June 2022 EMEA Market Structure Monthly



MICROSTRUCTURE OBSERVATIONS

• In June 2022, the average daily volume in EMEA equities decreased to €43.6B, 10% lower than May (€48.2B) and above June 2021's volume by 7% (€40.6B).

• The median quote size at the European Best Bid and Offer (EBBO) increased by 28% in June for STOXX 50 but decreased by 3% for STOXX 600 during the intraday trading period (08:30 to 16:00 GMT).

• Median spreads in STOXX 50 increased by 13% to 3.4bps while STOXX 600 symbol spreads increased by 5% to 5.9bps, during the intraday trading period.

• June's volatility levels did not change significantly, STOXX 50 increased by 4% and STOXX 600 has not changed during intraday trading. Volatility levels are higher than June 2021 by over 70%.

• Due to the FTSE rebalance and option expiry in June, the market share distribution between venues changed slightly from the prior month. In primary lit, market share decreased by 0.9% while primary auctions increased by 0.7%. dark venues levels decreased by 0.3% while FBA venues increased by 0.2%

- Virtu's POSIT dark market share increased by 1% while Cboe's decreased by 1%.
- Cboe's Large-In-Scale market share decreased by 4%, while Liquidnet and Virtu's POSIT both increased by 1%.
- Closing auctions maintain a large presence with over 25% of the daily volume for both STOXX50 and STOXX600.

EMEA MARKET STRUCTURE NEWS

EU Commission Publishes Regulation Proposal for Markets in Crypto-Assets

In an attempt to regulate the trading of crypto assets, the European Commission has published a new proposal. The Markets in Crypto-assets (MiCA) directive has four objectives: providing legal certainty by defining a sound legal framework; supporting innovation and the potential of digital finance; providing consumer and investor protection, and lastly maximizing financial stability and mitigating the risks involved in trading crypto assets. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0593

Governor of Bank of England and the Chancellor of the Exchequer Open Letter Exchange

After the Consumer Prices Index reached record levels of 9% in April, the Governor of the Bank of England and the Chancellor of the Exchequer exchanged open letters in June. The Governor and Chancellor agreed to keep inflation targets at 2%. Reasons for the increase are identified and possible actions for meeting the targets are outlined, see link for more detail.

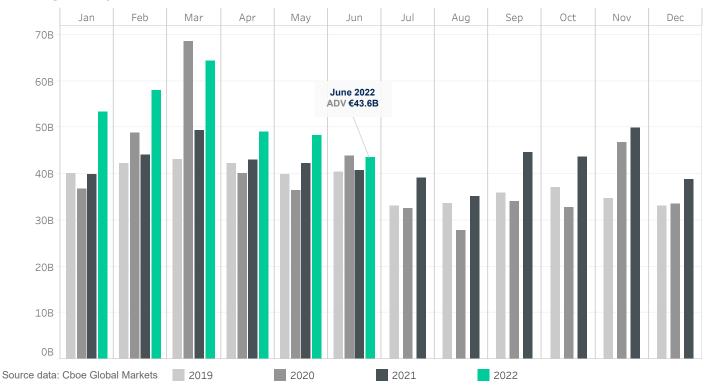
https://www.gov.uk/government/publications/open-letters-between-hm-treasury-and-bank-of-england-june-2022

Cloud Computing Gaining Wider Spread Momentum in the Capital Markets

Many well-known financial institutions have used the public cloud for computational research, risk simulation and regulatory reporting; however, the COVID-19 pandemic, which triggered unprecedented remote working scenarios, has accelerated cloud adoption not only for data scientists but also for traders. In response, software as a service (SaaS) has become increasingly popular among capital market software vendors to meet this need. Public clouds like AWS have been used to deploy real-time data sets from Bloomberg's B-pipe, a real-time market data provider, or Virtu's Open Technology platform featuring over 70 multi-asset class end-points including fixed income market data.

https://www.bloomberg.com/professional/blog/remote-work-accelerates-cloud-adoption-in-financial-markets/ Virtu's Open Technology Use Cases: https://www.virtu.com/block-open-tech-use-case/; https://www.virtu.com/open..





Average Daily Market Volume

Venue Type Market Share

41.6%	43.5%	43.8%	42.3%	44.7%	43.6%	42.3%	44.2%	46.0%	45.0%	43.4%	41.3%	40.4%
19.5%	20.9%	20.2%	19.4%	19.8%	20.1%	19.8%	20.9%	20.6%	20.5%	21.1%	21.3%	21.5%
24.5%	21.6%	21.9%	23.8%	20.0%	21.1%	23.3%	18.8%	18.3%	19.7%	19.7%	21.9%	22.6%
10.2%	9.7%	9.5%	9.8%	10.6%	10.4%	9.2%	10.4%	9.5%	9.7%	10.3%	10.0%	9.7%
4.3%	4.3%	4.6%	4.7%	4.9%	4.9%	5.3%	5.7%	5.6%	5.1%	5.5%	5.6%	5.8%
Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21	Dec 21	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22
Source data	a: Cboe Glob	oal Markets	Prir	mary 📃 N	MTF	Auctions	DARK	FBA	A			



Dark Market Share

38%	40%	41%	41%	42%	42%	41%	42%	44%	43%	48%	47%	46%
29%	28%	26%	26%	25%	24%	24%	23%	24%	23%	22%	22%	22%
13%	13%	14%	14%	14%	15%	15%	15%	14%	15%	12%	11%	11%
11%	10%	10%	10%	11%	11%	11%	11%	11%	11%	11%	11%	12%
6%	7%	7%	6%	6%	6%	6%	6%	6%	5%	6%	6%	6%
Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21	Dec 21	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22
Cboe E	urope	Turquoise	Liqui	dnet	POSIT	UBS	S MTF	Instinet	Blo Ad	quis	Sigma X	<

Source data: Cboe Global Markets

Block Market Share

24%	21%	18%	17%	18%	17%	17%	16%	16%	14%	16%	16%	17%
26%	29%	28%	30%	28%	28%	30%	30%	28%	28%	26%	24%	25%
22%	26%	29%	28%	28%	28%	26%	27%	29%	29%	29%	33%	31%
18%	15%	16%	17%	17%	17%	17%	17%	17%	18%	18%	17%	18%
10%	9%	9%	9%	9%	10%	10%	10%	10%	10%	11%	9%	10%
Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21	Dec 21	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22
	Turquoise	L	iquidnet	📕 Cb	oe Europe	📕 Posi	t	📕 Othe	rs			

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



Quotesize in Notional USD

		2Q 21		3Q 21			4Q 21			1Q 22			2Q 22	
		Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21	Dec 21	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22
8:00 - 8:30	Stoxx50	22.4K	19.3K	20.0K	18.7K	19.1K	18.0K	18.5K	18.8K	16.3K	17.3K	18.3K	17.9K	21.0K
	Stoxx600	11.5K	10.6K	11.0K	10.6K	10.4K	10.1K	10.6K	10.4K	9.6K	10.1K	11.0K		10.0K
8:30 - 16:00	Stoxx50	37.4K	32.5K	34.4K	32.7К	33.3K	32.0K	33.6K	33.8K	29.7K	23.1K	25.8K	26.4K	33.9K
	Stoxx600	18.2K	16.0K	17.0K	16.7K	17.0K		17.0K	17.0K	15.5K	12.6K	14.0K	13.3K	12.9K
16:00 - 16:30	Stoxx50	44.8K	38.1K	40.2K	37.8K	39.7K	38.1K	39.3K	37.9К	35.1K	28.3K	33.3K	33.1K	39.8K
	Stoxx600	22.1K	18.4K	19.4K	19.1K	19.9K		19.0K	19.1K	18.6K	14.6K	17.0K	16.0K	15.4K

Spread Bps

8:00 - 8:30	Stoxx50	3.8	4.5	4.1	3.9	4.1	4.2	4.2	4.0	4.5	5.3	4.9	5.0	5.4
	Stoxx600	6.9	8.0	7.2	7.0	7.6		7.8	8.2	8.8	10.1	9.1	9.4	9.6
8:30 - 16:00	Stoxx50	2.4	2.7	2.3	2.3	2.3	2.4	2.5	2.5	2.7	3.2	3.0	3.0	3.4
	Stoxx600	4.0	4.4	4.0	4.0	4.2		4.5	4.7	5.0	5.8	5.2	5.6	5.9
16:00 - 16:30	Stoxx50	2.1	2.3	2.0	2.0	2.0	2.1	2.2	2.2	2.3	2.7	2.5	2.6	2.8
	Stoxx600	3.5	3.7	3.4	3.5	3.5	3.8	4.0	4.1	4.1	4.7	4.4	4.7	4.8

One Minute Volatility Bps

8:00 - 8:30	Stoxx50	9.1	12.7	10.5	11.9	12.7	12.9	12.1	14.8	17.6	22.3	18.2	16.5	16.9
	Stoxx600	9.2	11.5	9.8	11.0	11.8		11.0	14.1	16.5	21.5	17.3	16.3	16.2
8:30 - 16:00	Stoxx50	4.2	5.3	4.5	5.3	5.2		5.3	6.6	7.8	10.0	7.3	7.3	7.6
	Stoxx600	4.0	4.8	4.2	4.8	4.9		4.9	5.9	6.7	8.5	6.5	6.8	6.8
16:00 - 16:30	Stoxx50	4.2	5.1	4.2	5.1	4.7	4.9	5.6	6.7	7.0	9.5	7.2	8.4	8.1
	Stoxx600	3.8	4.3	3.8	4.4	4.1	4.5	4.8	5.5	5.5	7.3	6.0	7.0	6.5

Percent ADV by Time of Day

Open	Stoxx50	1.0%	1.0%	1.0%	1.0%	1.0%	0.9%	0.9%	1.0%	1.0%	0.9%	1.0%	0.8%	0.9%
	Stoxx600	0.5%	0.5%	0.5%	0.6%	0.5%	0.5%	0.6%	0.7%	0.6%	0.5%	0.6%		0.5%
8:00 - 8:30	Stoxx50	6.1%	7.0%	7.1%	7.0%	8.5%	9.4%	9.0%	9.9%	9.2%	7.8%	7.5%	7.6%	15.1%
	Stoxx600	6.2%	6.6%	6.5%	7.0%	7.1%		6.8%	8.3%	7.9%	7.8%	8.2%	7.7%	8.3%
16:00 - 16:30	Stoxx50	18.0%	16.3%	17.2%	15.2%	11.7%	18.3%	19.4%	16.1%	15.5%	16.9%	14.8%	15.3%	16.2%
	Stoxx600	14.4%	13.0%	13.8%	13.1%	11.5%	12.8%	13.6%		12.2%	12.4%	10.6%	11.9%	12.1%
Close	Stoxx50	29.3%	27.2%	26.5%	26.5%	26.6%	25.8%	28.7%	22.2%	21.9%	23.6%	23.5%	23.8%	25.7%
	Stoxx600	30.4%	27.8%	27.7%	26.9%	26.7%	26.3%	29.0%	24.0%	24.5%	23.8%	26.0%	24.2%	

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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