

# EURONEXT EQUITIES: MARKET QUALITY ANALYSIS



**Is the Equity Market becoming more resilient to global turmoil?**

May 2022

# Euronext, a resilient marketplace during global turmoil

The geopolitical tensions of 2022 are bringing back volatility to the markets.

The Covid outbreak in 2020 had already marked a turning point, with volatility at consistently higher levels than historically, translating into uncertainty over future expectations. From a microstructure standpoint, market quality is considered to be very sensitive to volatility: it is generally observed to deteriorate as volatility increases.

Nonetheless, based on empirical observations during the ongoing crisis between Ukraine and Russia, the overall equity market in Europe now seems to be more resilient to distortions driven by global events.

In this study, Euronext provides a short analysis comparing the market quality metrics in 2020 during the first wave of the Covid-19 outbreak and the recent market turmoil in 2022 caused by the Ukraine-Russia crisis.

## Methodology:

- Market quality metrics are analysed for CAC 40<sup>®</sup> constituents, which are among the most liquid and highly traded securities on Euronext and at pan-European level. By selecting this subset, we exclude the potential impact of illiquid securities.
- The data range covers two volatile periods: "First Covid wave" from 3 February 2020 to 30 April 2020, and "Ukraine-Russia crisis" from 3 January 2022 to 31 March 2022.
- The red dotted lines in the charts highlight the relevant dates during the two periods: 16 March 2020, the day the first lockdown was announced in France, and 24 February 2022, the beginning of the Ukraine-Russia crisis.
- Volatility is evaluated using the VSTOXX<sup>®</sup> Index (V2TX), which measures the volatility of the EURO STOXX 50 Index.
- The market quality data in this study is sourced by the independent provider BMLL Technologies, and three metrics are analysed: Spread, European Best Bid & Offer (EBBO) Setting and EBBO Presence.

## Executive summary:

- Since early 2020, volatility and equity trading volumes have skyrocketed due to global market turmoil, driven by the Covid-19 pandemic waves and the ongoing Ukraine-Russia crisis.
- European market quality has been more resilient to distortions during the Ukraine-Russia crisis in early 2022 than during the first Covid-19 wave in 2020.
- Even during the recent geopolitical tensions, Euronext has maintained stronger metrics than MTFs in terms of average spreads and EBBO Presence/Setting.

## EQUITY TRADING VOLUMES AND VOLATILITY

After ten years of low volatility, the Covid-19 outbreak in 2020 triggered a period of spikes in volatility and equity volumes, driven by multiple pandemic waves and now by geopolitical tensions.

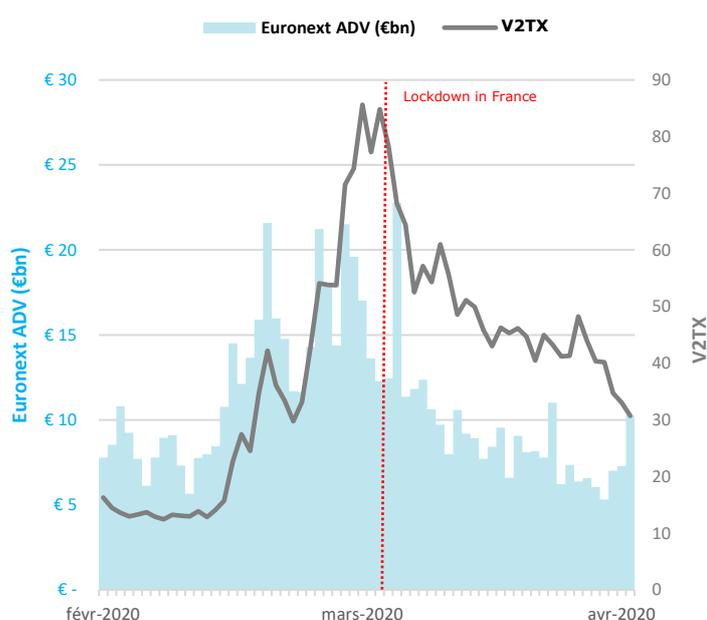
The **VSTOXX® Volatility Index (V2TX)** reached a level of **85.6** points on 16 March 2020, almost 6x higher than the pre-Covid average level of 15.1 in 2019. The V2TX stayed in the range of between 15 and 32 points during 2021 and surged again in February-March 2022 to surpass 55 points.

In parallel, equity trading activity has also increased sharply: the **Average Daily Value (ADV)** traded on Euronext\* markets was €6.7bn in 2019 and rose by +63% to €10.9bn during the first Covid-19 wave from February to April 2020. Then ADV stabilised at €10.7bn in 2021 (now including Oslo and Milan markets) and increased again to **€13.9bn** on average in Q1 2022 as Ukraine-Russia tensions escalated, with some days above €20bn ADV.

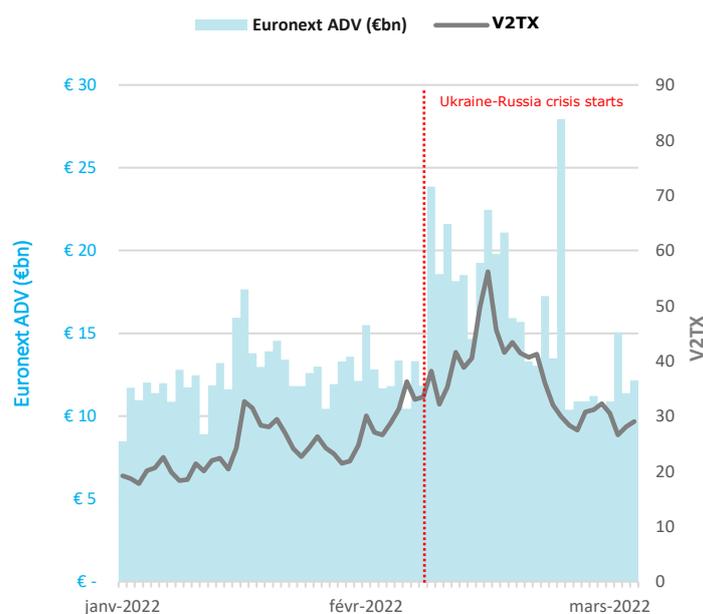
### FIRST COVID WAVE

### UKRAINE-RUSSIA CRISIS

#### Euronext\* Average Daily Value Traded (ADV) and VSTOXX® Volatility Index (V2TX)



Feb-Apr 2020	Euronext ADV	V2TX
Min	€5.3bn	12.5
Max	€22.8bn	85.6
Average	<b>€10.9bn</b>	<b>40.0</b>
Change vs 2019 (pre-Covid)	+63%	+ 166%



Jan-Mar 2022	Euronext ADV	V2TX
Min	€8.5bn	17.8
Max	€27.9bn	56.2
Average	<b>€13.9bn</b>	<b>29.5</b>
Change vs 2021 (pre-crisis)	+30%	+47%

\*Euronext volumes during the "First Covid wave" take into consideration Amsterdam, Brussels, Dublin, Lisbon and Paris markets. Oslo and Milan volumes are included from the start of 2021.

## SPREADS

The first pandemic wave in 2020 triggered a significant widening of spreads across European equity markets. Nevertheless, as demonstrated in our previous study, the spread increase on Euronext blue chips from January 2020 to September 2021 was **41% smaller** than on the best-performing MTF across different buckets of volatility.

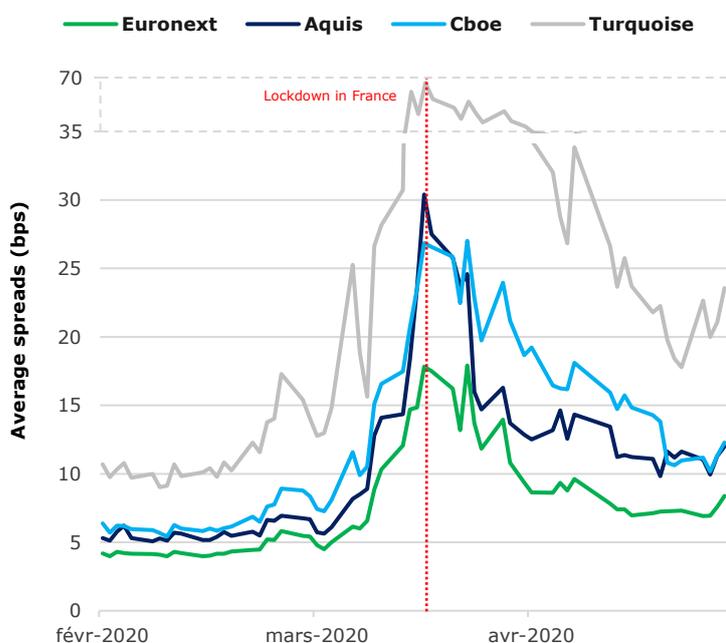
During the Ukraine-Russia crisis, the overall deterioration was less obvious and markets now seem more resilient to unexpected shocks: indeed, the average increase in spread on CAC 40® securities after 24 February 2022 (versus January 2022) has been close to **+1 bps** for Euronext, Aquis and Cboe Europe, and +4.1 bps for Turquoise.

During this recent turmoil, **Euronext** is still offering the lowest average spreads (4.5 bps) compared to **Aquis** (5.1 bps), **Cboe Europe** (5.8 bps), and **Turquoise** (13.9 bps) for CAC 40® stocks.

### FIRST COVID WAVE

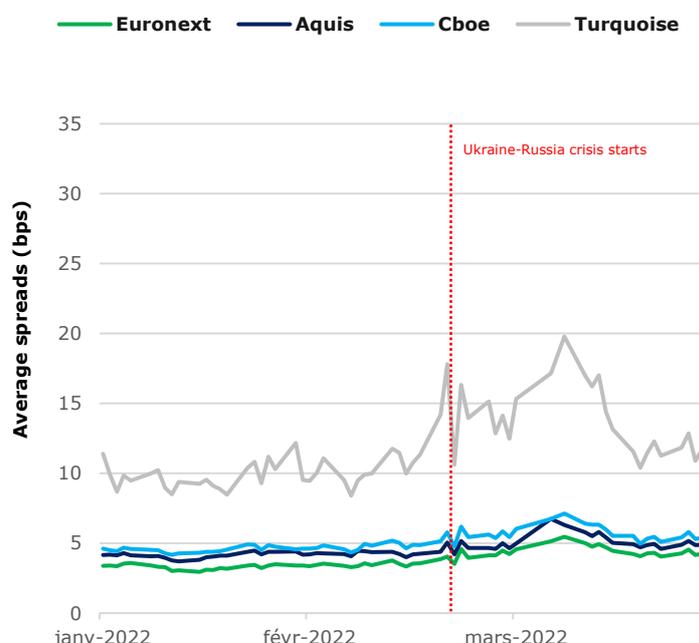
### UKRAINE-RUSSIA CRISIS

#### Average Spreads on CAC 40® securities



Spreads	Euronext	Aquis	Cboe**	Turquoise
Min	6.9 bps	9.8 bps	10.2 bps	17.8 bps
Max	17.9 bps	30.4 bps	27.0 bps	66.6 bps
Average Post-Covid	<b>10.5 bps</b>	<b>15.4 bps</b>	<b>17.7 bps</b>	<b>34.4 bps</b>
Change vs Jan 2020 (pre-Covid)	+6.4bps	+10.2bps	+11.8 bps	+24.8 bps

Reference period for Min/Max/Average spreads: **16 March to 30 April 2020**



Spreads	Euronext	Aquis	Cboe**	Turquoise
Min	4.0 bps	4.6 bps	4.9 bps	10.4 bps
Max	5.5 bps	6.7 bps	7.1 bps	19.8 bps
Average Post-Crisis	<b>4.5 bps</b>	<b>5.1 bps</b>	<b>5.8 bps</b>	<b>13.9 bps</b>
Change vs 2021 (pre-crisis)	+ 1.2 bps	+ 1.0 bps	+ 1.2 bps	+ 4.1 bps

Reference period for Min/Max/Average spreads: **24 February to 31 March 2022**

\*\* In the "First Covid wave" chart, Cboe data refers to the former Chi-X Europe market (former BATS market was excluded) as provided by BMLL; in the "Ukraine-Russia crisis" chart, Cboe data refers to Cboe DXE (European data). Aquis and Turquoise data also refers to the European venues.

## EBBO PRESENCE AND SETTING

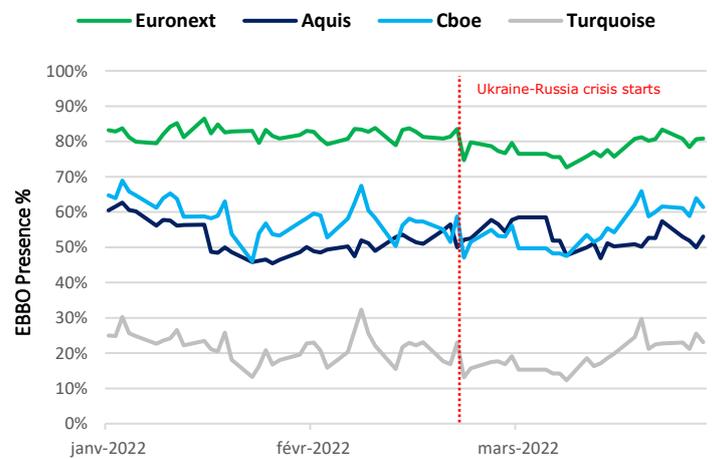
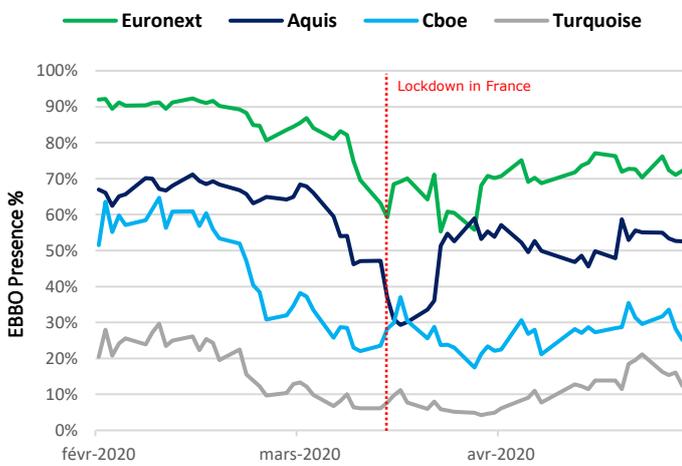
Despite the overall deterioration of market quality during the Covid pandemic, from February to April 2020 the average EBBO Presence and Setting on Euronext were 78% and 62% respectively – significantly higher than the best-performing MTF, Aquis (56% and 23%).

In addition, the impact of recent geopolitical turmoil has been marginal: **Euronext** EBBO Presence decreased slightly from 82% in January 2022 to 78% after war was declared in Ukraine, still 1.5x higher than **Aquis** (53%) and **Cboe Europe** (55%), and 4x higher than **Turquoise** (19%). The discrepancy is even more obvious for average EBBO Setting, with Euronext leading at 66% after the geopolitical crisis started – while MTFs were below 20%.

### FIRST COVID WAVE

### UKRAINE-RUSSIA CRISIS

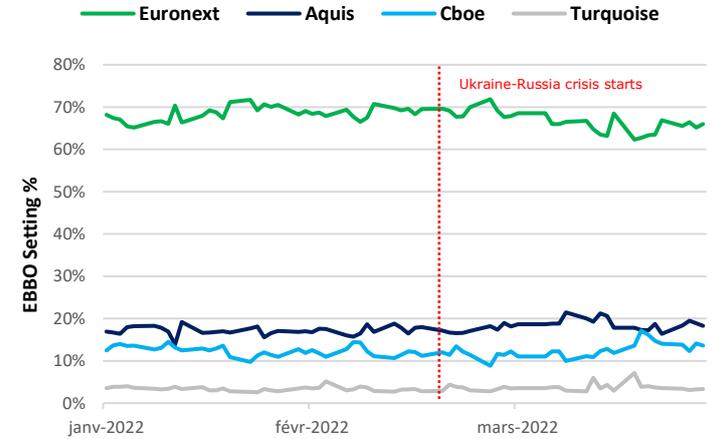
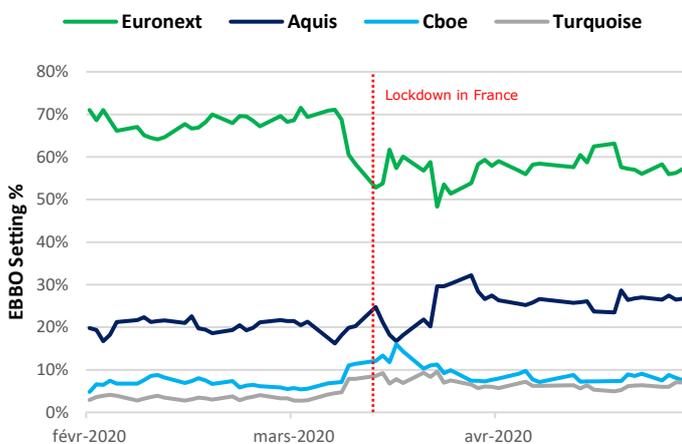
#### EBBO Presence (%) on CAC 40® securities



	Euronext	Aquis	Cboe	Turquoise
Avg EBBO Presence Post-Covid	<b>69%</b>	49%	27%	10%

	Euronext	Aquis	Cboe	Turquoise
Avg EBBO Presence Post-Crisis	<b>78%</b>	53%	55%	19%

#### EBBO Setting (%) on CAC40® securities



	Euronext	Aquis	Cboe	Turquoise
Avg EBBO Setting Post-Covid	<b>57%</b>	25%	9%	7%

	Euronext	Aquis	Cboe	Turquoise
Avg EBBO Setting Post-Crisis	<b>66%</b>	19%	12%	4%

## CONCLUSION

Since March 2020 when the Covid pandemic hit, and recently again in early 2022 with the Ukraine-Russia crisis, levels of volatility have remained exceptionally high. Although the nature of the two periods studied is clearly different, market participants have had to adapt to a new macro-economic and market structure environment.

We can observe that the European equity market became more resilient to distortions during the Ukraine-Russia crisis than it was during the first Covid wave in 2020. Despite the global turmoil, Euronext has maintained stronger metrics than MTFs in terms of average spreads and EBBO Presence/Setting. This testifies to Euronext's resilient market quality, proving again its reliability even in times of unprecedented levels of volatility.

## GLOSSARY

**Bid-Ask Spread:** The difference between the bid and the ask prices of a security.

**European Best Bid & Offer (EBBO) – Presence:** The presence of time during the continuous trading period where there is at least one order equal to the Bid / Ask / Bid&Ask price and simultaneously at least one order equal to the Bid / Ask / Bid&Ask price of the EBBO.

**European Best Bid & Offer (EBBO) – Setting:** The numbers of events where a venue improved the Ask / Bid price as a percentage of the numbers of all consolidated Best Ask / Bid price improvement events for the instrument.

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