

# 2021's New Normal

## Higher levels of global equity market volatility continue

This edition officially marks the sixth consecutive year the Virtu Analytics team have published an end-of-year global equity transaction cost summary. While some trends have remained consistent over the years, some have shifted. Typically, the equity market year-end is marked by decreasing volumes in the last two weeks of the year and a shift to smaller order sizes. In our 2020 review, we highlighted the pandemic-related return of volatility in March and April and sustained higher levels throughout the remainder of the year. Applying what we've learned from the past, we seek to extrapolate what the last few trading days of 2021 might look like.

### VOLATILITY REMAINS ELEVATED

While it may seem that equity volatility has returned to 'normal' we are calling this current state the 'new normal.' Across all developed and emerging markets, volatility, while having decreased from the highs observed in March and April 2020, has remained consistently elevated.

**Intraday Equity Market Volatility for Jan 2019 to Jan 2020 vs. Jun 2020 to Sep 2021 is:**

**16%**

higher in developed APAC

**18%**

higher in developed Europe

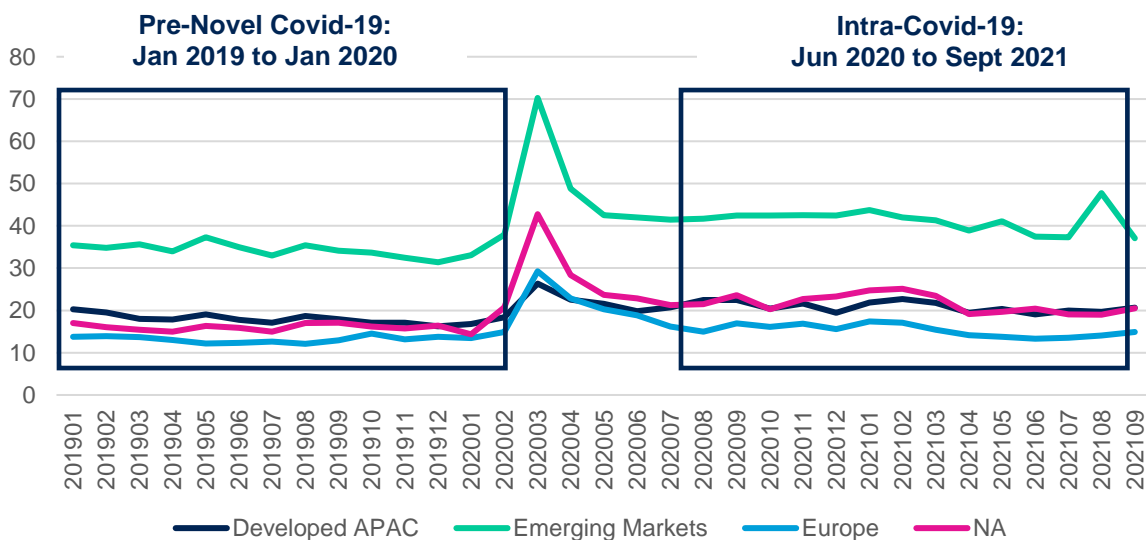
**36%**

higher in North America

**21%**

higher in emerging markets

### Intraday Equity Volatility for Jan 2019 to Jan 2020 vs. Jun 2020 to Sep 2021



Source: Virtu Analytics

## BLOCK ACTIVITY

Leveraging Virtu's Open Technology Block Volume API<sup>1</sup>, we compared the average size of the largest blocks (a block is where shares are greater than 10K and at least US\$250K notional) that printed in 4Q 2020, compared to the last two weeks of 2020 for various indices. Block size decreases across the board and traders should look to engage with natural liquidity where available.

In the last two weeks of 2020 compared to 4Q, we observed:

### S&P500

**15%**

smaller blocks

### Russell 3000

**5%**

smaller blocks

### MSCI World

**13%**

smaller blocks

## METHODOLOGY

To normalize for differences in calendar days and holidays year over year, the time-period in the volume charts depicted below follow the 21 trading days across each market/region prior to year-end.

This year also marks a shift to sourcing this data from our client-ready, Market Data Open Technology APIs. Sample code is available to clients that would like to look at specific markets in more detail.

For more details on our Block Volume API, check out our [Analytics in Action](#)

## Year-end Market Volumes

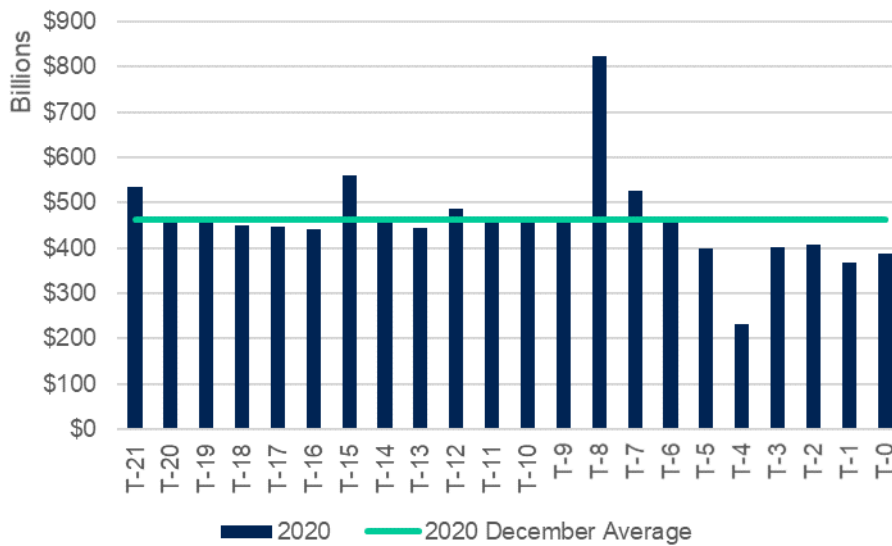
**Historically, we observe a year-end drop in volumes when many Portfolio Managers and Traders take time-away for the holiday season.**

- **NA:** in North America, volumes decrease by 18% in the last five days of the year excluding Christmas Eve which is only a half trading day.
- **EMEA:** volumes in European markets followed the same volume pattern from years' past, volumes increased going into the quad witching event and then sharply declined in the days after and through to year-end.

<sup>1</sup> Block Volume API is the latest release on Virtu's [Open Technology](#) platform, designed to integrate data-driven analytics into your execution processes. Using your preferred programming language, use a simple call to retrieve historical block liquidity and associated bid/ask spreads for a single security or trade lists

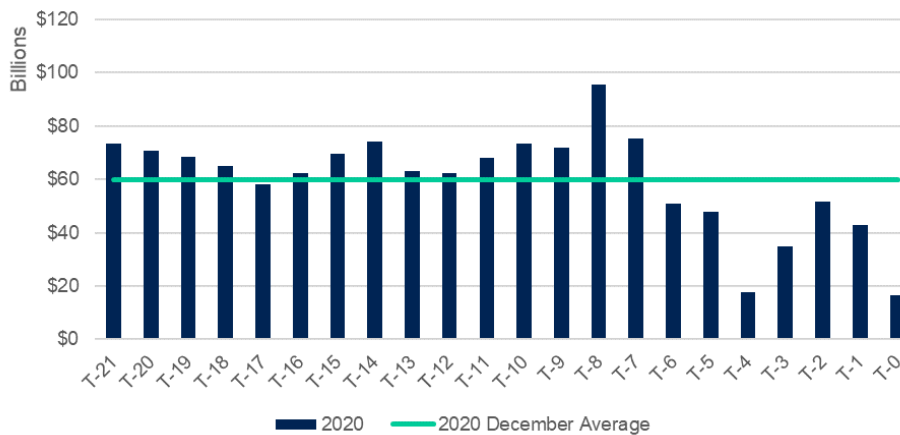
- **APAC:** APAC markets continue to be the least affected by the year-end slowdown, posting roughly equal volumes day over day through the end of the year with no noticeable decline.

### North America

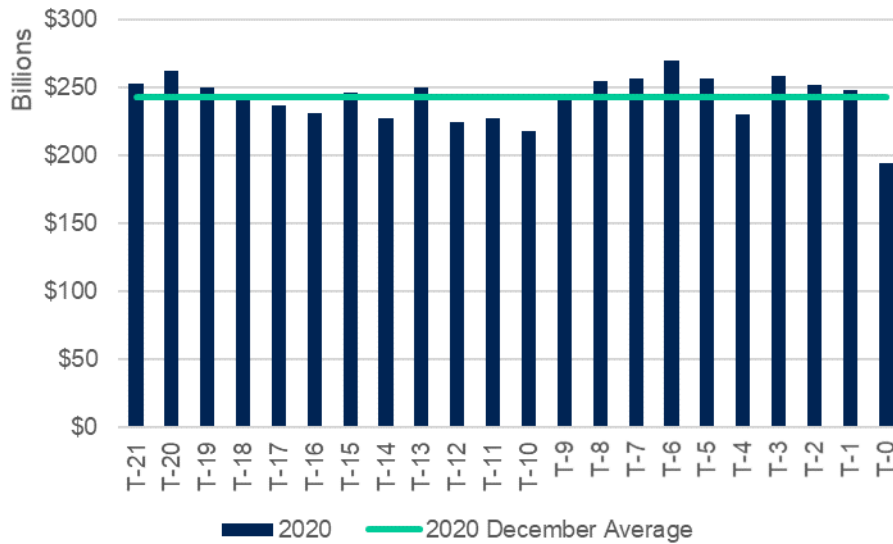


T-4 was 24 December in 2020. Excluding this as a half-trading day, we see volumes decrease by 18% in the last five trading days of the year.

### EMEA



## APAC



Like other years, APAC sees a much smaller drop-off around 25 December and more pronounced volume drop-off on 31 December.

Source: Virtu Analytics

## Buy-side Order Sizes

We supplemented actual market volumes with Virtu Analytics' Global Peer database<sup>2</sup> to decipher whether institutional manager and trader behavior changed in the last two weeks of December.

**NA:** Since we began publishing this review six years ago, there has been a consistent trend of decreased liquidity demand at the end of the year from the buy-side in North America. Perhaps with the expectation of less participants and volume, typically the Virtu Global Peer database observes a 5+% increase in notional volumes in smaller order sizes.

- In 2020, the same pattern holds true. Orders < 10% MDV account for 77% total dollar volume in the last two weeks of the year compared to 72% in Q4.
- The general move to smaller orders most likely also has an impact on the number of blocks that are available.

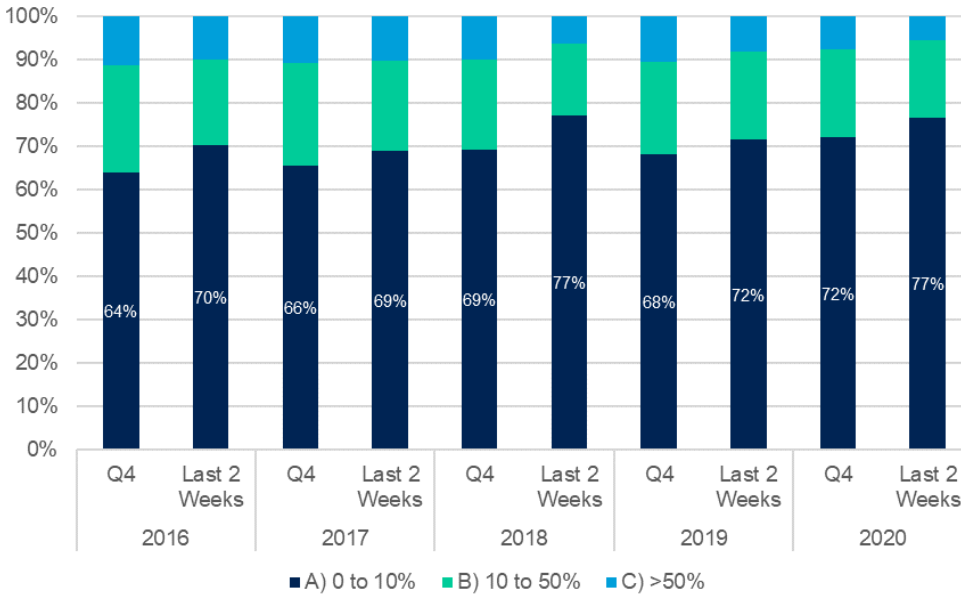
**EMEA:** We observe a similar pattern in EMEA—an increased amount of trading in small order sizes as the year comes to an end. However, Europe has a higher percentage of large orders traded in the last two weeks compared to North America.

<sup>2</sup> **Global Peer database** Our broker-neutral peer transaction database covers more than 20% of equity institutional trading. Leveraged by clients to meaningfully analyze their performance against their peer group—across asset classes and regions.

**APAC:** We observe a similar pattern of increased demand for smaller order sizes at the end of the year.

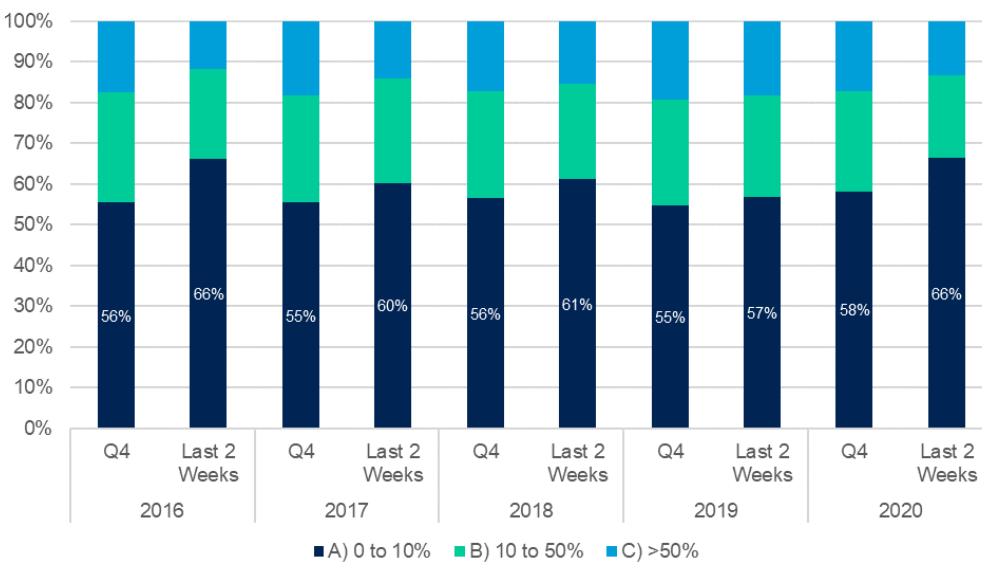
In the next section, we'll translate this shifting liquidity demand profile in the last two weeks to observed trading costs from Virtu's Global Peer database.

### North America

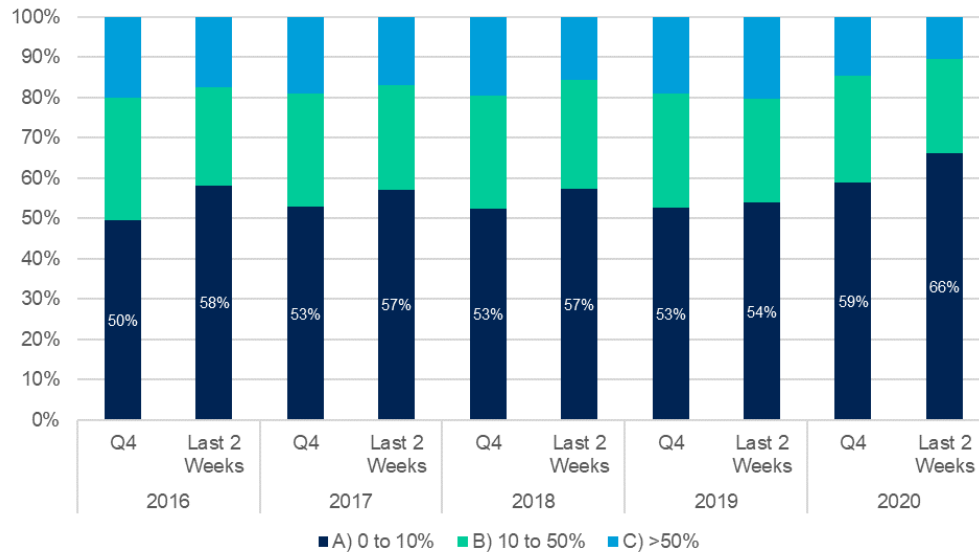


Smaller orders are consistently traded more in the last two weeks of the year by the buy-side compared to Q4.

### EMEA



## APAC



Source: Virtu Analytics

## End-of-Year Trading Costs

We further analyzed trading costs from our Peer Group database, specifically looking at the last two weeks of 2020 vs. 4Q 2020 overall.

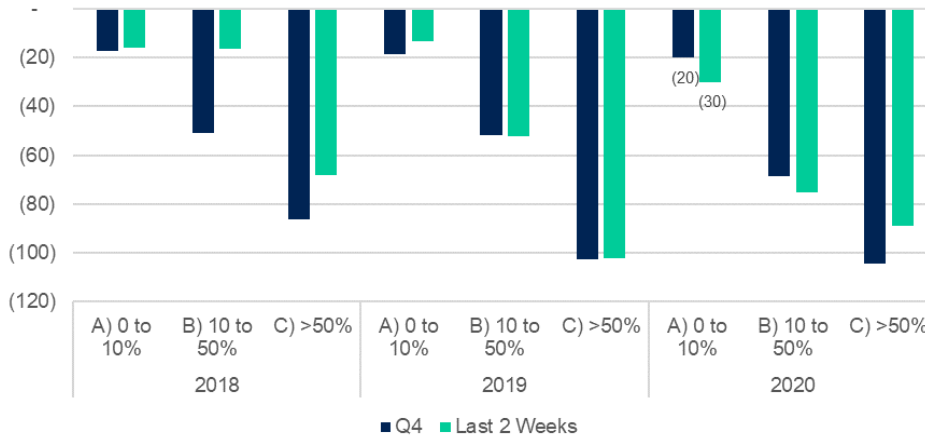
**NA:** In 2020 we see a reversal of a previously well-established pattern—implementation shortfall (IS) costs are higher in the last two weeks of the year compared to the rest of Q4. Trading small orders, <25% MDV, was costlier in the last two weeks of the year in 2020.

**EMEA:** In Europe, aggregate IS costs are smaller in the last two weeks of the year compared with cost in the rest of the 4Q 2020 period.

- Lower IS costs at the end of the year are driven by lower costs in larger orders (>25% MDV). For smaller orders, we see a similar pattern to North America—costs were higher in the last two weeks of 2020.

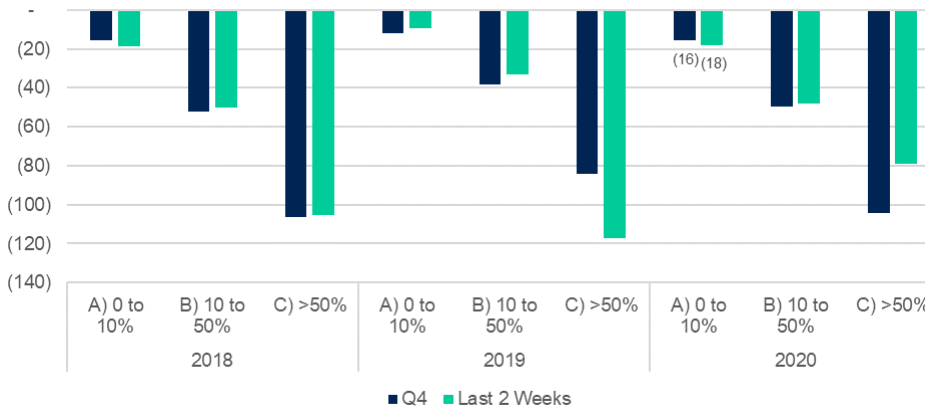
**APAC:** In 2020, trading costs in Asia Pacific markets followed a similar pattern to North America: notable increase in costs during the last two weeks of the year across all order size groups.

## North America

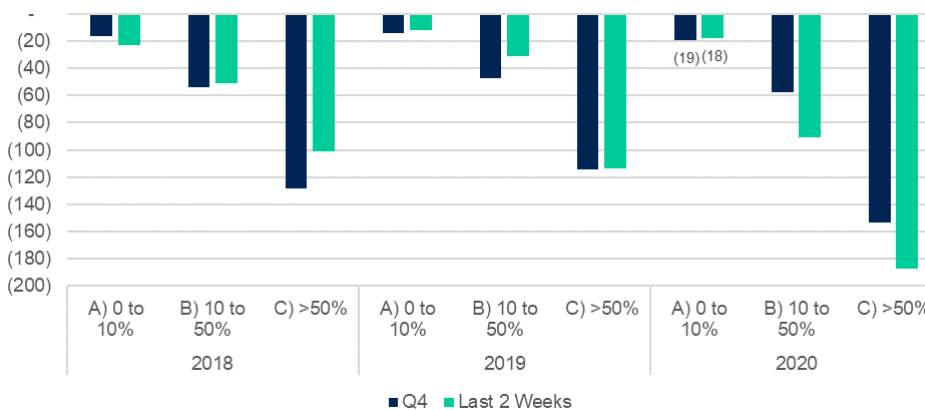


Smaller orders became more expensive in the last two weeks of 2020 for the first time in recent history.

## EMEA



## APAC



Source: Virtu Analytics

## CONTACT

To learn more, contact your Virtu Analytics representative:

**AMER** +1.866.265.4519 | **APAC** +852.3405.3755 | **EMEA** +44.20.7670.4114  
[analytics@virtu.com](mailto:analytics@virtu.com) | [www.virtu.com](http://www.virtu.com)

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