November 2021 EMEA Market Structure Monthly



MICROSTRUCTURE OBSERVATIONS

• In November 2021, the average daily volume in EMEA equities increased to €49.9B, 14% higher versus October 2021 (€43.7B) and above November 2020's volume by 6.6% (€46.8B).

• The median quote size at the European Best Bid and Offer (EBBO) marginally decreased in November. The STOXX 50 and STOXX 600 decreased by 4% during the intraday trading period (08:30 to 16:00 GMT).

• Median spreads increased in November. Median spreads in STOXX 50 increased by 4% from 2.3bps to 2.4bps and STOXX 600 symbols increased 7% from 4.2bps to 4.5bps.

• Volatility levels also increased in November. Volatility in STOXX 50 was up 7% while the STOXX 600 symbols were up 6%, during the intraday trading period (08:30 to 16:00 GMT).

• The average daily volume during the close period remained high at 26% for STOXX600 names while the average daily volume during the open period remained below 1%.

• The market share distribution between venues didn't change much in November, relative to the prior month. Primary auctions increased by 1.1% while primary lit venues decreased by 1.1%, expected impact given MSCI quarterly rebalance day was at the end of November.

EMEA MARKET STRUCTURE NEWS

The European Commission Published Proposed Revisions to MiFID and MiFIR

In late November, the European Commission adopted a package of measures to ensure that investors have better access to company and trading data. Proposed revisions with far-and wide-reaching implications include:

- Consolidated tape-new definitions of core market data, introductions of procedures for appointing consolidate tape providers, aligning trade reporting and setting requirements for license fees and revenue schemes
- Dark volume caps rules moved to a single cap at 7% from a 4% and 8% regime
- Systematic Internaliser (SI) pre-trade quote obligations increased from a minimum of one to two standard market size Introduction of a minimum threshold trade size for the reference price waiver (RPW) preventing any multi-lateral trading facilities and SIs from executing small trade sizes at mid, under RPW.
- Established an EU "official list" of shares subject to the Share Trading Obligation (STO)

Text of the MiFIR proposal (including the consolidated tape proposal)

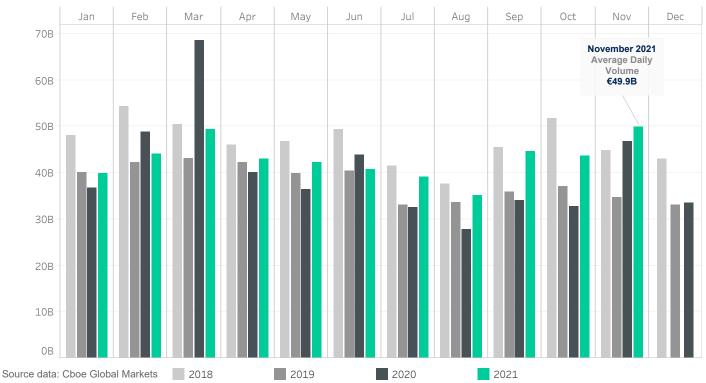
Text of the MiFID proposal Factsheet: 2021 CMU package - Consolidated tape Impact assessment accompanying the MiFIR proposal Summary of the impact assessment accompanying the MiFIR proposal More on MiFIR

The European Commission Proposes Extension of Equivalence for UK Central Counterparties

The European Commission for Financial Services, Financial Stability and Capital Markets Union, Mairead McGuinness, announced that in early 2022 she will propose a further extension of equivalence decision for UK-based central counterparties (CCP). Central clearing concerns and financial stability risk relating to an abrupt disruption meant an initial time-limited equivalence decision of 30 June 2022, however this date is now deemed too short for transferring derivatives clearing from the UK into EU. The extra time will be used to enhance supervisory and infrastructure and address any residual financial stability concerns.

https://ec.europa.eu/commission/presscorner/detail/en/statement 21 5905





Average Daily Market Volume

Venue Type Market Share

45.7%	45.4%	48.6%	47.6%	44.8%	43.6%	43.6%	41.6%	43.5%	43.8%	42.3%	44.7%	43.6%
18.5%	18.4%	17.9%	18.1%	18.5%	20.1%	19.8%	19.5%	20.9%	20.2%	19.4%	19.8%	20.1%
21.2%	22.4%	19.2%	19.5%	22.9%	21.8%	23.0%	24.5%	21.6%	21.9%	23.8%	20.0%	21.1%
10.2%	9.6%	10.2%	10.9%	9.9%	10.0%	9.3%	10.2%	9.7%	9.5%	9.8%	10.6%	10.4%
4.3%	4.2%	4.1%	4.0%	3.9%	4.6%	4.3%	4.3%	4.3%	4.6%	4.7%	4.9%	4.9%
Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21
Source data	a: Cboe Glol	oal Markets	Prir	mary 📃 🛚	MTF	Auctions	DARK	FBA	Ą			



Dark Market Share

33%	35%	37%	37%	35%	37%	38%	38%	40%	41%	41%	42%	42%
24%	24%	28%	29%	29%	29%	30%	29%	28%	26%	26%	25%	24%
13%	12%	15%	1 5 0/	14%	1 20/							150/
11%	11%	1370	15%	70	13%	13%	13%	13%	14%	14%	14%	15%
15%	14%	13%	12%	12%	11%	10%	11%	10%	10%	10%	11%	11%
3%	3%	6%	6%	7%	7%	7%	6%	7%	7%	6%	6%	6%
Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21
Cboe E	urope	Turquois	e	Liquidnet	P	OSIT	UBS	S MTF	Instin	et Block	SigmaX	

Source data: Cboe Global Markets

Block Market Share

23%	25%	21%	22%	22%	24%	24%	24%	20%	17%	17%	18%	17%
25%	17%	27%	28%	29%	27%	26%	26%	29%	28%	29%	28%	27%
	23%											
21%		23%	24%	22%	24%	24%	22%	26%	29%	28%	29%	29%
19%	21%	100/										
19%		18%	18%	20%	19%	17%	18%	16%	16%	17%	17%	18%
11%	14%	11%	7%	6%	6%	8%	10%	9%	9%	9%	9%	10%
Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21	0ct 21	Nov 21
	Turquoise	L	iquidnet	📕 Ct	ooe Europe	Pos	sit	📕 Othe	rs			

Large In Scale values as per defined per symbol by ESMA; Source data: Virtu Financial



Quotesize in Notional USD

		4Q	20		1Q 21			2Q 21			3Q 21		4Q	21
		Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21
8:00 - 8:30	Stoxx50	29.9K	32.2K	25.3K	25.5K	26.3K	20.8K	21.9K	22.4K	19.3K	20.0K	18.7K	19.1K	18.0K
	Stoxx600	12.6K	13.4K	11.1K		11.4K	11.0K	11.0K	11.5K	10.6K	11.0K	10.6K	10.4K	10.1K
8:30 - 16:00	Stoxx50	45.4K	50.6K	38.4K	37.8K	40.4K	35.0K		37.4K	32.5K	34.4K	32.7K	33.3K	32.0K
	Stoxx600	18.4K	20.3K	15.9K	16.2K	17.2K	16.9K	17.3K	18.2K	16.0K	17.0K	16.7K		16.3K
16:00 - 16:30	Stoxx50	63.2K	67.2K	46.9K	46.7K	51.1K	44.3K	43.3K	44.8K	38.1K	40.2K	37.8K	39.7K	38.1K
	Stoxx600	24.8K	26.2K	19.0K	19.2K	21.3K	20.6K	20.8K	22.1K	18.4K	19.4K	19.1K		18.9K

Spread Bps

8:00 - 8:30	Stoxx50	5.3	4.6	5.3	5.1	4.6	3.7	3.9	3.8	4.5	4.1	3.9	4.1	4.2
	Stoxx600	9.2	8.2	8.9	8.9		7.0	7.2	6.9	8.0	7.2	7.0	7.6	8.1
8:30 - 16:00	Stoxx50	3.2	3.0	3.2	3.1	3.1	2.4	2.4	2.4	2.7	2.3	2.3	2.3	2.4
	Stoxx600	4.8	4.5	4.7	4.7	4.5	4.0	4.0	4.0		4.0	4.0	4.2	4.5
16:00 - 16:30	Stoxx50	2.8	2.6	2.7	2.8	2.8	2.2	2.2	2.1	2.3	2.0	2.0	2.0	2.1
	Stoxx600	4.0	4.0	4.0	4.1	3.9	3.5	3.6	3.5		3.4	3.5	3.5	3.8

One Minute Volatility Bps

8:00 - 8:30	Stoxx50	15.9	12.8	14.5	14.3	12.2	10.3	11.1	9.1	12.7	10.5	11.9	12.7	12.9
	Stoxx600	15.9	13.0	14.0	14.0	12.2	10.4	10.5	9.2	11.5	9.8	11.0		12.5
8:30 - 16:00	Stoxx50	6.9	5.1	6.1	5.5	5.5	4.5	4.7	4.2	5.3	4.5	5.3	5.2	5.6
	Stoxx600	6.1		5.3	5.1	5.1	4.3	4.4	4.0	4.8	4.2	4.8	4.9	5.2
16:00 - 16:30	Stoxx50	6.9	5.6	6.6	6.2	5.6	4.4	4.7	4.2	5.1	4.2	5.1	4.7	4.9
	Stoxx600	5.9	5.0	5.5	5.4	4.9	4.2	4.2	3.8	4.3	3.8		4.1	4.5

Percent ADV by Time of Day

Open	Stoxx50	1.1%	1.0%	1.4%	1.1%	1.2%	1.1%	1.1%	1.0%	1.0%	1.0%	1.0%	1.0%	0.9%
	Stoxx600		0.5%	0.8%	0.6%	0.6%	0.5%	0.6%	0.5%	0.5%	0.5%	0.6%	0.5%	0.5%
				-										
8:00 - 8:30	Stoxx50	11.1%	10.7%	10.5%	8.7%	7.2%	6.9%	7.2%	6.1%	7.0%	7.1%	7.0%	8.5%	9.4%
	Stoxx600	8.8%	8.6%	9.3%	7.9%	7.3%	7.1%		6.2%	6.6%	6.5%	7.0%	7.1%	7.3%
16:00 - 16:30	Stoxx50	20.7%	22.5%	23.4%	19.3%	15.9%	15.4%	20.1%	18.0%	16.3%	17.2%	15.2%	11.7%	18.3%
	Stoxx600	18.5%	19.4%	17.8%	15.3%	15.1%		15.2%	14.4%	13.0%	13.8%	13.1%	11.5%	12.8%
Close	Stoxx50	23.4%	26.6%	31.5%	24.8%	26.6%	26.6%	26.6%	29.3%	27.2%	26.5%	26.5%	26.6%	25.8%
	Stoxx600	26.3%	29.0%	32.0%	27.0%		28.9%	26.9%	30.4%	27.8%	27.7%	26.9%	26.7%	26.3%

Median used for all metrics

One minute volatility is calculated using the difference between the high and low price within a one minute time bin, divided by that bin's VWAP Source data: Virtu Financial



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