



Reimagining The Markets Of Tomorrow

Unprecedented Times for Investors

Financial markets today are in an unprecedented time of intense interest and participation. The investing public has grown to include a widespread and diverse population that is looking for service that is smooth and seamless. Serving these customers can be intensely demanding, but where does one begin?

Real-time data service is one of the foundational elements for serving investors, and investors need the best quality data to make informed decisions. Now more than ever, excellent service and investor education are key.

Leveraging Insights to Empower Economies

If you are building a website or mobile application that requires real-time exchange data, this study will familiarize you with the following key concepts covering the U.S. Equity Markets:

1. The Ecosystem — U.S. Equity Markets & U.S. Stock Exchanges¹
2. Where Do Stocks Trade? — Listing vs Trading Venue
3. What is the market data solution for you?²

Stock markets have a simple underlying purpose. They join those who need capital with those who are looking to invest. In order to execute on that mission, modern markets have evolved into an ecosystem of specialized participants, each playing a different but critically important role in primary (IPO) and secondary (trading) markets.

Exchanges play a central role in this ecosystem. An exchange creates a “single market” for issuers, investors and liquidity providers. This allows companies, investors and traders to interact at the same prices, despite each participant’s varied time horizons and different trading signals.

Exchanges, by making prices public, also create competition to be the best buyer or seller. This competition creates tighter spreads³ that not only reduce transaction costs⁴, but also form prices that investors use for portfolio and asset evaluation.

Investors come in two main flavors: Institutional (primarily mutual fund companies) and Retail (individual investors). Data suggest both groups have around the same amount of capital to invest⁵ (approximately \$30 trillion each). Other owners of stocks include hedge funds, banks, market makers, arbitrageurs, family offices, pension funds, and foreign investors who hold U.S. stocks for



1 <https://www.nasdaq.com/articles/the-2023-interns-guide-to-the-market-structure-galaxy>

2 <https://www.nasdaq.com/solutions/nasdaq-basic>

3 <https://www.nasdaq.com/articles/three-charts-that-show-the-importance-of-a-competitive-bid-offer-nbbo-2018-12-04>

4 <https://www.nasdaq.com/articles/v-volume-and-its-implications-access-fee-pilot-2019-04-04>

5 Nasdaq Economic Research

investment, risk management or trading purposes. Although each of these participants have different objectives, they all play a critical role in keeping markets efficient and liquid.

While the U.S. stock market may be the largest source of equity capital in the world at \$59 trillion⁶, U.S. markets are not alone in their mission to bring buyers and sellers together. Public markets have to also compete with private markets⁷ as well as with international stock markets when attracting new listings.

Where Do Stocks Trade – Listing vs Trading Venues

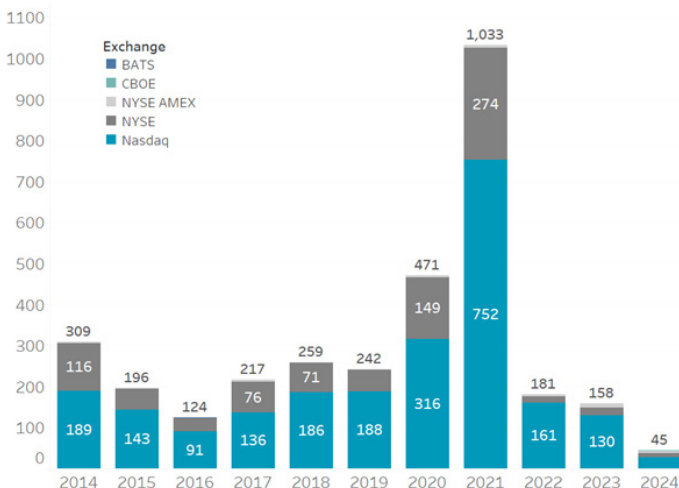
At the time of this paper's publication, the U.S. exchange landscape is comprised of 17 independent trading venues. While all 17 markets compete for "order flow" five of these markets have the additional distinction of being "listing exchanges."

Generally, a "listing exchange" is the exchange where a company sold shares to the market for the first time under an initial public offering (IPO) or direct listing.

In 2021, Nasdaq led U.S. exchanges⁸ with 752 IPOs, representing an 76% win rate for operating companies, and 63% of all capital raised. Overall, IPOs raised \$286 billion in 2021 compared to \$155 billion in 2020. For the subsequent years, Nasdaq continues to be the major listing venue for companies wanting to list in the U.S. market. But listings is not the only arena in which exchanges compete.

Count of IPOs by Listing Exchange

Data Through: 3/31/2024



U.S. Market Structure



Nasdaq is the exchange with the largest liquidity pool and can provide access to all U.S. listed equities



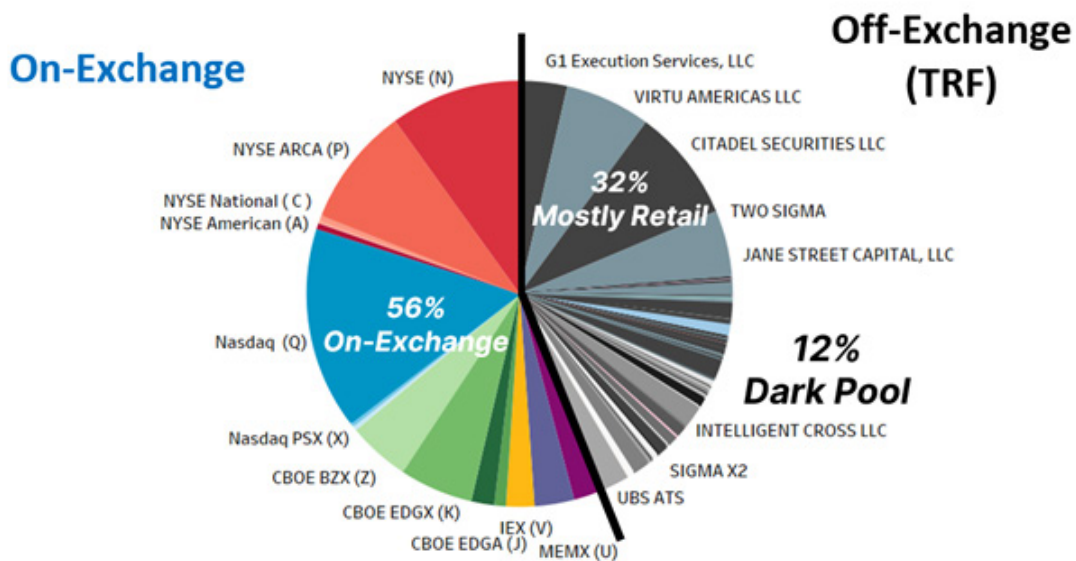
6 U.S. Equities Researcher Dataset by Sibilis Research at 31 March 2021
 7 <https://www.nasdaq.com/articles/how-much-does-trading-cost-the-buy-side>
 8 Nasdaq Economic Research

In 1994, the SEC amended the Exchange Act to introduce Unlisted Trading Privileges (UTP) under the UTP Act. Unlisted Trading Privileges allow exchanges to compete for order flow regardless of where the operating company is listed. This means that any exchange can trade any security, regardless of where that security is listed.

Of the 17 active trading venues, Nasdaq owns and operates three: Nasdaq, BSX, and PSX. NYSE has five venues: NYSE, ARCA, National, American and Chicago. CBOE has four: BZX, BYX, EDGX, EDGA. There are five other exchanges that trade less than 8% of volume: IEX, MEMX, LTSE, MIAX and BSTX. Across all listed U.S. securities, approximately 56% of all trades by volume are matched through one of the 17 trading exchanges.

However, in the varied ecosystem of capital markets participants, exchanges are not the only place a trade can be matched. Brokers are also able match trades off-exchange using an alternative trading system (ATS, e.g., dark pools) or facilitating (trading directly with) clients trades, usually for profit. These off-exchange transactions are held to basically the same regulations and reporting standards as transactions originating from a trading exchange. For an investor, this means protections regardless of where an order is executed. It also means all off-exchange executed transactions (but not bids and offers) must be reported for the benefit of all market participants.

Reporting for the approximately 44% of trades being executed off-exchange is facilitated via Trade Reporting Facilities (TRFs), of which there are three. Nasdaq operates two of the three TRFs: the FINRA/Nasdaq TRF Carteret and FINRA/Nasdaq Chicago. Those two venues are responsible for reporting the overwhelming majority of all transactions occurring off-exchange.

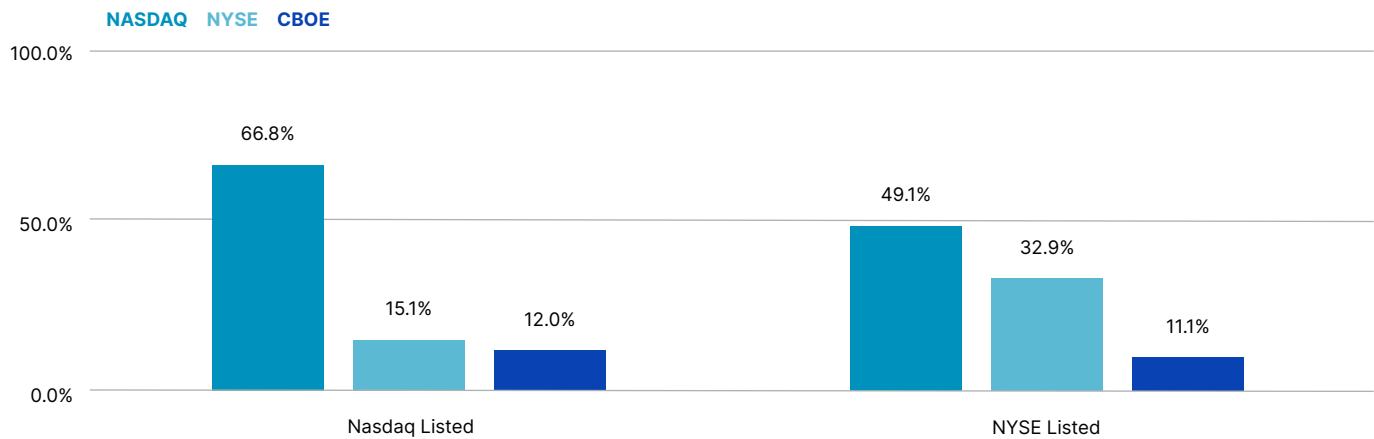


More specific details on market breakdown can be found on the official daily statistics of U.S. Equities Market Volume⁹.

9 <http://www.nasdaqtrader.com/trader.aspx?id=FullVolumeSummary>

As represented in the figures below, Nasdaq records the most trading activity across all U.S. stock exchanges. For example, Nasdaq has a 49.1% market share in trading NYSE-listed stocks vs. NYSE's 32.9%. Similarly, Nasdaq has a 66.8% market share in trading Nasdaq-listed stocks vs. NYSE's 15.1%. (*Trade Volume for March 2024)

Market Share – March 2024



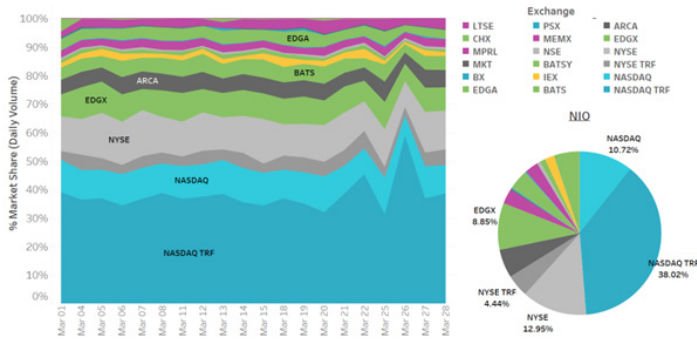
Source: Cboe, https://www.cboe.com/us/equities/market_share/market/2024-03-01/

EXCHANGE / MARKET SHARE	NASDAQ LISTED	NYSE LISTED
Nasdaq (Nasdaq, BS, PSX, FINRA TRF)	66.8%	49.1%
NYSE (NYSE, ARCA, NYSE National, NYSE American, NYSE Chicago, FINRA TRF)	15.1%	32.9%
CBOE (EDGX, BZX, BYX, EDGA)	12.0%	11.1%

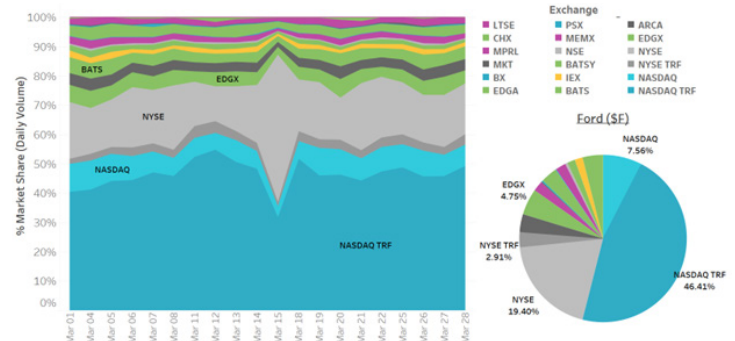
These statistics are used as a key measurement to determine the data quality of each stock exchange's proprietary data products. The data show that Nasdaq's proprietary products are based on higher data quality than its exchange peers.

Whether a stock trades on the Nasdaq or NYSE is not necessarily a determining factor for investors. The mandate, however, to report off-exchange trades to a TRF is crucial to determine market data quality in today's markets. The increase in retail order flow has caused an increase in trading off-exchange, and therefore trades reported to the TRF. The next chart shows how Nasdaq's market share in one of the most heavily traded NYSE-listed stock during March 2022 was 49.1%. This is due to Nasdaq's leading position in the proprietary TRF data space when compared to NYSE. Nasdaq, through Nasdaq Basic and Nasdaq Last Sale, provides the trades reported in the jointly operated TRFs with FINRA: FINRA/Nasdaq TRF Carteret, FINRA/Nasdaq TRF Chicago, which accounted for nearly 38.0% and 46.4% of the total volume for "NIO" and "F" in March 2024 compared to FINRA/NYSE TRF which is approximately 4.4% and 2.9% respectively. CBOE does not at this time operate a TRF.

**NIO - % Market Share for All Exchanges
(March 2024)**



**Ford (\$F) - % Market Share for All Exchanges
March 2024)**



Why Is Nasdaq The Right Market Data Solution?

U.S. equity markets are vibrant and competitive. Markets compete for listings, for order flow, and in addition, they compete to power the international trading communities' tools, algorithms, and displays. In any competition, there are winners and losers. We have seen how Nasdaq wins the IPO competition by capturing 86% of U.S. IPOs, and we have seen how Nasdaq wins the competition for order flow with superior trading systems.

For these reasons, Nasdaq is the golden source for U.S. Equity data. Nasdaq's real-time market data products are provided to millions of users, powering price discovery and investment decisions across the globe. Every day, a wide variety of customers across capital markets, from buy side to sell side—from the startup retail online brokers to multinationals, financial media portals and market data vendors—turn to Nasdaq for the most complete and powerful data solutions available from a U.S. equity exchange.

Introducing Nasdaq Basic: Nasdaq's Proprietary Real-time Level 1 Data Product

One specific customer segment under the spotlight in the last few years is online broker/dealers. For customers looking for access to financial data to power internal systems, applications, terminals, and front-end displays, Nasdaq created the innovative and market-leading solution called Nasdaq Basic. Nasdaq Basic is a cost-effective, real-time U.S. equity quote and trade solution, and the leading exchange-provided alternative for real-time Best Bid, Offer and Last Sale information for all U.S. exchange-listed stocks.

With Nasdaq Basic, investors are able to access a proprietary data product that provides accuracy, liquidity, instrument coverage and accessibility with significant cost-savings. But the largest source of differentiation from other U.S. exchange data products is the completeness and the accuracy of the trade data. That "completeness" is not just the fact that Nasdaq Basic is +50% of all trades reported for all U.S. stocks on any given day, but that each trade message reported also tells what the total volume is on a consolidated basis.

All of these factors provide customers the confidence necessary to consolidate all U.S. exchange data into one easy-to-administer data feed from the preeminent data partner across U.S. equities, Nasdaq.

Connect Today To Start Saving



Contact your market data representative



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<https://www.nasdaq.com/solutions/nasdaq-basic>