

4<sup>th</sup> May, 2018

### **Via Electronic Submission**

Giles Ward International Organization of Securities Commissions (IOSCO) Calle Oquendo 12 28006 Madrid Spain

# Re: PUBLIC COMMENT ON MECHANISMS USED BY TRADING VENUES TO MANAGE EXTREME VOLATILITY AND PRESERVE ORDERLY TRADING

Dear Mr. Ward:

FIA welcomes the opportunity to respond to the Consultation Report ("the Report") issued by OICV-IOSCO on the mechanisms used by trading venues to manage extreme volatility and preserve orderly trading.

FIA is the leading global trade organization for the futures, options and centrally cleared derivatives markets, with offices in London, Singapore and Washington, D.C. FIA's membership includes clearing firms, exchanges, clearinghouses, trading firms and commodities specialists from more than 48 countries as well as technology vendors, lawyers and other professionals serving the industry. FIA's mission is to support open, transparent and competitive markets, protect and enhance the integrity of the financial system, and promote high standards of professional conduct. As the principal members of derivatives clearinghouses worldwide, FIA's member firms play a critical role in the reduction of systemic risk in global financial markets. Further information is available at www.fia.org.

### 1. Introduction

FIA has been a long-term proponent of risk controls within trading venues to protect market integrity, including producing a substantial body of work on risk controls and automated trading, starting with FIA's Market Access Risk Management Recommendations,<sup>1</sup> published in April 2010 – one month before the May 6, 2010 "Flash Crash" in US equities and futures.

Following our recommendations paper, FIA conducted a survey of global exchange traded derivatives venues in 2010 regarding the types of controls they offered, and we will be conducting a new survey of venues in 2018 to see how venues have adapted through both the evolution of best practice and the introduction of regulation (such as MiFID II within the European Union).<sup>2</sup>

<sup>2</sup> <u>http://ec.europa.eu/finance/securities/docs/isd/mifid/rts/160714-rts-7\_en.pdf</u>: Directive 2014/65/EU, RTS

<sup>&</sup>lt;sup>1</sup> <u>https://fia.org/sites/default/files/content\_attachments/Market\_Access-Best-Practices.pdf</u>

<sup>7,</sup> Article 19 Mechanisms to manage volatility.



Although FIA's work on risk controls has ostensibly been within the exchange traded derivatives space, we feel that we have reflected best practices that may be applied across many asset classes where trading has become increasingly electronic or algorithmic in nature, including – but not limited to - equities, US Treasuries, foreign exchange and fixed income markets. Of the four examples cited in the introduction to the Report, two occurred specifically within the futures markets and the other two occurred in markets where derivatives of those instruments – notably futures - also play an important role in price discovery within the overall market ecosystem (foreign exchange, and US Treasury securities).

FIA supports IOSCO's core objective to ensure that markets are fair, efficient and transparent, and broadly supports the recommendations made within the Report. As stated in the Report, events of extreme volatility can undermine this objective, as well as weaken the integrity of markets and lessen participants' confidence in them. Mechanisms employed by trading venues to manage market integrity during periods of extreme volatility – as well as during regular operation – are important to meet these objectives. Such mechanisms can include trading halts, also known as "circuit breakers", where the price discovery process is temporarily interrupted during times of extreme volatility. Transparency around how these mechanisms are triggered, how they act, and how notice of their activation is disseminated to market participants and the public is also critical.

### 2. Evolution of Markets

The Report makes reference to several academic papers and analyses of trading halts from the 1990s. As we mention throughout our response, markets have become increasingly electronic and automated in nature since the 1990s. This has led to many challenges in how fast processes and procedures can react to market events, especially within an increasingly interconnected and global marketplace that requires both independent and potentially coordinated action - not just within the same asset class but across multiple asset classes.

FIA has observed many evolutionary changes over the last 10 years, particularly within the global exchange traded derivatives markets, that have led to the introduction of trading halts and other mechanisms to manage extreme volatility in markets. While trading halts temporarily interrupt the price discovery process, they allow for a market re-evaluation if the process of price discovery has been distorted through abnormal or aberrant activity, and slows the "herd-type" reaction to potential misinformation as discussed by Ackert (2012).<sup>3</sup> We note that the SEC report on the Findings Regarding the Market Events of May 6, 2010 point to the implementation of a trading halt in the E-Mini S&P 500 futures market as a key juncture within that event.<sup>4</sup>

### 3. Trade Certainty

<sup>&</sup>lt;sup>3</sup> Lucy F. Ackert, "The Impact of Circuit Breakers on Market Outcomes," UK Government Foresight Project, The Future of Computer Trading in Financial Markets, 2012.

<sup>&</sup>lt;sup>4</sup> <u>https://www.sec.gov/news/studies/2010/marketevents-report.pdf</u>: Page 6, extract from Lessons Learned – "As demonstrated by the CME's Stop Logic Functionality that triggered a halt in E-Mini trading, pausing a market can be an effective way of providing time for market participants to reassess their strategies, for algorithms to reset their parameters, and for an orderly market to be re-established."



Alongside the evolution of volatility mechanisms has been the development of supporting mechanisms to help ensure trade certainty. Many futures exchanges have implemented price limits and price bands to help protect the price discovery process by limiting the possibility of trades being "busted" or treated *void ab initio* during periods of market stress. These price bands encourage trading to occur within specific price ranges defined by the trading venue and prevent potential market dislocation by aggressive market and limit orders that could trade outside of the price range set by the band.<sup>5</sup>

If, under rare circumstances, an execution does occur outside of a price band, then trades are typically not busted but rather price adjusted to the range defined within the price band – ensuring that they remain valid transactions. Within exchange traded derivatives markets - where the focus is on risk transferal and price discovery - ensuring certainty of execution is paramount. It has also been noted that trade certainty during times of extreme volatility is key to encouraging the continued provision of liquidity, and we note that the SEC report on the Findings Regarding the Market Events of May 6, 2010 found that equities trades executed on platforms without similar mechanisms for trade certainty were busted in a non-transparent manner.<sup>6</sup>

### 4. No One-Size-Fits-All Approach to Volatility Mechanisms

In conclusion, FIA agrees with the IOSCO Report that there is no single "one-size-fits-all" approach to how volatility mechanisms (including "circuit breakers") or other forms of market integrity protection should work.

Different markets require different types of controls, and while it may be appropriate to halt a particular market (albeit briefly), it may not be appropriate to do so in other markets. For example many commodity derivatives markets utilize the concept of "limit-up" or "limit-down", where the market continues to trade, but does not allow orders to aggress in a direction that may exacerbate a market move (for example aggressively selling during a limit-down event, or aggressively buying during a limit-up event). Such a mechanism may be appropriate for commodity derivatives but may not be appropriate for another type of financial instrument where trading may be paused briefly or for the remainder of the trading day depending on the volatility profile of the instrument.

FIA believes that trading venues should be able to determine the appropriate volatility mechanisms and parameters used to calibrate them, for the instruments that they make available for trading. Calibration for each instrument should be driven through engagement with market participants, other trading venues

<sup>&</sup>lt;sup>5</sup> <u>https://www.scribd.com/document/31546905/CME-Group-Report-on-the-Flash-Crash</u>: Page 4 – "Stock index futures markets on CME Group exchanges performed their function as price discovery and risk management tools flawlessly throughout the period in question. Our markets experienced no untoward dislocations, no errors were in evidence and no trades were busted. We believe there is evidence that futures were a moderating factor during the incident, providing liquidity when it was needed the most."

<sup>&</sup>lt;sup>6</sup> <u>https://www.sec.gov/news/studies/2010/marketevents-report.pdf</u>: Page 6, extract from Lessons Learned: "A further observation from May 6 is that market participants' uncertainty about when trades will be broken can affect their trading strategies and willingness to provide liquidity. In fact, in our interviews many participants expressed concern that, on May 6, the exchanges and FINRA only broke trades that were more than 60% away from the applicable reference price, and did so using a process that was not transparent."



offering similar or derivative instruments, and - where appropriate - regulators. Implementation and calibration of volatility mechanisms by trading venues should be performed in a fair and transparent manner, and made available to the market participants and the public to promote confidence in the function of the markets during times of stress.

### 5. Conclusion

Global trading venues are at various points of development when it comes to the implementation of many market integrity controls, including mechanisms to manage extreme volatility. To that point, we commend IOSCO for making recommendations that can be adopted by parties across the globe to create greater consistency on how trading venues ensure orderly trading.

Respectfully submitted,

Greg Wood Senior Vice President of Global Industry Operations & Technology



### **APPENDIX A – SPECIFIC COMMENTS ON OICV-IOSCO RECOMMENDATIONS**

### RECOMMENDATION 1 – TRADING VENUES SHOULD HAVE APPROPRIATE VOLATILITY CONTROL MECHANISMS

Trading venues should establish and maintain appropriate volatility control mechanisms during trading hours in order to manage extreme volatility and preserve orderly trading in a financial instrument on the market.

As we have noted, FIA is supportive of appropriate volatility controls to protect market integrity in the event of stress caused by both short-term and long-term volatility. Such controls should be tailored to the appropriate instrument and consider various factors regarding how that instrument typically trades. For example, does the instrument typically act as sole source of price discovery or is it linked to other instruments within the same trading venue or other trading venues? How liquid is the instrument, and what would be considered "normal" price fluctuations during a typical trading day? It is also important to consider whether the instrument acts as an indicator of price on other trading venues that may be closed during that instrument's trading hours.

Where a financial instrument is a derivative of another, FIA does not believe that the trading venue should try to link the price discovery of the derivative to the underlying instrument through use of theoretical or "fair value" calculations, which may be costly to implement. Price discovery of the derivative instrument should be driven by independent market forces, which ultimately allows the market itself to correct any price differentials (typically through arbitrage opportunities). This "decoupling" of price discovery is particularly important when trading for a derivative instrument may be 24-hours in nature compared to a shorter trading day for the underlying instrument(s).

There should not be a one-size-fits-all approach. Trading venues should be able to decide whether a volatility mechanism is best calibrated based on moves expressed in price percentage or number of ticks. Such parameters should be publicly available to market participants.

FIA also believes that volatility mechanisms should be automated in nature where appropriate to the typical behavior of the market, with the parameters that trigger such mechanisms fully transparent to market participants. However, we note that the trading venue should retain discretion to interact manually where there is need to do so to maintain market integrity – for example in reaction to events outside of the financial instrument that may have detrimental impact to the price discovery process including - but not limited to - movement of an index that contains the impacted instrument. It is important that such manual intervention should be employed minimally and if required should be communicated to market participants, including details of when the intervention will cease and how the instrument will resume the normal price discovery process.

As we have also noted previously, FIA is supportive of the use of price banding to ensure that executions occur within a preset, transparent, range of prices determined by a reference price. Trading venues should also be able to recalculate price bands dynamically as long as there is appropriate transparency to market participants. Price bands are an important factor in ensuring market integrity and trade certainty, and when used in conjunction with trading halts will help ensure that trades are not busted during



periods of volatility and that bands may be appropriately reset to reflect prevailing market conditions at resumption of trading after a halt.

### **RECOMMENDATION 2 – CALIBRATION OF VOLATILITY CONTROL MECHANISMS**

*Trading venues should ensure that volatility control mechanisms are appropriately calibrated. To do so, trading venues may consider the following non-exhaustive list of elements:* 

- a) the nature of the financial instrument or underlying asset e.g. a security, ETF or derivative;
- *b) the liquidity or trading profile of the financial instrument;*
- *c) the volatility profile of the financial instrument or underlying product;*
- *d) the volatility control mechanisms in place for related financial instruments and/or markets;*
- e) the price of the financial instrument.

As we have already noted, FIA supports the ability of the trading venue to calibrate their mechanisms based on how they anticipate the financial instrument to function, and should do so with input from both market participants and regulators. There should not be a one-size-fits-all approach to calibration of volatility mechanisms – different instruments require different mechanisms and different levels of calibration.

### **RECOMMENDATION 3 – MONITORING OF VOLATILITY CONTROL MECHANISMS**

Trading venues should regularly monitor volatility control mechanism to make sure they are working as designed and to identify circumstances that would require the mechanisms to be re-calibrated.

FIA is also supportive of the ability of the trading venue to monitor and review parameters for financial instruments and make the appropriate calibration changes based on observation of how the market has behaved during situations of both low and high volatility.

Regular review and recalibration is an important part of ensuring the market functions as expected – particularly in relation to interlinked or underlying instruments - and should be conducted with full transparency to market participants. It is important that such mechanisms are initially tested, monitored, reviewed, and amended as appropriate – however we do not feel that there should be a mandate on timeframes for review, instead this should be dictated by the trading venue in consultation with market participants and regulators with full transparency.

# RECOMMENDATION 4 – INFORMATION NECESSARY FOR REGULATORY AUTHORITIES TO MONITOR THE VOLATILITY CONTROL MECHANISM



Regulatory authorities should consider what information they require to effectively monitor the overall volatility mechanism framework in their jurisdiction, and make sure that trading venues maintain relevant records.

FIA is supportive of regulatory oversight of trading venues and the mechanisms they employ to manage volatility and protect market integrity. To that point, FIA has noted that many exchange traded derivatives venues have evolved their controls to protect market integrity over the last 10-20 years and should be allowed to continue that evolution through thought-leadership.

FIA advocates a principles-based approach to regulatory oversight, allowing markets and participants – including trading venues – to continue to evolve and implement best-practices, focused on the promotion of fair, transparent, and efficient markets. We do not believe that there is a single one-size-fits-all approach to such regulatory oversight, and different jurisdictions may choose to take different approaches – however, we caution that too much prescription can potentially stifle innovation.

We encourage regulators to require transparency from trading venues regarding their implementation of volatility control mechanisms, as well as the parameters used for both initial and subsequent calibration of such controls. Such information should be disseminated publicly so that all market participants are aware of how the mechanisms work and the parameters that may trigger them.

## RECOMMENDATION 5 – INFORMATION REGARDING TRIGGERING OF VOLATILITY CONTROL MECHANISMS TO REGULATORY AUTHORITIES

Trading venues should make available upon request by their regulatory authorities information about the execution of any volatility control mechanism.

FIA believes that when a mechanism is triggered, the activation of the trigger and the parameters regarding its triggering should also be publicly disseminated to all market participants as well as regulators. This includes both automatic and manual triggering of the mechanism.

Where a volatility mechanism has been triggered, its activation and cause should also be relayed to related markets to allow them to determine when automatic intervention may occur or manual intervention may be required. While such information should be communicated in real-time – or as near real-time as practicable - it should also be available to both regulators and market participants on request after the event.

# RECOMMENDATION 6 – COMMUNICATION OF INFORMATION ABOUT VOLATILITY CONTROL MECHANISMS TO MARKET PARTICIPANTS AND THE PUBLIC

Trading venues should communicate sufficient information to market participants and, if appropriate, the public to understand the nature and operation of the volatility control mechanisms used.



## RECOMMENDATION 7 – COMMUNICATION TO MARKET PARTICIPANTS WHEN A MECHANISM IS TRIGGERED

Trading venues should make available to market participants and, if appropriate, the public information regarding the triggering of a volatility control mechanism. Information to market participants should be provided promptly.

As we have noted throughout our response, FIA believes that it is very important to disseminate both the criteria around how a volatility mechanism is defined and triggered, as well as its activation within a financial instrument. Information should be disseminated not just to regulators, but also publicly for both market participants and observers of the market. In an extreme volatility event, it is very important to ensure that communication of any triggering of a mechanism is communicated as quickly as possible to market participants who are managing market risk and may be impacted by an interruption to the price discovery process within a particular financial instrument. Public transparency around the volatility mechanisms and their parameters also helps market participants potentially prepare in advance for their triggering.

While it may be appropriate to communicate market status with market members through private channels – including market data feeds - it is also important to provide information through public websites and social media as appropriate. Where manual intervention has been utilized, rather than a transparent automated mechanism, to intervene in the trading process, it is especially important for the event and its cause to be publicly disseminated to ensure the maintenance – and public perception – of fair and orderly markets.

FIA believes in a principles-based approach regarding the timing and means of communication - these should not be dictated by the regulator but rather by the trading venue in consultation with its regulator and market participants. This allows for the continued evolution of the mechanics of communication that may be employed regarding notification to regulators, market participants and the public regarding the activation and cause of a volatility mechanism being triggered.

### **RECOMMENDATION 8 – COMMUNICATION BETWEEN TRADING VENUES**

Where the same or related instruments are traded on multiple trading venues in the same jurisdiction, trading venues should communicate as appropriate when volatility mechanisms are triggered. Where the same or related instruments are traded in different jurisdictions and the mechanism is triggered, communication may be appropriate.

FIA notes that markets have become both increasingly fragmented yet interlinked globally. This leads to many challenges particularly when it comes to the implementation of mechanisms to manage extreme volatility and preserve orderly trading. We strongly believe that communication is paramount when it comes to the event and cause of a volatility mechanism being triggered.

However, we note that a trigger within one market or jurisdiction may be appropriate without needing to stop the price discovery process in another market or jurisdiction. This is particularly important when



alternative price discovery – and risk transferal – may continue in a derivative instrument or another instrument that is distinct but closely linked to the market that may have been paused. Price discovery may also continue in another time zone regardless of an event in one time zone. Halting alternative price discovery should only be implemented when there is a need for fundamental protection of market integrity, and should be carefully calibrated and managed in a transparent manner.

To this point, FIA recommends that trading venues implement appropriate measures regarding coordination of trading halts or other volatility measures where it is appropriate for the fundamental integrity of the overall marketplace. This may not require exact duplication of volatility mechanisms, or coordination of volatility events. Instead, the trading venues – in consultation with market participants and their regulators - should be able to determine the role that their markets play with regard to each other.

As we have noted, communication between parties including regulators, market participants – including associated trading venues – and the public remains paramount to not only protect overall market integrity but to ensure that appropriate risk transferal can continue through potentially alternative sources of price discovery.