



**Hearing on Dark Pools, Flash Orders, High-Frequency Trading, and
Other Market Structure Issues**

**TESTIMONY OF DANIEL MATHISSON
on behalf of Credit Suisse**

Subcommittee on Securities, Insurance, and Investment

Senate Banking Housing, and Urban Affairs committee

October 28, 2009

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Introduction

Good morning, and thank you for giving me the opportunity to share my views on the best structure for our nation's stock markets. My name is Dan Mathisson, and I am a Managing Director and the Head of Advanced Execution Services for Credit Suisse¹.

The U.S. broker-dealer subsidiary of Credit Suisse Group has been operating continuously in the United States since 1932, when the First Boston Corporation was founded. Today, Credit Suisse is the market share leader in electronic trading², and Credit Suisse owns and operates Crossfinder, the largest Alternative Trading System (ATS) by volume.³

Advanced Execution Services ("AES") is a team of approximately 200 financial and technology professionals based in New York that executes trades electronically on behalf of mutual funds, pension funds, hedge funds, and other broker-dealers. AES currently connects with 31 US trading venues, and we help clients solve the problem of fragmentation by electronically linking many market centers into one order. The AES group does not engage in proprietary or risk trading. 100% of our revenue comes from institutional client commissions, and therefore our success depends on our ability to minimize our client's transaction costs while providing safe and reliable trading systems.

¹ Credit Suisse provides its clients with private banking, investment banking and asset management services worldwide. Credit Suisse offers advisory services, comprehensive solutions and innovative products to companies, institutional clients and high-net-worth private clients globally, as well as retail clients in Switzerland. Credit Suisse is active in over 50 countries and employs approximately 47,400 people. Credit Suisse is comprised of a number of legal entities around the world and is headquartered in Zurich. The registered shares (CSGN) of Credit Suisse's parent company, Credit Suisse Group AG, are listed in Switzerland and, in the form of American Depositary Shares (CS), in New York. Further information about Credit Suisse can be found at www.credit-suisse.com.

² Greenwich Survey, May 2009, Tabb Report, October 2009

³ Rosenblatt Survey, September 2009, Tabb Survey, September 2009

I have been managing the AES group at Credit Suisse since founding it in 2001. Prior to that, I traded stocks for eight years for a New York investment firm called DE Shaw & Co. In addition to my role at Credit Suisse, I am presently on the Board of Directors for the BATS Exchange based in Kansas City, and I am a regular columnist for Traders Magazine, where I write about market structure issues. I appreciate the chance to appear here today representing Credit Suisse.

Summary

Credit Suisse supports fair markets for all investors, and fair access to all market venues. We believe that several of the recent changes in the trading and markets area proposed by the Securities Exchange Commission (“SEC”) are positive developments. For example, Rule 204, which we supported and which has already been implemented, has dramatically reduced “naked” short-selling. The proposed ban on flash orders is another positive step, and we support this change as well.

On the topic of dark pools, we believe that they merely automate a process that has always existed, and that they are beneficial to the U.S. market structure. However, we believe there is a problem with today’s market structure, due to a lack of fair access to dark pools for all investors. Under Regulation ATS, dark pool operators are allowed to decide who can participate in their pool, and broker-dealers are often denied access to each other’s pool for competitive or capricious reasons. We believe that markets work best when open to all, and therefore we propose that the Fair Access provision of Regulation ATS be changed to force all dark pools to be open to all broker-dealers, and through those broker-dealers, to the investing public.

While we acknowledge the need for fair access reform, we believe that much of the debate over dark pools is misguided and is fueled by a desire by exchanges to avoid healthy competition. We believe investors have a right to remain silent, and that dark pools and dark order types fill a critical need. Those who would compel dark pools to display bids and offers have the issue exactly backwards: we believe dark pools and dark order types help long-term investors, by giving them an avenue to trade without revealing sensitive trading intentions to short-term traders. We do not think that forcing investors to play poker with their cards face-up would solve any problems, though it would potentially create many new ones.

We believe that the “price discovery” argument is a red herring. Despite popular belief, dark pools must report all their trades immediately to the consolidated tape, and dark pools have always been, and will remain, a niche product that will not lead to the end of publicly-displayed bids and offers.

In summary, we believe that the key to a strong and resilient stock market is a healthy competition for order flow among multiple venues, whether dark or light, along with mandated fair access to each of them.

The Role of Dark Pools

Selling 200 shares of ABC without moving the price is easy. Selling 2,000,000 shares is difficult – if word leaks out that a large pension fund or other big investor is selling millions of shares, institutional buyers of ABC will pull back, anticipating a price decrease, and other sellers will be more aggressive, driving the price down. The result

of this information leak is that the stock would likely drop quickly, potentially costing the pension fund a lot of money.

To avoid this scenario, institutional traders, and the brokers who trade on their behalf, expend a great deal of effort figuring out ways to buy and sell large amounts of stock that avoid signaling that a large investor is buying or selling. This has always been the case. To accomplish it, traders use a variety of trading techniques to reduce trading signals. There are four main types of signals that can reveal a trader's intentions to others: traditional phone calls, electronic messages like "IOIs" (Indications of Interest), reading patterns within the "tape", or displaying bids and offers on exchanges.

Of the four types of signals, displayed bids and offers are the most obvious signals, and therefore the most dangerous for investors – by design, displayed bids and offers are immediately shown to every trader in the marketplace. Therefore, the decision to display a bid or an offer is not made lightly by an institutional trader.

Before computerized "dark pools" existed, traders often chose to keep their bids and offers undisplayed, to avoid sending a signal of their trading intentions to the marketplace. This was accomplished by giving a "not-held" order to the floor brokers on the exchange who would then keep sensitive orders "in their pocket". The broker would literally drop the order ticket in his pocket, without displaying it to the world, while keeping his eyes and ears open for the other side of the trade. This process also occurred at the specialist post on the exchanges, and in the "upstairs" market, where brokers would hold client orders while looking for the other side.

A “dark pool” merely automates this age-old process. Traders drop orders into the computer’s “pocket.” The computer, just like the floor broker of old, does not tell anyone about the order in its pool. If the other side of the trade happens to also drop into the pool, the computer matches the two orders, and a trade occurs.

Computerized dark pools have been around since 1987. Today, they are an enmeshed part of the trading ecosystem, and they exist because they fill a need: the need for an institutional investor to be able to trade without telling the entire world that a new buyer or seller has entered the marketplace. Since decimalization, the number of shares required to be considered potentially “market-moving” has decreased, as the average trade size dropped from over 1400 shares in 1999, to under 300 in 2009. In a decimalized environment of constant small trades, even small orders can benefit from dark pools.

Questions have been raised about whether dark pools contribute to “price discovery.” Dark pools must report all trades to the consolidated tape immediately, and their prints are a valuable source of “last trade” data. When buying a house, buyers determine the appropriate price based on the prices at which similar houses actually sold in the neighborhood. Asking prices are interesting, but actual home sales are far more important. To assert that “last trade” data from dark pools does not contribute to price discovery is disingenuous.

The next question that is raised by dark pool opponents is: what if all bids and offers went dark? Would there no longer be a quote? Current estimates are that dark pools make up 8.6% of consolidated U.S. equity volume⁴, which we believe is in line

⁴ Rosenblatt Securities, Market Structure Analysis & Trading Strategy, September 30, 2009

with historical amounts from when the dark market was “upstairs” or run in the pockets of floor brokers. Dark pools fill a particular niche in the trading ecosystem, and they are here to stay, but we think scenarios of them taking over entirely are far-fetched and do not need to be addressed further.

Exchanges, which are for-profit entities, are natural competitors to dark pools. Every share matched silently on a dark pool is by definition a share that the exchanges have lost to rigorous competition. Therefore, the exchanges are understandably advocating for their interests by cloaking their arguments around rhetoric such as “price discovery” and “transparency”. They are also trying to harness the current debate around high-frequency trading to try to somehow link it to dark pools in an attempt to increase the regulatory costs for dark pool operators.

But the argument that dark pools are somehow part of the high-frequency trading debate simply does not make sense. High-frequency traders make their money by digesting publicly available order information faster than others; dark pools hide order information from everyone. Moving orders out of dark pools and onto exchanges would enable high-frequency traders to use new streams of information that are today kept quiet. This would not help retail investors, long-term investors, or the capital markets.

Recommended regulatory changes to ensure fair markets

Credit Suisse believes that several of the recent changes in the trading and markets area proposed by the SEC are positive developments and will help to ensure fair markets. However, one critical need has not yet been addressed – fair access to all

market venues. While we believe that dark pools play a critical role in the marketplace, institutions searching for liquidity across dark pools do face a fragmentation problem.

Currently, Regulation ATS allows dark pool operators to decide which broker-dealers can participate in their pool. There is a “fair access” requirement, but it is not effective. The current rule requires that ATS’s only have to open their system to all users in any individual stocks where they have exceeded 5 percent of the volume for four of the past six months. On top of that very high bar, there is a long list of exemptions, including exempting any ATS that systematically prices at the midpoint of the bid and ask.

Last week, the SEC proposed lowering the threshold for quoting by ATS’s when they send out so-called IOI’s (which are electronic messages that reveal trading information). The SEC specifically decided to split the quoting threshold from the fair access threshold. Credit Suisse believes that the SEC needs to focus on the issue of ensuring that all broker-dealers have the ability to access all ATS’s, enabling all broker-dealers to send dark orders to all dark pools. We propose the 5% threshold on the Fair Access provision be removed, and that all investors receive an equal opportunity to swim in all dark pools.

Regulation NMS effectively connected the nation’s exchanges. A simple change in the fair access provision of Regulation ATS could do the same for dark pools.

The Role of Flash Orders and High-Frequency Trading

"Flash" refers to orders that exchanges post for a fraction of a second to subscribers of their data feed before forwarding them to another exchange. Flash

orders were created in 1978, when an exemption was included as part of what is now Rule 602 of Regulation NMS. Credit Suisse supports the proposed ban on flash orders.

But while we support the proposed ban, it is worth noting that we do not support it for the reasons flash orders have been opposed in the media. Opponents of flash orders have repeatedly stated an incorrect argument: that flashes represent non-public information only available to a group of privileged insiders. This is not correct -- anyone can subscribe to the exchange data feeds and anyone has the opportunity to read flash quotes. Several of the major exchanges provide their data to the public for free, while others charge a nominal monthly fee that must be approved by the SEC. It is important to the debate to acknowledge that flash orders are in fact publicly available information, and that orders “flashed” are done so at the request of the “flashing” client.

The reason that we do support the proposed ban is that flash orders are allowed to virtually lock the market for a fraction of a second. “Locking” a market means that the highest bid is the same as the lowest offer. Regulation NMS expressly banned locked markets, mandating that a bid and offer at the same price must trade. Flash orders therefore violate the spirit of Regulation NMS and weaken the concept of a national market system.

High-frequency trading is linked in the debate to flash orders, but unlike flash orders, it is an undefined term. High-frequency trading is conceptualized as very short-term computerized trading, in which traders go in and out of stocks at high speeds. But how fast to qualify as a “high-frequency trader” is unclear – is a trader who goes in and out of a position once every five minutes a high-frequency trader? How about once an hour? Once a day? Most in the industry seem to use Justice Potter Stewart’s “I know it

when I see it” obscenity definition, but the result is that estimates of high-frequency trading range from 10% up to 60% of the volume. Credit Suisse believes the lower bound seems to be closer to the truth, but the lack of a formal definition makes it impossible to estimate what percentage of the marketplace they make up, or to perform any rigorous quantitative analysis to evaluate their effects.

We believe the focus at this point in the debate should be on creating a clear and specific definition of high-frequency trading, so that analysts and academics can perform rigorous studies, and we can separate the facts from the conspiracy theories. Only after rigorous study of the nature and impact of high frequency trading should any remedies be prescribed.

Equal Access and the Advantages of Technology

There is a big philosophical debate behind many of these questions: what does “an unfair trading advantage” actually mean? Is it unfair if a trader has any advantage at all, or just unfair if they have an advantage that can’t be replicated by others?

A staple of the argument against high-frequency trading is that these traders have an informational advantage, since most people don’t have the technology to read and respond to market data in a split-second time frame. This raises the question of why we would single out technological advantages without also looking at other types of advantages - no one has been suggesting that it is unfair to spend more money on fundamental research, for example, or to hire smarter or faster-thinking traders.

The question should not be: do people who have invested in technology and figured out how to build smarter or faster computers have an advantage? Of course

they do, as they would in any industry or undertaking. The question should be: do they have *unfair access* that others can't replicate?

Here, we believe the answer is clearly no. High-frequency traders base their investment decisions on publicly available market data. They buy computer hardware the same way everyone else does. And they compete for computer programming talent in the same job market as every other company in America. In short, there are no unfair barriers to entry: any entrepreneur can buy machines, hire programmers, subscribe to the public data feeds and attempt to become a successful high-frequency trader.

The only example that is used to demonstrate their "unfair" advantage is around the issue of co-location. "Co-location" refers to the practice of setting up your trading computers in the same physical building as the exchange's computers, to get a time advantage over your competitors. Like "dark pools" being the 21st century version of floor brokers putting order tickets in their pocket, co-location is the 21st century version of traders trying to get office space close to the exchange. In the days before the telephone, brokers would send "runners" down the block to deliver orders. The closer a broker's office was to the exchange, the faster they could execute orders, which was a major selling point for brokers that were clustered near the exchanges.

Today, firms do the computerized version of the same game of trying to stay physically close to the exchanges. Credit Suisse has hundreds of computers located in a data center operated by a third party, where several exchanges and many other brokers and trading firms cluster their machines. As in days of old, physical proximity to the exchanges and speed of execution remains a major selling point. And the general

public can get access to the benefits of sophisticated technology and co-located machines by selecting a technology-savvy broker-dealer to transact on their behalf.

If data center owners discriminate against giving leases to certain brokers or traders, it would be unfair, just as it would've been unfair in the old days for landlords near the exchange to refuse to lease to a particular ethnic group. But there is no evidence of unfairness in the market for data center leases, and it was reported last week that Nasdaq voluntarily agreed to have access to their data center regulated by the SEC going forward.⁵

Therefore, while fair access is critically important, Credit Suisse does not believe there is currently any unfairness of colocation access. More generally, we oppose regulatory changes based on disparities that result from some firms investing in technology while other firms choose not to.

Conclusion

Credit Suisse believes that the main principles governing market structure decisions should be the principles of fair access and information protection. Fair access does not mean equality of results or forced equality of technological capabilities – it means an equal opportunity to participate in trading destinations, whether displayed or dark, and an equal opportunity to invest in technology and processes that allow investors to perform their best.

Fair access, when combined with the existence of multiple venues, both dark and light, and protected by Regulation NMS and a robust Best Execution standard, add up

⁵ Traders Magazine, October 22, 2009, “SEC to Regulate Nasdaq’s Co-location Business”, by Peter Chapman.

to a marketplace where all buyers and sellers have an equal opportunity to achieve the best price. And it adds up to a competitive marketplace where exchanges and dark pools compete over technology and techniques to the benefit of all investors.

Information protection means that investors have a right to ask their brokers to keep their orders “in the pocket.” It means acknowledging that investors have the right to remain silent, and that they deserve access to dark pools and dark order types that fill this critical need.

In summary, we believe that:

- 1) Fair Access to all exchanges and dark pools is the solution to solving problems of inequality in the markets. The “Fair Access” provision of Regulation ATS should be overhauled to allow all investors to participate in all dark pools. Access to ATS quotes is not enough.
- 2) Attempting to steer orders from dark pools to displayed exchanges is misguided and would benefit short-term information-based traders, at the expense of big long-term investors.
- 3) High-frequency trading is a term that needs to be officially defined by the SEC before it can be properly analyzed or evaluated, and careful analysis is needed before prescribing remedies for problems that may not exist.
- 4) Disparities that result from differentiated levels of investment in technology are natural. It is only unfair if the opportunity to invest and build similar technology does not exist.

Thank you for the opportunity to appear today and I will be happy to answer any questions that you may have.