Mechanisms used by trading venues to manage extreme volatility and maintain orderly trading. June 2018.

On 7 March 2018 the International Organization of Securities Commissions (IOSCO) published a consultation document on "*Mechanisms used by trading venues to manage extreme volatility and preserve orderly trading*" with a view to encouraging the public to comment on its analysis and recommendations.
The public consultation ended on 6 May and it is planned to analyse the comments received in the coming months in order to prepare a final report.

One of IOSCO's aims is to ensure that markets are fair, efficient and transparent. Extreme volatility events can undermine this objective, weaken the integrity of securities markets, and lessen confidence in the markets. In recent years the use of technologies has increased considerably. In general, technology has provided the market and its participants with major advantages, such as greater participation, smaller price ranges, higher liquidity, less short-term volatility and better tools for the execution of clients' orders. However, technology can also bring with it a number of potential risks, such as the overloading of trading centre systems due to large volumes of orders or, in the case of algorithmic trading and high frequency trading, the risk of generating duplicate or erroneous orders and other anomalies that can cause market disruptions. Information technologies have increased the speed, capacity, and complexity of transactions at a time when events of extreme or abnormal volatility have been occurring in financial markets (Example: the 2010 Flash Crash).
In particular, the report analyses the following elements:

– The various automated mechanisms used by trading venues to halt or constrain trading during extreme volatility events.
– The procedure for establishing and monitoring the thresholds and reference prices used in these mechanisms.
– How and what kind of information regarding the design, operation and triggering of these mechanisms is disseminated to regulatory authorities, marketplace participants and the general public.
– The level of communication between trading venues, both in the jurisdiction of the trading venue where the volatility management mechanism is triggered, and among different jurisdictions where the same or related instruments are traded.

The consultation document concludes with a series of recommendations intended to help trading venues and regulatory authorities take decisions regarding the implementation, operation, and monitoring of volatility control mechanisms.

The recommendations are as follows:

1) Trading venues should have control mechanisms in place to manage extreme volatility during trading hours and ensure the orderly trading of financial instruments on the market.

2) Trading venues should ensure that volatility management mechanisms are appropriately calibrated. To this end 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.

3) Trading venues should regularly monitor their volatility management mechanisms to ensure they are working as intended and to identify any circumstances that might require these mechanisms to be recalibrated.

4) Regulatory authorities should consider that the information they need to monitor effectively the regulatory framework of all the volatility management mechanisms in their jurisdiction, and ensure that all trading venues maintain appropriate registries.

5) Trading venues should make information on the execution of any volatility management mechanism available to the supervisory authority.

6) Trading venues should communicate sufficient information to market members and, when appropriate, to the general public, for them to understand the nature and operation of the volatility management mechanisms used.

7) Trading venues should provide market members, and whenever appropriate, the general public, with information regarding the triggering of a volatility control mechanism. Information should be provided to market members without delay.

8) When the same or related financial instruments are traded on multiple trading venues in the same jurisdiction, the trading venues should communicate as necessary when the volatility control mechanism is triggered. When the same or related financial instruments are traded on different jurisdictions and the control mechanism is activated, communication would be advisable”

Comparison with the principles prevailing in the European Union.

In the European Union, Article 48 of Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 (MiFID II) on markets in financial instruments addresses the reliability of systems, volatility management mechanisms, and algorithmic trading. With regard to volatility management mechanisms, Paragraph 5 of the aforementioned article states that Member States should require their regulated markets to be in a position to temporarily halt or constrain trading if a significant fluctuation occurs in the price of a financial instrument on that market or on a related market for a brief period of time, and even, in exceptional cases, to cancel, alter or correct any transaction (IOSCO Recommendation 1).

Also, Member States should require regulated markets to ensure that the parameters for halting trading are appropriately calibrated. It actually goes further than IOSCO Recommendation 2 and establishes that when calibrating these mechanisms, regulated markets should take into account the liquidity of the various asset classes and subclasses, the nature of the market model, and the types of users, and ensure that they are sufficient to prevent significant disturbances to the correct functioning of trading.

The aforementioned Paragraph of Article 48 of MiFID II also requires Member States to ensure that regulated markets inform the competent authority of the parameters for halting trading and of any modification of those parameters, in a consistent and comparable manner, and that the competent authority should, in turn, inform the European Securities and Markets Authority (ESMA) in this regard, in line with IOSCO Recommendation 5.

Meanwhile, Article 48, Paragraph 12 of MiFID II establishes that ESMA should produce technical regulations specifying a series of organisational requirements for trading venues regarding system reliability, volatility management mechanisms, and electronic trading, while Article 18, Paragraph 5 specifies that this regulation should be extended to Multilateral Trading Facilities and Organised Trading Facilities (MTFs and OTFs). These requirements are implemented by Delegated Regulation 2017/584 of 14 July 2016. Among the provisions of Article 18 of this Delegated Regulation, which deals with the Prevention of anomalies in trading conditions, there is one which establishes that trading venues should have mechanisms in place to manage volatility (IOSCO Recommendation 1). Furthermore, in Paragraph 3 it requires trading venues to establish arrangements and policies regarding volatility management mechanisms, among other issues, in accordance with Article 19 of the same Regulation.

This Article 19, which is based on the aforementioned Article 48, Paragraph 5 of MiFID II, regulates the volatility management mechanisms and establishes that trading venues should ensure that there are appropriate mechanisms for automatically halting or constraining trading, that they operative at all times during trading hours, that they are tested before and after being applied, that human and IT resources are available to maintain and supervise them and that these mechanisms are subject to constant supervision.

The same article also requires that the arrangements and policies referred to in Paragraphs 2 and 3 of the Article, among which are the volatility management mechanisms, be made public (IOSCO Recommendation 6). Also full records should be kept of the arrangements and policies referred to in Paragraph 3 of Article 18 covering volatility management mechanisms (IOSCO Recommendation 4).

According to the regulation, trading venues should also maintain records of the rules and parameters of the volatility management mechanisms, and of any modification made to them, and of the functioning, management and improvement of those mechanisms. In this respect, Article 19 requires that trading venues ensure that their rules on volatility management mechanisms include procedures that enable the management of situations in which the parameters need to be invalidated manually to ensure orderly trading.

Pursuant to the aforementioned Article 48, Paragraph 5 of MiFID II, ESMA has prepared guidelines for the calibration of volatility management mechanisms and publication of trading halts, which should be applied by trading centres allowing algorithmic trading, and should be required by their competent authorities. (These are aspects mentioned in the recommendations of the consultation document of IOSCO). These guidelines establish that volatility management mechanisms should use reference prices that reliably reflect the volatility behaviour of the financial instrument and, if necessary, have the capacity to refer to external reference. Trading venues should calibrate their mechanisms according to a predetermined methodology, one which has been statistically proven and which takes into account the following non-exhaustive list: nature of the financial instrument, liquidity profile (liquid, semi-liquid, illiquid), quotation level of the financial instrument, volatility profile, order imbalance, trading venue mode and rules, external references (correlation between spot and futures, same instrument traded on several venues, etc.), duration of halts (randomisation of duration) and newly issued instruments.

Also, the special external communications (IOSCO Recommendation 7) that trading venues will be publishing in the immediate future call for the communication, through the normal channels for communicating pre-trading and post-trading information (clearly differentiating between the trading suspensions provided for in Articles 32 , 52 and 69 point (m) of the MiFID II Directive), on the triggering of a halt, the type of trading halt, the phase of trading in which the halt was triggered, and the scope and end the halt.

Finally, with regard to Spanish markets, it should be mentioned that market model of the Spanish Stock Market Interconnection System (Spanish acronym SIBE) has a chapter dedicated to volatility auctions and price ranges. This contains a detailed explanation of the functioning of the Spanish market's volatility auctions, both by static range and dynamic range (IOSCO Recommendation 6). SIBE Circulars 1/2017 and 2/2017, the former on equity income and the latter on ETFs, call for the establishment of static and dynamic ranges for each security traded on the SIBE. In response to this, the *Sociedad de Bolsas* (the company that runs the Spanish Stock Exchange) uses a monthly operating instruction to communicate the static and dynamic ranges of the general trading of stock, of fixing trading, of ETFs, and of subscription rights. The Sociedad de Bolsas has a methodology, to which the CNMV has access, for calculating static and dynamic ranges, and has the capacity to request any additional information in that respect and in respect of the records that the CNMV maintains.

Link of interest:

Mechanisms used by trading venues to manage extreme volatility and preserve orderly trading. Consultation report.