

December 2020

EMEA Market Structure Monthly

Microstructure Observations

- The average daily volume in December 2020 for EMEA equities decreased to €33.4B, lower than the previous month by 27.6% (€46.8B) and in line with December's volume in the previous year €33.1B (+1%)
- The median quote size at the European Best Bid and Offer (EBBO) increased in December 2020, the STOXX 50 increased by 12% and STOXX 600 increased by 10% during the trading period of 8:30 to 16:00 GMT. Last month quote sizes at the EBBO were the highest they were since March 2020, STOXX 600 were higher by 78% during intraday trading (8:30 to 16:00 GMT).
- Median spreads did not change significantly in December 2020 relative to the previous month. Median spreads in STOXX 50 and STOXX 600 symbols decreased by 6%. Last month median spreads were the lowest they have been since March 2020, STOXX 50 and STOXX 600 symbols are just 7% higher compared to February 2020 levels for intraday trading.
- Intraday volatility has decreased in December 2020, relative to previous month. One minute volatility in STOXX 50 symbols decreased by 26% and STOXX 600 symbols decreased by 20% during intraday trading.
- The market share distribution between primary exchanges, primary auctions, MTFs, FBA, dark and RFQ venues did not change significantly in December 2020 relative to the prior month. Primary auctions execution increased by 1.1% from 21.2% to 22.3 while dark trading decreased by 0.6% from 10.2% to 9.6%.

Market Structure News

ESMA Launched a Consultation on The Impact of Algorithmic Trading

The European Securities and Markets Authority has invited comments on the impact of requirements regarding algorithmic trading—including high-frequency algorithmic trading. Market participants are invited to submit their feedback to the report by 12 March. ESMA will consider the feedback it receives and expects to publish a final report and submit it to the European Commission by July 2021.

<https://www.esma.europa.eu/press-news/esma-news/esma-consults-impact-algorithmic-trading>

New Financial Transaction Tax in Spain

In October 2020, the Spanish Council of Ministers approved the text of a bill introducing a Financial Transactions Tax (FTT), effective on 16 January. The FTT is a 0.2% tax on the acquisition of shares of Spanish companies with market capitalization over €1B, admitted to trading on the Spanish market, or on a regulated market of another EU member state or on an equivalent third-country market.

<https://www.reuters.com/article/us-spain-economy-budget/spain-hopes-to-raise-6-8-billion-euros-in-new-taxes-including-google-tax-idUSKBN2711B5>

New Options for ETF Trading by Two Major Stock Exchanges

In December, the Swiss Stock Exchange launched Quote on Demand (QOD) and the London Stock Exchange launched RFQ 2.0 product offerings that enhance the ETF segment. Both systems allow settlement via a central counter party and automated interaction with liquidity providers and the exchange order book.

<https://www.lseg.com/markets-products-and-services/our-markets/london-stock-exchange/exchange-traded-funds/rfq-2-0-overview>

<https://www.six-group.com/en/newsroom/news/the-swiss-stock-exchange/2020/quote-on-demand.html>

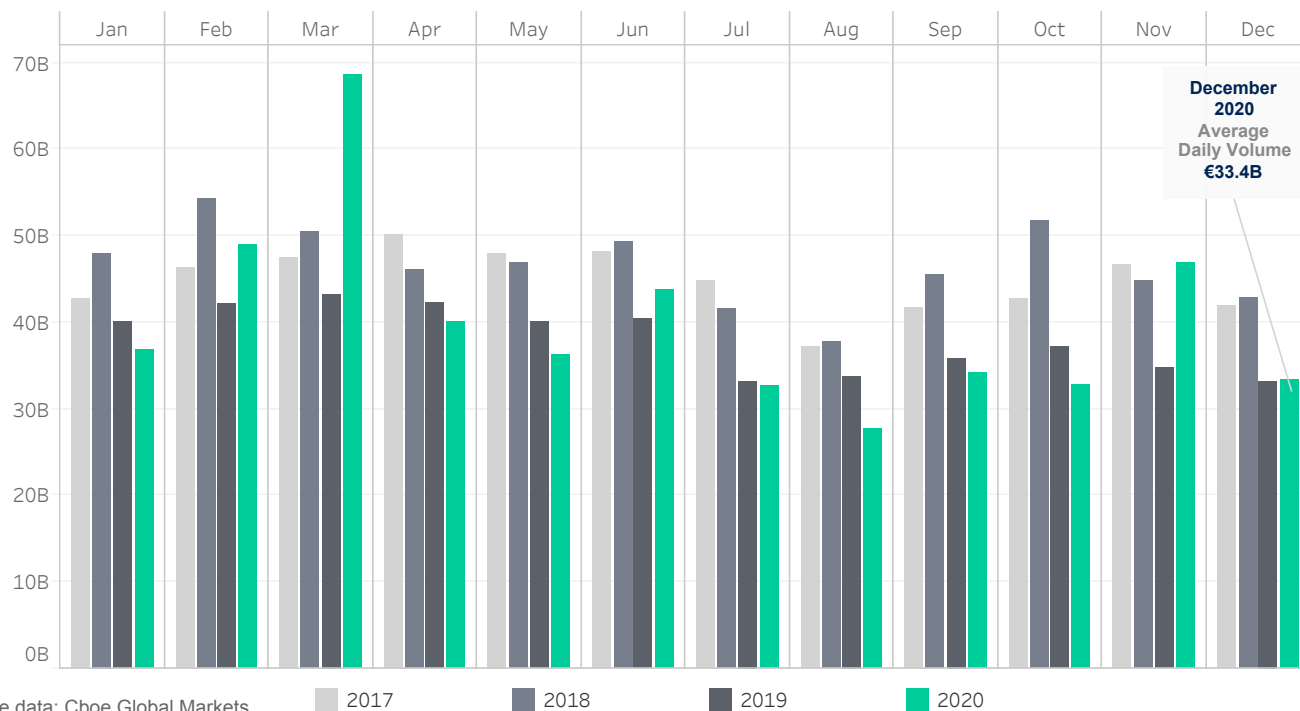
European Commission Proposes Partial MiFID II Unbundling Roll back

In 2018, MiFID II introduced requirements, with the intent of protecting investors, which mandated the unbundling of charges for investment research from other charges such as execution and advisory services. In December, as part of a COVID-19 recovery package, the EU agreed on a partial roll-back on these unbundling requirements for small to medium sized companies with a market capitalization below €1B (US\$1.2B). The intention of this partial roll-back is to facilitate small and medium sized companies in raising much needed capital as a result of the pandemic.

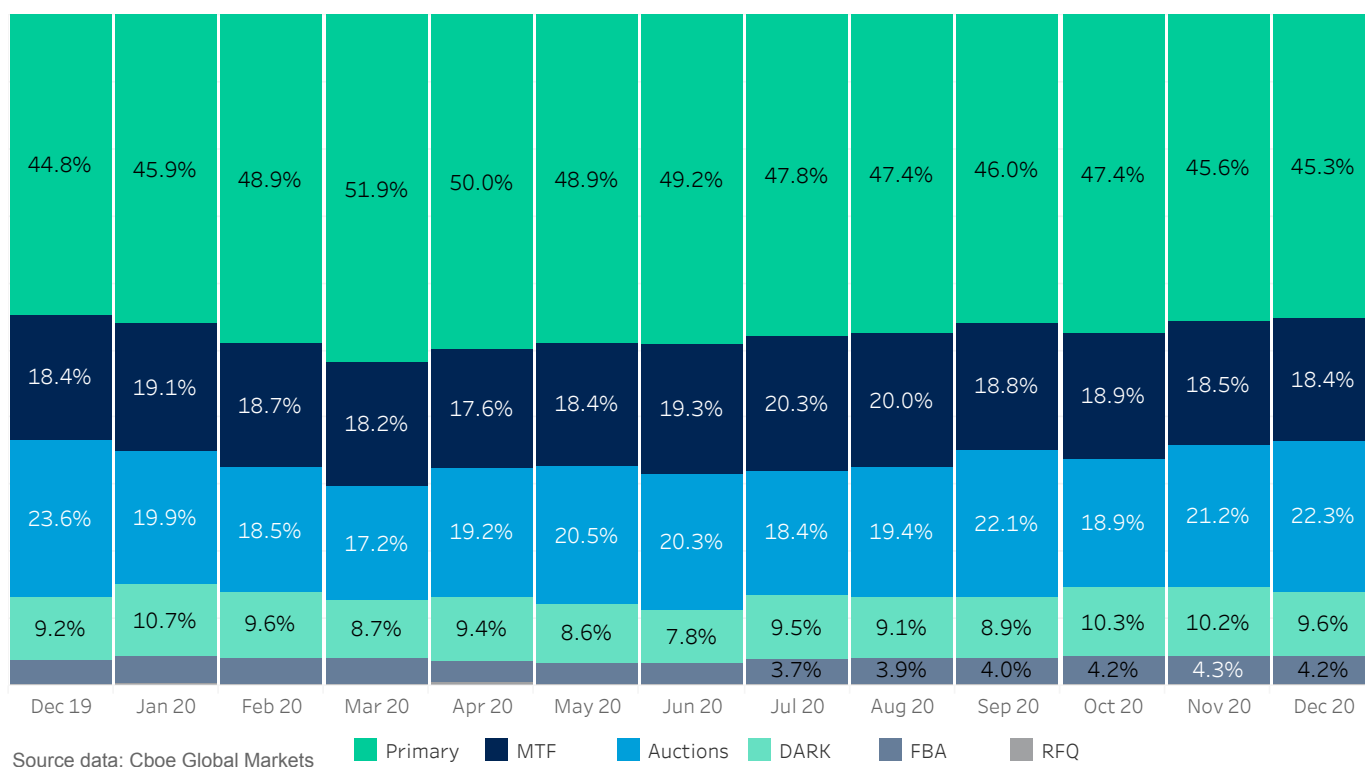
<https://www.bloomberg.com/news/articles/2020-12-09/mifid-ii-rules-loosened-by-eu-in-search-of-post-pandemic-growth>



Average Daily Market Volume

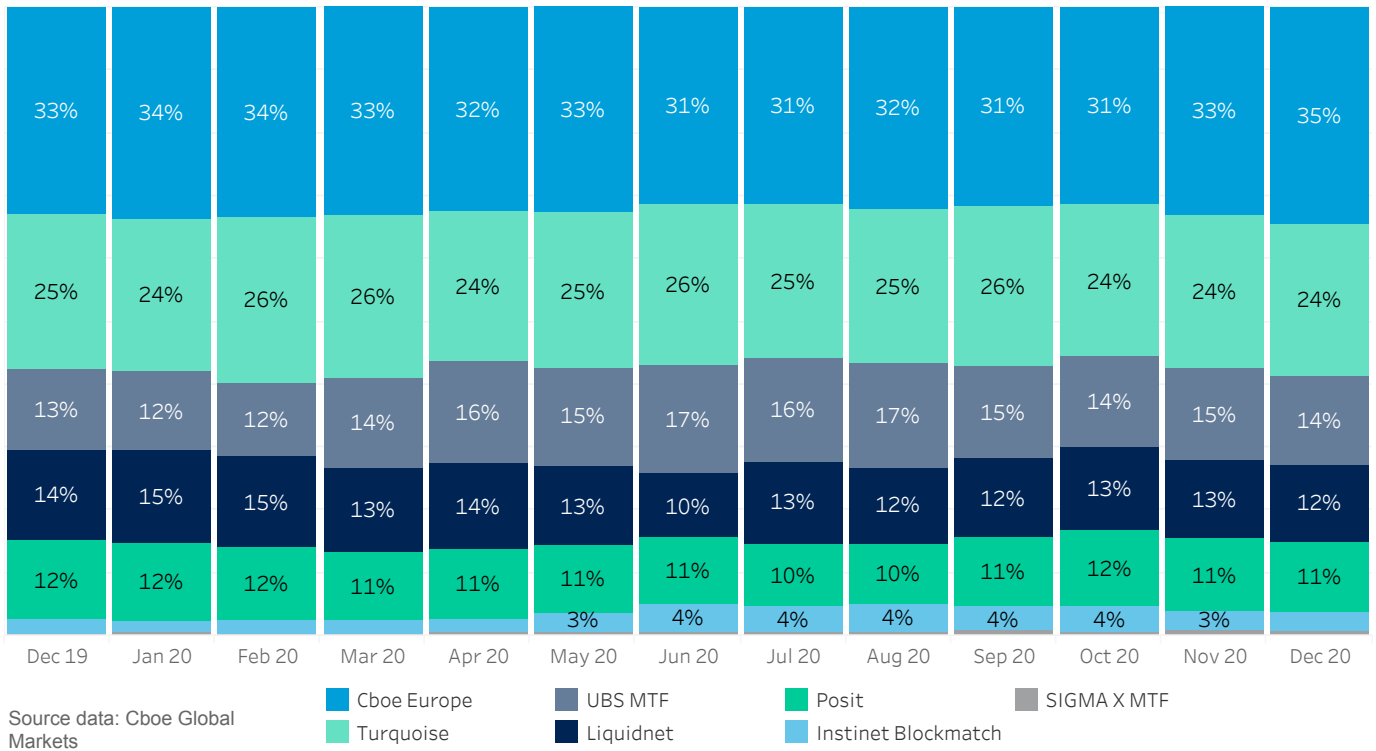


Venue Type Market Share

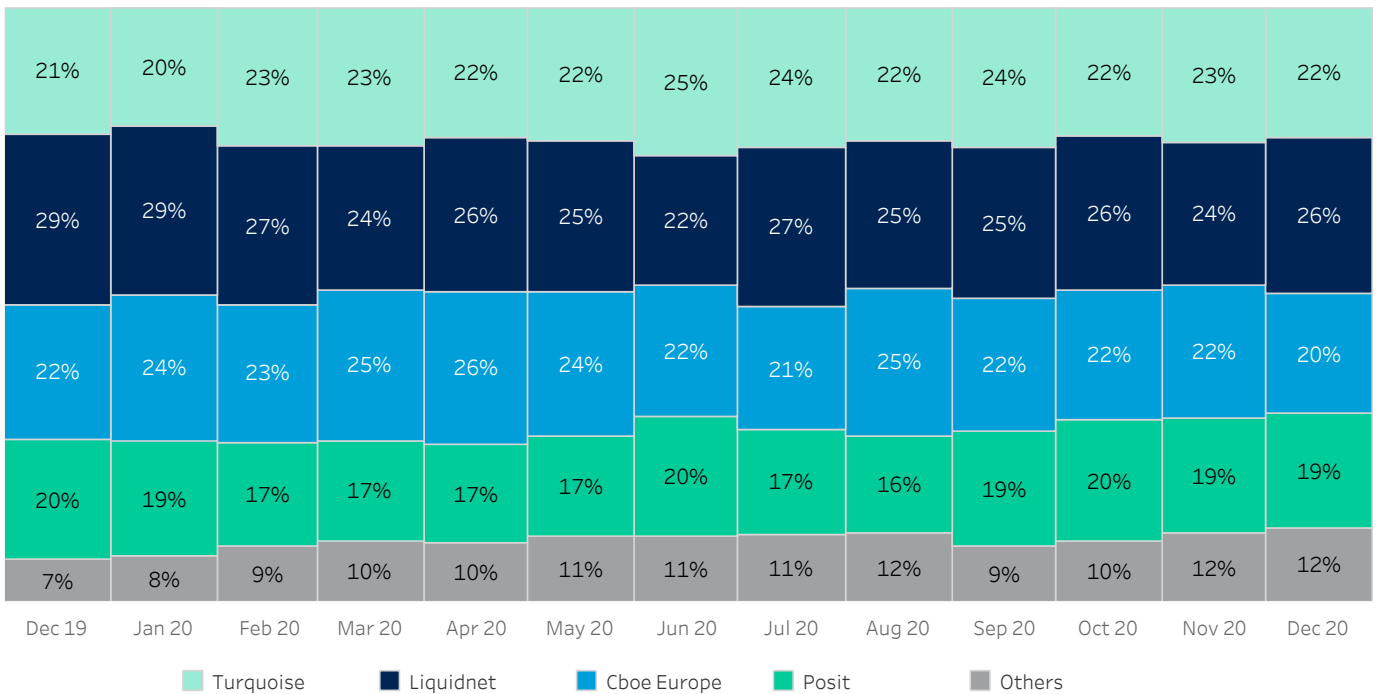




Dark Market Share



Block Market Share



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



Quotesize in Notional USD

		4Q 19	1Q 20			2Q 20			3Q 20			4Q 20		
		Dec 19	Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jun 20	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20
8:00 - 8:30	Stoxx50	42.1K	43.7K	41.2K	20.2K	21.8K	23.0K	27.2K	28.7K	29.4K	29.3K	26.6K	29.9K	32.9K
	Stoxx600	15.5K	16.1K	15.5K	10.0K	9.9K	10.1K	12.1K	12.5K	12.9K	12.5K	12.0K	12.6K	13.5K
8:30 - 16:00	Stoxx50	69.2K	69.4K	66.0K	22.5K	31.3K	33.7K	40.5K	42.3K	43.0K	43.6K	38.9K	45.4K	50.9K
	Stoxx600	25.2K	26.5K	24.6K	11.4K	13.3K	14.4K	17.3K	17.6K	18.2K	17.7K	17.1K	18.4K	20.3K
16:00 - 16:30	Stoxx50	98.9K	99.3K	96.4K	27.8K	39.1K	42.5K	51.8K	57.3K	61.4K	58.4K	54.1K	63.2K	67.2K
	Stoxx600	36.2K	36.7K	35.8K	13.0K	15.9K	18.1K	22.1K	23.2K	24.3K	22.5K	22.3K	24.8K	26.2K

Spread Bps

8:00 - 8:30	Stoxx50	3.5	3.5	3.8	11.2	8.6	6.9	6.6	5.8	5.5	5.5	5.6	5.3	4.6
	Stoxx600	6.5	6.6	7.4	19.5	15.9	12.5	11.5	9.9	9.4	9.2	9.5	9.2	8.2
8:30 - 16:00	Stoxx50	2.6	2.6	2.8	5.9	4.5	4.0	3.9	3.5	3.2	3.4	3.4	3.2	3.0
	Stoxx600	4.1	4.1	4.4	9.7	7.7	6.5	6.2	5.5	5.1	5.1	5.0	4.8	4.5
16:00 - 16:30	Stoxx50	2.2	2.2	2.3	4.2	3.9	3.5	3.3	3.0	2.7	2.9	2.9	2.8	2.6
	Stoxx600	3.7	3.7	3.7	7.0	6.5	5.6	5.1	4.6	4.3	4.4	4.2	4.0	4.0

One Minute Volatility Bps

8:00 - 8:30	Stoxx50	8.3	9.5	11.3	37.3	23.1	19.1	20.4	15.1	15.0	15.9	16.8	15.9	12.7
	Stoxx600	9.1	9.9	11.7	34.0	23.7	19.5	19.8	14.7	14.5	15.0	16.0	15.9	13.0
8:30 - 16:00	Stoxx50	3.7	4.0	4.8	20.1	10.5	9.3	9.8	6.9	6.0	7.0	7.0	6.9	5.1
	Stoxx600	3.8	3.9	4.6	15.9	9.3	8.3	8.5	6.2	5.4	6.1	6.0	6.1	4.9
16:00 - 16:30	Stoxx50	3.8	3.9	4.4	19.1	12.4	11.2	11.2	7.5	6.1	8.1	7.3	6.9	5.6
	Stoxx600	3.6	3.6	4.0	15.5	10.1	9.4	9.0	6.2	5.3	6.5	5.8	5.9	5.0

Percent ADV by Time of Day

Open	Stoxx50	0.8%	0.9%	0.9%	1.0%	1.1%	1.0%	1.0%	0.9%	0.8%	0.9%	1.1%	1.1%	1.0%
	Stoxx600	0.4%	0.5%	0.5%	0.8%	0.7%	0.6%	0.5%	0.5%	0.5%	0.4%	0.5%	0.5%	0.5%
8:00 - 8:30	Stoxx50	9.7%	11.2%	9.7%	10.3%	11.2%	11.5%	11.8%	11.1%	11.6%	10.6%	11.1%	11.1%	10.6%
	Stoxx600	7.1%	8.3%	8.1%	8.3%	9.1%	9.2%	9.1%	8.9%	9.7%	9.1%	9.1%	8.8%	8.6%
16:00 - 16:30	Stoxx50	20.2%	19.5%	20.9%	25.7%	22.8%	19.3%	19.0%	19.7%	19.9%	19.4%	20.7%	20.7%	22.5%
	Stoxx600	19.3%	18.8%	19.6%	17.2%	14.8%	17.7%	18.0%	18.3%	19.0%	17.5%	17.6%	18.5%	19.4%
Close	Stoxx50	27.3%	24.5%	24.8%	21.1%	25.0%	23.2%	22.4%	22.0%	24.0%	24.8%	24.2%	23.4%	26.3%
	Stoxx600	28.0%	26.7%	25.6%	21.1%	24.6%	23.5%	23.2%	23.7%	24.0%	25.1%	26.1%	26.3%	29.0%

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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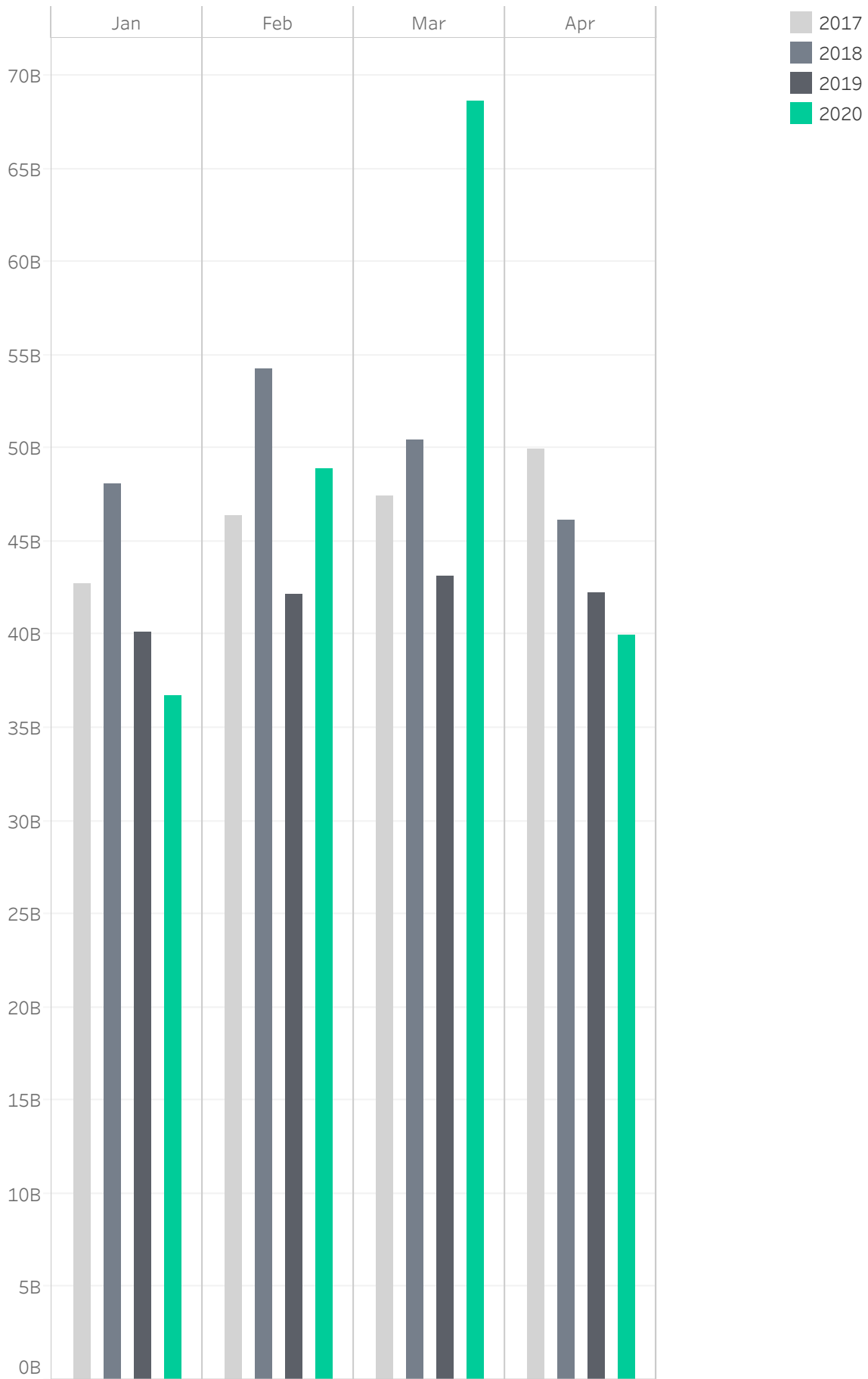
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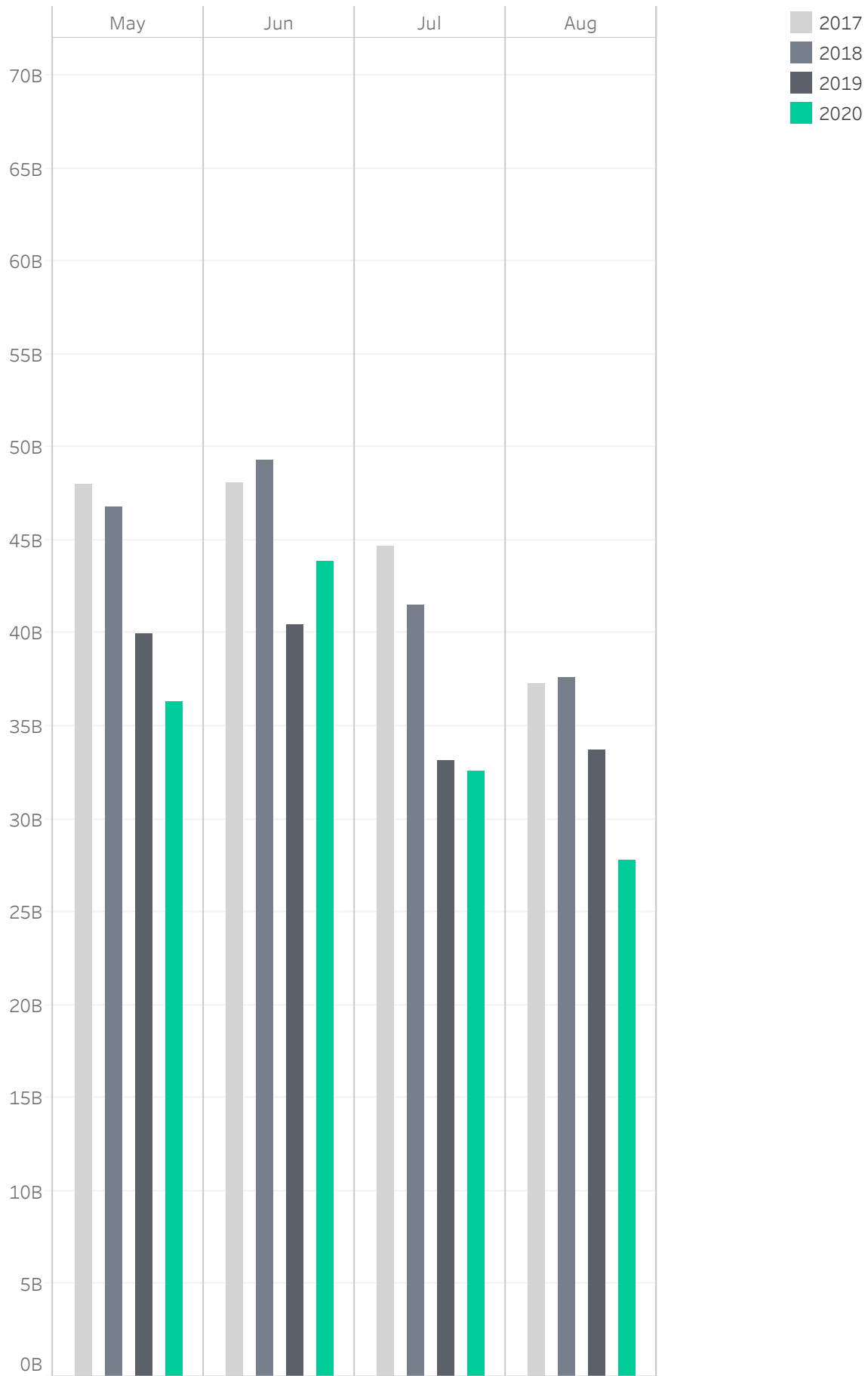
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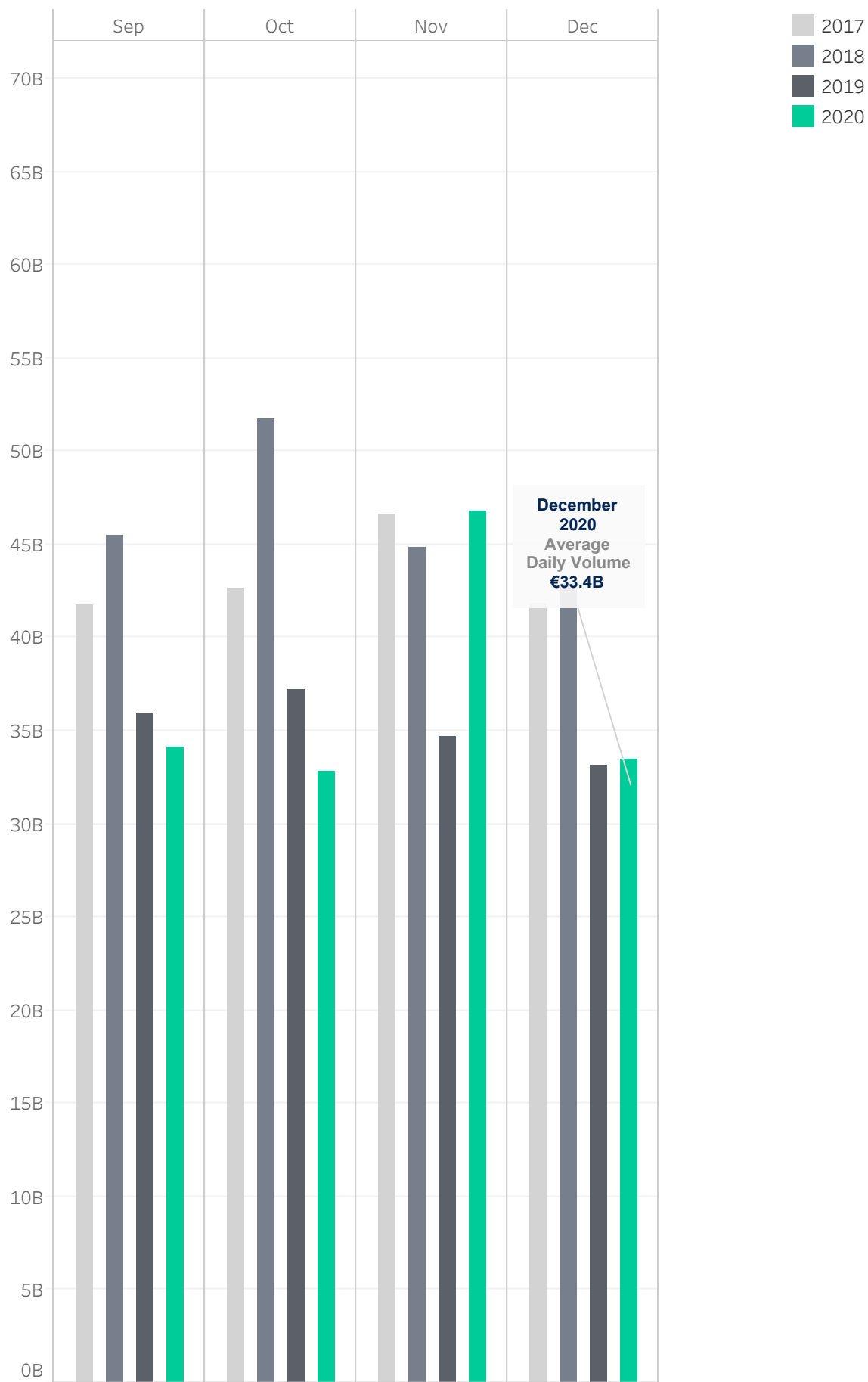
Average Daily Market Volume



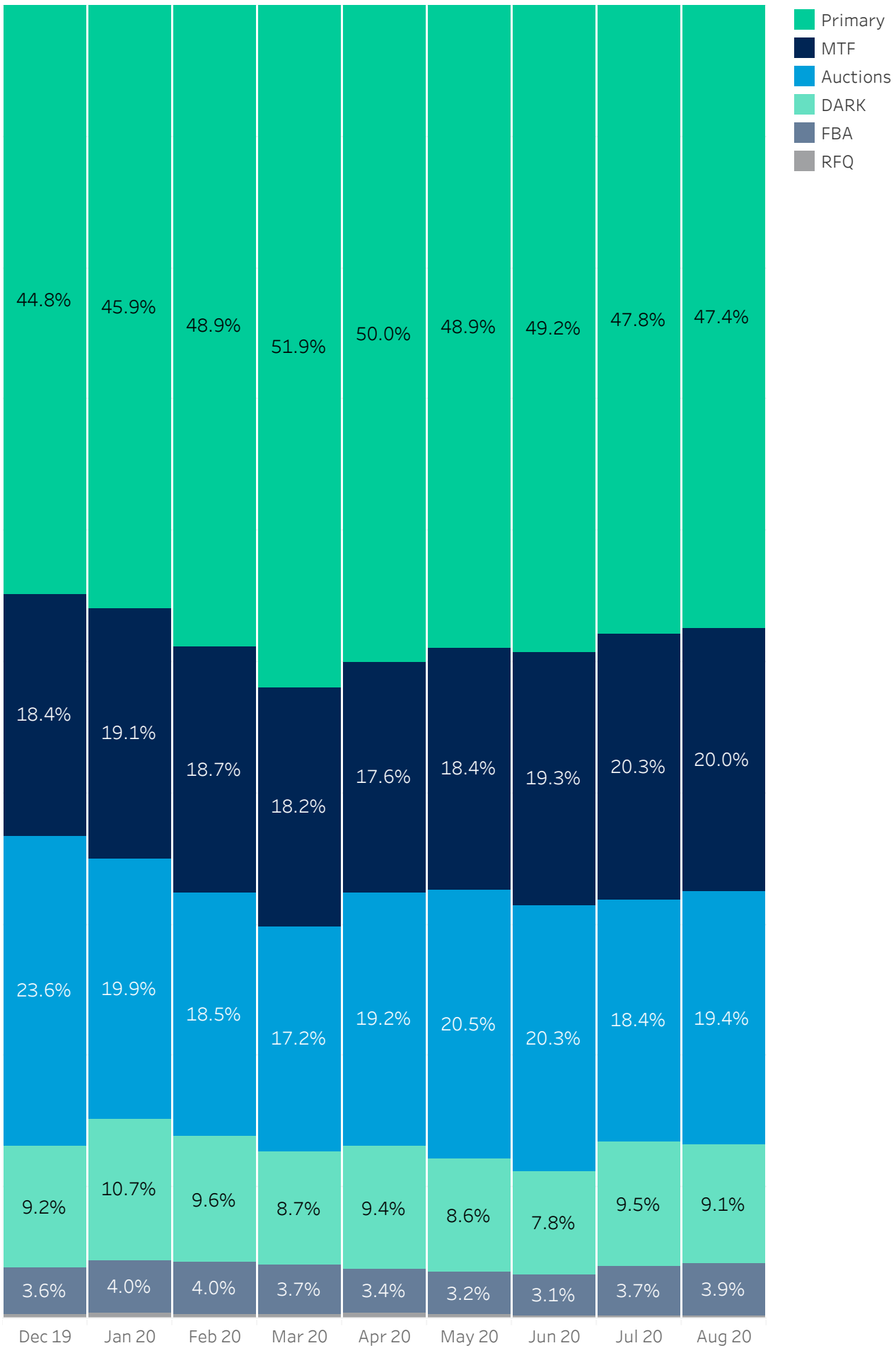
Average Daily Market Volume



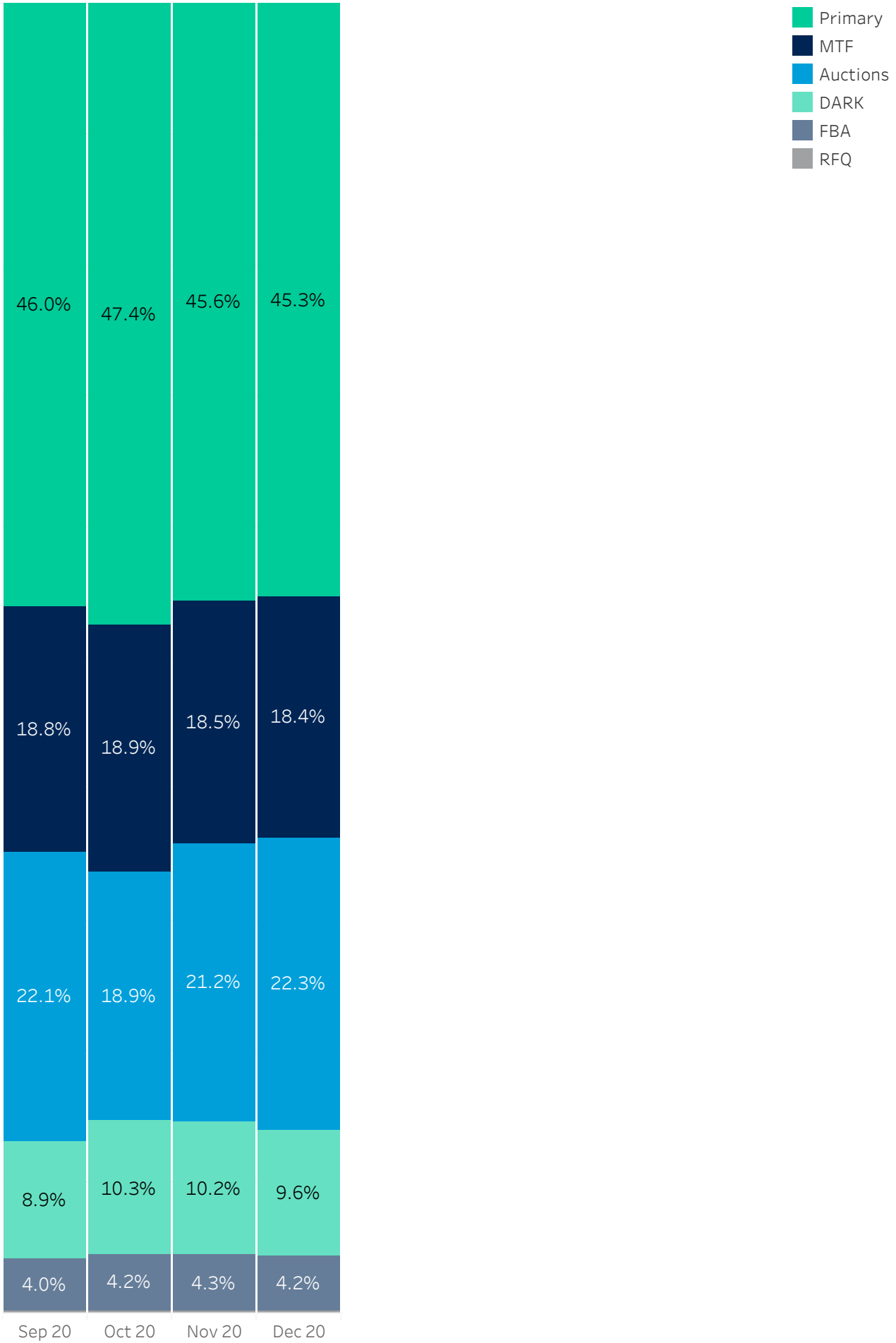
Average Daily Market Volume



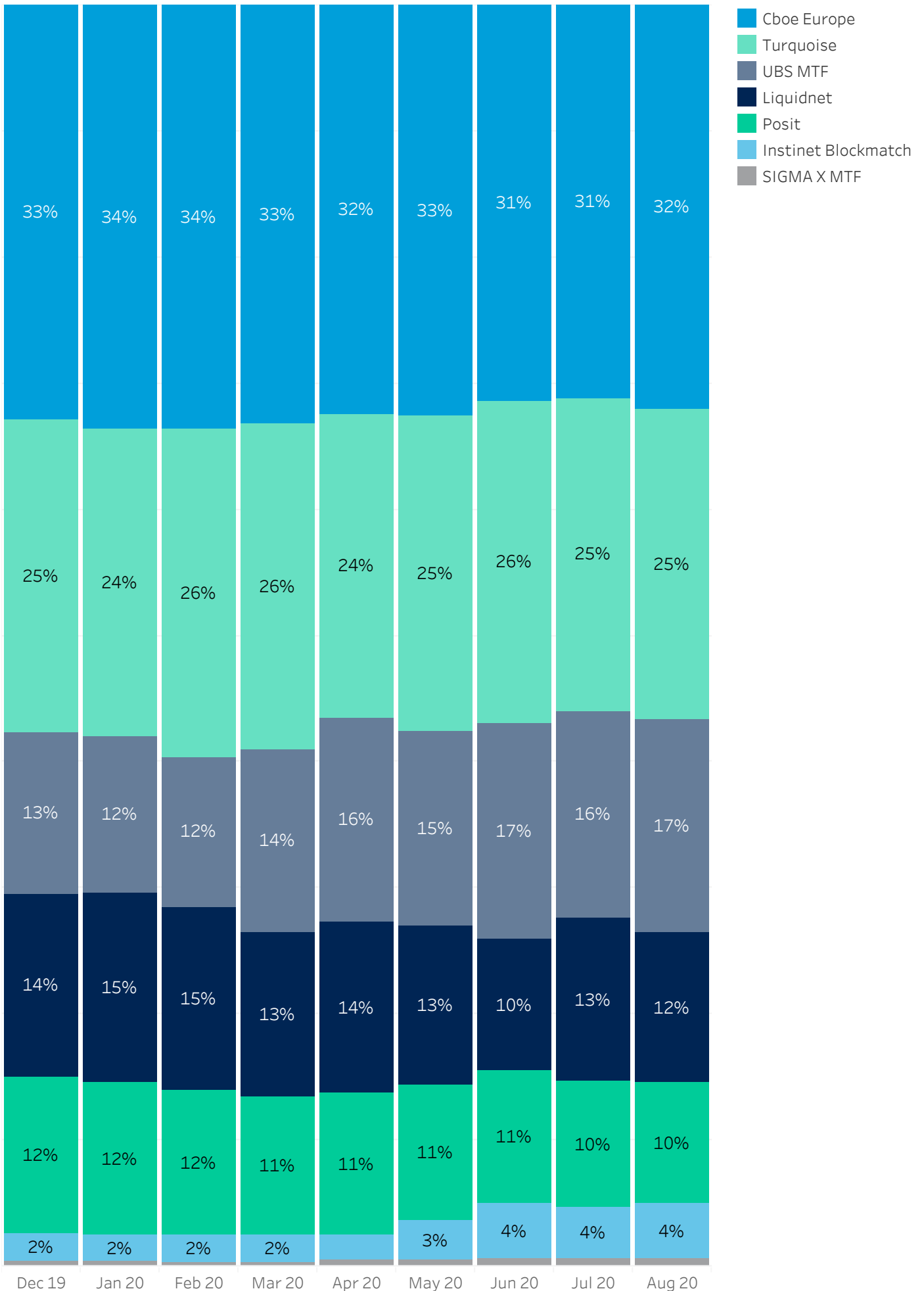
Venue Type Market Share



Venue Type Market Share



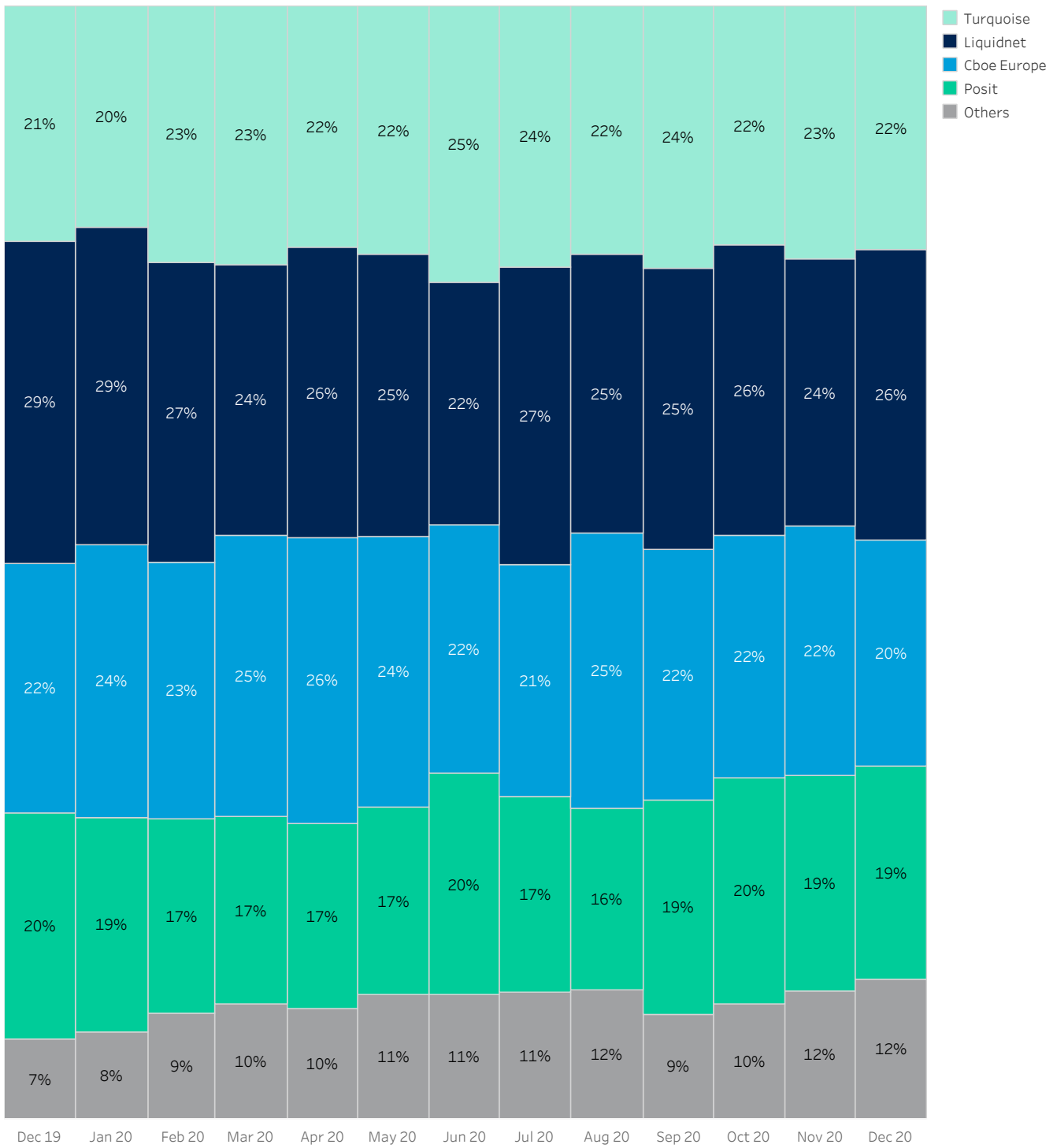
Dark Market Share



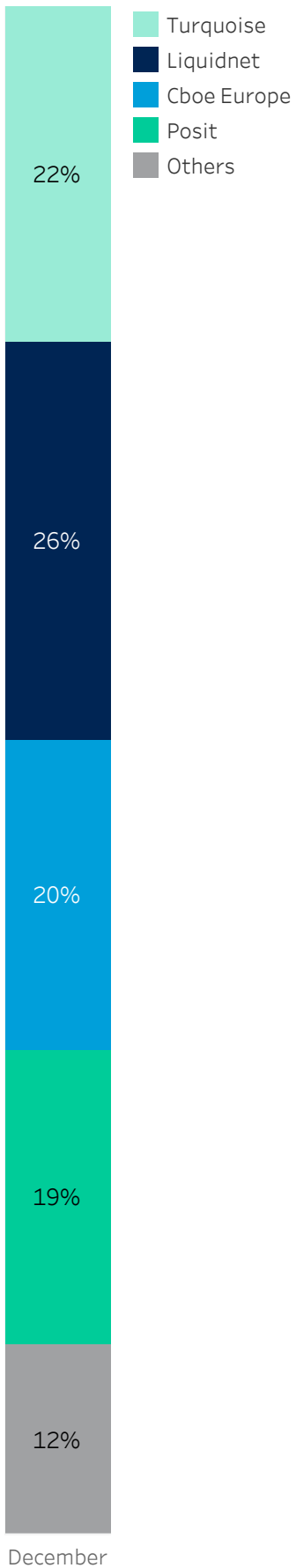
Dark Market Share



Block Market Share



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December

Quotesize in Notional USD

		4Q 19	1Q 20			2Q 20			3Q 20
		Dec 19	Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jun 20	Jul 20
8:00 - 8:30	Stoxx50	42.1K	43.7K	41.2K	20.2K	21.8K	23.0K	27.2K	28.7K
	Stoxx600	15.5K	16.1K	15.5K	10.0K	9.9K	10.1K	12.1K	12.5K
8:30 - 16:00	Stoxx50	69.2K	69.4K	66.0K	22.5K	31.3K	33.7K	40.5K	42.3K
	Stoxx600	25.2K	26.5K	24.6K	11.4K	13.3K	14.4K	17.3K	17.6K
16:00 - 16:30	Stoxx50	98.9K	99.3K	96.4K	27.8K	39.1K	42.5K	51.8K	57.3K
	Stoxx600	36.2K	36.7K	35.8K	13.0K	15.9K	18.1K	22.1K	23.2K

Percentile of Median m..



0.0K 0.0K

Quotesize in Notional USD

		3Q 20		4Q 20		
		Aug 20	Sep 20	Oct 20	Nov 20	Dec 20
8:00 - 8:30	Stoxx50	29.4K	29.3K	26.6K	29.9K	32.9K
	Stoxx600	12.9K	12.5K	12.0K	12.6K	13.5K
8:30 - 16:00	Stoxx50	43.0K	43.6K	38.9K	45.4K	50.9K
	Stoxx600	18.2K	17.7K	17.1K	18.4K	20.3K
16:00 - 16:30	Stoxx50	61.4K	58.4K	54.1K	63.2K	67.2K
	Stoxx600	24.3K	22.5K	22.3K	24.8K	26.2K

Percentile of Median m..



0.0K

0.0K

Spread Bps

8:00 - 8:30	Stoxx50	3.5	3.5	3.8	11.2	8.6	6.9	6.6	5.8
	Stoxx600	6.5	6.6	7.4	19.5	15.9	12.5	11.5	9.9
8:30 - 16:00	Stoxx50	2.6	2.6	2.8	5.9	4.5	4.0	3.9	3.5
	Stoxx600	4.1	4.1	4.4	9.7	7.7	6.5	6.2	5.5
16:00 - 16:30	Stoxx50	2.2	2.2	2.3	4.2	3.9	3.5	3.3	3.0
	Stoxx600	3.7	3.7	3.7	7.0	6.5	5.6	5.1	4.6

Percentile of Median m..



0.0% 100.0%

Spread Bps

8:00 - 8:30	Stoxx50	5.5	5.5	5.6	5.3	4.6
	Stoxx600	9.4	9.2	9.5	9.2	8.2
8:30 - 16:00	Stoxx50	3.2	3.4	3.4	3.2	3.0
	Stoxx600	5.1	5.1	5.0	4.8	4.5
16:00 - 16:30	Stoxx50	2.7	2.9	2.9	2.8	2.6
	Stoxx600	4.3	4.4	4.2	4.0	4.0

Percentile of Median m..



0.0% 100.0%

One Minute Volatility Bps

8:00 - 8:30	Stoxx50	8.3	9.5	11.3	37.3	23.1	19.1	20.4	15.1	15.0	15.9	16.8
	Stoxx600	9.1	9.9	11.7	34.0	23.7	19.5	19.8	14.7	14.5	15.0	16.0
8:30 - 16:00	Stoxx50	3.7	4.0	4.8	20.1	10.5	9.3	9.8	6.9	6.0	7.0	7.0
	Stoxx600	3.8	3.9	4.6	15.9	9.3	8.3	8.5	6.2	5.4	6.1	6.0
16:00 - 16:30	Stoxx50	3.8	3.9	4.4	19.1	12.4	11.2	11.2	7.5	6.1	8.1	7.3
	Stoxx600	3.6	3.6	4.0	15.5	10.1	9.4	9.0	6.2	5.3	6.5	5.8

One Minute Volatility Bps

8:00 - 8:30	Stoxx50	15.9	12.7
	Stoxx600	15.9	13.0
8:30 - 16:00	Stoxx50	6.9	5.1
	Stoxx600	6.1	4.9
16:00 - 16:30	Stoxx50	6.9	5.6
	Stoxx600	5.9	5.0

Percent ADV by Time of Day

Open	Stoxx50	0.8%	0.9%	0.9%	1.0%	1.1%	1.0%	1.0%	0.9%
	Stoxx600	0.4%	0.5%	0.5%	0.8%	0.7%	0.6%	0.5%	0.5%

Percentile of Median m..

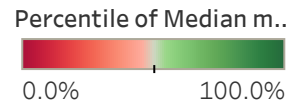


0.0%

100.0%

Percent ADV by Time of Day

Open	Stoxx50	0.8%	0.9%	1.1%	1.1%	1.0%
	Stoxx600	0.5%	0.4%	0.5%	0.5%	0.5%



8:00 - 8:30	Stoxx50	9.7%	11.2%	9.7%	10.3%	11.2%	11.5%	11.8%	11.1%
	Stoxx600	7.1%	8.3%	8.1%	8.3%	9.1%	9.2%	9.1%	8.9%
16:00 - 16:30	Stoxx50	20.2%	19.5%	20.9%	25.7%	22.8%	19.3%	19.0%	19.7%
	Stoxx600	19.3%	18.8%	19.6%	17.2%	14.8%	17.7%	18.0%	18.3%

Percentile of Median m..

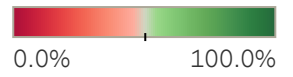


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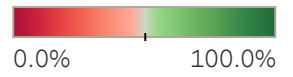
8:00 - 8:30	Stoxx50	11.6%	10.6%	11.1%	11.1%	10.6%
	Stoxx600	9.7%	9.1%	9.1%	8.8%	8.6%
16:00 - 16:30	Stoxx50	19.9%	19.4%	20.7%	20.7%	22.5%
	Stoxx600	19.0%	17.5%	17.6%	18.5%	19.4%

Percentile of Median m..



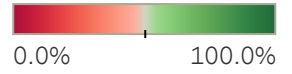
Close	Stoxx50	27.3%	24.5%	24.8%	21.1%	25.0%	23.2%
	Stoxx600	28.0%	26.7%	25.6%	21.1%	24.6%	23.5%

Percentile of Median m..



Close	Stoxx50	22.4%	22.0%	24.0%	24.8%	24.2%	23.4%
	Stoxx600	23.2%	23.7%	24.0%	25.1%	26.1%	26.3%

Percentile of Median m..



Close	Stoxx50	26.3%
	Stoxx600	29.0%

Percentile of Median m..

