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Conflicts of Interest Associated with the Use of Predictive Data Analytics by Broker-Dealers and Investment Advisers --Manuscript Draft--

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Abstract:	Securities and Exchange Commission ("SEC" or "Commission") is proposing new rules covering the use of predictive analytics by broker-dealers and investment advisers (collectively, "firms") to eliminate, or neutralize the effect of, certain conflicts of interest associated with broker-dealers' or investment advisers' interactions with investors through these firms' use of technologies that optimize for, predict, guide, forecast, or direct investment-related behaviors or outcomes. The Commission is also proposing amendments to rules under the Exchange Act and Advisers Act that would require firms to make and maintain certain records in accordance with the proposed conflicts rules. Both investors, financial institutions, and regulators face opportunities and difficulties as a result of this shift. In this extensive piece, we explore the use of Predictive Data Analytics ("PDA") on stock regulation, including its benefits, drawbacks, potential for enforcement in India, feasibility, and recommendations for improvement.

Conflicts of Interest Associated with the Use of Predictive Data Analytics by Broker-Dealers and Investment Advisers

ABSTRACT

Securities and Exchange Commission (“**SEC**” or “**Commission**”) is proposing new rules covering the use of predictive analytics by broker-dealers and investment advisers (collectively, “**firms**”) to eliminate, or neutralize the effect of, certain conflicts of interest associated with broker-dealers’ or investment advisers’ interactions with investors through these firms’ use of technologies that optimize for, predict, guide, forecast, or direct investment-related behaviors or outcomes. The Commission is also proposing amendments to rules under the Exchange Act and Advisers Act that would require firms to make and maintain certain records in accordance with the proposed conflicts rules. Both investors, financial institutions, and regulators face opportunities and difficulties as a result of this shift. In this extensive piece, we explore the use of Predictive Data Analytics (“**PDA**”) on stock regulation, including its benefits, drawbacks, potential for enforcement in India, feasibility, and recommendations for improvement.

BACKGROUND

The artificial intelligence and machine learning underlying the PDA-like technologies that financial firms use to interact with investors are complex.¹ But the problems that may arise from the use of such technologies are simple to understand. The algorithms that underlie these technologies are just formulas for making choices. For example, robo-advisors employ key algorithms that rank the financial products for investors to select. Each algorithm is embedded in software code that is based on a model of how to optimize the fit between the attributes of the financial products available to the investor and the attributes of the investor using the robo-advisor. The algorithm then matches investors with products.² The problem is that the firms using these technologies may employ a biased matching or ranking algorithm.³ PDA-like technologies are not immune from the misalignment of incentives that has historically affected financial product

¹ William Magnuson, *Artificial Financial Intelligence*, 10 HARV. BUS. L. REV. 337, 377 (2020).

² Tom Baker and Benedict Dellaert, *Regulating Robo Advice Across the Financial Services Industry*, 103 IOWA L. REV. 713, 734 (2018).

³ Lindsay Sain Jones and Goldburn P. Maynard, Jr., *Unfulfilled Promises of the Fintech Revolution*, 111 CALIF. L. REV. 801, 835 (2023).

intermediaries.⁴ Humans still develop, run, and maintain the algorithms that provide financial advice.⁵ These algorithms can be programmed to prioritize what is best for the firm, rather than what is best for the client.⁶ For example, the algorithm may prioritize investments that lead the firm to receive more compensation than it would have had the algorithm prioritized other investments.⁷ But it would be a conflict of interest for a matching algorithm to take into account either the size of the commissions or the fees paid to the firm using the PDA-like technology.⁸ The firm personnel who design the algorithm may also be influenced by firm incentives, which could lead them to subconsciously bias algorithms to favor the firm over the firm's clients.⁹ So the firms that use these technologies remain subject to the usual incentives that could cause them to place their interests ahead of the interests of their clients, and regulators cannot assume that the firms will always choose the algorithms and choice architecture that are best for investors rather than the firms.¹⁰ As a result, regulators must require that the firms that use PDA-like technologies ensure that the algorithms that underlie the PDA-like technologies do not incorporate biases that affect outcomes in a way that harms investors.¹¹ Indeed, the need to guard against biases in the algorithms that underlie PDA-like technologies is more pronounced than in the case of traditional investment advice. In the case of advice provided through PDA-like technologies, investors “have no choice but to rely on the accuracy of the software as the algorithm behind it is opaque.”¹² This “open[s] the door” to “biased advice” since investors may have no apparent reason to suspect bias or, if they do, “may find it difficult to formulate specific questions to clarify issues.”¹³ These concerns are not theoretical. In 2022, Charles Schwab agreed to pay a \$135 million penalty in response to allegations that it marketed its robo-adviser portfolios as charging investors no fees despite the fact that they were pre-set to hold a certain percentage of assets in cash and its affiliate would earn

⁴ Baker and Dellaert, 103 IOWA L. REV. at 732.

⁵ Jones and Maynard, 111 CALIF. L. REV. at 836.

⁶ Megan Ji, Note, Are Robots Good Fiduciaries? Regulating Robo-Advisors Under the Investment Advisers Act of 1940, 117 COLUM. L. REV. 1543, 1573 (2017).

⁷ Id

⁸ Baker and Dellart, 103 IOWA L. REV. at 736.

⁹ Ji, 117 COLUM. L. REV. at 1573.

¹⁰ Baker and Dellart, 103 IOWA L. REV. at 732.

¹¹ Id. at 736.

¹² Philipp Maume, Regulating Robo-Advisory, 55 TEX. INT'L L.J. 49, 70 (2019).

¹³ Id

income on customers' cash held in deposit accounts.¹⁴ This compensation structure created a conflict of interest, as it could drive the company to allocate more of a customer's portfolio to cash even if that strategy would not maximize customer returns.¹⁵ Similarly, in 2017, investors filed a class action lawsuit alleging that Morningstar, a roboadviser designer, and Prudential, the investment management company, colluded 'to design a robo-adviser program to steer [users] toward investments that paid Prudential high fees.'"¹⁶ The complaint alleged that Morningstar and Prudential "modified their adviser technology 'to generate "revenue sharing fees" . . . by limiting the investment options available to [the plaintiffs].'"¹⁷ The risks of PDA-like technologies are not limited to algorithms that produce advice or recommendations that steer investors to favored products. Firms may use PDA-like technologies to gather customer-specific information and then use that information to exploit vulnerabilities.¹⁸ A brokerage app may collect information on a customer's trading patterns, predict what types of securities the customer is likely to buy, and target that customer with recommendations for more of those types of securities.¹⁹ Or the app may target investors who are likely to purchase securities on margin.²⁰ This targeting may allow a broker to pursue investors that are receptive to a particular pitch or trading strategy, which may generate additional revenue for the broker but run counter to the investor's best interest.²¹ The use of these technologies can generate conflicts of interest if firms use them to nudge users to trade more frequently on their platforms, or to invest in products that are more profitable for the firm but expose investors to higher costs or risks.²²

¹⁴ Charles Schwab & Co., Inc., Exchange Act Rel. No. 95087, 2022 WL 2128612 (June 13, 2022).

¹⁵ Jones and Maynard, 111 CALIF. L. REV. at 835.

¹⁶ Id. at 835-36 (quoting Diana Novak Jones, Morningstar, Prudential Face Class Action over Robo-Adviser, LAW360 (Aug. 4, 2017), <https://www.law360.com/articles/951428/morningstar-prudential-face-classaction-over-robo-adviser>).

¹⁷ Id. at 836 (quoting Green v. Morningstar Inv. Mgmt. LLC, No. 1:17-cv-05652, 2019 WL 216538, at *1 (N.D. Ill. Jan. 16, 2019)).

¹⁸ Jill E. Fisch, GameStop and the Reemergence of the Retail Investor, 102 B.U. L. REV. 1799, 1855 (2022)

¹⁹ Id

²⁰ Id. at 1856.

²¹ Id. at 1856

²² Release at 54,002.

INTRODUCTION

Artificial intelligence has the potential to transform finance. The last few decades have witnessed significant advances in financial technology made possible in part by artificial intelligence.²³ Many of these advances have been beneficial for society.²⁴ They have lowered the costs of capital, expanded the types of financial resources available to a broader and more diverse population of investors, and made it easier for individuals to bank and invest.²⁵ But regulators must guard against the risks that these technological innovations will also cause investors harm.²⁶ The Proposal recognizes that one way in which firms' use of artificial intelligence may harm investors is through conflicts of interest that arise from predictive data analytics ("PDA"). PDA draws inferences from large datasets to make predictions about future outcomes.²⁷ For example, algorithmic trading is a widely used application of artificial intelligence and machine learning in finance.²⁸ In those applications, machine-learning models analyze large datasets and identify patterns and signals to optimize, predict, guide, forecast, or direct investment-related behaviors.²⁹ Although the use of PDA and similar technologies ("PDA-like technologies") has the potential to benefit investors, it may also harm investors if the technologies lead to advice or recommendations that allow firms to benefit at the expense of investors.³⁰ These conflicts of interest may arise from the use of PDA-like technologies in several ways. For example, conflicts of interest may arise from the data the PDA-like technology uses and from the inferences the PDA-like technology makes.³¹ The dataset underlying the PDA-like technology may be biased towards investments that are more profitable for the firm than other investments.³² Or the algorithm that uses the dataset may produce advice or recommendations that prioritize investments that are more profitable for the firm than other investments.³³ The ease with which conflicted advice or recommendations may be transmitted to investors through chatbots, push notifications, and robo-advisory platforms means that it could

²³ Tom C.W. Lin, *Artificial Intelligence, Finance, and the Law*, 88 *FORDHAM L. REV.* 531, 532 (2019).

²⁴ *Id.*

²⁵ *Id.*

²⁶ See *id.* at 533 (noting that the use of artificial intelligence presents both benefits and risks).

²⁷ Release at 53,962 n.9.

²⁸ *Id.* at 53,963.

²⁹ *Id.*

³⁰ *Id.* at 53,961.

³¹ *Id.* at 53,962.

³² *Id.*

³³ *Id.*

spread rapidly to many investors.³⁴ The Proposal attempts to redress these problems by requiring that firms eliminate, or neutralize the effects of, the conflicts associated with their use of PDA-like technologies in investor interactions that place the firm's interests ahead of investors' interests.³⁵

Just as Netflix uses recommendation algorithms to shape viewer behavior, investment advisers and broker-dealers are increasingly using sophisticated algorithmic and data analysis tools to provide "better" and more tailored financial advice. From robo-advice, digital nudges, gamification and digital engagement practices, to less visible uses of data analytics to inform or shape investment outcomes and operational behavior, these technologies are transforming the financial advisory industry. But because technology can shape information environments, choice sets, and investor behavior in ways that are not typically captured by broker-dealer and investment adviser regulation, they raise new questions about whether legacy regulatory frameworks are up to the task.

The financial industry's adoption of artificial intelligence and predictive data analytics has brought about significant changes in how investments are managed, how advice is given, and ultimately how capital is allocated in the broader economy.³⁶ From simple spreadsheets to Monte Carlo simulations and more complex algorithms, a key feature in this transformation has been the shift from human-led analysis and advice to algorithm-driven insights.³⁷ Computer algorithms consume and analyze data, make predictions, and guide investment decisions at scale and speed. As a result, the influence of these technologies extends far beyond individual transactions to impact broader market behaviors and outcomes.³⁸ A wide range of conflicts of interest may exist between broker-dealers and their retail investors. Investment advisers may also conflict with interests regarding investors in their pooled investment vehicles and advice customers. Some of these conflicts of interest stem from the connections these companies have with their investors. An

³⁴ Id

³⁵ Id

³⁶ See Daniel Broby, *The Use of Predictive Analytics in Finance*, 8 J. FIN. & DATA SCI. 145 (Nov. 2022); IOSCO, *The use of artificial intelligence and machine learning by market intermediaries and asset managers*, at 1 (Sept. 2021); Tom C.W. Lin, *Reasonable Investor(s)*, 95 B.U. L. REV. 461, 497 (2015).

³⁷ See, e.g. Hugh Son, *JPMorgan is developing a ChatGPT-like A.I. service that gives investment advice*, CNBC (May 25, 2023).

³⁸ See Dimitris Andriosopoulos et al., *Computational Approaches and Data Analytics in Financial Services: A Literature Review*, 70 J. OPERATIONAL RSCH. SOC. 1581 (2019).

investment adviser who receives payment as a percentage of the assets under management, for instance, may be incentivized to push clients to transfer assets into their advisory account. Similar to this, a broker-dealer who is compensated on a transaction basis (such as commission) has an incentive to increase the number of transactions, which could increase costs to the investor or expose them to other risks associated with excess trading. Regardless of whether it is in the investor's best interest, brokerage firms that provide both advising and brokerage accounts have an incentive to push clients towards the account type that generates the highest profits for the business. These conflicts of interest have the potential to lead broker-dealers and investment advisers to prioritise their own interests over those of investors if they are not sufficiently resolved³⁹. The usage of these PDA-like devices⁴⁰ has the potential to generate or transmit conflicts of interest that priorities a firm's interests over those of investors if they are not sufficiently addressed. This could happen in the event that a company offers recommendations or advice regarding investments, as well as in the company's sales procedures and interactions with investors in general, including features and design or messages that encourage the recipient to take more rapid, ill-informed action a financier.

As technology improved, firms began adopting other technologies, such as computers, email, spreadsheets, and the internet. The Commission has previously observed that these and other

³⁹ See <https://www.sec.gov/rules/final/2019/34-86031.pdf>, Exchange Act Release No. 86031 (June 5, 2019) [84 FR 33318 (July 12, 2019)] (“Reg BI Adopting Release”); Commission Interpretation Regarding Standard of Conduct for Investment Advisers, Advisers Act Release No. 5248 (June 5, 2019) [84 FR 33669 (July 12, 2019)], at section II.C. (“Fiduciary Interpretation”) (describing an adviser’s fiduciary duties to its clients). Additionally, rule 206(4)-8 under the Advisers Act prohibits certain statements, omissions, and other acts, practices, or courses of business as fraudulent, deceptive, or manipulative with respect to any investor or prospective investor in a pooled investment vehicle.

⁴⁰ Artificial intelligence is generally used to mean the capability of a machine to imitate intelligent human behavior and machine learning is a subfield of artificial intelligence that gives computers the ability to learn without explicitly being programmed. See generally Sara Brown, Machine Learning, Explained, MIT Sloan School of Management (Apr. 21, 2021), <https://mitsloan.mit.edu/ideas-made-to-matter/machine-learningexplained>. Predictive data analytics draws inferences from large data sets, relying on hypothesis-free data mining and inductive reasoning to uncover patterns to make predictions about future outcomes, and may use natural language processing, signal processing, topic modeling, pattern recognition, machine learning, deep learning, neural networks, and other advanced statistical methods. See Nathan Cortez, Predictive Analytics Law and Policy: Mapping the Terrain: Challenging Issues in Specific Private Sector Contexts, Substantiating Big Data in Health Care, 14 ISJLP 61, 65 (Fall 2017). See generally Financial Industry Regulatory Authority, Inc. (“FINRA”), Artificial Intelligence (AI) in the Securities Industry 5 (June 2020) (“FINRA AI Report”), <https://www.finra.org/sites/default/files/2020-06/ai-report-061020.pdf>; Financial Stability Board, Artificial Intelligence and Machine Learning in Financial Services: Market Developments and Financial Stability Implications (Nov. 1, 2017) (“FSB AI Report”), <https://www.fsb.org/wpcontent/uploads/P011117.pdf>; see also Department of the Treasury, et al., Request for Information and Comment on Financial Institutions’ Use of Artificial Intelligence, Including Machine Learning (Feb. 2021) [86 FR 16837, 16839-40 (Mar. 31, 2021)] (“Treasury RFI”).

technologies have helped to promote transparency, liquidity, and efficiency in our capital markets. If responsibly implemented and overseen by firms, new technologies can aid firms' interactions with investors, and bring greater access and product choice, potentially at a lower cost, without compromising investor protection, capital formation, and fair, orderly, and efficient markets. Where once investors placed trades with their broker in-person, they eventually began to place orders over the phone, and then through a website. Now investors can instantaneously place a trade directly through an app on a smart phone and, instead of a recommendation delivered by a human, they may receive push notifications potentially designed to affect trading behavior. These technological interactions can be designed to respond to human behavior, for example, sending increased notifications for certain investment products depending on where the person scrolling through investment products pauses on her smartphone. As technology continues to evolve⁴¹, we believe that firms are likely to increase their reliance on behavioral science frameworks in influencing investor behavior.

Use of these PDA-like technologies encourages practices that are profitable for the firm but may increase investors' costs, undermine investors' performance, or expose investors to unnecessary risks based on their individual investment profile, such as: (i) excessive trading, (ii) using trading strategies that carry additional risk (e.g., options trading and trading on margin), and (iii) trading in complex securities products that are more remunerative to the firm but pose undue risk to the investor.

THE PROPOSAL

The proposed conflict rules set forth a structured framework aimed at ensuring the integrity of investor interactions within firms. One pivotal requirement involves the thorough evaluation of any potential conflicts stemming from the use or anticipated use of specific technology during engagements with investors. This rigorous evaluation process is designed to identify conflicts of interest that might prioritize the firm or its associated individuals over the best interests of investors. Upon identifying these conflicts, the proposed rules mandate a resolution process. Conflicts that could potentially place the firm or its representatives ahead of investor interests are to be eliminated or effectively neutralized. This critical step aims to mitigate any adverse effects

⁴¹ See infra section I.B.

these conflicts might have on investors. To further bolster compliance and accountability, firms engaging in investor interactions using specified technology are required to establish comprehensive written policies and procedures. These policies encompass various elements, including delineating the evaluation process for technology usage, disclosing conflicts arising from such use, assessing conflicts that could negatively impact investor interests, and outlining steps to address and resolve these conflicts. Regular and thorough reviews of these policies, conducted at least annually, are mandated to ensure their adequacy and effectiveness.

Moreover, the proposed amendments to recordkeeping rules, if implemented, would necessitate firms to maintain meticulous records related to their adherence to the proposed conflict rules. This amendment aims to facilitate regulatory examinations and enforcement by providing a comprehensive record of compliance. Overall, the core objective of these proposals is twofold: to safeguard investor interests by diligently managing conflicts of interest within firms and to encourage ongoing technological advancements in the industry. This balance seeks to protect investors while fostering innovation and progress within the financial sector.

The proposed discussions reflect the growing awareness of the impact of technology on stock market dynamics. The importance of maintaining the current obligations of advisers and brokers to act in investors' best interests and argues that investors should be shielded from potentially conflicted interactions resulting from technology-driven strategies, even when these interactions don't constitute explicit recommendations. This perspective aligns with the fundamental principle of investor protection that has long been the cornerstone of financial regulation.

How the Proposal would create an additional set of conflict-of-interest rules.

Notwithstanding these existing protections, the Proposal would create new rules under the Exchange Act and the Advisers Act that operate in addition to, not in place of, the conflict-of-interest rules that already apply to broker-dealers and investment advisers. More specifically, the Proposal would require registered broker-dealers and investment advisers to identify all conflicts of interest associated with any “use or reasonably foreseeable use” by the firm of “covered technology” in any “investor interaction.”⁴² “Covered technology” would mean any “analytical, technological, or computational, algorithm, model, correlation matrix, or similar method or

⁴² Proposal at 53,971.

process that optimizes for, predicts, guides, forecasts, or directs investment-related behaviors or outcomes.”⁴³ “Investor interaction” would mean “engaging or interacting” with an investor “including by exercising discretion with respect to an investor’s account; providing information to an investor; or soliciting an investor.”⁴⁴ These definitions are intended to capture an extremely broad range of technologies and actions. Everything from a complex machine learning algorithm to a simple spreadsheet that optimizes asset allocation recommendations to investors would be covered.⁴⁵ In fact, the definition would cover any action that involves computation or calculation, regardless of whether any computer or other “technology” – as that term is generally used – is involved. Notably, an “investor” would include clients and investors in a pooled investment vehicle advised by the investment adviser.⁴⁶ Thus any advertisements that solicit investment in a fund or any investment strategies applied by a fund would be covered.⁴⁷ The Proposal would use an unprecedentedly broad definition of “conflict of interest” that covers any scenario where a covered technology “takes into consideration an interest” of the firm or its associated persons.⁴⁸ Notably, this definition does not require that the interest of the firm conflicts with an interest of the investor.⁴⁹ Thus if an algorithm that the firm uses could potentially incentivize an investor to trade more often or open an options or margin account, thus increasing the firm’s revenue, a conflict of interest would exist, even if such trading was beneficial for the investor.⁵⁰ Similarly, if an adviser received a fee based on assets under management or performance-based compensation, conceivably every trade that the adviser executes on behalf of the client would be a conflict of interest, since it potentially affects an “interest” of the adviser. Having identified a conflict of interest, the firm would then be required to determine if the conflict “places the interests of the firm or its associated persons ahead of those of the investor.”⁵¹ If a firm makes or “reasonably should” make this determination, the firm must “eliminate or neutralize” the conflict such that the interaction “no longer places the interests of the firm ahead of the interests of investors.”⁵² The Proposal prescribes no method for this determination or how a firm would eliminate or neutralize

⁴³ Id. at 53,970.

⁴⁴ Id. at 53,974.

⁴⁵ Id. at 53,972. 11 12 Id. 13 14 15 Id. 16 Id. at 54,007. 17 Id.

⁴⁶ Id. at 53,974.

⁴⁷ Id.

⁴⁸ Id. at 53,981.

⁴⁹ Id. at 53,982.

⁵⁰ Id.

⁵¹ Id. at 53,985.

⁵² Id. at 53,986.

such a conflict and provides only a handful of examples: a firm could eliminate a conflict by, for example, ceasing the use of the “technology” (as broadly defined) that created the conflict or neutralize a conflict by “subordina[ting]” consideration of firm-favorable information to investors’ interests, or ceasing to earn revenue from the products and services they provide.⁵³ Notably, a firm could not eliminate or neutralize a conflict by disclosing it to the investor.⁵⁴ The Proposal would require firms to adopt and implement written policies “reasonably designed” to achieve compliance with these conflict-of-interest rules.⁵⁵ Firms would also be required to maintain and preserve “all books and records” related to their compliance with the proposed rules, including documentation of their identification of any conflict of interest associated with covered technology in any investor interactions, their determination of whether any such conflict was prohibited by the rule, and how the conflict was neutralized or eliminated.⁵⁶ The books and records requirement would also require firms to “make and maintain” records of each instance in which any covered technology of the firm “was altered, overridden or disabled.”⁵⁷

SETBACKS

The proposed rules fail the SEC’s own stated goal of being technology-neutral. Instead, the proposed rules establish highly onerous and impractical requirements that target technology in general rather than focusing on the manner in which technology is used. The proposed rules are also overbroad in scope, covering not only emerging technologies but nearly any technology, including technology as simplistic or utilitarian as a spreadsheet. Such a limitless approach to regulating technology will not only increase costs, but will likely undermine the ability of firms to offer low-cost solutions to investors. As the proposal recognizes at times, these requirements are so onerous that they effectively bar investment advisors from communicating with their clients using much of the technology covered by the rule. And barring this technology is anti-innovative, anti-competitive, and anti-investor. *Complying with the Proposal would be unworkable, extremely costly, and impede the business operations of firms.* The Proposal would create a compliance burden that would hinder virtually every aspect of the operation of broker-dealers and investment

⁵³ Id.

⁵⁴ Id at 54,007.

⁵⁵ Id.

⁵⁶ Id at 54,008.

⁵⁷ Id.

advisers. The mere attempt to comply with such sweeping provisions would be prohibitively costly. In many cases compliance would be virtually impossible.

The SEC fails to establish any policy rationale for the Proposal.

The Proposal acknowledges that the existing regulatory regimes for investment advisers and broker-dealers include comprehensive conflict-of-interest protections. However, the SEC asserts that additional rulemaking is necessary due to “unique risks” associated with PDA technology that can “rapidly transmit or scale conflicted actions across a firm’s investors base.”⁵⁸ The SEC is concerned that “firms will intentionally or unintentionally take their own interest into account in the data or software underlying the applicable AI, as well as the applicable PDA-like technologies, resulting in investor harm.”⁵⁹ However, the SEC presents virtually no evidence of these “unique risks” or that existing rules are inadequate to address conflicts that arise from such technology. The SEC offers anecdotal reports that use of artificial intelligence (“AI”) and other PDA technology in the investment advisory and brokerage industries is increasing.⁶⁰ But the SEC cites only one example of an actual instance of a conflict of interest in support of its assertion: an enforcement action against a firm providing automated investment advisory services where the firm was alleged to have failed to disclose a conflict of interest.⁶¹ Even in this case it is unclear whether or how the lack of disclosure related specifically to PDA technology. If the use of such technology is indeed increasing as the SEC suggests, then the near total absence of any actual examples of misuse of that technology by investment advisers and broker-dealers belies the SEC’s assertion that investors face “unique risks” stemming from such technology that are not addressed by existing rule. And indeed, in the only example the SEC cites, existing conflict-of-interest rules were evidently sufficient to identify the conflict and provide a remedy. The SEC also reasons that the Proposal is necessary because of purported gaps in the scope of Regulation Best Interest (“Reg BI”), which applies to broker-dealers, because Reg BI only covers “recommendations” and certain PDA-associated actions are outside the scope of recommendations.⁶² But if such a gap exists, it does not justify a complete remaking of the basic features of conflict-of-interest regulation. The

⁵⁸ Proposal at 53,962.

⁵⁹ Id. at 53,965.

⁶⁰ Id. at Note 3.

⁶¹ Id. at 53,968.

⁶² Id. at 53,975.

underlying rationale for the Proposal appears instead to be an attempt to limit the increasingly broad range of legitimate options available to investors and increasing participation of retail

The Proposed Rules are disproportionately broad

The SEC’s concerns around protecting investors from the potential irresponsible use of PDA and related technology, while important, do not require the adoption of new rules. The Proposed Rules pose a set of new requirements premised on the SEC’s position that a conflict of interest exists any time a firm uses a covered technology that takes into consideration the firm’s interest in an investor interaction. This definition of “conflict of interest,” combined with the scope of what is a “covered technology” that is used in connection with an “investor interaction,” brings into the Proposed Rules’ scope almost every technologically-driven interaction and communication across institutional and retail client platforms, including what have long been understood as marketing or advertising. Further, the subsequent obligations for firms under the Proposed Rules,⁶³ and the indeterminacy of how firms will effectuate such requirements, all pose significant and potentially impracticable implementation and operational burdens and, as a result, may harm market participants. The existing securities regulatory framework provides significant and sufficient protection for investors and established principles by which firms can address the concerns of the SEC, including but not limited to the existing standard of care frameworks for broker-dealers and investment advisers.⁶⁴ We believe there should be thoughtful, tailored solutions for any empirically established harms posed by the industry’s use of complex technologies, and we respectfully urge the SEC to leverage current regulations instead of establishing an entirely new set of requirements.

The Proposed Rules may result in adverse consequences for investors

Responsible technological advances have for the past several decades benefited investors by increasing access, participation, education, and choice, promoting healthy market competition, and increasing efficiency for both investor and industry participants, all while steadily driving down costs. The overly broad scope of the Proposed Rules may result in investors losing the very access

⁶³ Pursuant to the Proposing Release, these include evaluating and determining if the investor’s interest is placed ahead of the firm’s, the availability of only conflict elimination or neutralization as remedies if not, and extensive documentation obligations.

⁶⁴ Fed. Reg. 33335 (Jul. 12, 2019); Commission Interpretation Regarding Standard of Conduct for Investment Advisers, SEC Release No. IA-5248, 84 Fed. Reg. 33669 (Jul. 12, 2019). The Investment Advisers Act of 1940 and the Investment Company Act of 1940 require advisers and investment companies to comply with various rules and regulations thereunder that are designed to address conflicts of interest. Both broker-dealer and registered

and choice that technological advances have made possible. Even well-resourced firms may be challenged to shoulder the implementation and ongoing operational burdens that compliance with the Proposed Rules will necessitate, and many firms, regardless of resourcing, may be discouraged to innovate under the Proposed Rules. The inability or disinclination by the industry to incorporate technological development into their operating models could result in unavailability of broader market choice for investors and the diminishment of investor participation. We respectfully encourage the SEC to view scalability and innovation as not adversarial to investor interests but the driving force behind widespread market participation and resiliency and deeply consider the harm the Proposed Rules could have on investors and the financial services industry.

The Proposed Rule Will Harm Investors, Competition, and Innovation

i. The Proposed Rule Will Harm Investors:

Authors primary concern with the rule is that it will hurt investors: Because consumer decisions could be influenced by firms' engagement activities, and those efforts could involve AI-created content, the Commission has decided that consumers should be deprived of their free will altogether. As Commissioner Hester Peirce points out in her statement against the proposed rule, "[the Commission] appears to assume that AI is so complex it needs special rules." She counters, "Aren't humans even more complex?"⁶⁵ The proposed rule assumes that investors will blindly accept AI-generated information and be victimized by firms that prioritize their own gain over the interests of consumers. However, such a notion ignores the fact that broker-dealers and investment advisers are already bound to strict fiduciary duties, including the requirement that they disclose any potential conflicts of interest, as mandated by existing SEC regulations. Moreover, considering our information-driven age and the burgeoning socially-mobilized investment movement, how could investors possibly be better served by weakened access to market choice? What the proposal condemns as the "gamification of trading" in actuality represents a democratization of investing, supplying retail investors with real-time access to markets and accessible educational material. This movement has radically increased free-market participation and improved accessibility to global financial markets beyond the arenas of institutional investors and elites. To impose the roadblocks put forth in the proposal would stymie the very financial opportunities that the

⁶⁵ Peirce, "Through the Looking Glass."

Commission promises to foster for ordinary entrepreneurs and investors across America. Further, the proposed rule will likely lead to perverse results. Of course, the rule will not deprive investors from using AI to make investment decisions. Such AI is already available and widely discussed on social media platforms including Reddit’s Wall Street Bets.⁶⁶ Yahoo Finance published an article in May entitled “7 Stock Picks That AI Predicts Will Make You Rich.”⁶⁷ Danelfin advertises itself as an “AI-powered stocks analytics platform” and publishes the “Top 25 stocks with the highest probability of beating the market short-term.”⁶⁸ *The horse has already left the barn*: Retail investors are already using AI to invest. As such, the effect of the proposed rule will not be to protect investors from dangerous, AI-tinged investment advice, but to prevent them from being able to meaningfully discuss it with the only person actually charged with looking out for their best financial interest—namely, their investment advisor. A hypothetical may underscore this concern. Let us say that an investor gets an alert from an AI stockpicking website they signed up for that the U.S. tech sector is going to tank. They call their investment advisor to see if they agree with that assessment, as the investor is inclined to sell all of their U.S. tech holdings immediately. The investment advisor thinks that the AI stock program’s prediction is terrible and tries to convince their client otherwise by pointing to traditional analyses. The investor is unconvinced. The investment advisor also knows, perhaps from doing research for their own portfolio, that the particular AI stock-picking program their client is using is terrible, and there are four other AI stock picking programs that have proven much more reliable. All four other programs predict U.S. tech will outperform. The investment advisor considers this information material, particularly because they know that their client sincerely believes (rightly or wrongly) that AI generated stock-picking is much more accurate than humans. The investment advisor is nonetheless barred from being able to share this material information with their client, because the information was generated using a black box algorithm used by the other four stock picking programs. In such circumstances, the proposed rule is likely to force investment advisors to breach their fiduciary duties of candor and loyalty to their clients by muzzling their ability to provide full, truthful, and unbiased advice. The rule also does not prevent others from using AI models to predict returns and

⁶⁶ u/Chrix, “AI Stock Recommendations,” r/wallstreetbets, Reddit, December 2022, https://www.reddit.com/r/wallstreetbets/comments/zo4c6u/ai_stock_recommendations/.

⁶⁷ Omar Ibne Ehsan, “7 Stocks AI Predicts Will Make You Rich,” Yahoo Finance, May 3, 2023, <https://finance.yahoo.com/news/7-stocks-ai-predicts-rich-160937425.html>.

⁶⁸ “Top US Stocks,” Danelfin, <https://danelfin.com/top-us-stocks>.

market trends and optimize their investment decisions as a result. Large institutional investors, for example, have large teams of in-house analysts that are free to incorporate AI into their investment decisions.⁶⁹ Venture capital firms are using AI to consider deals.⁷⁰ And private equity firms are increasingly using AI to identify potential public companies to take private, as well.⁷¹ These same financial tools, however, will be stripped from investment advisors' toolboxes when they provide advice to individual investors, meaning that advisors will be forced to contribute to an informational asymmetry that allows large institutional investors and private equity to take advantage of AI-powered insights that retail investors are forbidden to see (or, at least, obtain professional investment advice about). *Such a result is not only unfair, but also sows the kind of distrust that retail investors often have in capital markets generally*—that the rules are designed to give an edge to Wall Street and the 1 Percent to allow them to get ahead with better information, faster trades, and better technology. The Commission's role should be to equalize this playing field, not tilting the scales further in favor of elites. In short, rulemaking that attempts to control current technology, while also allotting the Commission unbounded authority to regulate future developments, will not in any way advance investors' best interests. There currently exist sufficient safeguards that obligate brokers and advisers to disclose conflicts and risks and prioritize their clients, and the increasing use of PDA and PDA-like technologies does not affect these firms' fiduciary duties.

ii. The Proposed Rule Is Anti-Innovative and Hostile Towards Technology

The Commission's website describes a key part of its mission as “providing companies and entrepreneurs with a variety of avenues to access America's capital markets to help them create jobs, develop lifechanging innovations and technology, and provide financial opportunities for those who invest in them.”⁷² Furthermore, it is directly stated in the proposal text that the rule is “intended to be technology neutral.”⁷³ Nevertheless, given the extent to which the proposal

⁶⁹ Amy Resnik, “How Will AI Change Institutional Investing?”, Chief Investment Officer, September 1, 2023, <https://www.ai-cio.com/news/how-will-ai-change-institutional-investing/>.

⁷⁰ Ray Zhou, “The Impact Of AI In Private Capital,” Forbes, August 15, 2023, <https://www.forbes.com/sites/forbestechcouncil/2023/08/15/the-impact-of-ai-in-private-capital/>.

⁷¹ Dylan Thomas, “Private Equity Firms Take Tentative Steps Adopting AI for Their Own Use,” S&P Global Market Intelligence, August 28, 2023, <https://www.spglobal.com/marketintelligence/en/news-insights/latest-newsheadlines/private-equity-firms-take-tentative-steps-adopting-ai-for-their-own-use-77215381>.

⁷² “Mission,” Securities and Exchange Commission, <https://www.sec.gov/about/mission>.

⁷³ Proposal, 39.

opposes technological advancements—past, present, and future—the proposed rule is antithetical to the Commission’s objective to develop “life-changing innovation and technology.” The proposed rule states that it is “designed to prevent firms’ conflicts of interest from harming investors while allowing continued technological innovation in the industry”;⁷⁴ but the inevitable impact on targeted institutions leaves little room for innovation: Organizations will be reluctant to adopt new technologies, and for companies that do, their implementation efforts will be burdened by the newly imposed restrictions. In either scenario, the proposed rule will hamper institutions’ ability to provide retail investors with the most useful and cost-effective resources and advice. If the Commission shares our belief that continuous innovation enables businesses to adapt to the evolving demands of the free market, this proposal—which discourages technologically-advanced investment solutions, supposedly to allay conflict-of-interest concerns already covered in the existing regulatory regime—stands in direct contrast to that conviction. The recurring theme in this proposed rule is that innovations in artificial intelligence have rapidly shifted the technology landscape of financial services. One could make the case that emerging technologies will require additional regulation and scrutiny in order to protect the end consumer, perhaps through additional disclosures or even by obtaining affirmative informed consent, but there must first be consensus on which technologies are actually being regulated and why. The extremely broad and onerous regulation proposed here takes the opposite approach and will thus serve only to stifle innovation.

iii. The Proposed Rule Is Anti-Competitive

In addition, this proposal would create an anti-competitive landscape in the financial services industry that will harm not only existing small to medium size broker-dealers and investment advisors but also punish the individual investor, who would face limited investment options due to slowed entrepreneurship in the space. Notably, *innovation and technological development provides a unique opportunity to level the playing field for new entrants* and smaller investment advisory firms. That is not only because large players are the only ones likely to have sufficient resources to comply with the new rules, but because they are also the ones who can afford the much more expensive process of communicating with their clients the old-fashioned way—by fielding huge teams that provide individualized, one-on-one phone calls and meetings for investors. But not all investors want or are able to afford such individualized attention, and so

⁷⁴ Proposal, 42.

rendering this model the only one available to investment advisors will serve only to further entrench large players' position in the market and harm investors who would benefit from increased competition and market choice.

The Proposal would place firms and investors at risk of data breaches.

The Proposal's recordkeeping provisions could put at risk extremely valuable and sensitive intellectual property of broker-dealers and investment advisers. In particular, the Proposal would require firms to create a centralized written record of all covered technology. As explained above, the Proposal's definitions are so broad that this requirement could be interpreted to encompass certain information about a firm's technologies, systems, and strategies, including a fund's confidential investment strategies, and every change to those technologies, systems, and strategies. Storing all of this information in a centralized record would create a target for cyberattacks and create a risk that a successful attack would result in the loss of all or a significant portion of a firm's valuable intellectual property.

SUGGESTIONS

The Commission should refine its current proposal by more precisely matching any truly novel risks posed by artificial intelligence and other new technologies with pinpointed regulation, keeping in mind that some risks that the Commission seeks to address may already be in scope of the current regulatory framework. A more narrowly tailored rule keyed to address the novel risks specifically posed by firms' use of artificial intelligence would better promote investor protection and avail clients of access to value-enhancing and efficient technology, all while preventing unnecessary regulation that discourages firms from using or developing client-beneficial or well-established tools.

The Commission Should Limit the Proposal to the Technologies that Actually Cause the Concerns Expressed in the Proposing Release.

The Commission's proposed definition of "covered technologies" is overbroad, and it should limit the technologies subject to the Proposed Rules to those identified in the Proposing Release as actually presenting a risk to retail investors. The Proposing Release devotes a great deal of time and attention to the perceived potential for AI and PDA (what the Release refers to as "PDA-like")

technologies) to harm retail investors.⁷⁵ However, for reasons the Proposing Release does not explain, the restrictions in the Proposed Rules apply to a much broader group of “covered technologies”: “an analytical, technological, or computational function, algorithm, model, correlation matrix, or similar method or process that optimizes for, predicts, guides, forecasts, or directs investment-related behaviors or outcomes in an investor interaction.”⁷⁶ This definition of “covered technologies” is broad enough to encompass simple spreadsheets or math formulas far removed from AI and PDA.⁷⁷ The Proposing Release does not justify the extreme overbreadth of the definition of “covered technologies” as compared to the limited types of AI and PDA technologies that may actually present the perceived harms that the Commission is trying to address. The Commission should tailor its Proposed Rules to the technologies that actually present investor protection concerns.

Commission Should refine and align it with existing technology Regulations.

Firstly, to Restrict Regulation to Direct Human-Technology Interaction. This involves limiting regulation to technologies that interact directly with investors, excluding scenarios where human intermediation is involved. The argument is that existing regulations already cover human interactions between advisors and investors, ensuring robust oversight and accountability. Furthermore, the distinct risks posed by direct technology interactions, such as automated behavioral prompts and manipulation, necessitate targeted regulation.

Secondly, there is a call for Alignment with Regulation Best Interest and Advisers Act Fiduciary Duty. This recommendation urges alignment of any new rule with existing standards like Regulation Best Interest⁷⁸ and the Advisers Act fiduciary duty. It suggests redefining "conflict of interest" to match the terminology and principles outlined in Regulation Best Interest. Additionally, it recommends utilizing the same "eliminate, mitigate, and disclose" framework from

⁷⁵ Proposing Release at pages 12-21, 27-33.

⁷⁶ Proposing Release at pages 37-38. We recognize that Question 1 in the Proposing Release concerns the breadth of the definition of “covered technologies” and this section is designed to address that issue.

⁷⁷ Commissioner Hester Peirce, Through the Looking Glass : Conflicts of Interest Associated with the Use of Predictive Data Analytics by Broker-Dealers and Investment Advisers Proposal (July 26, 2023) (<https://www.sec.gov/news/statement/peirce-statement-predictive-data-analytics-072623>) (citing Proposing Release at pages 48-49: “Similarly, if a firm utilizes a spreadsheet that implements financial modeling tools or calculations, such as correlation matrices, algorithms, or other computational functions, to reflect historical correlations between economic business cycles and the market returns of certain asset classes in order to optimize asset allocation recommendations to investors, the model contained in that spreadsheet would be a covered technology because the use of such financial modeling tool is directly intended to guide investment-related behavior.”).

⁷⁸ See Regulation Best Interest.

Regulation Best Interest for resolving conflicts of interest arising from technology use. The emphasis is on the benefits of harmonization, including clarity, consistency, and preservation of innovation, while effectively addressing conflicts of interest and safeguarding investor interests.⁷⁹

CONCLUSION

Under the Proposed Rule, “covered technology” is defined as “an analytical, technological, or computational function, algorithm, model, correlation matrix, or similar method or process that optimizes for, predicts, guides, forecasts, or directs investment-related behaviors or outcomes.”⁸⁰

As currently written, the definition of “covered technology” is overly broad and would likely cover more technology than the Commission intended to cover. For example, under this definition, technology such as Excel sheets containing macros and statistical tools that are commonly used in the industry to determine investment recommendations would likely be deemed to be covered technology. Covered technology would also include more advanced technology that could be used to meaningfully advance the industry, such as AI tools. The definition of covered technology unnecessarily includes certain technology beyond the scope of the legitimate risk to investors that regulation regarding the use of predictive analytics is intended to address. Under the Proposed Rule, broker-dealers and investment advisers registered or required to be registered with the SEC would be required to eliminate or neutralize conflicts of interest associated with the firm’s use of any current or future covered technology in investment interactions that prioritize the firm’s interest above the investor’s interest. Additionally, firms that use covered technology in investor interactions would be obligated to maintain prescriptive policies and procedures, including onerous documentation requirements, to prevent violations of the Proposed Rule. Given the broad scope of covered technology and the substantial requirements under the Proposed Rule, many advisers, especially smaller firms, will limit technology usage if the Proposed Rule is adopted. As a result, increased costs attributable to inefficient processes will be passed on to clients.

The SEC presents no evidence or policy rationale for a need to fundamentally remake the conflict-of-interest rules that apply to broker-dealers and investment advisers. Although the Proposal is framed as added protection for investors with respect to supposedly novel risks associated with the use of AI and similar technologies, the SEC has identified no evidence that existing conflict-of-

⁷⁹ Fiduciary Duty Release at 8.

⁸⁰ 3 Conflicts of Interest Associated with the Use of Predictive Data Analytics by Broker-Dealers and Investment Advisers, 88 Fed. Reg. at 53,972.

interest rules are insufficient to deal with those risks. Moreover, far from being limited to novel technologies, the Proposal would apply to virtually any calculation-based process or application, whether computerized or not. The Proposal would also apply to interactions with institutional investors, who are even less in need of the Proposal's paternalistic rules. The Proposal would however result in extremely costly and unnecessary disruptions to the operations of broker-dealers and investment advisers. In addition to being impracticable, if not impossible, to comply with, the Proposal would create serious cybersecurity risks with respect to proprietary investment strategies and investors' personal information. The Proposal also exceeds the SEC's statutory authority. The Committee therefore calls on the SEC to withdraw the Proposal. To the extent the SEC in the future identifies compelling evidence of gaps in the application of existing conflict-of-interest regulations, these should be addressed with discrete and tailored adjustments to those regulations. It is suggested to Limit Scope to Artificial Intelligence (AI) Technologies which involves redefining "covered technologies" to exclusively include present and foreseeable developments in artificial intelligence and machine learning. The proposal advocates for excluding established technologies like simple algorithms in spreadsheets from further regulation, as their risks haven't fundamentally changed. By focusing solely on AI technologies, regulatory concerns regarding complexity, speed, and wide-scale deployment can be clarified.