

## TRADING SAFEGUARDS: HOW EURONEXT PROTECTS ITS MARKETS

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A lot has already been written about the circuit-breakers, whether their percentage levels are too low in the context of volatile markets, and whether halting markets serves the well-functioning of financial markets. Obviously we are operating in a globalised economy, so we are observing very closely the latest developments and analysis on the handling of trading suspensions. We cannot be complacent on such a vital topic for the security and safety of our markets. So, it might be useful to explain how Euronext protects its markets.

Euronext's general philosophy is to not halt trading unless in extreme circumstances. To achieve this we do not rely on circuit-breakers only, but on a full set of trading safeguards. Over the years Euronext has developed a complete set of market protection mechanisms, designed as priority to prevent situations of disorderly markets, and also to detect unusual events. Those mechanisms have also been designed not to halt trading unnecessarily, as we understand the benefits for investors to manage their risks in a safe and transparent trading environment.

Prior to any intervention, Euronext acts on two levels:

- **Prevention:** this set of market protection mechanisms includes the capacity to reject potentially aberrant orders (unusually large in size or in units) before they enter the markets, to limit the potential for one single order to disrupt the market, or to prevent brutal price variations (dynamic or static collars).
- **Detection:** a complete set of alerts that are triggered by our monitoring systems (again, it's about orders size, price variations, unusual order-to-trade ratio, etc...) and handled in near real-time by the analysts of our Market Surveillance team who follow a specific investigation and resolution process. The handling of these alerts gives us a very solid basis to ensure we are maintaining fair and orderly markets on a day by day basis. On very active days, analysts can handle a few hundred alerts. The human analysis remains a critical factor for proper evaluation of and decision making about unusual situations.

### TRADING SAFEGUARDS FOR INDIVIDUAL STOCKS

In some cases, trading halts are inevitable. On the cash side, our most famous circuit-breaker is the static collar, which automatically halts trading on a stock in case a +/- 8% (for Blue Chips constituents) and +/-10% (for other stocks applying the Static Collars) price variation (vs previous close) is reached. It is active for the opening auction and during the rest of the day (+/- 8% - for Blue Chips constituents - and +/-10% - for other stocks applying the Static Collars - price variation vs opening price). This simple and robust mechanism has been a good safety net over the past years. More details are available in Appendix.

On Euronext, the circuit-breakers are active per individual stock, so we might automatically suspend trading on a few stocks, but not have to close the whole market. Also, we can resume trading on one stock once we have certified that the conditions for a fair and orderly market for that stock have been met again. We would still disseminate indices if several blue chips were halted temporarily. If 20% (in market cap) of the index constituents would not trade after the opening, then indices will still be disseminated as being indicative.

## TRADING SAFEGUARDS FOR DERIVATIVES

Sufficient liquidity in the markets provides a certain level of protection. Safeguarding and maintaining the liquidity with good Market Models combined with adequate Market Surveillance interventions are of the utmost importance. Wrongly priced orders might be executed at undesirable or even aberrant levels if liquidity is not available in derivative contracts. Euronext aims to have the most traded derivative products filled with two sided markets with sufficient volume and tight spreads in relation to its underlying reference. However it might occur that liquidity in derivative products is not available. Especially under these circumstances, protective boundaries are needed. If a derivative order is submitted at an unrepresentable price at an illiquid moment, it might trigger a transaction at a price not representative of the value of the contract. With this in mind, Euronext currently validates order limits instead of traded prices.

Underlying references fluctuate by offer and demand. Derivatives however are theoretically calculated (based on their underlying), and so is the Price Limit reference price around which protective Price Limit spreads are set. When the underlying changes, all derivatives prices (based on that underlying) need to be recalculated. The same applies when other parameters change: a company adjusts its dividend, interest levels change or the volatility varies in an underlying which impacts the pricing of its derivative listings.

Maintaining Price Limit reference prices for derivatives is managed by the Euronext Market Surveillance team. Parameters need to be continuously reviewed and adjusted. A consequence of incorrect price limit levels might be that well priced orders are rejected, and liquidity in the markets will decrease. Wrongly priced orders might be executed at unrepresentable prices.

Also, other types of interventions might be needed at irregular or volatile moments. Since Price Limits should not obstruct the derivative markets but protect it, it might be needed to widen the limit spreads and revert back to normal spread limits when the exceptional circumstance is less applicable.

Euronext might temporarily halt trading of derivatives products if no fair and orderly market can be guaranteed. In practice, the market is automatically halted on a contract level if the collars on Euronext underlyings are breached.

Finally, it is also important to note that all Euronext's market protections mechanisms have been discussed and validated with our **regulators**. So, we are constantly improving the safety net across all our regulated markets. For example, in recent years, three new trading safeguards were introduced in 2015 after quite extensive work with our College, the collars were adapted also to penny stocks trading, the case of multiple stop orders being triggered and creating a brutal price drop has been resolved. As we are in a very innovative industry, our Market Surveillance team continues to work on the various adjustments that may be required to strengthen our set of trading safeguards on a case by case basis.