Against the Duopoly:
The New Economics for US Regional Stock Exchanges and Equity ECNs

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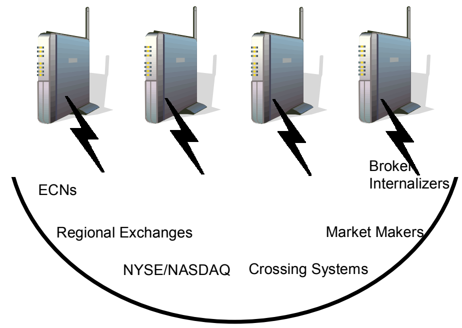
"Most regional stock exchanges and ECNs are seeing interest not because the market demands it, but because they meet the needs of their particular sponsors."

The US Regional Stock Exchanges and equity ECNs have been the princesses at the ball of late. With the acquisitions of INET and BRUT by NASDAQ and ArcaEx by the NYSE, the remaining entities with the regulatory authority to be an equity execution venue have never been hotter. The economics for these firms however remains troublesome, as none alone have enough order flow to create a growth-oriented business. Rather, they all appear to be serving the purposes of their owners, whether brokers or quant trading firms, or still struggling to find a partner with deep pockets. In this article we discuss revenue opportunities for ECNs, Regionals and the brokers that have invested in them. We also give our projections for the next round of industry consolidation.

The Regionals and ECNs are competing in a very crowded market (see Exhibit 1). As these venues look to attract orders from independent asset managers and broker-dealers, they compete with the NYSE and NASDAQ, with crossing networks like LiquidNet and POSIT, with market makers like Knight and ATD, and with brokers who are internalizing order flow all on their own. Increasingly, the ECNs and Regionals (and the NYSE and NASDAQ to a lesser degree) are becoming the end-stage dumping ground for picked-through order flow. That does not make an attractive story for the institutional investor looking for a good trade. All is not lost, however, as the ECNs and Regionals have a few tricks up their sleeves yet.

Exhibit 1
Venues Competing for Equity Order Flow

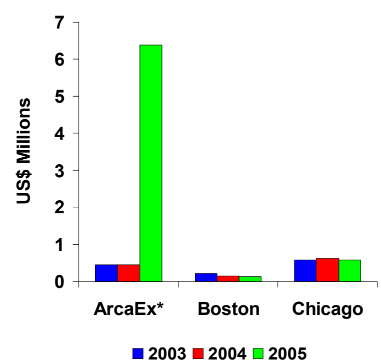


Source: Vodia Group

Listings and Issuer Services

Stock Exchanges make money in three ways: listings and issuer services, market data, and other market services including trading fees. For the Regionals, listings have more or less been stagnant for several years now. ArcaEx made a go at listing firms independently, but their revenues did not take off until their acquisition of the Pacific Stock Exchange (see Exhibit 2). Generally speaking, the market for new listings has become more difficult for all US exchanges; with the advent of Sarbanes-Oxley, even the majors are losing international companies to exchanges like the London Stock Exchange and Euronext. For the Regionals, competing with NASDAQ and the NYSE for listings has become all but impossible. ECNs can not list their own companies.

Exhibit 2
Issuer services revenues, ArcaEx, Chicago Stock Exchange and Boston Stock Exchange, 2003 to 2005



Sources: Exchange Annual Reports, Vodia Group estimates for Boston and Chicago 2005

Trading

In trading, the recent acquisitions by NASDAQ and the NYSE have opened the door for one or two new "natural" entrants to the marketplace. Market participants want three things from their execution venue: liquidity, speed and low cost. By creating a duopoly, the NASDAQ and NYSE have already shown their intentions to slowly raise prices and cut rebates. One or two new market entrants help keep the major exchanges honest while forcing improvements in execution quality, with enough liquidity left to go around.

The market has gotten excited however, and participants, mostly brokers, have created not one but seven semi-viable new ECNs or revitalized Regional exchanges to compete with the majors. Very few of these vehicles will survive without a major sponsor to feed them order flow. And in fact, few have to. Most of the new ECNs or broker-backed Regionals now exist to serve their broker masters, and are not there really to compete with the NYSE or NASDAQ per se.

CSFB and Citigroup are the latest brokers to enter the ECN fray, on top of their investments in the BeX (Boston Stock Exchange, Fidelity, Lehman Brothers, CSFB and Citigroup) and the Philadelphia Stock Exchange (Merrill Lynch, Citadel, CSFB, Citigroup, Morgan Stanley and UBS). Why bother, says the market. We reply that the economics suggest these are good trades (see Figure 1). In CSFB creating a new ECN or Citigroup buying OnTrade (aka Nextrade), these brokers are setting up the means to route their outbound liquidity, have an external participant send an order (and pay their trading fee), then use their investment positions with a Regional to capture the market data fees the Regional collects off of their print. For a small broker this doesn't make sense, as no Regional will cut a deal for market data rebates unless there is sizeable volume involved. For CSFB and Citigroup, each crossing or internalizing over 100M shares daily, the economics become attractive.

Outside of the dollars, this new execution arrangement gives the brokers two valuable intangibles: greater negotiating leverage with the NYSE and NASDAQ and a way to legitimize their own internalization of order flow. On the second point, proprietary trading desks will be able to interact with the new ECN as an independent entity, thereby ensuring that the open market has had a chance to bid on all orders before they are traded by a desk owned by the broker itself. This is about as clean as internalization gets.

Figure 1: What is a Fictional ECN Worth to a Large Broker?

Trading Revenues	$.0002 spread per executed share
Shares Executed	100 million daily
Trading Revenues	$5.04 million
Market Data Revenues	$6 million (relationship with CTS participant)
Self-clearing and IT Costs	$2 million (with clearing trade compression)
Human Resources	$2 million
Profit	$7.04 million
Intangibles	Leverage in sending flow to other exchanges Legitimate internalization

The lessons of CSFB and Citigroup suggest that while they are the latest ECN markets entrants, they won't be the last. Other brokers, in particular UBS, have the justification to launch their own ECNs as well. UBS internalizes a huge volume of retail order flow on a daily basis from the former Paine Webber and from their deal with Charles Schwab.[*] UBS also has the capacity to trade over 100 million shares a day reported to the NYSE's program trading system. This bulk of flow would easily enable them to populate an ECN to capture the spreads from their own run-off. The profile looks surprisingly like CSFB and Citigroup (see Figure 2).

[*] In acquiring Charles Schwab's SoundView Capital Markets division (the former WitSoundview) in 2004, UBS also acquired the right to all of Schwab's retail order flow for multiple years to follow.

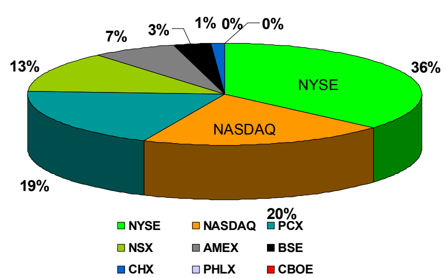
Figure 2: Where Exchanges, ECNs and Crossing Networks draw liquidity

NYSE	Major market
NASDAQ	Major market
Boston	Fidelity, retail
Chicago	Retail
BATS	Tradebot
Direct Edge	Knight outbound
Track	Day trading
Pipeline	Buy and sell-side block
LiquidNet	Buy-side block
CSFB	Institutional algorithmic, proprietary outbound
Citigroup (Nextrade)	Institutional algorithmic, proprietary outbound

Market Data

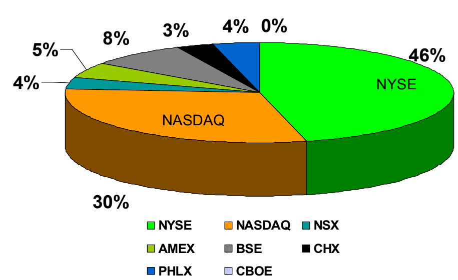
Market data revenues from real-time trading are the hidden treasure trove of the Stock Exchange and ECN world. In 2004, the nine participants in the Consolidated Tape Association (CTA) shared a pool of $394M. In 2007, we estimate the total dollar amount of the pool to be roughly unchanged but the number of participants has already shrunk. By virtue of their acquisitions, the NYSE's share of revenues will grow from 36% to 46%, while NASDAQ's will grow from 20% to 30% (see Exhibits 3 and 4).

Exhibit 3
Market Data Revenue Share by Consolidated Tape Association (CTA) Participant, 2004



Source: SEC

Exhibit 4
Market Data Revenue Share by Consolidated Tape Association (CTA) Participant, 2007 (projected)



Source: Vodia Group

More interesting is our projected growth of the Regionals' share of revenue. We see Boston's CTA share growing from 3% to 8%, driven by prints from their new investors, meaning real dollar growth from $11M to $32M. The Boston shares 61% of its market data revenues with its participants (i.e., firms that trade and print on the exchange). This means that while most of their revenues will go out the door, the Boston will keep an additional $8.2M for itself in 2007 alone. Not bad for a Regional that has seen its listings and prospects decline in the last several years.

Left to their own devices, ECNs do not participate in this pool of cash; to get access they have to make deals with Regionals or other recognized CTA participants. The National Stock Exchange (NSX), formerly known at the Cincinnati Stock Exchange, made market data revenue sharing a primary line of business until NASDAQ's purchase of INET. The National took home $52M in market data revenue in 2004, much of which was driven by INET's prints and shared with INET, and by extension with INET's trading clients. That relationship is now ending. In 2007, assuming a new best-case ECN relationship, we see the National bringing in only $16M.

Back to the brokers: by investing in a Regional and acting like an executing (or printing) firm, brokers are able to capture back a share of market data revenue, increase the value of their investment and effectively pay themselves for trading. By having their own ECN they can capture a spread as well. In the case of CSFB, the Boston becomes an ideal printing ground for their new ECN. For Lehman, who does not have an ECN (yet), they can still capture back 61% of market data revenue. Assuming that Lehman contributes 20% of the new market data revenue volume that equals a dollar payment of $4M annually, or a one year 40% return on what was likely a $10M investment to begin with.

The Next Wave of Consolidation

As we have shown, Regionals and ECNs are seeing a resurgence not because the market demands it, but because they meet the needs of their particular sponsors. We see this situation continuing for a short while, until the broker/owners of the new trading venues start to thinking about growing their investments. Not that the current ECN and Regional owners don't want to be that counterbalance to the NYSE and the NASDAQ that the market wants; just that no venue is close enough yet. If this situation continues for another year, we expect a new wave of mergers and consolidations.

The fastest relationships we see forming are between the ECNs and the Regionals. This is a logical step to take, given that the ECNs need market data revenue and the Regionals benefit by being the CTA member in the middle. The Regionals also offer much improved pricing for clearing and settlement, assuming a trade is formally executed at the Regional and not just printed there. A Direct Edge/National Stock Exchange relationship makes sense here, as does a BATS/National Stock Exchange or Chicago Stock Exchange tie-up. It seems inevitable that Citigroup's Nextrade will affiliate with the Boston Stock Exchange new electronic venue BeX, itself based partly on Citi-owned Lava Trading's technology. We also see a logical fit between BATS and UBS; both trading groups have a highly quantitative mind-set and are hungry to expand their present boundaries.

The merger we'd most like to see however is between the Chicago Stock Exchange and the Boston. These two entities have struggled to find their natural place in the new world order of equities trading, but between the two of them, with 181 listings, still strong enough retail flow (Chicago) and broker investors (Boston), this could be the viable entity for growth that becomes the third marketplace that actual investors, not just brokers, are looking for.

About the Author

Josh Galper is Managing Principal of Vodia Group LLC. His expertise centers on corporate development for financial services and financial technology firms, including mergers and acquisitions, strategic market analysis and new business development. He is a regular speaker at industry conferences and has been quoted in *Forbes*, *Wall Street and Technology*, *MarHedge*, *Institutional Investor* and *Securities Industry News*. He holds an MBA from the MIT Sloan School of Management. He can be reached at jgalper@vodiagroup.com.

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