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Securities and Exchange Commission
100 F St. NW
Washington, DC 20549-9303
Rule-comments@sec.gov

Files: SR- NASDAQ-2012-090

Re: Self-Regulatory Organizations; The NASDAQ Stock Market LLC; Notice of Filing of Proposed Rule Change to Amend Rule 4626 – Limitation of Liability

Dear Securities and Exchange Commission:

The Facebook IPO debacle raises the interesting issue of exchange liability for trading problems. Current SEC-sanctioned rules limit the liability of an exchange for trading losses. In particular, Nasdaq Rule 4626 limits Nasdaq's payments to $3 million in any one month. Other exchanges have similar rules on their books. In light of the events surrounding the Facebook IPO, Nasdaq is proposing to increase the amount it can pay to its customers. Rather than opine on the particulars of this proposal, this comment letter addresses the issue of exchange liability more broadly: What should the rules regarding exchange liability look like?

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[1] I am also on the boards of directors of the EDGA and EDGX stock exchanges. My comments are strictly my own and don't necessarily represent those of Georgetown University, the University of Pennsylvania, EDGX, EDGA, or anyone else for that matter.

Do these rules limiting exchange liability make sense in the modern world of for-profit exchanges? Normally we expect individuals and businesses to be responsible for any damage they cause. This creates the proper incentive for people to engage in appropriate risk management actions that mitigate risks and contain damages. A lack of liability could lead to reckless actions as someone else will bear the costs. So, from the 30,000 foot level, it seems reasonable that an exchange should be just as liable for damage it causes as any other company.

But what kind of damages should an exchange be liable for? Lawyers have long drawn a distinction between direct damage and indirect, or consequential, damage. Direct damage would occur if an exchange employee in its data center negligently damages hardware belonging to an exchange customer. It is pretty clear that in such a case the exchange should be liable to repair or replace the hardware. However, indirect or consequential damage is a much grayer area. Indirect damage consists of other downstream losses. For example, if a dry cleaner damages a suit, there is direct damage to the suit. Indirect damage arises from the lost business opportunity because the suit owner was not properly dressed for a job interview. In the exchange example above, a consequential damage would be the lost revenue the customer suffered while the hardware was out of service. Likewise, failure to properly execute an order could lead to losses – or gains.

What is an exchange's liability in such situations? This is a fascinating legal question regarding the role of government-approved SRO rules, exchange contracts with members, and more. A similar legal question involves the proper forum for resolving such disputes. Should the SEC be the arbiter through rule filing proceedings such as this one, should such disputes go through FINRA arbitration, or should they be litigated in front of Texas juries? However, I am not now and never have been a lawyer, so I will leave these fascinating legal questions for another day. I will address the economics of the situation: what should the liability be going forward? Eventually, lawmakers and judges tend to opt for the economically efficient rule for society in the long run. (Of course, as Keynes pointed out, in the long run we are all dead. I'm not holding my breath waiting for such outcomes. Sigh.)

In the modern electronic world, competing for-profit equity exchanges operate on razor-thin margins. These systems process millions of transactions flawlessly on a daily basis. Yet any technology can fail. Despite all of our best efforts, airplanes sometimes crash. Airlines can and do buy insurance for such incidents. However, insurance actuaries can predict airline losses accurately enough to offer such insurance on commercially reasonable terms. This is not the case with trading systems. The unpredictable nature of exchange technology failures makes it infeasible for insurance companies to offer such a product on commercially reasonable terms.

One way to look at the issue is from the perspective of risk bearing capacity. The exchanges are relatively small compared with their major customers and with the industry as a whole. For example, NYSE Euronext has a market capitalization of $6 billion, which is very small in comparison with JPMorgan Chases's $140 billion or Goldman Sach's $51 billion or even Schwab's $16 billion and TD Ameritrade's $9 billion. A big market-wide glitch will generally inflict losses on many different firms, with losses proportional to the size of the firm. As the large customers have more risk bearing capacity than the exchanges, they can more easily bear the risk, especially if it has been spread over the entire industry. Concentrating all of the risk onto the relatively small exchanges does not make good sense.

Assigning strict liability for consequential damages to the exchanges would force the exchanges to charge a large risk premium to cover the risk of a catastrophic glitch. Because the exchanges are or should be somewhat risk averse, this risk premium would be higher than the expected value of the losses. These higher fees would be paid for by the customers of the exchanges. It would be cheaper for everyone in the aggregate for the customers to accept the risk of the occasional glitch rather than continually pay higher fees.

Contracts, customer agreements, and warranties often explicitly address the issue of who bears various types of risk. Individuals are normally free to accept or reject such arrangements and take their business elsewhere. However, this is not completely the case in the highly regulated exchange industry. Even though a brokerage firm can route its orders to any exchange or market maker, all exchanges have rules that limit their liability. It is useful to examine situations in less regulated markets to see how freely contracting individuals agree to assign liability.

In general, one finds that sellers don't have (or accept) liability for consequential damages when the potential for damage is very large relative to the value of the service provided, and when the damages are hard to measure. For example, a dry cleaner may be liable for the damage to the suit, but not the much larger and harder to calculate loss from the botched job interview. In the olden days of film cameras, the film processors were only responsible for the cost of damaged film, not the value of the images that were lost. The cost of the processing is very small compare with the potential value of some of the images. Moreover, it is extremely difficult to determine the value of snapshots from a family vacation. Similarly, an airline is not responsible for economic damages caused by a late arrival.

Similar logic implies that exchange liability should likewise be limited for consequential damages caused by not filling, acknowledging, or cancelling an order. The fee charged is extremely small compared with the total value of the order. An exchange may charge a net fee of five cents for handling a 100 share order of a stock worth thousands of dollars. Figuring out the damage from a botched trade can be difficult, as there are many possible benchmarks for figuring the alleged damage from a botched trade.

The problem becomes even more interesting given the intense competition between exchanges. Exchange rules such as Nasdaq Rule 4626 actually permit exchanges to pay some damages at their discretion- up to a limit. Despite legal limits on liability, exchanges sometimes "voluntarily" compensate their customers for various losses for a variety of reasons. Exchanges may do this to retain the commercial goodwill of customers. One of the benefits of our competitive market structure is that the competing exchanges have to work hard to retain customer goodwill. Customers often have a choice of where to send orders, and exchanges need to provide good customer service in order to attract order flow, and this includes appropriately fixing problems that occur.

Even though the rules seem to limit exchange liability, there could be protracted litigation testing those rules. An exchange may prefer to enter into a settlement that avoids protracted and expensive litigation that could eviscerate the liability protections in the rules. Also, an exchange may voluntarily make a payment for ethical reasons because they feel it is the right thing to do in such circumstances.

It is thus reasonable that exchange liability should be limited, but what should the dollar amount of the limit be? The right limit would be one that inflicts serious financial pain on a negligent exchange without jeopardizing its survival, perhaps a limit of three months or so of typical net income for the exchange. This would be painful enough to motivate management to operate as prudently as humanly possible. Additional liability would not result in additional safety for the industry, but could lead to such large financial distress for the exchange that its ability to properly fulfill its role as a key part of our nation's financial infrastructure would be threatened. A financially distressed exchange would be tempted to cut corners in a number of areas, including, paradoxically enough, investments that would increase the technical stability of the exchange. Furthermore, additional liability would raise the cost of capital for an exchange as investors would require a substantial risk premium to compensate them for the risk of sudden and unexpected bankruptcy. This added cost would then be passed on to all exchange customers.

If you have any questions, feel free to email or call me.

Respectfully submitted,

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