



## **Virtu Financial**

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December 28, 2015

Mr. Christopher Kirkpatrick  
Secretary of the Commission  
Commodity Futures Trading Commission  
Three Lafayette Centre  
1155 21<sup>st</sup> Street, NW  
Washington, DC 20581

Re: Notice of Proposed Rulemaking on Regulation Automated Trading  
("Regulation AT"), RIN 3038-AD52

Dear Mr. Kirkpatrick:

Virtu Financial, Inc. (together with its affiliates, "Virtu" or "we") is submitting this letter to share our views with the Commodity Futures Trading Commission (the "Commission") regarding Regulation AT, including a series of risk controls, transparency measures, and other safeguards to enhance the regulatory regime for automated trading on U.S. designated contract markets ("DCMs").

By way of background, Virtu is a leading technology-enabled market-maker and liquidity provider to the global financial markets, operating from offices in New York, Austin, Singapore and Dublin. Virtu acts as a registered market-maker across numerous exchanges and asset classes, is a direct member of most recognized futures exchanges in the United States and around the globe, and, through its subsidiary, is registered as a Floor Trader with the Commission and the National Futures Association.

### **Overview**

Virtu broadly supports the aims of Regulation AT and believes that requiring firms with direct electronic access to register at the federal level and implement principles based risk controls helps protect our markets against disruptive or harmful

behavior. Further, we believe that mandating the deployment of self-match prevention technology by designated contract markets, and requiring increased transparency of matching logic and participant incentive programs enhances the integrity of our futures markets and increases participant confidence in their fairness.

## **Definitions and Registration**

We applaud the Commission for its thoughtful definitional approach to regulation, focused on identifying those participants with direct electronic access and which disseminate orders in an entirely automated fashion, and ensuring that such participants are appropriately registered and subject to rules tailored to protect against disruptive or harmful behavior. We previously expressed concern regarding the creation of a category based on ambiguous marketplace nomenclature, or based on a participant's behavior, market orientation, or other commercial characteristics, and expressed further concern regarding how such a definition might be utilized.<sup>1</sup> We appreciate the Commission's responsiveness to these concerns and believe that the proposed rules appropriately identify a group of participants based on connectivity and automation and subject such group to appropriate rules which generally reflect industry best practice and enhance market integrity.

## **Multi-Layered Risk Controls**

As we noted in our prior letter, we support mandated multi-layer risk controls to ensure that market participants order and activities are subject to robust risk management filters to avoid disruptive events and behavior.<sup>2</sup> While we generally favor principles-based requirements to ensure that any risk controls are reasonably designed and appropriately implemented and monitored, we do support the specific requirements proposed by the Commission regarding messaging and price limitations. We are generally supportive of multiple layers of risk controls to be applied at different points in an order's life cycle, however, we encourage the Commission to consider the potential adverse consequences of overlapping or redundant risk controls at separate levels which may not be perfectly congruent. As other commenters have noted<sup>3</sup>, if the same conceptual risk control is implemented at multiple levels but is applied, tuned, configured or calculated differently at each level, market participants may struggle to predict or discern which of these orders will reach the order book and which may be (inadvertently or unexpectedly) screened by a "downstream" risk layer. Such a scenario would inevitably cause confusion and could result in unexpected positions, ultimately causing substantial harm to a market participant and the marketplace generally.

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<sup>1</sup> Virtu Financial LLC ("VF") Comment Letter (Jan. 10, 2014) at 2.

<sup>2</sup> VF Comment Letter at 2-3.

<sup>3</sup> The Futures Industry Association ("FIA") Comment Letter (Dec. 11, 2013) at 61.

## **Development and Testing of Algorithmic Trading Systems**

Virtu generally supports the proposed rule requiring Automated Traders to implement policies and procedures regarding the development and testing of their algorithmic trading systems. We believe that robust processes around development and change management are integral to ensuring that automated trading strategies behave as intended and avoid causing disruption to the futures markets. We do, however, express our reservations about any proposed rule which would inhibit a market participant's ability to protect its intellectual property. Virtu, along with many other "AT Persons", has invested countless human and other resources into developing and refining its extensive technological infrastructure globally and the associated market making and other trading strategies that utilize this proprietary infrastructure, and has taken significant measures to protect the confidentiality, and to limit the dissemination, of the software embodying such infrastructure and strategies. As Commissioner Giancarlo noted, Virtu's technology and market making strategies are not merely historical records, but instead reflect the present and future investment and or execution intentions of market participants.<sup>4</sup> We therefore encourage the Commission to avoid adoption or promulgation of rules which would grant the Commission or any other governmental authority unprecedented ordinary course inspection rights over a market participant's source code repository, which could currently only be accessed pursuant to a subpoena. Such access is seemingly unprecedented<sup>5</sup> in a highly competitive industry and could undermine the substantial efforts made by participants to maintain the confidentiality of the intellectual property.

## **Self-Match Prevention & Matching Engine and Incentive Program Transparency**

Virtu broadly supports the mandatory deployment of self-match prevention technology by Designated Contract Markets, as well as transparency regarding matching engine logic and market maker and liquidity provider incentive programs. While we defer to the Commission and the DCMs on the nuances of any such requirements, as a market maker we believe self-match prevention technology is critical in facilitating price discovery and narrowing of bid/ask spreads in modern electronic markets. Similarly, transparency and dissemination of information regarding the market microstructure enhances end-user confidence in and soundness of the marketplace.

In conclusion, we applaud the Commission for its thoughtful approach to regulation in a dynamic market place. We encourage the Commission to adopt those rules which enhance the integrity of the market place, while being conscious of potential

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<sup>4</sup> Statement of Commissioner J. Christopher Giancarlo ("Giancarlo Statement") Regarding Notice of Proposed Rulemaking on Regulation Automated Trading, November 24, 2015.

<sup>5</sup> "I am unaware of any other industry where the federal government has such easy access to a firm's intellectual property and future business strategies." Giancarlo Statement.

unintended and/or harmful consequences of overlapping risk controls and undermining the confidentiality of critically important intellectual property.

Sincerely,

A handwritten signature in black ink that reads "Doug A Cifu". The signature is written in a cursive, slightly stylized font.

Douglas A. Cifu  
Chief Executive Officer  
Virtu Financial, Inc.