The Regulatory Scheme for Transparency and Data in U.S. Equity Markets

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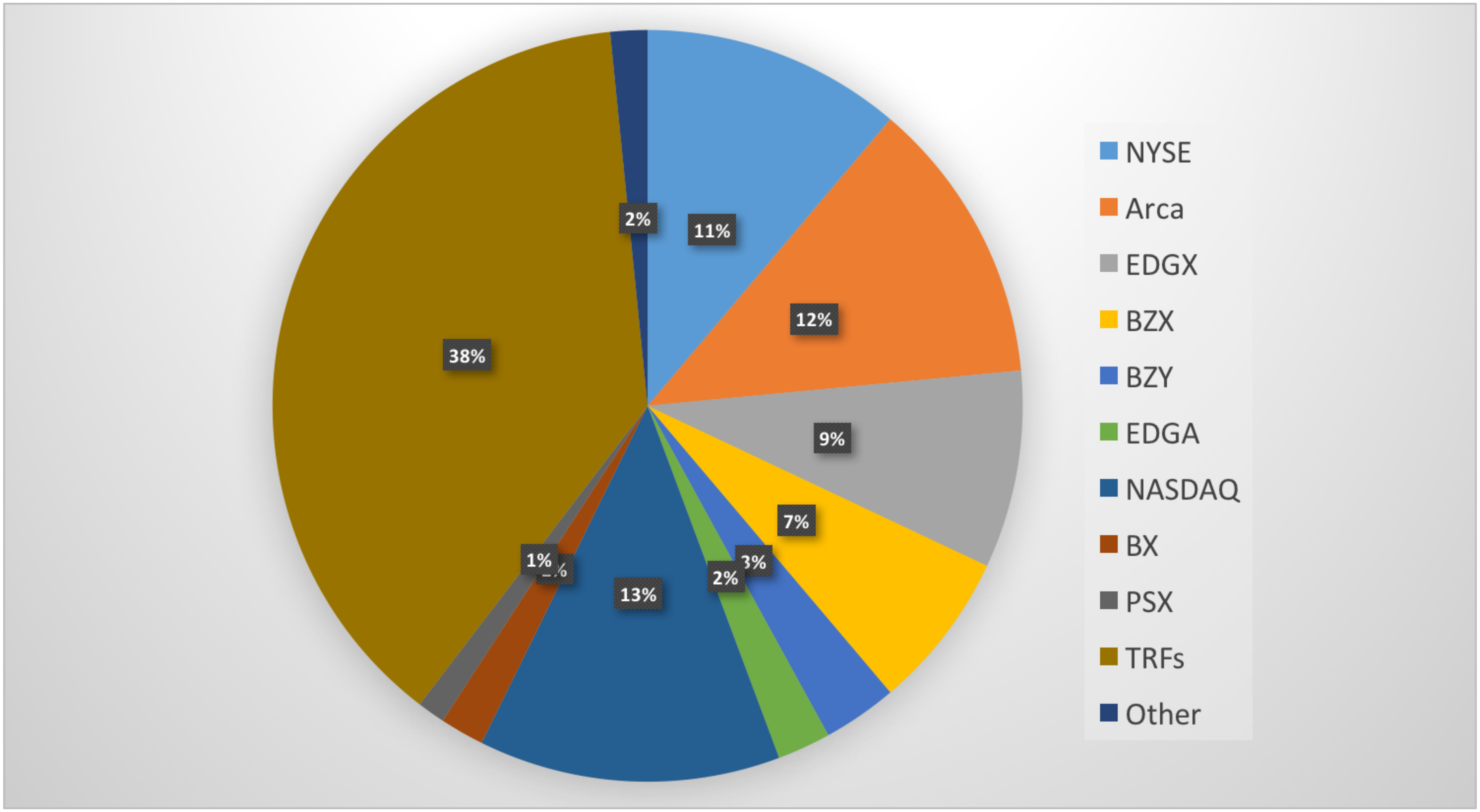
Transparency in the United States is very precisely regulated

- The Securities and Exchange Commission actively administers the regime for transparency and market data
- Arises from the 1975 legislative mandate that required the SEC to develop and administer a National Market System
- Four primary types of data in equity markets:
  1. Pre-trade data
  2. Post-trade data
  3. Routing and market quality information
  4. Audit trail information

The regulatory framework encourages competition among trading venues

- The United States currently has:
  - ~13 exchanges
  - > 40 ATSs (dark pools)
  - 200 broker-dealer market centers
- Regulations about transparency and market data serve to integrate these market centers and minimize fragmentation
- Whether or not this has been successful has always been, and remains today, a much debated topic

Distributed markets shares makes transparency and data essential



Goals of the 1975 amendments to the 1934 Exchange Act

- The SEC must facilitate the creation of a market with the objective of:
  - the maintenance of stable and orderly markets; and
  - the <u>centralization of all buying and selling interest</u> so that each investor would have the opportunity for the best possible execution of his order, regardless of where in the system it originates.
- Congress recognized the communications was the key to doing this

The market centers interact pursuant to Regulation NMS

- The SEC approached equity market structure under the “let a thousand flowers bloom” approach, emphasizing competition among markets vs order consolidation
- Reg. NMS attempts to integrate these markets by requiring that all automated markets have their best priced orders “protected” across the entire market, eliminating “trade-throughs” at inferior prices
- When promulgated in 2004, forced the slower manual exchanges into the automated era

Section 11A requires the SEC to assure:

- Economically efficient execution of trades
- Fair competition among broker-dealers, among exchange markets, and between exchange markets and <u>markets other than exchange markets</u>
- The practicability of broker-dealers executing investors' orders in the best market
- <u>The availability to broker-dealers and investors of market information</u>
- An opportunity for investors' orders to be executed without the participation of a broker-dealer

1. Pre-trade data and transparency

- (“Display Rule”) requires vendors and BDs that provide BDs and investors with market information for a stock, to provide a consolidated display of information from all reporting market centers (NBBO).
- Traders cannot purchase only the data they want
- Causes inelastic demand for certain market data
- Pricing traditionally based on the costs for collecting and disseminating the data, which leaves a lot of surplus to the Bloombergs and Reuters of the world

1. Pre-trade data (cont'd)

- Notably, an investor can elect not to have their priced non-marketable order displayed, even on lit venues such as exchanges, and even if it is the best price order in the market

- In addition, the Display Rule is currently interpreted to only apply to the SIP-derived NBBO, and not private linkages/direct feeds
  - Enhanced market data as a depth-of-book is provided at trader and market center option
  - High-speed direct feeds not required to be provided or used, though these are increasingly relevant
  - These data must be provided and priced on a basis that is not "unreasonably discriminatory" (See Schwab 1999 petition)

2. Post-trade data and transparency

- ("Trade Reporting Rule") Generally requires, through the creation of market data plans, SROs (exchanges) and their members to collect and provide trade data to a securities information processor (SIP)

- The SIP will then sell the information to BDs and the public

- Key data is ticker, time, price, quantity, and venue

- For non-exchange trades, reports made to a trade reporting facility (TRF) that will not generally re-disseminate the venue identifier

3. Routing and market quality information

- Regulation NMS, which is the central set of rules governing US market structure, requires two types of market quality information
  - Rule 605: requires exchanges and market centers to publicly report on a monthly basis, execution quality statistics by various size buckets
  - Rule 606: requires broker-dealers that route customer orders to publicly report on a monthly basis market centers to which the route orders
- These disclosures, and the predecessors, work together and were designed to enhance competition among market centers

4. Audit trail data

- These are regulatory data used for investigation and enforcement purposes only. (OATS, CAT)
- They integrate data about trade execution with broker-dealer internal account information about the original investor
- Such data can let a regulator see the creation, pricing, routing, re-routing, partial executions, and reporting of trades
- Very useful in investigating allegations related to insider trading, market manipulation, fraud, best execution, etc.

Current flash points related to transparency

- High frequency trading is reducing the relevance traditional SIP data, such as the NBBO. This has raised concerns related to fairness and to market access
- Limited transparency into reporting by non-exchanges (BD internalization and dark pools)
- Standards for broker conduct, including agency duties such as best execution, and market manipulation, will be assessed differently depending on the data used