markets, faces an important regulatory challenge. Should the SEC relax restraints on the system, allowing technology and markets to take their natural course, or should it micromanage the new markets? Regrettably and predictably, the SEC is headed on the latter course. That path will not likely lead to a sounder trading system to provide capital for businesses and security and profits for investors. Rather, it could drive trading overseas, still in the electronic reach of American traders but out of reach of U.S. government regulators.

THE IMPORTANCE OF THE MARKET

Modern history shows the importance of stock markets. Many financial instruments such as letters of credit and insurance were developed or formalized in Milan and Florence more than five centuries ago and helped to fuel the Renaissance. The capitals of most great modern powers (e.g., the British and Hapsburg empires) were dominant financial trading markets as well (London, Vienna).

Stock markets consist of buyers and sellers of securities, trading at mutually agreeable prices. Healthy markets have a number of attributes. They are deep, meaning they have many participants. They are liquid, meaning they have substantial trading volume at any one time. They are efficient, meaning that the expenses of trading are minimal. And they are honest, meaning they are free of manipulation and fraud.

In a healthy trading market, firms can raise money to capitalize their businesses at lower cost than in weak or malfunctioning markets. Stock prices act as guides to help optimize the allocation of capital and other investments. Stock markets also offer opportunities for smaller investors to own capital. Today a growing number of individuals hold a growing portion of their wealth in mutual funds and invest in the market to build retirement income. Markets also provide employment for bankers, institutional investors, broker-dealers, accountants, and lawyers—professionals who service the trading markets. Thus securities trading markets are not luxuries or curiosities; they are essential to the success of America's economic system and its global competitiveness. The stakes are high then when the SEC makes major regulatory moves.

THE STRUCTURE OF MARKETS

In the past, America's stock markets have consisted of three national exchanges, the New York Stock Exchange (NYSE), and the much smaller American Stock Exchange (Amex), and the Chicago Board Options Exchange (CBOE), which trades primarily stock options. Only members licensed by the exchanges can trade directly on those exchanges. Members tend to be large investment banks, brokerage houses, specialist firms, independent brokers, and even a few companies. Some financial institutions, for example insurance companies, cannot be members. On trading floors, members in effect auction stocks, with sellers and buyers setting prices. In that way, every day the prices of stocks are established. Membership on exchanges is difficult to obtain. The NYSE, for example, has not increased its membership since the early 1950s. Seats on an exchange must be purchased or rented from a member. Stock exchanges are thus very exclusive institutions.

Under a statute administered by the Securities and Exchange Commission (SEC), such stock exchanges are classified as "Self-Regulatory Organizations" (SROs). They have their own operating rules and structure, and they control their membership with admission and disciplinary rules. Congress has granted the SEC power to oversee SRO operations, to approve all SRO rules and regulations, and, in a rarely used power, to write SRO rules itself.

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The United States also has five regional stock exchanges, labeled the Boston, Philadelphia (PHLX), Chicago, Pacific (located in San Francisco and Los Angeles), and Cincinnati Exchanges. The Cincinnati Exchange is fully automated and has no trading floor. The regional exchanges trade stock listed on the other exchanges, usually the national exchanges, as well as a few local stocks and some novel derivative instruments (stock options) not listed elsewhere. The regionals have as members both institutions that also are members of national exchanges and institutions that cannot afford, or have no strong economic incentive to belong to, a national exchange but still want access to the national markets. The regional exchanges are also SROs over which the SEC has oversight.

Another component of the nation's financial markets is the "over-the-counter" (OTC) markets that consist of a geographically dispersed group of traders linked to one another by telecommunication systems. The National Association of Security Dealers' Automated Quotation System (NASDAQ) is the largest such trading system. On the NASDAQ, dealers post quotations on computer screens and then receive orders from other dealers via computer link or over the telephone. Some broker-dealers are market makers, taking either bids or offers. Like dealers on the national and regional exchanges, they make money through commissions on each transaction or on the spread between buying and selling stocks on their own accounts. All participants in the OTC market must be members of, that is, certified by the National Association of Securities Dealers (NASD), an SRO with its own membership rules and with oversight by the SEC. While individuals must have both capital and expertise to secure membership, membership is open to anyone who meets the qualifications.

On all the national and regional exchanges but one, Cincinnati, stocks exchange hands on physical trading floors. Cincinnati, organized in 1884, phased out floor trading in 1976. Most of the traditional exchanges are experimenting with computer trading. The NYSE, since 1991, has had an after-hours crossing system (see below) with automatic execution of single-stock orders and baskets of stock. NASDAQ, merging with AMEX and PHLX, will run the new OptiMark electronic trading system. The CBOT has electronic trading in financial futures side-by-side with its traditional open outcry pits. And all the exchanges and the NASDAQ have small order execution systems that allow members to route orders electronically to the specialist or market makers in specific stock for execution, limiting the use of intermediary floor brokers.

The new kids on the block are privately owned, electronic trading systems such as the Real-Time Trading Service operated by Instinet Corporation (Instinet), the Island System (Island), Portfolio System for Institutional Trading (POSIT), and the Arizona Stock Exchange (AZX). These fully automated systems allow institutions and other market participants to

execute trades electronically in a variety of ways. They do not suffer under the membership restrictions of the national and regional exchanges.

Island and Instinet are "matching" systems into which participants enter firm, priced orders. The system automatically executes buy orders against sell orders at the same price using time priority. All electronic systems display the matched or executed orders, and some of the systems display unmatched orders as well to the systems' subscribers.

POSIT is a "crossing" system. With that system subscribers enter unpriced orders, usually after normal trading hours on the national exchange. The orders are automatically executed with parties wishing to sell stock, typically at a price derived from the closing price of the security on the

national exchanges or NASDAQ. AZX is a "single-price" auction system. Participants enter firm priced orders and the computer determines the price at which it can match the largest volume of orders. All orders are then executed at the determined price.

The still-young electronic exchanges now handle over one and one-half times the trading volume of the Amex and all the regional exchanges combined. Most of their growth has come in the past five years. The more than twenty electronic trading systems offer subscriptions to mostly institutional investors who are dissatisfied with the trading costs and time lags in our traditional markets. An additional 140 broker-dealers operate some type of limited internal computer trading system for their own traders or customers. A few of the new membership electronic systems are doing so well that they soon could become viable substitutes for the registered exchanges or NASDAQ.

To compare the operation of the traditional exchanges and the new alternative trading systems, assume that the best publicly displayed bid on XYZ, Inc., listed on a national exchange is two-thousand shares at $54\frac{1}{16}$ and the best offer to sell is for three thousand at $54\frac{3}{16}$. The spread is $\frac{1}{8}$. An investor wants to buy four-thousand shares. The oldest method of purchase is for the investor's broker to give the order to a floor broker. The broker enters the "crowd" around the XYZ specialist and tries to find another broker willing to sell the four thousand shares at, or for less than, $54\frac{3}{16}$. In this case he knows he will do no worse than securing three thousand at $54\frac{3}{16}$. Occasionally he will be able to beat the posted price, for example, buying the final one-thousand shares he needs to meet the order at $54\frac{1}{8}$. The broker will profit by the commission he charges his client for processing the order.

Under the exchange's new automated small-order execution systems, the investor's broker sends the order electronically to the floor specialist in charge of XYZ stock. The floor broker is eliminated. The specialist holds the order for a short time and tries to obtain a better price, for example, $54\frac{1}{8}$. In this case, with the market conditions assumed above, the investor will

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still probably get at least three-thousand shares at $54\frac{3}{16}$. But occasionally he may get some shares for less, say $54\frac{1}{8}$, though if the specialist holds the purchase order for too long, waiting for a better price, he could lose the opportunity to purchase the stock at $54\frac{3}{16}$.

With the new alternative electronic trading systems the investor's broker enters the order electronically with instructions to execute automatically against the best offer. Neither floor broker nor specialist interacts with the order. In our example the investor automatically buys the three thousand shares at $54\frac{3}{16}$ and is left with one thousand to buy. One advantage of an electronic system is that it is cheaper, with no fees or commissions paid to floor brokers and specialists. Another advantage is increased certainty that the trade will be executed automatically. Institutional investors worry that in the time between when they send in their orders and when the orders are executed, floor brokers and specialists may jump ahead of their orders. That is to say, the floor broker might purchase shares of XYZ stock himself for a low price, say, in the above example, $54\frac{1}{8}$. If the price to purchase the stock then goes up, say to $54\frac{1}{4}$, the floor broker will purchase XYZ stock for the client for a higher price while selling his own XYZ stock for a profit.

NEW PLANNED REGULATIONS

The size and potential of the electronic markets has caught the

attention of the SEC as well as the established national and regional markets that see electronic trading as a threat. In May 1997, the SEC published a 120-page "Concept Release" asking for comments on how to regulate the electronic trading systems. The written public comments received by the agency were deeply divided. In April 1998 the SEC released its 180 pages of "Proposed Rules." After a public comment period, the rules could become final later this year.

The proposed rules primarily would place new burdens on those entrepreneurs who have developed successful electronic trading systems. The established traditional markets would benefit as their new competitors are placed at a disadvantage. In short, the rules discourage and penalize the most successful innovators.

The SEC began its proposed regulations by revising its old definition of an "exchange" to include rather than exclude electronic trading systems. For the past decade the SEC defined an exchange traditionally to include member-operated trading floors that centralize orders and give participants control over order execution. That, of course, would exclude electronic exchanges because they are proprietary, often owned and operated by entrepreneurs. Further, they have no trading floor and are often run out of trading desks in brokerage houses. Individuals and institutions pay fees to subscribe to these systems. Moreover, traditional exchanges also act as clearing houses. They actually hold customer funds or securities to

clear trades. By contrast, most alternative trading systems simply allow subscribers to arrange for trades executed on the system to be cleared through a broker-dealer. For example, if Smith Corp. and Jones Corp. both subscribe to a particular electronic system and make a stock trade, they will rely on, say, Merrill-Lynch, with which they both have accounts, to clear the deal.

The proposed SEC definition is broader than the current one, including as an exchange any trading system that consolidates orders from multiple parties and sets nondiscretionary conditions under which subscribers entering orders agree to the terms of a trade. Excluded from the exchange definition are order-routing systems, quote display systems, and brokerage house internal client-matching systems. The SEC proposes, in essence, to define most subscriber-based computer trading systems as "exchanges."

The SEC proposed rules then would give the owners of electronic trading systems a choice to register either as an exchange or as an Alternative Trading System (ATS).

REGULATING ELECTRONIC EXCHANGES

If owners register an electronic trading system as an exchange, the exchange is deemed a self-regulatory organization (SRO) and subject to a bevy of new obligations. As SROs, they have to erect and operate disciplinary proceedings to enforce the securities laws. But doing that would be costly for an electronic, computerized system. Systems that are basically a computer with limited access sold to members would be required to reorganize in accord with SEC directives.

As exchanges, electronic trading systems would be required to restructure their boards of directors to ensure "fair representation" of their members. But computer trading systems are proprietary, owned by those who develop and market them. They are not owned by members who are subscribers who pay for access. Such a rule would be the equivalent of requiring America Online (AOL) to guarantee "fair representation" on their board for their subscribers who, of course, do not own AOL and who can drop their subscriptions at any time. By requiring electronic systems developers to share the fruits of their efforts with member-clients who use the system, the proposed SEC requirement reduces the incentive of clever entrepreneurs to develop such systems.

The proposed regulations also would require electronic trading enterprises registering as exchanges to restrict their membership, that is, the individuals or institutions to whom they could sell subscriptions, to broker-dealers. That would exclude institutional investors, such as insurance companies and many mutual funds that are not associated with brokerage houses.

Proposed regulations would require electronic trading enterprises to provide "fair access" to all registered broker-dealers, even to those who are not subscribers to the system. Currently

owners of electronic systems can choose to offer subscriptions only to certain types of investors. This might make a system particularly useful, allowing investors to deal only with other investors that they expect will best meet their needs. The proposed SEC rule would mean that the owners of alternative trading systems would no longer be able to select their subscribers.

The proposed regulations would require electronic trading companies to join the national transaction and quotation systems of the National Market System (NMS). Those companies would have to pay entry and operating fees, and would be required to

post their best bids and offers on the national system.

The proposed regulations would require electronic trading firms to comply with SEC trading halt procedures, forcing them to change their operating procedures.

While that seems to be a small cost, it could stifle the entrepreneurial efforts of systems designers and be the first step toward SEC regulation of the actual operating programs of the electronic systems. The real innovation in the computer trading systems is that they allow experimentation with novel operating programs that attract users. Users might not want trading halts, but if the SEC has its way, they will no longer have access to exchanges that do not have them.

The proposed regulations would offer one small advantage to electronic firms that register as an exchange. They would be allowed to trade options contracts, which they cannot currently trade. Those that do not register as exchanges would continue to be covered by the current SEC rule. The current rule is, of course, the problem. There is no justification for limiting computer trading systems to selected kinds of securities in any event.

ALTERNATIVE TRADING SYSTEMS

If, under the proposed rules, owners of electronic systems do not elect to be regulated as exchanges, they will be subject to the regulatory power of SROs that run competing trading markets, and regulated as Alternative Trading Systems (ATS).

Electronic trading systems that choose to be registered as ATSS must attach themselves to an existing self-regulatory organization, all of which now operate their own trading markets. As noted above, NASD, an important SRO to which many of the ATSS will choose to attach under option two, runs the over-the-counter markets, NASDAQ. The conflict of interest and the potential for trouble are palpable, and the SEC's promise to oversee and manage the conflicts is hardly reassuring.

Moreover, registering as an ATS comes with other burdens. ATSS must fill out more paperwork. They must file new, more complex forms for the SEC and for their surveillance SROs. The SEC requires a notice of operation, which means electronic trading companies must turn over all of the details about what rules govern their systems. The SEC requires quarterly updates documenting any changes to their operating system. Additional forms require reports on total volume by unit and dollar amount for all securities traded. And ATSS must keep

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records of audit trails, daily summaries of trading, and time-sequenced records of order information. They must also keep records of subscribers and their affiliations, all operating notices and communications to subscribers, and other records. While each record-keeping requirement might be defensible as an aid to the SEC enforcement function, when one adds up the requirements, the total additional cost to a small computer-based trading system is substantial.

ATs with significant volume, defined as a certain volume of business during a certain period of time, also would be required to disseminate their best-priced orders into the National Marketing System (NMS), a national public quotation system, and provide nonsubscriber broker-dealers with access to the displayed orders. Further, the SEC would set the fees that electronic companies could charge to nonmembers for that access. This is heavy-handed stuff. ATs, in essence, lose control over their quote display practices, their subscriber base, and their fees. The electronic companies would be treated almost like public utilities.

PROBLEMS WITH DISPLAY REQUIREMENTS

The quote display requirement in particular deserves a closer look. The proposed regulation requiring electronic trading systems to provide access to their screen displays and to post best-priced subscriber orders on the NMS illustrates how political motives are pushing policy. The proposed rule is pro-

mulgated in the name of "market transparency." This might seem innocuous, but consider the rule's source. The rule was the primary request of the many comment letters coming from those most threatened by the alternative electronic trading systems—the traditional exchanges, Chicago, Cincinnati, Chicago Board Options Exchange, the NYSE, and their specialists. The competing markets know that institutional investors like the anonymity of the current electronic trading systems. The order display requirement would substantially limit this feature.

Large institutional investors worry that if their orders and trades must be made public, the size of those orders and trades will move the market price to their disadvantage whenever they want to trade. For example, an investor might want to purchase a large block of a certain stock. But if other market participants perceive what that investor is doing, they will raise the price of that stock. Thus institutional investors tend to make offers quietly and subdivide trades. In traditional markets they can hide their trades by using human intermediaries, floor brokers and specialists, who "work" orders—execute orders in bits and pieces.

Up until now the SEC has not required electronic trading systems to publish the true size or origin of entered orders and many do not. Thus the electronic trading systems are popular places for institutional investors seeking to trade large blocks of shares. Institutional investors trade anonymously and shield the full size of their orders to keep their full trading interest private.

The SEC public display requirement proposal would require high volume alternative trading systems to furnish to the public the full size of the best displayed buy and sell orders. The SEC aims to enhance market transparency by ensuring that the public quote better reflects true trading interest in a particular security.

Institutional investors will, of course, resist publicizing their trading interest. They will either direct their traders to parcel out trades to alternative trading systems, thus reducing the cost advantage of using computer trading systems, or avoid the computer trading systems altogether. The traditional exchanges hope that the institutional investors will return to using human intermediaries, floor brokers and specialists, on the traditional physical trading floors. The SEC has asked for comment on whether to allow institutional investors to elect to keep their orders private, but its leanings on the matter in the rule proposal are unmistakable.

The SEC's reasons for its public quote display rule are ostensibly laudable. The SEC is worried about "hidden markets" for institutional and other large traders that are not accessible by the vast majority of private investors. So in the name of "market transparency" the SEC is considering micro-management of electronic trading to the advantage of established trading exchanges.

But the SEC concern does not stand up to scrutiny. First, traditional markets allow anonymous trading as floor brokers "work" orders. There is no requirement that floor brokers disclose their full order book in the process. And there is no indication that there is some special problem associated with the same type of "working orders" through a computer trading program.

Second, there are good reasons why the SEC ought not to enforce perfect equality of trading opportunity for all traders, large and small. After all, a fleet purchaser of automobiles does not usually pay the same price for a car as an individual purchasing a single vehicle does. Market power often merits price discounts and other forms of preferred treatment.

And third, institutional investors' desire for anonymity and special forums for large trades will not disappear with the promulgation of the proposed rules. They will seek other venues for their trades, none of which provide for market transparency and all of which are more expensive to their clients, including middle-class 401(k) savers. In addition to returning to trading floors, institutional investors could return to the telephone, avoiding computers for the telephone-based trading among themselves that has long been the staple of the "upstairs" market, that is, to the "old boys network," hardly a move that will enhance transparency. Or they could trade overseas.

DRIVING TRADING OFFSHORE

Proposed SEC regulations of electronic trading may drive a significant amount of trading activity offshore. With Internet connections and other forms of high-speed telecommunication

access, any American individual or institutional investor can interact with electronic trading systems located anywhere in the world. And numerous international trading markets are computerized—the London Securities and Derivative Exchange, the Paris Bourse, the Toronto Stock Exchange, OM Stockholm, the New Zealand Stock Exchange, the Korean Stock Exchange, the Singapore Stock Exchange, among many others.

Recent events in Europe are sobering up United States exchanges. The London future exchange (LIFFE) has a physical trading floor and, until recently, one of its most significant trading products was a future on German currency. Deutsche

Terminborse (now Eurex Deutschland) opened an electronic trading system on that currency future and within days took the entire trading market on that future from LIFFE. LIFFE is scrambling

to start its own electronic trading program. Foreign exchanges are anxious to make similar inroads on the products traded by United States exchanges.

The SEC is also concerned with how to regulate the foreign computerized markets when they have American customers. In the past Americans who wished to trade on foreign markets had to go through an American broker with overseas connections or an overseas broker who was a member of the foreign trading facility. The SEC regulated the brokers, as "gate keepers," through its traditional legal machinery. Now that Americans can interact directly with foreign computerized trading markets, there are no intermediary brokers for the SEC to regulate.

The SEC, in its 1997 Concept Release, asked for comment on whether it should require foreign markets with United States customers to register as United States exchanges! It is obvious that such a proposal would create serious international friction. In the alternative, the SEC wondered whether it could regulate Internet access providers such as AOL.

That proposal is equally problematic. It would make Internet servers that at present simply transmit information responsible at some level for the content of what they transmit. The SEC is musing about whether to impose record keeping, reporting, disclosure, and antifraud requirements on the AOLs of the country. The SEC seems to hope that specialized access providers for trading will develop and Internet servers will stay out of the business of providing access to trading markets. But how does an Internet server, with a simple search-and-access engine with no editing capacity, stop people from using the system to trade?

The commodities trading system in the United States, regulated by a separate federal agency, the Commodity Futures Trading Commission (CFTC), faces an international electronic trading challenge similar to the American stock trading system. Cantor Fitzgerald, the world's largest bond broker and a member of the country's largest and oldest commodity exchange, the CBOT, has announced plans to begin electronic

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trading in futures contracts on United States Treasury bonds and notes. The contracts represent about 50 percent of the trading volume on the CBOT. Cantor claims to be able to trade the contracts at a 75 percent reduction in fees and cost.

The CBOT is lobbying the CFTC to block regulatory approval of Cantor's plan. In regulating the Cantor system, the CFTC will face the same pressures that face the SEC.

The CBOT has an alternative defense as well. As noted above, the CBOT is, to the consternation of many of its members who trade on a physical trading floor in open outcry pits, starting an electronic system "side-by-side" with their pits. The price of an exchange seat is plunging in response. The electronic system opens September 18th.

The CBOT members know well the recent experience of MATIF, the French futures exchange. MATIF began trading its contracts on an electronic network during the trading hours of its physical trading floor. The open outcry pit lasted all of two weeks. MATIF is now all electronic. By the time this article is published, the CBOT pits may have expired as well.

In sum, stock markets around the world are experimenting with electronic trading. No new market anywhere in the world is imitating the NYSE; markets are imitating the electronic system of the Paris Bourse, and, yes, some of our new proprietary electronic systems. Hope for innovation in this country comes primarily from the proprietary electronic trading systems that can pressure the traditional membership exchanges into adapting for the twenty-first century. Yet the alternative trading systems are the ones on which the SEC is focusing its regulatory might.

CONCLUSION

In light of new developments in technology, the SEC's regulations on exchanges are truly antiquated. Yet rather than change its regulations with the times, the SEC wants to tie weights to the feet of the newer, faster, leaner market. If the SEC wants to protect investors in electronic markets it would do better to limit its role to informing the public about the details of whatever markets develop, so small investors understand the risks of the game. The SEC could, for example, provide investor education on the risks of trading in foreign markets. The SEC could also refocus on requiring large traders to be honest with their clients on how they trade—stopping those traders' current shameful practices that make it difficult for clients to determine whether they are receiving the best execution of their trades.

The SEC's vision of securities markets is likely to be shortsighted and dangerous; dangerous because the SEC, despite its good intentions, may stifle the innovation that could allow America's markets to be envy of the world. At present traditional markets, the NYSE and most of the regional exchanges, are old-fashioned and resistant to change. Whenever the SEC strays beyond enforcing rules against basic fraud, as it is straying in its regulation of electronic trading, those participating in our secondary trading markets are rarely winners.