

# Auld Lang Syne, 2020

## Should year-end trading volatility be forgot, we bring them now to mind

This edition officially marks the fifth consecutive year we have published an end-of-year transaction cost article. While some trends have remained consistent over the years, some have also shifted. Typically, the year's end has been marked by decreasing volumes in the last two weeks of the year and a shift to smaller order sizes. In our [2019 review](#), we highlighted the surprise volatility that came in at the end of 2018 catching many Portfolio Managers and Traders off-guard. We use what we've learned from the past to extrapolate as to what 2020 might look like, though if we've learned anything about this year it's that it's been quite different than what many of us have experienced before.

### TAKEAWAYS

While we continue to see decreasing volume in NAM and EMEA in the last two weeks of the year, we're not seeing the same shift away from liquidity demand by the buy-side that we saw back in 2016 when we wrote this article for the first time. While order sizes are starting to look more consistent between the last two weeks of the year versus Q4 in general we're still seeing higher trading costs in the period prior to the holidays. With the much higher levels of volatility that we've already seen this year we're potentially looking at a more volatile lead into the New Year.

### DATA NOTE

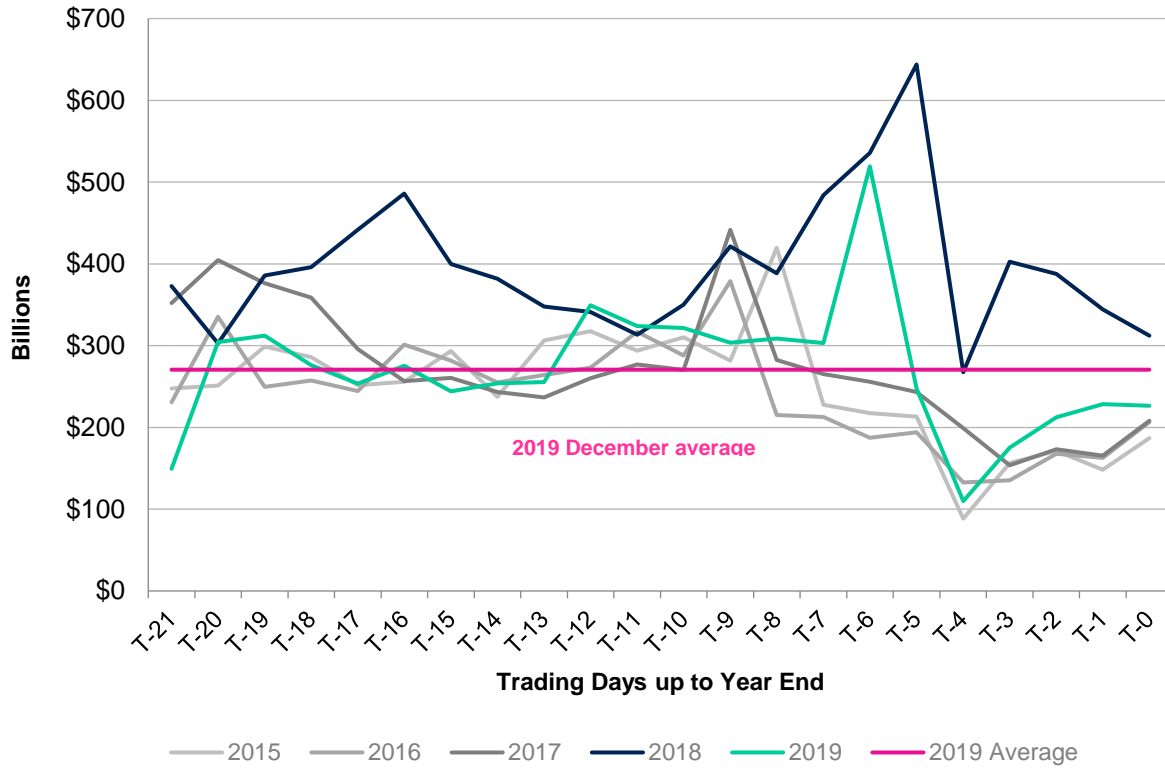
To normalize for differences in calendar days and holidays year over year, the time period in the volume charts depicted below follow the 21 trading days across each market/region prior to year-end.

## Year-End Market Volumes

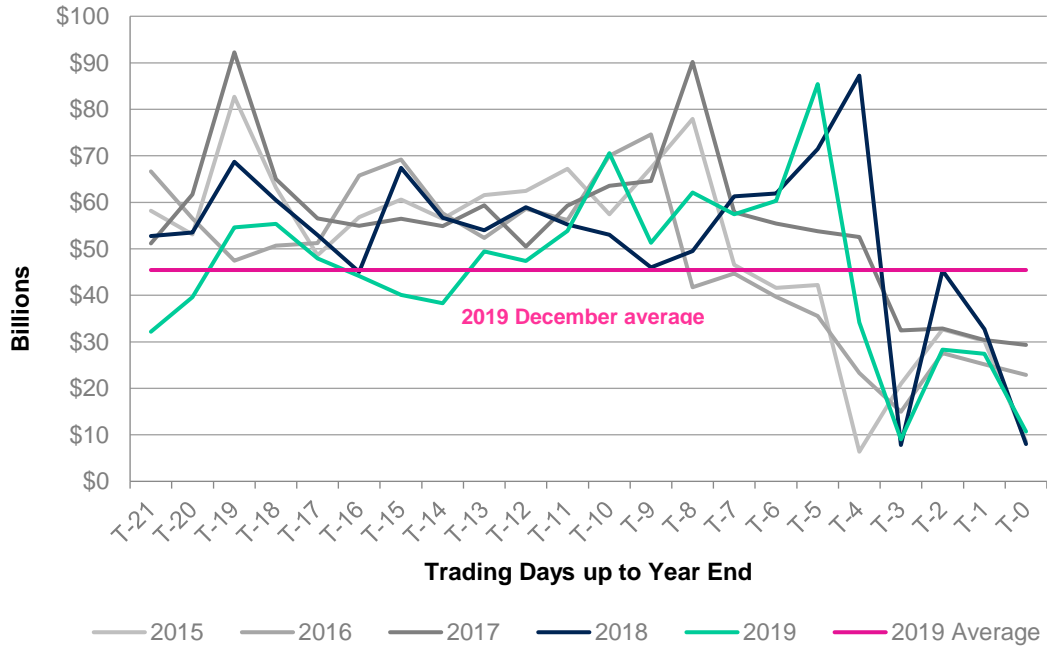
Historically, we observe a year-end drop in volumes when many Portfolio Managers and Traders take time-away for the holiday season.

- **NAM:** In North America, volumes at the end of 2019 tapered off compared with 2018-year end averages, decreasing by 32%; 2019 averages remained roughly equal with that of 2017 and years prior.
- **EMEA:** Volumes in European markets followed the same volume pattern from years past as well, with volumes swelling going into the quad witch event and then sharply declining in the days after and through to year-end.
- **APAC:** APAC markets continue to be the least affected by this prescribed year-end slowdown, posting roughly equal volumes day over day through the end of the year with no noticeable decline.

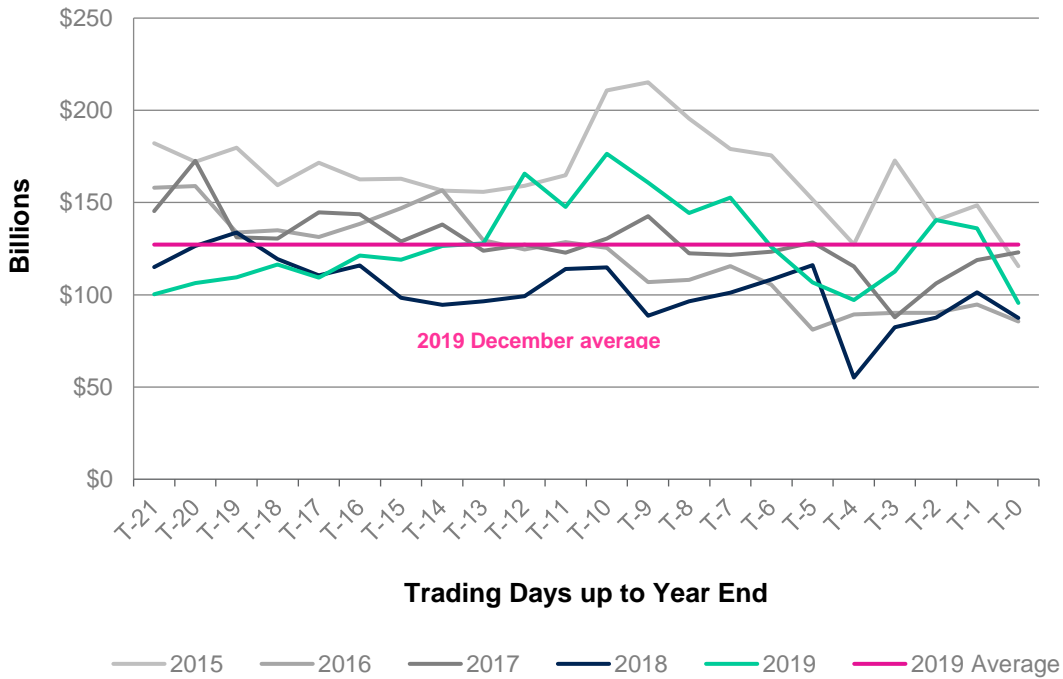
**North America Dollar Volume**



### EMEA Dollar Volume



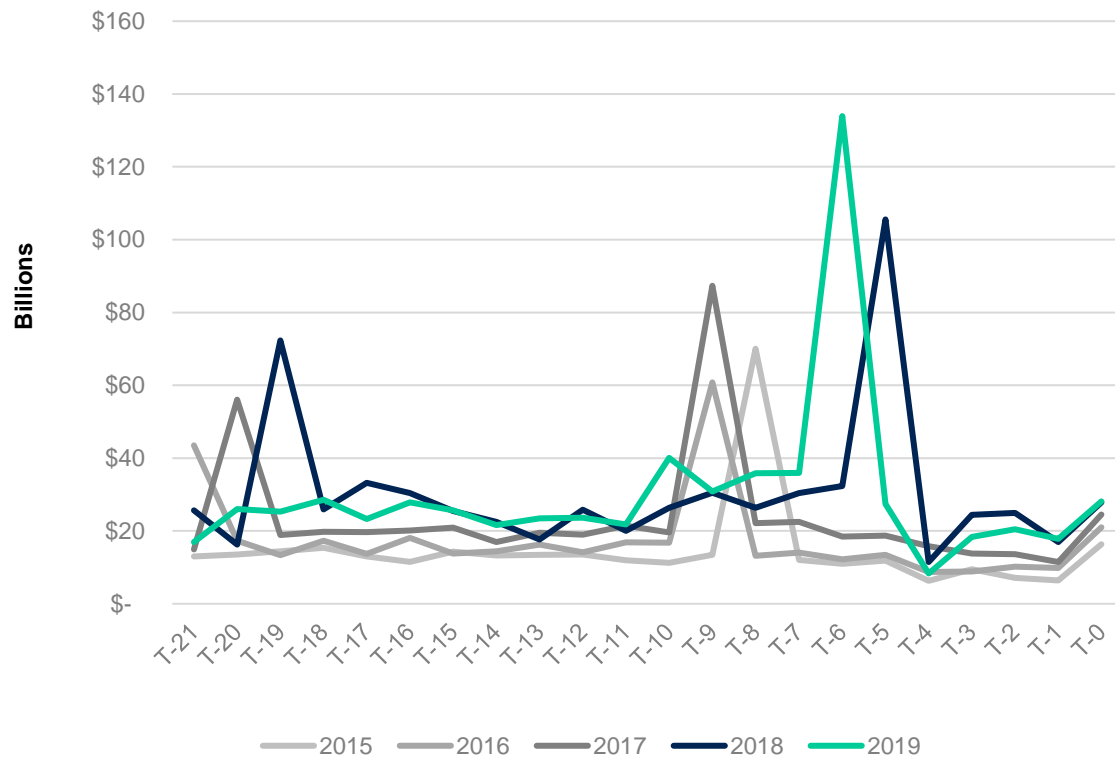
### APAC Dollar Volume



## US Closing Volumes

**NAM:** Dollars traded on the US close, on the last day of 2019, remained steadily higher compared to past years, and roughly similar to what we observed at the end of 2018. The quad witch event in 2019 (20 December 2019) held the most volume recorded in recent years, 27% higher in 2019 over 2018, and 53% higher than in 2017.

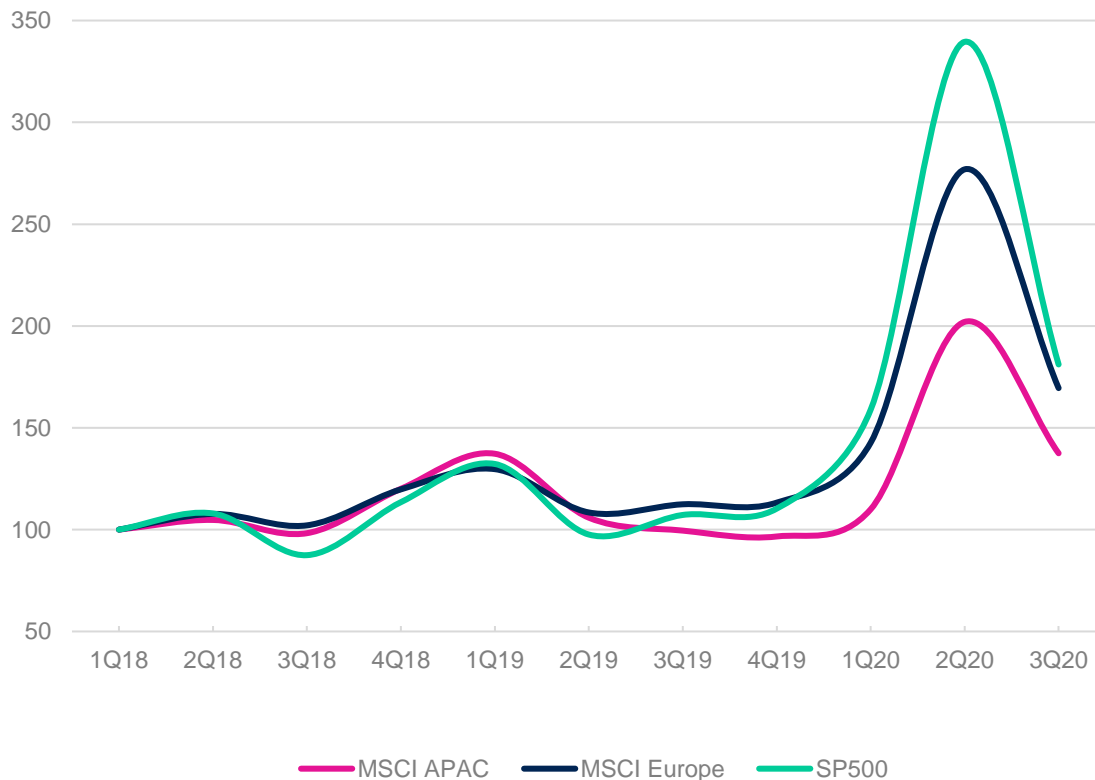
US Closing Volumes Year Over Year



## Volatility

The COVID-19 pandemic increased market volatility to levels not seen for a few years. In our 2019 review, noting observed volumes and volatility at the end of 2018, we relayed a connection between the surprise volatility in December and elevated trading volumes. Skipping forward another year, as 2019 waned, we saw a decrease in volatility across global indices, lower global trading volumes compared with EOY 2018 following suit. In 2020 however, volatility across global markets has soared, as evidenced in the chart below. These levels reach far higher than any period of volatility measured in recent years. The team will be monitoring to see if there will be any record-setting levels of holiday volatility and/or volumes towards the end of the year.

**Annualized Volatility by Quarter - Indexed to 100**



## Buy-Side Order Sizes

We supplemented actual market volumes with Virtu Analytics' Global Peer database<sup>11</sup> to decipher whether institutional manager and trader behavior changed in the last two weeks of December.

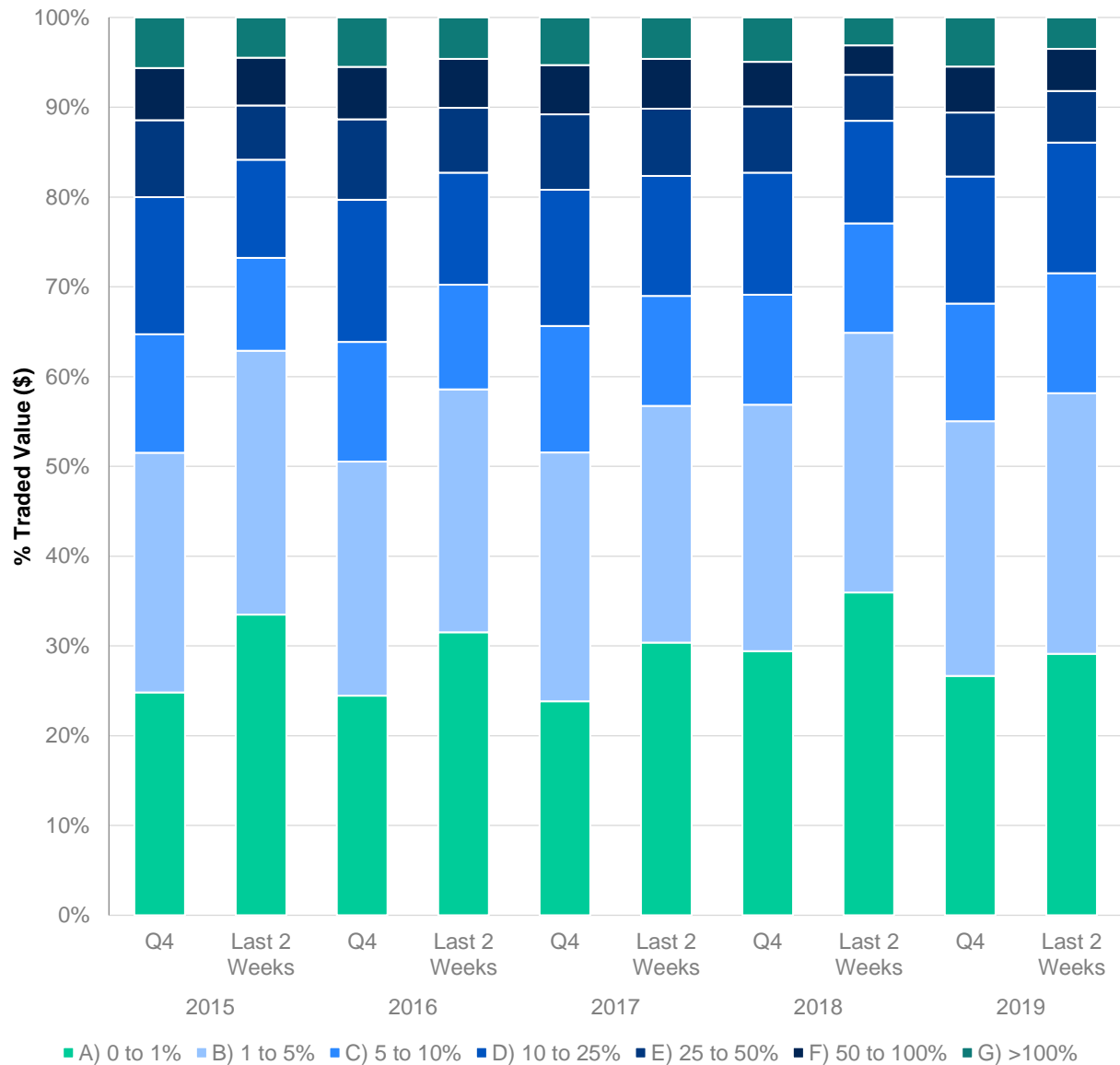
- **NAM:** Since we began this review five years ago, there has been a consistent trend of smaller liquidity demands at the end of the year from the buy-side in North America. Perhaps with the expectation of less participants and volume, typically the Virtu Global Peer database observes a 5+% increase in notional volumes in smaller order sizes
  - However, 2019 was a contrarian year, with order sizes looking more consistent in the last two weeks of the year compared with the rest of the Q4 period. In other words, in 2019 we saw little changes in liquidity demand during the last two weeks of the year.
- **EMEA:** Also follows the 2019 trend, albeit to a lesser degree; increased demand for smaller orders is still present.
- **APAC:** Evident as well in APAC markets, a consistent trend year over 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.

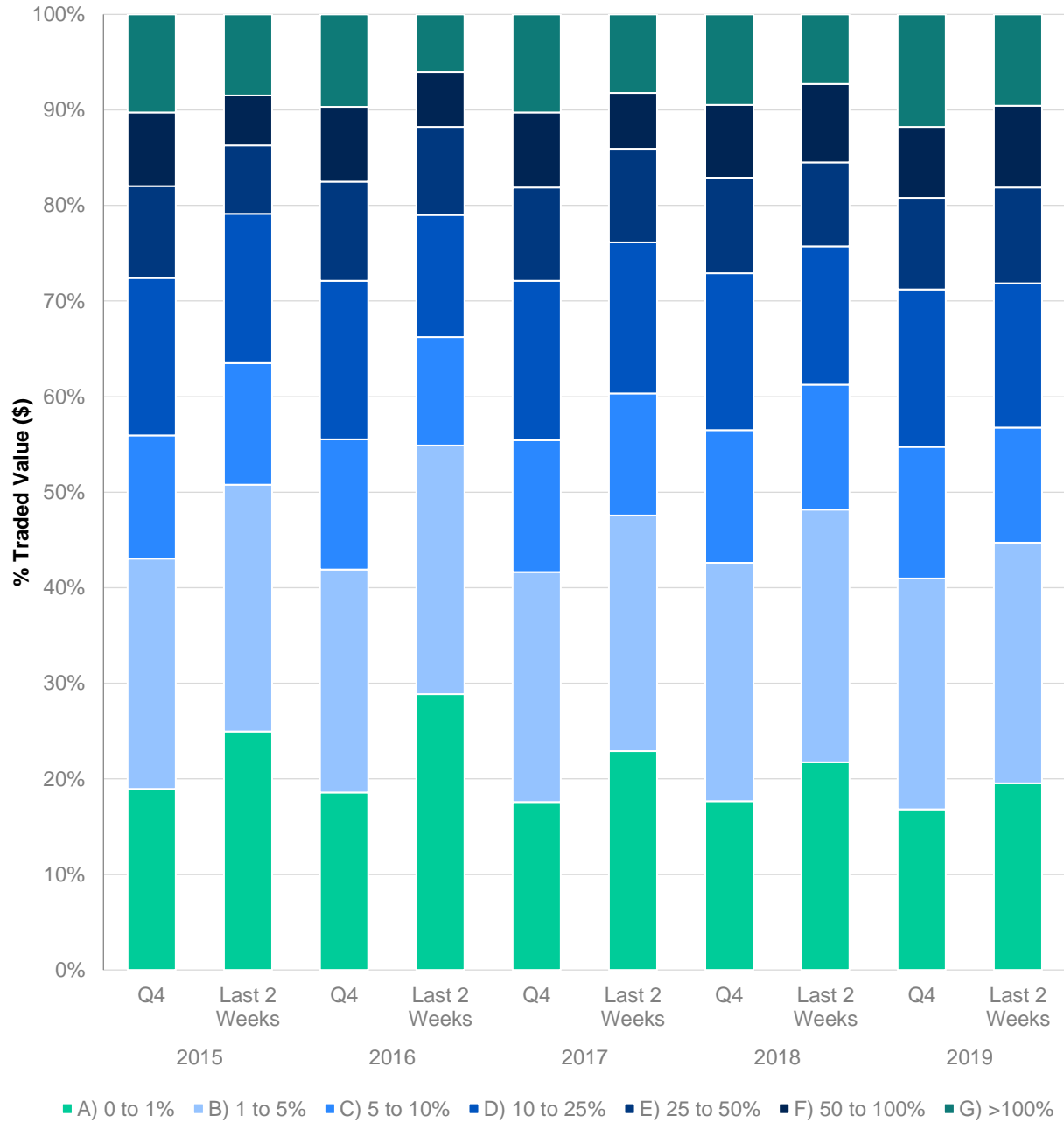
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<sup>1</sup> Global Peer database, our broker-neutral peer transaction database, is leveraged by clients to meaningfully and anonymously analyze their performance against firms in their peer group—across asset classes and regions.

**Order Size Distribution - North America**

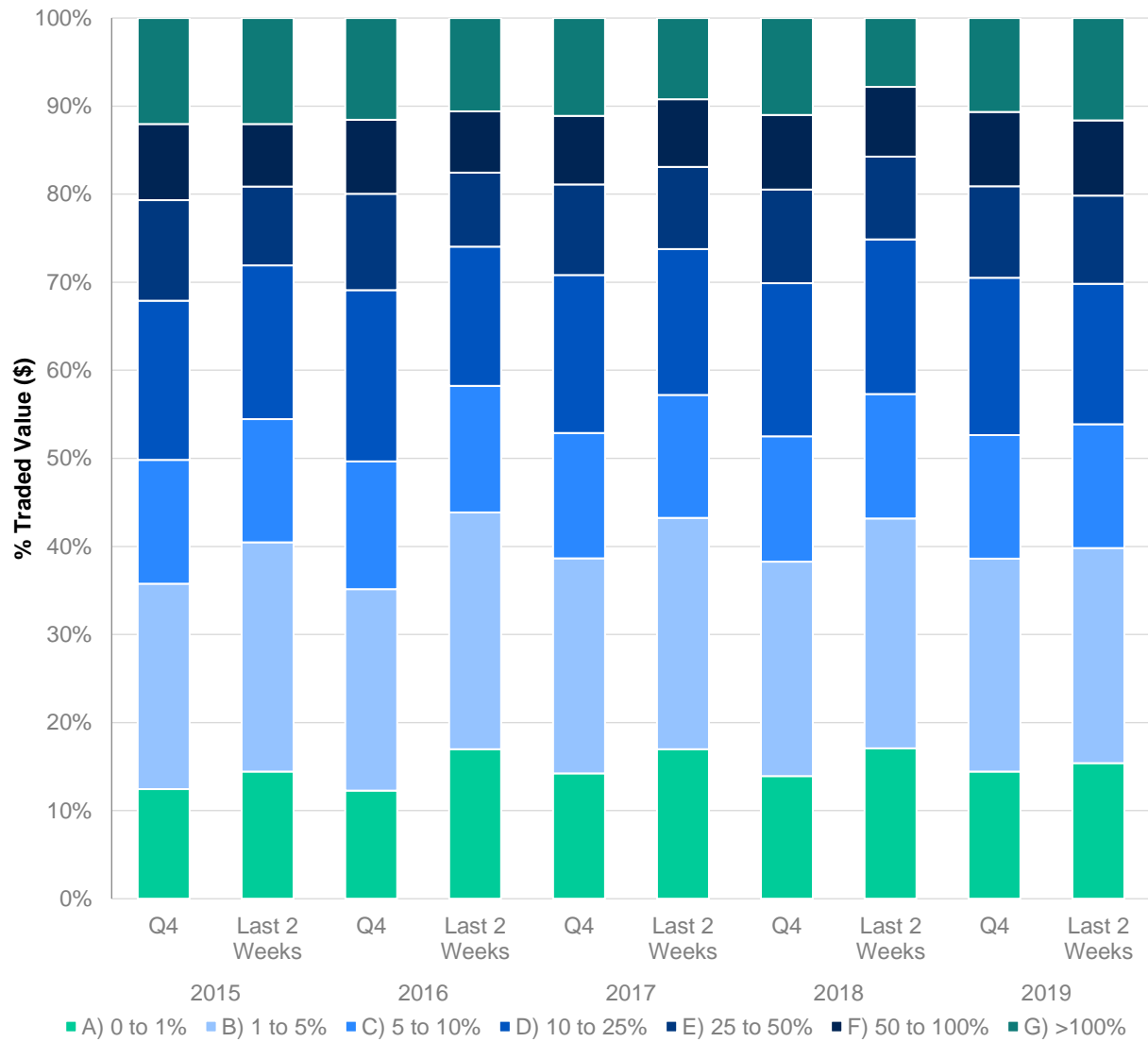


**Order Size Distribution - EMEA**





**Order Size Distribution - APAC**

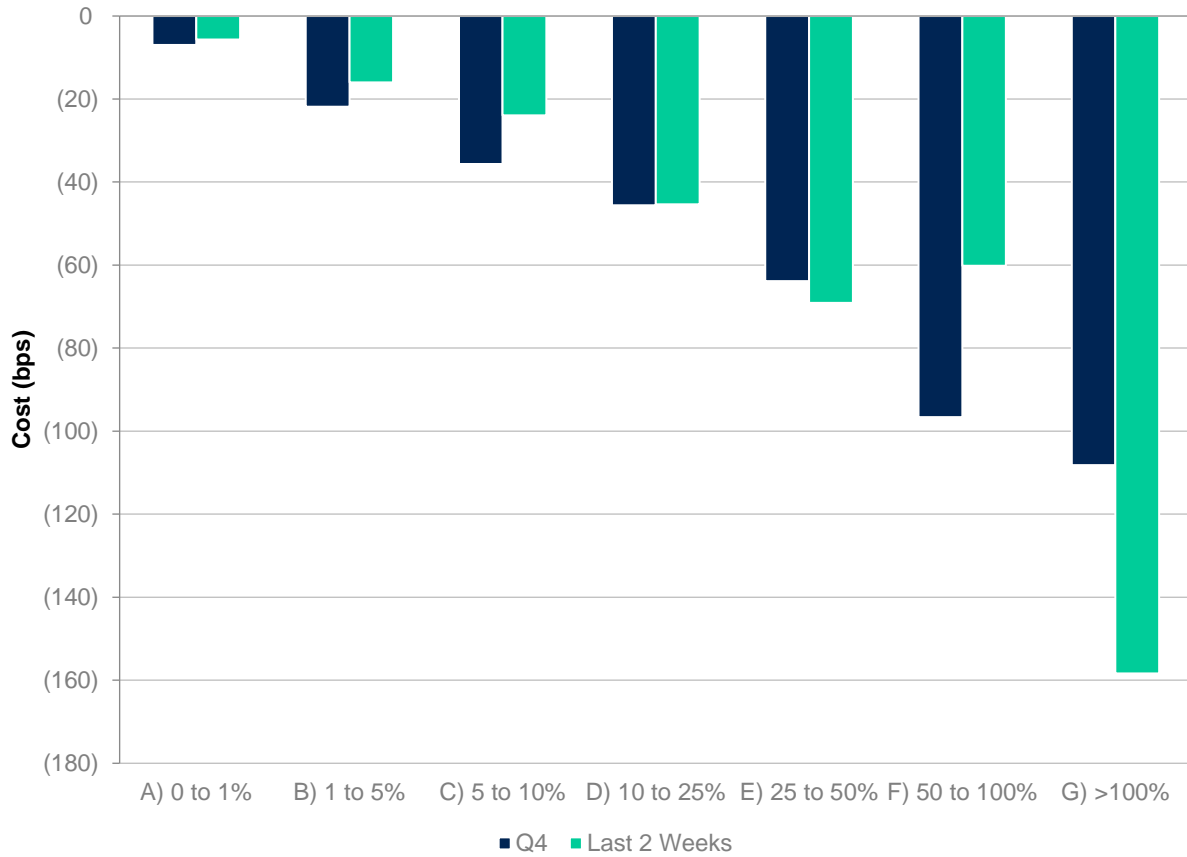


## End-of-Year Trading Costs

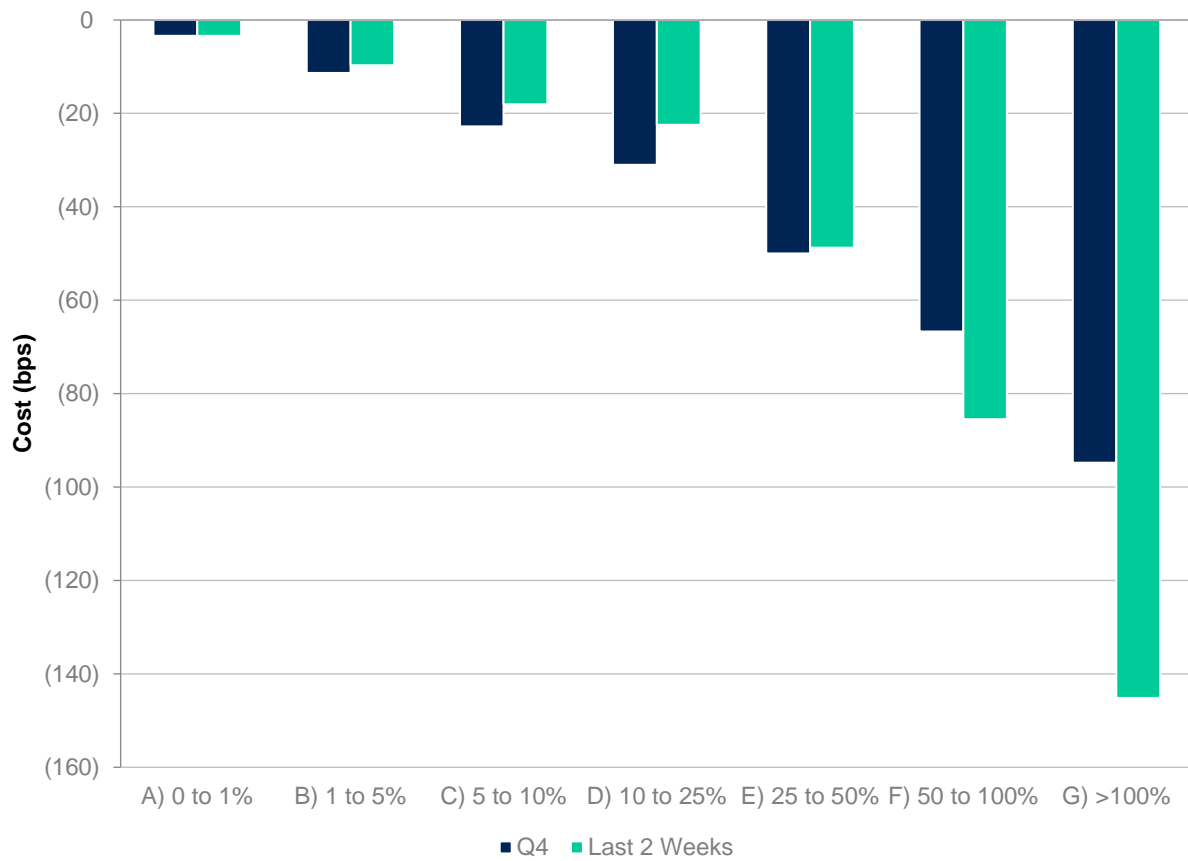
We further analyzed trading costs from our Peer Group database, specifically looking at the last two weeks of 2019 vs. Q4 2019 overall.

- **NAM:** Despite the smaller pullback in liquidity demands through the end of the year highlighted below, costs across all order sizes less than 100% of the MDV (median daily volume) exhibited implementation shortfall (IS) costs either roughly equal or lower in the last two weeks of the year compared with observed costs in the rest of the 4Q 2019 period.
    - NAM trading costs were also about even or smaller at year-end in both 2018 and 2017.
  - **EMEA:** In end of year trading in the EMEA region, IS costs across order sizes see a similar pattern to NAM, IS costs across orders of smaller size (less than 50% of the MDV), show to be smaller or equivalent in the last two weeks of the year compared with the rest of Q4.
    - Orders greater than 50% of the MDV proved much more expensive when trading at the end of the year.
  - **APAC:** Orders in Asia Pacific markets followed a similar pattern to the other regions: notable decreases in costs across order sizes smaller than 100% MDV during the last two weeks of the year; very large orders in APAC (>100% MDV) showing roughly the same costs vs. IS across both time frames.
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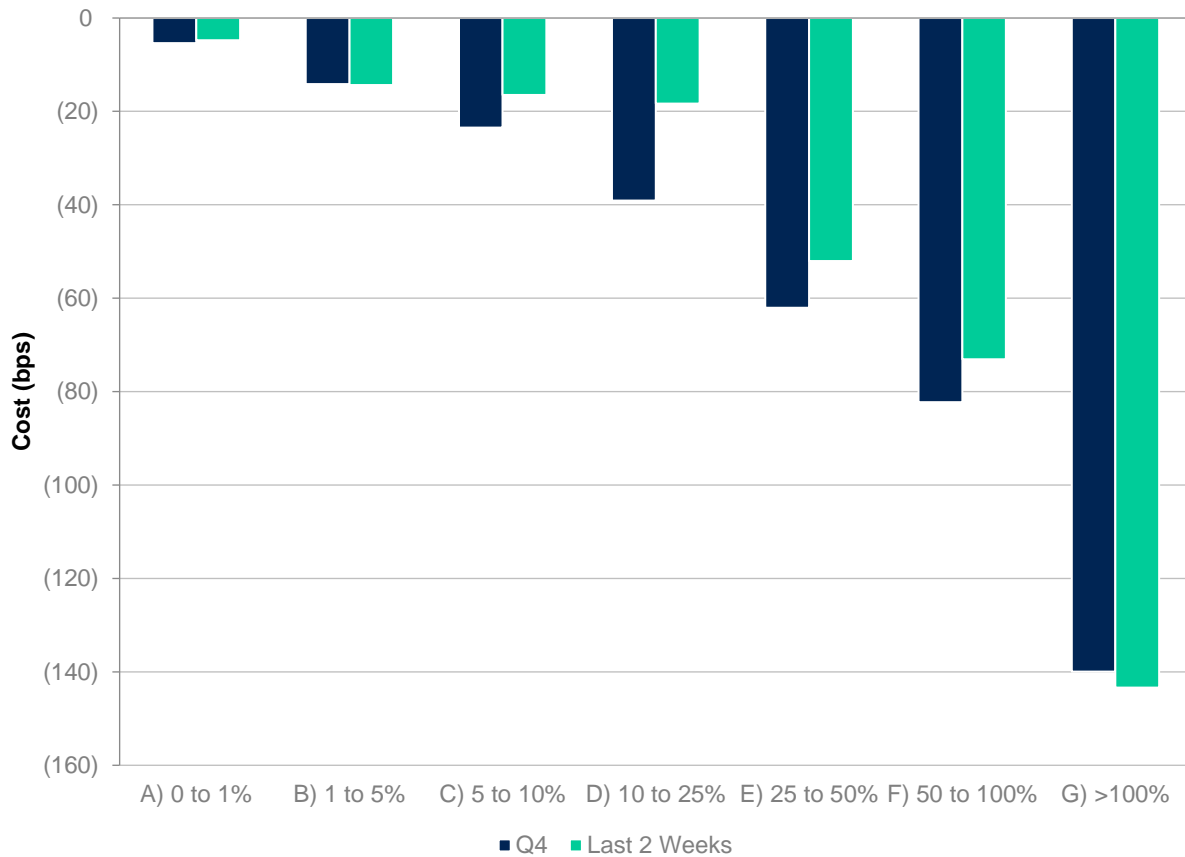
**2019 Trading Costs in North America from Virtu's Global Peer Universe**



**2019 Trading Costs in EMEA from Virtu's Global Peer Universe**



### 2019 Trading Costs in APAC from Virtu's Global Peer Universe



To learn more, contact your sales representative or call our desk at:  
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