\_|\_|\_|\_|\_|\_|\_|\_|\_|\_|\_|\_|\_|\_|\_|\_| -|-|-**|-|-|-|-|-|-|-|-|-|-|-**|--|-|-**|-|-|-|-|-|-|-|-|-|-|-|-**|-

# Nasdaq

# High-Frequency Traders & Single-Dealer Platforms

Discussion by

Satchit Sagade

Economic & Statistical Research, Nasdaq

Stockholm, 4 May 2022

Views expressed are solely those of the author and do not necessarily reflect Nasdaq's views

#### European Equity Trading Landscape

## Dark, Quasi-Dark, and Lit Venues

MiFID-II imposed ban on BCNs led to the emergence of ELP SIs



Note: Heterogeneity across venues within a mechanism

#### European Equity Trading Landscape

### **ELP SI: Institutional Setup**



SIs publish two-way quotes through APAs but:

- Limited pre-trade transparency
  - Order size
  - Liquid versus illiquid stocks
- Commercial discretion to choose counterparties
- Ability to limit number of transactions with same counterparty
- Tick size
  - Not applicable above SMS (€10k)\*

# SIs engage in cream-skimming harming public market liquidity (Aramian and Nordén, 2021)

\*above LIS after June-2020

This Paper

# ELP SIs harm displayed exchange liquidity



HFT dealer activity is associated with:

- Reduced liquidity supply on exchanges by the
- More aggressive trading on exchanges by the
- Lower quoted liquidity on public markets

HFT dealers scale back public liquidity provision and/or engage in inventory rebalancing on public

#### This Paper Some Questions?

Do you observe any intraday patterns?

- Do you observe stronger inventory results towards the end of the day?
- Do HFTs learn about the direction of intraday flow (Battalio et al., 2018)?

How do ELP SI trade during more volatile periods?

- Are they more or less likely to trade during moments of high market uncertainty?
- Do your results get stronger/weaker?

PFOF / Best Execution

- US versus Europe (clients, best execution policies, client execution costs)

#### This Paper PFOF and Best Execution

55% of retail orders earn the spread on Nasdaq vis-à-vis internalizers who charge a spread (with or without PI)

#### **Retail Trading Volumes**



#### **Retail Trading Across Different Mechanisms**



#### This Paper Conclusions

Very interesting and topical paper!

Inventory channel (plus cream skimming, plus PFOF concerns)

Interplay between on- and off-exchange liquidity provision by HFTs Harmful effects on public market liquidity

Can you tie in your results to the ongoing regulatory rebate? Policy implications...

Thank you!

#### This Paper

#### Some further comments

Consider controlling for volatility in inventory and liquidity supply regressions

- Higher spread capture versus increased inventory risk
- Volatility also affects market fragmentation

Differences between dealer and non-dealer HFTs

- Size, scale, heterogeneity of HFT strategies

Disentangle aggressive strategies by HFTs versus aggressive inventory rebalancing?

- Scale liquidity supply by total volume instead of total own volume