

Ms. Countryman:

I appreciate the opportunity to submit this comment letter in response to the U.S. Securities and Exchange Commission's (SEC) rule proposal titled, "Conflicts of Interest Associated with the Use of Predictive Data Analytics by Broker Dealers and Investment Advisers" (the Proposal). I commend the SEC's efforts to review the use of advanced predictive data analytics (PDA), machine learning (ML), and artificial intelligence (AI) technologies by broker-dealers and investment advisers, and to make sure that retail investors receive adequate protections in the market from actual conflicts of interest associated with using these specific technologies. In my opinion, the elements of these technological developments need to be integrated within the existing regulatory framework (e.g., see rules listed at the end of this comment letter) to achieve the goals of investor protection and capital formation, instead of fragmenting the industry's investor service and regulatory compliance efforts towards new disconnected regulations.

As a seasoned academic researcher on equity trading and market microstructure, I have taken a keen interest in the impact of technological innovations on capital markets. With rigorous data driven research, my co-authors and I have documented that new technologies have brought the immense liquidity and stock performance benefits to our capital markets which easily dominate the costs from marginal increases in volatility episodes related to technological advancements. Technology enabled easy ex-post audit of investment transactions to detect conflict of interest issues such as front-running of customer orders that was impossible in floor trading environment. The key to investor protection is not always complex fragmented regulations but often simple transparency and disclosure of transactions as was done via academic access to TORQ, SOD, CAT, TRACE and other datasets.¹

The world of finance has undergone complete digital transformation in the last 50 years. Consumers often choose to conduct commerce on their laptops, mobile phones, and other connected devices. This includes everyday activities such as shopping for groceries, buying clothes, and booking travel to major life decisions, such as obtaining a mortgage to buy a home, purchasing a car, and investing for school or retirement. Technology has made these transactions – from the smallest purchases to very significant financial decisions – more efficient and lower cost with detailed auditable records to detect any systematic risks and problems.²

Retail investors have benefited greatly from the financial innovations that have driven down costs and increased access to U.S. capital markets. This is not only good for the individual investor seeking to earn additional income, build wealth, or save for the future, but has also helped make capital markets more liquid and inclusive.³

¹ See: Ellul, A., C. Holden, Pankaj K. Jain, and R. Jennings, 2007, "Order Dynamics: Recent Evidence from the NYSE," *Journal of Empirical Finance* 14, 636–661.

² See: Jain, Pankaj, Pawan Jain, and Thomas H. McInish, 2016, 'Does High Frequency Trading Increase Systemic Risk', *Journal of Financial Markets* 31, 1-24.

³ See Jain, Pankaj K., 2005, "Financial Market Design and the Equity Premium: Electronic vs. Floor Trading," *Journal of Finance* 60, 6, 2955-2985 and "The Impact of Retail Investors on Stock Liquidity and Crash Risk" by Hufener, Stryke, and Westerholm, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3973202; <https://www.schwabmoneywise.com/tools-resources/ariel-schwab-survey-2022>; <https://www.bloomberg.com/opinion/articles/2020-09-21/stock-investors-are-younger-and-more-racially-diverse>

Technology has played a key role in helping financial intermediaries provide innovative, lower cost products and services (e.g., commission-free trading, fractional shares, robo-advice) that have helped open the markets to millions of new investors.⁴ Technology has also empowered many retail investors to make their own trading and investing decisions through self-directed mobile platforms that are more intuitive and accessible to a new generation of Americans. Indeed, technology has helped to make interactions between financial services firms and their customers more efficient and informative. For example, retail investors no longer need to call or visit their broker or adviser in person to invest, and technology has provided investors with a host of beneficial informational features they didn't have readily available in the past, such as digestible education at key moments in an investor's decision-making process, free market news and timely updates on corporate events (e.g., bankruptcies, stock splits, and dividends), and information on products and services that can help drive long-term investing and saving behaviors (e.g., automated investing tools, retirement accounts, and high yield interest-bearing accounts).

Emerging technologies such as advanced PDA, ML, and AI hold both great promise and significant risk for consumers and investors. I support the Commission's objectives and efforts to examine the use of these technologies in the financial services industry to ensure that investors receive adequate protections. With regard to the specific contours of the Proposal, however, I urge the Commission to consider a holistic approach by integrating this initiative to update existing rules dealing with conflicts of interest. Instead of trying to define a relevant set of "covered technology" at the current instance of time, we need to realize that rapid advancements in technology are the mainstay in the U.S. economy. Imposing new and heightened regulatory standards focused squarely on technologies could stifle innovation and result in investors losing access to the benefits of capital markets by increasing the costs to invest and reducing overall rates of investor participation, particularly among younger and historically underserved demographics.⁵ Imagine the outcome of reduced capital market access (positive NPV investments) and increased casino and other negative NPV options on everyone's mobile phones which has actually happened in some other parts of the world.

The SEC already has a set of robust regulations that address conflicts of interest associated with financial intermediary use of PDA, ML, AI and any other technology when providing personalized investment advice to their customers. These regulations include the SEC's Regulation Best Interest, Regulation Best

⁴ <https://www.finrafoundation.org/sites/finrafoundation/files/New-Investors-2022-Entering-The-Market-In-Novel-and-Traditional-Ways.pdf>

⁵ "Conflicts of Interest Associated with the Use of Predictive Data Analytics by Broker Dealers and Investment Advisers" at 189: <https://www.sec.gov/files/rules/proposed/2023/34-97990.pdf> ("In these situations, investors would lose the potential benefit of these types of technologies, which could in theory have no conflict of interest, but firms might have no practical or financially viable way to demonstrate that there was not a conflict of interest or that any such conflict did not result in actions placing the firm's or an associated person's interest ahead of an investor's interest. Similarly, there may be technologies that do create conflicts that must be eliminated or their effect neutralized, but that also benefit investors if firms address those conflicts. Investors would lose the benefit of such technologies if firms determine that the process of eliminating, or neutralizing the effect of, conflicts is too difficult, costly, or uncertain to succeed. Broker-dealers that use covered technologies and interact with both retail and non-retail investors might pass along some of the cost burden of the rules onto both retail and non-retail investors. Even though non-retail investors are not defined by the proposed rules as investors, they might nevertheless indirectly bear some of the costs of the proposed conflicts rule. In addition, non-retail investors might also be adversely affected to the extent that broker-dealers alter the use of their covered technologies to respond to conflicts of interest with retail investors")

Execution, FINRA Rule 2210 on written communication with the public, and the fiduciary duty under the Investment Advisers Act. I urge the Commission to reconsider whether additional layers of regulation are warranted to address any conflicts that may be unique to the use of technology, or whether further clarity on the application of existing laws to such technologies may be sufficient to address the concerns that the SEC and popular press have raised.

Thank you for the opportunity to comment on the Proposal.

PK Jain