



James J. Angel, Ph.D., CFP®, CFA
Associate Professor of Finance
Georgetown University¹
McDonough School of Business

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

March 31, 2023

Securities and Exchange Commission
100 F St. NW
Washington, DC 20549-9303
Rule-comments@sec.gov

Re: The December 14, 2023 Equity Market Structure Proposals
File No. S7-31-22, S7-32-22, S7-30-22, and S7-29-22

Dear SEC:

¹ All opinions are strictly my own and do not necessarily represent those of Georgetown University or anyone else. I am very grateful to Georgetown University for financial support. Over the years I have served as a Visiting Academic Fellow at the NASD (predecessor to FINRA), served on the boards of the EDGX and EDGA stock exchanges, served as Chair of the Nasdaq Economic Advisory Board, and performed consulting work for brokerage firms, stock exchanges, other self-regulatory organizations, market makers, industry associations, and law firms. I am the academic director for the FINRA Certified Regulatory and Compliance Professional (CRCP®) program at Georgetown University. I've also visited over 75 stock and derivative exchanges around the world. As a finance professor, I practice what I preach in terms of diversification and own modest and well-diversified holdings in most public companies, including brokers, asset managers, market makers, and exchanges.

Introduction

The SEC has proposed a major overhaul of the U.S. equity markets. On December 14, 2022, the Commission proposed four major rule changes at the same time, totaling 1,656 pages with 3,301 footnotes. Thank you for the Christmas present for us market structure nerds! The year 1656 was an eventful year in financial history. That was the year that Stockholm Banco issued the first paper notes in Europe.²

Stockholm Banco went bankrupt a dozen years later. These proposals, like Stockholm Banco's notes, contain some serious flaws. This comment letter discusses the combined impact of the four rule proposals. I am submitting separate comment letters on the individual proposals.

The cost estimates leave out the \$38 million cost of just creating these SEC rule proposals.

Completely missing from the economic analyses are any estimates of the cost to the Commission of producing the proposal and to the country of analyzing it. This should be included in all major rule proposals going forward. These costs are not insubstantial!

Each rule filing requires a large amount of Commission effort to think about the topic, compose an approach to it, debate it internally within the Commission, present individually to Commissioners, negotiate internally within the Commission, present at an open meeting, vote on it, write statements about why the Commissioners voted the way they did, and then promulgate on the web site and the Federal Register. Then the comment letters need to be processed, and the process repeated over again for the final rule.

The cost of analyzing the proposals to the country is also substantial. The most expensive government affairs people pore over every detail in preparing their reactions, and their meters are running every minute.

² https://centerforfinancialstability.org/hfs/Key_dates.pdf

Let me take a first stab at this. The length of each proposal is a good proxy for the quantity of resources that go into producing it.³ If we assume that each page requires the equivalent of 100 hours of average Commission resources at an average all-in cost of \$223.48/hour to analyze, debate, draft, and promulgate, then the cost to the taxpayer of these 1,656 pages of filings is approximately \$37 million, about 1.7% of the SEC's \$2.1 billion budget request for 2023.⁴

Then we have the cost of posting, reading, cataloging, and analyzing the comment letters. As over 2,000 comments have already been received, it is safe to assume that around 4,000 may be received in total. If we assume one hour per comment letter, that adds another \$893,927 to bring the cost to nearly \$38 million.

Then there will be the cost of promulgating the final rules, if any. As final rule filings are often twice as long as the original filings, the cost of finalizing these rules would add another \$76 million, bringing the total cost to the SEC alone of \$109 million. This represents a gross misallocation of resources that should have been spent coming up with a rational means of regulating digital assets rather than the Kafka-esque *ex-post-facto* regulation-by-enforcement approach the SEC has chosen. It is hard for the badly underfunded SEC to justify higher appropriations when it so badly misallocates what little funding it gets from Congress.

The cost estimates leave out the massive cost of analyzing SEC rule proposals.

The cost to the rest of the country to analyze what the SEC has done is easily many times the cost to the SEC. The SEC's economic analysis does not include the cost of producing the numerous media articles (including law firm summaries), internal debate, conferences, discussions, and preparation of comment letters just to analyze and comment upon the proposals.⁵ At Georgetown we hosted a Zoom panel on the topic and had over 200 people show up.⁶ Sessions at industry events likewise attracted hundreds of participants.

³ You may cite this approach as the "Angel methodology."

⁴ If one takes the 2023 budget request and divide by the number of FTE requested and assume 2,000 hours of labor per FTE, then the average all-in cost per hour for SEC time is \$223.48. This includes not only direct wages, but other expenditures for benefits, overhead, office space, utilities, databases and so forth. Data from https://www.sec.gov/files/fy-2023-congressional-budget-justification-annual-performance-plan_final.pdf

⁵ For example, the attorneys at Davis Polk, who are among the most experienced and expensive attorneys in the field, produced a summary with an estimated read time of 31 minutes. <https://www.davispolk.com/insights/client-update/going-once-going-twice-sec-proposes-package-equity-market-structure>

⁶ You can watch it on YouTube at <https://youtu.be/HZulXX0mYbE>. Even ChatGPT showed up at the panel.

It is conservative to estimate that the combined analysis costs are twice what the SEC spent. That brings the analysis cost outside the SEC to \$76 million, for a total cost the country of \$114 million just for this rule proposal debate. Actually, implementing anything that is adopted will likely cost much more.

The Economic Analyses ignore the interaction among the four proposals.

The massive equity structure reform proposals that were proposed on the same day are all interrelated. Clearly, tick size affects how people place orders and how brokers search for best execution. Rules regarding tick size and best execution clearly will affect how the proposed auctions work. However, the economic analyses do not attempt at all to explore how the combined impact of these proposals. This is a major fault.

Any changes should be phased in one at a time for proper analysis.

I concur with the other commenters who suggest a phased approach to implementing any of these proposals. Do them one at a time so that the impact can be readily observed. Make the phase-in of each one a well-designed natural experiment with controls and publicly available data so that the implementations can be very carefully examined.

Verbose rule filings are sign of sloppiness, not diligence.

The 1,656 pages are highly repetitive. They contain the phrase “discussed” or “described” 537 times, usually in reference to other parts of the same documents. I don’t know how the Commissioners who have to read these things can stand such mindless repetition. Perhaps the Commission rightfully fears another loss in court and thinks that repeating the same thing over and over again will convince the court that the SEC has done its due diligence. I have more faith in the judges to understand the substance more than the form, and to understand that mindless repetition is a sign of sloppiness and poor management, not diligence.

- Proposed rule: Disclosure of Order Execution Information
- proposals **discussed** in this release. 101 See, e.g., Letter from James J.
 - As **discussed** above (supra section II.D), Rule 606 requires broker-dea
 - As **discussed** further below, the Commission also is proposing to req
 - as **discussed** further below, proposed Rule 605(a)(7) states that any b
 - As **discussed** further below, broker-dealers that were previously not r
 - As **discussed** above, broker-dealers that generally route the orders th
 - As **discussed** herein, the Commission is proposing to modify Rule 60
 - b) **discussed** above. In particular, the Commission solicits comment
 - As **discussed** further below, the Commission is proposing to eliminat
 - As **discussed** above, the Commission proposes to expand the scope
 - As **discussed** below, the Commission is proposing that NMLOs woul
 - As **discussed** further below, evidence suggests that hedge funds mak
 - are **discussed** below. 255 See Adopting Release, 65 FR at 75423. 256 S
 - as **discussed** below.²⁶⁹ Additionally, modifying the order size catego
 - As **discussed** below, the Commission proposes to modify this definit
 - orders, **discussed** in more detail in section IV.B.2.b) infra, are a
 - as **discussed** further below. 295 See Proposing

Respectfully submitted,

James J. Angel,

Georgetown University