



Using Data to Enable Price Discovery

Nasdaq

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Agenda

1. Intro to Nasdaq Data Business
2. Nasdaq Last Sale for Pre/Post Session Price Movement
3. Net Order Imbalance Data
4. Understanding Retail Flows
5. Final Thoughts



Intro to Nasdaq Data Business

Leading Proprietary, Partner, and Alternative data products

Nasdaq Data Link is a technology platform that provides all segments of the investing public with a comprehensive suite of core financial, fund and alternative data.



A trusted partner

Our proprietary & 3rd party data sets are trusted by hundreds of firms globally, including institutional investors, retail brokerages, retail investors, fintech apps, media platforms and academic institutions.



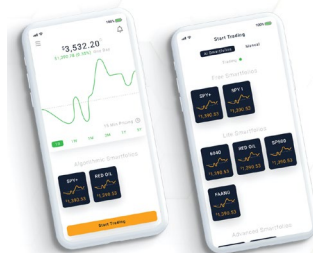
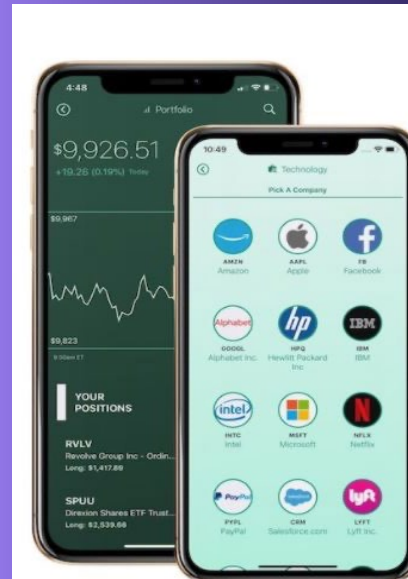
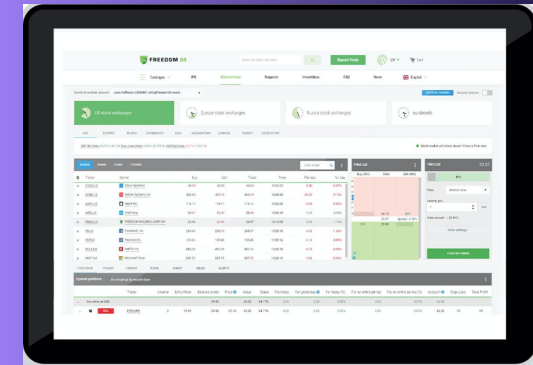
High-quality data

Nasdaq Data Link offers 250+ core financial, fund and alternative datasets that undergo rigorous Q/A process powered by technology, expertise and a team of data engineers committed to product excellence.



Seamless delivery

You can easily access data in your preferred format: Nasdaq Data Link delivers data through APIs, Excel, Python and R. We provide excellent documentation, guidance and ongoing support to ensure simple integration and deployment.



Nasdaq Last Sale supplies the widest distribution and most transparent access to real-time market data.

THIS SOLUTION HELPS

Retail Investors

Financial Web Portals

Pre-Market

4am – 9:30am

**Excludes imbalance period*

Main Trading Session

9:30am – 4:00pm

**Excludes imbalance period*

Post-Market

4:00pm – 8:00pm

**Excludes imbalance period*



Net Order Imbalance Data

This indispensable tool provides invaluable information about opening and closing orders and the likely opening and closing prices of a security.

Opening Timeline

9:25 A.M.

- Dissemination of opening order imbalance information begins.
- MOO, LOO and IO orders may be submitted but not updated or canceled.

9:28 A.M.

- MOO orders may no longer be entered, canceled or canceled/replaced.
- LOO orders may be entered until 9:29:30 a.m., but may not be canceled or modified after posting on the order book.

9:29:30 A.M.

- LOO orders received after 9:29:30 a.m. are treated as Imbalance-Only orders.
- IO orders may be submitted but not updated or canceled.

9:30 A.M.

The Opening Cross occurs.

- The Opening Cross process begins, Nasdaq Official Opening Prices are disseminated, and executions are sent to the tape.

Closing Timeline

PRIOR TO 3:55 P.M.

Nasdaq begins accepting MOC, LOC and IO orders.

- Entered orders can be canceled.

3:55 P.M.

Dissemination of closing order imbalance information begins.

- Nasdaq stops accepting entry, cancellation or cancel/replacement of MOC orders.
- LOC Orders may be entered until 3:58 p.m. ET, but may not be canceled or modified after posting on the order book

3:58 P.M.

- Nasdaq stops accepting entry of LOC orders.
- IO orders may be submitted but not updated or canceled.

4:00 P.M.

The Closing Cross occurs.

- Nasdaq Official Closing Prices are disseminated and executions are sent to the tape.



- 1 My Portfolio
- Top 50 Highest by Imbalance 8
- Top 50 Highest by Variance 9
- IPO/Halt Imbalances 10

Portfolio/Symbol: Portfolio 1 ⚙️ 6 7 Launch Top List Date: 2008-11-18 5 ▼

Market Open 2
 Market Close

Time	Symbol	Paired Shares	Imbalance Shares	Imbalance Side	Current Reference Price	Near Indicative Clearing Price	Far Indicative Price	Price Variance Indicator	Cross Volume	NOCP
15:59:55	AAPL	665,706	0	N	\$89.62	\$89.62	\$89.62	0-.99%		\$0.00
15:59:56	GE	17,840	0	N	\$16.09	\$16.09	\$16.09	0-.99%		\$0.00
15:59:56	MSFT	5,230,265	0	N	\$19.51	\$19.51	\$19.51	0-.99%	5,230,265	\$19.62
15:59:56	NDAQ	126,679	0	N	\$19.65	\$19.65	\$19.65	0-.99%		\$0.00
15:59:57	SCHW	571,194	0	N	\$15.73	\$15.73	\$15.73	0-.99%		\$0.00

Export to Excel 4

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Retail Trading Activity Tracker

Captures **\$30B** in daily retail trading activity in all US-listed stocks, ETFs, and SPACs.

Provides detailed, real-time insight into retail traders' sentiment and participation at a ticker level.



Thank you!

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