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

Erik R. Sirri
Babson College

Workshop on China/US Stock Trading Systems
Princeton University
April 30, 2016
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 ATSSs (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 share 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 centralization of all buying and selling interest 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 markets other than exchange markets
- The practicability of broker-dealers executing investors' orders in the best market
- The availability to broker-dealers and investors of market information
- 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 of traditional SIP data, such as the NBBO. This has raised concerns related to fairness and 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.