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BEFORE THE SENATE SUBCOMMITTEE ON SECURITIES, INSURANCE, AND INVESTMENT AND THE SENATE PERMANENT SUBCOMMITTEE ON INVESTIGATIONS

"Examining The Efficiency, Stability, And Integrity Of The U.S. Capital Markets"

December 8, 2010
Room 538, Dirksen Senate Office Building

A. INTRODUCTION

Chairman Reed, Chairman Levin, Ranking Member Bunning, Ranking Member Coburn, and Senators, thank you for inviting me here to discuss some of the issues facing the nation's securities and futures markets and what we might do to address these issues.

I am the Chairman and C.E.O. of the Interactive Brokers Group. Interactive Brokers is a technology-focused brokerage firm that provides sophisticated investors and institutions with access to securities and futures trading in the U.S. and across the world. Interactive Brokers also has a large market making business, in which we provide liquidity on stock, options and futures exchanges. We are an $8 billion company by market capitalization and our customers hold about $21 billion dollars with us, and so

you might say we have a lot of "skin in the game" in terms of our interest in the health of the U.S. markets. We have some serious concerns that I would like to share with you.

B. THE INTERCONNECTED SECURITIES AND FUTURES MARKETS OF THE U.S. CONTINUE TO BE VULNERABLE TO MAJOR DISRUPTION

To begin, I would like to tell you about my worst nightmare:

Consider a high frequency trading -- or "HFT" -- operation with as little as $30 to $50 million dollars. This HFT firm consists of a few computers, a couple of programmers, and maybe a three-month track record of high volume, computerized trading with modest gains or losses.

Many such high frequency trading operations exist today scattered around the world. They gain direct, unfiltered access to U.S. exchanges via what is called ***Sponsored Access***, wherein the sponsoring, often undercapitalized, U.S. broker will essentially lend out its exchange membership for a fee and under that broker's membership, the high-frequency trading operation is able to do an unlimited number of transactions without any pre-screening by the sponsoring broker. *I.e.*, the sponsoring broker does not see the orders before the HFT firm executes them.

One day, at 3:45 p.m., the HFT firm's computers start sending orders to sell large capitalization stocks and Exchange-Traded Funds ("ETFs"). The circuit breakers are not in effect after 3:35 p.m., but even if they were, perhaps our HFT firm would try to mediate its orders to avoid triggering the circuit breakers. As the HFT firm's selling continues, the market decline accelerates and spreads to the futures and options markets. As the close of trading approaches, many other sellers jump in, including day traders trying to go home flat, traders with stop orders in the system, and securities and

futures brokers liquidating under-margined customer accounts.[1] With the right pressure applied, the market might easily close down 30% for the day.

The next morning, scared investors and brokers holding under-margined accounts all have to run for the exits and sell into the cascading circuit breakers. Under-capitalized brokers fail. Other HFTs and hedge funds that were long going into the decline, fail, and their clearing brokers fail. Clearinghouses may be threatened, as more and more positions must be liquidated for margin reasons. There will be a great many losers, but the HFT firm that started it all will garner huge profits when it covers its short positions during the fire sale. Its gains will be moved quickly to offshore accounts before the regulators figure out who did it.

In the other, almost-as-bad scenario, when the market opens the next day it realizes it was duped. No external event or news is seen justifying the prior day's break, and the source of the orders has been isolated. In this scenario, the market rallies sharply, climbing 40% the next morning. The HFT firm's sell orders that caused the original decline become massive losers, losses that the broker sponsoring the access (and its clearing broker) cannot cover. Bankruptcies follow.

Under either scenario, many innocent, ordinary investors will be caught by the huge downdraft or updraft and confidence in the stability and integrity of our markets will suffer further.

Unfortunately, what I have just described is very plausible. It could be an

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[1] There is a new short sale restriction scheduled to become effective in March 2011, which restricts short sales from hitting the bid if a certain downward threshold has been reached. In the case of a sponsored account, one wonders how this rule would be enforced. If the high frequency trading firm does not label short sales as such, the market damage will be done and the violation only detected, if at all, some time after the event.

attempted manipulation by an HFT firm with a goal of simple profit. It could be an intentional act by a terrorist or anarchist, or by a dissatisfied employee of a hedge fund or broker or HFT firm. Or it could be caused by a simple computer bug.

So the question becomes, what can we do to prevent these and other, less dramatic abuses?

C. RECOMMENDATIONS

I. The SEC's New Rules Banning Certain Forms Of Sponsored Access And Requiring Risk Management Procedures Should Be Strengthened And Should Be Made Effective Immediately, By Emergency Order If Necessary. The CFTC Should Also Adopt Similar Rules.

The SEC recently approved new rules banning certain forms of sponsored access and requiring brokers to implement new risk management procedures, but the rules do not go into practical effect until mid-July 2011, seven months from now. A great deal could happen between now and then.

In addition, the regulations are somewhat vague and seem to leave enough discretion to brokers that some might allow orders to be sent to market that are beyond the financial wherewithal of the customer.

Finally, although the new rules prevent *customers* from sending orders directly to an exchange using sponsored access, about 5,000 *brokers* that are not members of the clearing house are still allowed to send orders directly to an exchange, with no pre-filtering or credit review by the clearing member broker that is ultimately financially responsible.

These gaps need to be closed. First, the SEC should make the new rules (or at least the important, operational portions of them) effective very shortly, by emergency order if necessary and hopefully by the end of the year.

Second, the regulations should be clarified to require that the clearing broker that is financially responsible for a particular customer's orders must set a specific credit limit for that customer. This credit limit must not exceed the smaller of: 1) the customer's stated capital (as reasonably relied upon by the broker); or 2) the assets on deposit with the broker plus 10% of the broker's capital.

The broker should calculate the margin requirements on the customer's existing positions in real time and reject any order that, if executed, would cause the customer's margin requirements to exceed the prescribed credit limit. This is an elementary risk management tool that most reputable brokers already use, and all reputable brokers *should* use.

Finally, the ability to submit orders to exchanges should be restricted to brokers that are clearing members. Thinly capitalized firms or firms with poor risk management systems may register as broker-dealers, become exchange members, and send orders directly to the exchange, for which another broker -- the clearing broker -- ultimately will be responsible. And yet that clearing broker whose capital is at risk is not required to see or to credit check these orders before execution. This is a huge risk management gap that must be closed.

II. **The SEC Should Approve And Accelerate Its Proposed Audit Trail Rules. The CFTC Should Adopt Coordinated Rules And Use The Same Unique Beneficial Owner Codes So That The Agencies Can Effectively Share Surveillance Information. As A Stopgap Until These Systems Are Fully Developed, The Commissions Should Require Clearing Brokers To Create Basic Audit Trails, Including Beneficial Owner Information.**

Manipulation and insider trading are frequent and appear to be on the upswing, and the SEC and the CFTC need real-time consolidated audit trail information, including most importantly the identity of the underlying beneficial owner behind each trade.

The SEC has proposed comprehensive rules providing for the creation of a single, consolidated audit trail, but these rules have not yet been approved and will not become fully effective for at least two years, and probably more like three or four including the extensions of time that the industry undoubtedly will request.

The SEC should approve its proposed audit trail rules and shorten the timeframe for implementation substantially. But as a stopgap, the SEC should issue a very basic order, effective in no greater than 90 days, requiring that clearing brokers maintain a basic audit trail, including the identity of the underlying beneficial owner behind each order for which the clearing broker is responsible. The information would have to be provided to the Commission and relevant SROs on demand, perhaps using existing systems.

Having immediate access to the identity of the underlying traders behind each order by a simple request to the clearing broker will be a marked improvement over the current system until the full-blown, cross-market consolidated audit trail comes on line in two or three or four years.[2]

[2] The ultimate goal of the proposed consolidated audit trail is to allow regulators to view order and trade

When the consolidated audit trail system does come on line, the SEC and CFTC should have similar or identical systems. Most importantly, the unique large trader and beneficial owner codes that would be issued by the central audit trail processor should be the same across the securities and futures markets so that cross market activity can be monitored effectively.

III. To Improve Liquidity And Transparency And Help Prevent Future Crashes, Off-Exchange Trading Of Exchange-Listed Products Should Be Limited Or Prohibited.

An observer from another planet, here to study our financial regulation, would have some difficulty understanding the following proposition: In the wake of Dodd-Frank, equity-based *"Over-the-Counter"* derivatives must trade on *exchanges*, so long as similar products are listed there. Yet "*Exchange-Listed Securities"* remain free to trade *over-the-counter*. This is bureaucracy at its best, or perhaps at its worst.

In the current U.S. equity markets, brokers "internalize" stock trades by trading against their customers' orders directly or selling them to another firm to do so (thus avoiding the exchanges). The trades are then printed to the tape and put up at the clearinghouse. Brokers are supposed to provide best execution even when they internalize or sell their order flow, but best execution is vaguely defined and essentially unenforced.[3] Brokers in the U.S. must post reports showing where they route their

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information in time-sequence in order to be able to replay actual market events. Due to calibration difficulties and inherent latencies in communications, it will be impossible to precisely recreate market events. In any event, we usually know *wha*t happened but do not know *who* did it. The presence of quickly accessible data identifying rule violators would serve as a deterrent.

[3] The internalizers are supposedly matching the best prices prevailing at the exchanges, so that they can argue that their customers get best execution. This is subject to serious doubt, however. Transaction Auditing Group, Inc., a third-party provider of transaction analysis, has consistently determined that

customers' orders, but it is clear that most brokers do not care what is reflected in those reports.

It should be shocking that according to the Rule 606 reports mandated by the SEC, no major online broker, with the exception of our company Interactive Brokers, sends more than 5% of its orders to organized exchanges. More than 95% of their orders go to internalizers!

The fact is that when exchange-listed products are traded off of the exchanges, liquidity on the exchanges dries up. As fewer orders are sent to exchanges, fewer market makers compete for those orders or quote in size because they get nothing out of it. Exchanges become illiquid and are unable to withstand supply and demand imbalances. This causes confidence-draining mini-crashes in single stocks from time to time, but becomes disastrous on days where a major market event occurs. On such days, the internalizers suddenly dump their orders on the exchanges because the internalizers are afraid to take on large positions, but there is no liquidity on the exchanges to deal with the orders sent there.

Congress or the SEC should prohibit off-exchange trading of exchange-listed securities or limit it to large institutions trading very large size. This is essential to restore liquidity and confidence in our markets.

Interactive Brokers' U.S. stock and options executions are significantly better than the industry (on average 28 cents better per 100 shares in the most recent six-month period studied). Rather than internalize its customers' orders, Interactive Brokers simply routes each order, or parts of an order, to the exchange or market with the best price for that order, and quickly reroutes if another market becomes more favorable.

IV. The Existing Circuit Breakers Must Be Modified And Must Be Effective At All Times While Markets Are Open

First, the current circuit breakers in the equity markets are only in effect from 9:45 a.m. until 3:45 p.m., leaving the volatile opening and closing periods of trading uncovered. The circuit breakers should be in effect at all times that the market is open.

Second, the circuit breakers do not kick in until a price moves 10% in a five-minute period. This allows prices to move 2% per minute indefinitely without ever triggering the circuit breakers (allowing the market to move, for example, nearly 80% in 40 minutes). This needs to be changed.

Circuit breakers should first take effect at a price 10% up or down from the prior day's close. When a circuit breaker is triggered, trading would ***not*** be halted, but no trades would be allowed for five minutes at any price further than 10% from the prior close. In a falling market, for example, trades at prices above 10% down would still be allowed during the five-minute circuit breaker period, thus allowing the stock to bounce but preventing it from falling any further for five minutes. [4]

After five minutes, the stock would be able to trade freely again, except that another circuit breaker would take effect at 20% down from the prior day's close, for another five minutes. The process would be repeated at 30% down from the prior close, 40%, and so on.

[4] "Mini-crashes" continue to occur even with the recently enacted circuit breakers in the equity markets. This is because the primary listing market for each equity security has to calculate throughout the day whether the circuit breaker has been tripped for that security and then notify the secondary markets if the circuit breaker has been tripped. But between the time that such electronic notification is made by the primary market and the time that the secondary markets can react to it, the security can continue to trade on the secondary markets at prices well outside the circuit breaker. If the circuit breakers instead were set at 10%, 20%, 30%, etc. away from the prior day's close, the secondary markets would not need to wait for notice from the primary market that a circuit breaker was triggered (because they could calculate

In addition to these individual circuit breakers, there would be a market-wide circuit breaker that would take effect if at any time more than 10% of National Market System stocks had tripped the 20% price band. If this overall circuit breaker were triggered in a down market, then the 10% of NMS stocks already trading outside the 20% price band would not be allowed to trade at any price lower than their day's low to that point. Stocks that had not yet traded below 20% down from the prior close would be allowed to trade at any price down to 20% but no further. The price limits would last for the rest of the trading day.

The current circuit breakers in the futures markets should be augmented with the same market-wide circuit breaker. Thus, when 10% of NMS stocks traded outside the 20% band, futures markets would limit the move in related index contracts by calculating the maximum allowed price move of each index component (including some index components that would be allowed to trade down 20% and some that might already have broken that band and thus would be allowed to trade down to their day's low) and than applying these individual component limits to the fair value of the lead futures contract.

Likewise, functionally equivalent restrictions would have to be applied to other equity-based derivatives markets (such as exchange-traded options).

the circuit breaker triggers themselves by comparing trade prices throughout the day with the prior day's close).

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Thomas Peterffy is the Chairman and CEO of the Interactive Brokers Group, a global market making and brokerage firm with a market value of over $8 billion.

In 1977, Mr. Peterffy joined the American Stock Exchange as an independent floor trader and formed the company known today as Interactive Brokers Group. The automated systems and risk management practices used by the company have been under continuous development ever since.

Today the firm makes markets and offers brokerage services in securities, futures, foreign exchange instruments, bonds and mutual funds on more than 80 electronic exchanges and trading venues around the world. The firm has over 800 employees in offices located in the United States, Canada, the United Kingdom, Hong Kong, India, Australia, Japan and Switzerland.

The company's subsidiary Interactive Brokers LLC is a U.S. broker-dealer and futures commission merchant providing high-speed, technology driven trading solutions to sophisticated individual clients, hedge funds, institutional investors, financial advisors and introducing brokers.

The company's subsidiary Timber Hill LLC was one of the world's first electronic market making firms and is a registered market maker and/or liquidity provider on all major U.S. futures and securities markets. The firm provides liquidity in over 450,000 individual products using automated market making systems overseen by risk management and technology staff.