October 6, 2023

Ms. Vanessa Countryman
Secretary
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549-1090
Via Email to rule-comments@sec.gov File Number S7-12-23

Re: Release No. 34-97990; File No. S7-12-23 Conflicts of Interest Associated with the Use of Predictive Data Analytics by Broker-Dealers and Investment Advisers

Dear Ms. Countryman:

The Hedge Fund Association ("HFA") respectfully submits these comments in response to the U.S. Securities and Exchange Commission's ("SEC" or "Commission") request for comments regarding the release titled "Conflicts of Interest Associated with the Use of Predictive Data Analytics by Broker-Dealers and Investment Advisers" (the "Release"). The HFA is an international non-profit industry trade group and nonpartisan lobbying organization established to serve the alternative investment industry. We are devoted to advancing transparency, development and trust. Our global presence spans multiple continents and countries. HFA constituents include hedge fund sponsors, financial institutions, funds of hedge funds, family offices, public and private pension funds, endowments and foundations, high net worth individuals, allocators and service providers including prime brokers, accounting firms, administrators, custodians, auditors, lawyers, technologists and third party marketers.

Our comments in this letter relate to the application of the Release to investment advisers, given our organization's focus, and we do not take any position as to its application to broker-dealers. In addition, although our letter does not challenge the SEC's statutory authority to adopt the rules proposed in the Release, through our silence on this topic we do not intend to imply that we believe the adoption of the rules to be lawful or unlawful. We point you to other comment letters that focus on the legality of the rules that have been posted and that we anticipate will be posted by law firms and others.¹

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¹ See for example: https://www.sec.gov/comments/s7-12-23/s71223-258279-605062.pdf

We acknowledge that the use of predictive data analytics, including the field of artificial intelligence ("AI"), in the securities industry presents potential risks and conflicts of interest, but we also acknowledge the opportunities these technologies present for quantum leaps in efficiency and other benefits to society, including to investors.² AI currently has a grip on the public's attention, as evidenced by the media's focus on AI and its potential risks. We commend the SEC on its desire to examine these technological issues and get ahead of them. The risks associated with AI range from the mundane to the existential³ and, as discussed below, we believe that specific prescriptive rules, especially those that will be difficult and costly to implement, should be reserved for those risks that present the highest potential harm. We view the potential conflicts of interest raised in the Release as more mundane. In summary, we believe that the proposed rules: (i) are written in a manner that is overbroad and likely to result in unintended consequences, (ii) are expensive to implement, (iii) will be unnecessarily risky to investment adviser personnel (including chief compliance officers), and (iv) will be suppressive to innovation and competitiveness of U.S. investment advisors. For these reasons, we believe that the Release should be withdrawn and suggest that the conflicts of interest of concern to the SEC can be presented in a risk alert or in another format.

Most Serious Sources of Harm Not Addressed by Release; Conflicts may be Adequately Addressed in Risk Alerts

The field of predictive analytics, and AI specifically, is rapidly evolving, and we believe that imposing prescriptive rules to address various categories of harm, which are likely to evolve faster than regulators can implement rules, is not the best approach. In the near future, objects and software that do not incorporate AI are likely to incorporate AI. For example, few offices in any industry could function without the Microsoft Office suite of software and, as reported, "Microsoft is setting its sights on instigating nothing less than a total revolution in the way we use machines. It intends to usher in the age of augmented working, general-purpose AI tools, and a new generation of user interfaces." AI tools may make our coffee, drive our cars and even chat for us in online applications. Given the uncertainty associated with the ways in which technology will evolve and the ways in which workflows will be impacted, organizations will need to evaluate

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² See for example "The economic potential of generative AI: The next productivity frontier" by McKinsey Digital at https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/the-economic-potential-of-generative-ai-the-next-productivity-frontier#key-insights

³ See https://www.forbes.com/sites/bernardmarr/2023/06/02/the-15-biggest-risks-of-artificial-intelligence/?sh=6f71f4632706 for a list of certain Al-related risk. See the Last Week in Al podcast titled "Al and Existential Risk - Overview and Discussion" at https://www.lastweekinai.com/e/aixrisk/ for a discussion of existential risks.

⁴ See "Microsoft's Plan to Infuse AI and ChatGPT into Everything" by Bernard Marr in Forbes, dated March 6, 2023. https://www.forbes.com/sites/bernardmarr/2023/03/06/microsofts-plan-to-infuse-ai-and-chatgpt-into-everything/?sh=3e3c172453fc

⁵ See "Meet Washington Square's New Robot Barista: Artly Barista Bot" by Daisy Caballero, March 9, 2023, on the KGW8 website at https://www.kgw.com/article/tech/robot-arm-coffee-washington-square-mall-ai-tech-future/283-ef2ce210-acbc-47a1-855c-3c4755f4cc06 and "Teaser's AI Dating App Turns You Into a Chatbot" by Amanda Silberling, June 9, 2023, in the Techcrunch website https://techcrunch.com/2023/06/09/teasers-ai-dating-app-turns-you-into-a-chatbot/

their use of AI in their own ways and take risk-based approaches to establish appropriate guardrails for this technology.

The Release proposes to regulate and eliminate certain categories of conflicts of interest. Conflicts of interest represent a single category of negative outcomes associated with the use of covered technologies, including AI. As noted above, the risks associated with AI range from mundane to existential. Although there may be no agreed-upon definition of existential risks or even catastrophic risks, for purposes of this letter, we would propose that catastrophic risks include those that would tend to wipe out a substantial portion of an investor's savings or disrupt the securities markets. Although addressing conflicts of interest is a laudable goal, after reading the Release we are not convinced that the conflicts of interest targeted by the rule (such as routing orders to an affiliated broker-dealer or recommending products for which the adviser receives greater compensation) represent existential, catastrophic or even substantial levels of potential harm. We believe that investment advisers, as fiduciaries, are already obligated to address conflicts of interest arising from their use of AI and other predictive analytics, and therefore narrow and prescriptive rules are unnecessary and undermine the current principles-based approach to investment adviser regulation.⁶

Rather than proposing new rules, we believe it would be preferable for the SEC to warn the industry from time to time of various risks, potential conflicts of interest and other potential sources of harm associated with evolving technologies, and then let the industry players address them under the scrutiny of the SEC's examination staff. The Division of Examinations' risk alerts provide an avenue for this type of warning. These alerts could be developed along with greater outreach to industry participants and their service providers. We fully encourage this type of healthy dialogue, which would take place in a non-adversarial forum.

Conflicts Traditionally Addressed through Disclosure

Conflicts of interest are traditionally dealt with through disclosure and not through outright prohibitions on the existence of the conflict. Investors and investment advisors negotiate the terms of their relationship so that the parties can define the scope of the services and the fees. Is the potential harm in this context so high that this traditional regime needs to be abandoned? As noted above, we do not believe that these potential conflicts of interest present risks of catastrophic harm, even upon review of the hypothetical examples presented in the Release. We believe that they can be dealt with by the SEC (and other organizations such as the Consumer Financial Protection Bureau and the Department of Justice) through the existing examination and enforcement regime,

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⁶ We are concerned that the principles-based approach is being replaced with a prescriptive rules approach. See pages 21-22 of the Release for a summary of certain other ways in which these risks fall under existing regulations. ⁷ For example, the Release (page 11) presents the following hypothetical:" a firm may use PDA-like technologies to automatically develop advice and recommendations that are then transmitted to investors through the firm's chatbot, push notifications on its mobile trading application ("app"), and robo-advisory platform. If the advice or recommendation transmitted is tainted by a conflict of interest because the algorithm drifted to advising or recommending investments more profitable to the firm or because the dataset underlying the algorithm was biased toward investments more profitable to the firm, the transmission of this conflicted advice and recommendations could spread rapidly to many investors. [footnote omitted] This conflict seems like a gardenvariety risk, not one that requires a fundamental change to the regulatory regime.

as well as civil litigation (including class action litigation). Commissioner Peirce summarized our objections to the SEC's rejection of a disclosure regime to address conflicts of interest in her statement regarding the Release titled "Through the Looking Glass: Conflicts of Interest Associated with the Use of Predictive Data Analytics by Broker-Dealers and Investment Advisers Proposal" when she states:

But this release does more than single out particular technologies for regulatory hazing, it also rejects one of our primary regulatory tools—disclosure. If a firm determines that the use (or potential use) of a covered technology involves a conflict of interest, then the firm has to eliminate or neutralize the conflict. Disclosure is not an option. In many ways, the discussion surrounding the inadequacy of disclosure is the most troubling aspect of the proposal. The long-term ramifications of the Commission's rationale for dismissing the value of disclosure—namely, that disclosure is of no use to investors—cannot be exaggerated. The release explains that disclosure cannot work since investors are powerless pawns incapable of resisting psychological manipulation by technologies designed to play to their "proclivities."

In the Release (page 9), the SEC asserts: "While the presence of conflicts of interest between firms and investors is not new, firms' increasing use of these PDA-like technologies in investor interactions may expose investors to unique risks. This includes the risk of conflicts remaining unidentified and therefore unaddressed or identified and unaddressed." One could describe all new conflicts of interest and risks as being unique and therefore we disagree with that characterization. In addition, the Release (page 25) states that "In particular, disclosure may be ineffective in light of, as discussed above, the rate of investor interactions, the size of the datasets, the complexity of the algorithms on which the PDA-like technology is based, and the ability of the technology to learn investor preferences or behavior, which could entail providing disclosure that is lengthy, highly technical, and variable, which could cause investors difficulty in understanding the disclosure." Supervising teams of humans, with their individual motivations, biases and psychological makeups, and the interactions among those humans are also complex. In some respects, understanding conflicts presented by the use of computers, whose behaviors are determined in full by algorithms, is less complex.

Proposed Rules are Overbroad and Unworkable in Practice

We believe that the text of the rules proposed by the Release presents many unanswered questions, and, generally, will be very difficult for investment advisers to understand and implement. See our comments above regarding the lack of predictability in the manner in which these technologies are likely to develop.

The term "Covered technology" (defined in the Release as "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") is not self-explanatory and may be without defined boundaries. The Release states that this definition

⁸ <u>https://www.sec.gov/news/statement/peirce-statement-predictive-data-analytics-072623</u> Footnotes omitted from quote.

is designed to capture PDA-like technologies. The term "PDA-like technologies" also is far from clear. "PDA" stands for predictive data analytics, a concept that is already difficult to define. Footnote 9 of the release provides 17 lines of text explaining artificial intelligence (one segment of PDA) and pointing the reader to scholarly articles and other reports to better understand the definition. Adding the "like" qualifier makes it even more vague. As per the Release, the term "covered technology" includes, but is not limited to, "PDA-like technologies, such as AI, machine learning, or deep learning algorithms, neural networks, NLP, or large language models (including generative pre-trained transformers), as well as other technologies that make use of historical or real-time data, lookup tables, or correlation matrices among others." The release (page 43) goes on to state "The proposed definition would include widely used and bespoke technologies, future and existing technologies, sophisticated and relatively simple technologies, and ones that are both developed or maintained at a firm or licensed from third parties." Where does this definition begin and end? Will it be the Chief Compliance Officer's duty (under the threat of potential civil or criminal liability) to make this determination? Business people use tools but often don't know exactly how they work or the data that they pull in, yet understanding the nuts and bolts of each piece of covered technology is essential to conducting the analysis required by the proposed rules. This analysis would need to be conducted even in cases where the potential conflict arising from a covered technology and risk of harm is minimal. 9 Is the SEC prepared to fully train its examination teams and issue guidance to the industry as to what is and is not a covered technology so that there can be any measure of fairness and uniformity?

We believe that the definition of "investor interaction" (which the Release defines as "engaging or communicating with an investor, including by exercising discretion with respect to an investor's account; providing information to an investor; or soliciting an investor; except that the term does not apply to interactions solely for purposes of meeting legal or regulatory obligations or providing clerical, ministerial, or general administrative support") is similarly both extremely wide and vague, and we believe unworkable in practice. In any event, in response to question 12, which is set out on page 56 of the Release, we would exclude private funds and their investors from coverage of the rules. The investors are not "clients" relying upon the investment adviser as their direct fiduciaries and they receive additional protections (as compared to managed account investors) under existing anti-fraud rules and the rules related to securities offerings. In addition to our view that the proposed rules are unnecessary, we believe that they are especially unnecessary in the context of pooled investment vehicle investors. U.S. private fund managers often pull in investors from around the world, and putting constraints on the tools that U.S. registered private fund managers may utilize will put them at a distinct competitive disadvantage.

The "conflicts of interest" definition (which exists when "an investment adviser uses a covered technology that takes into consideration an interest of the investment adviser, or a natural

⁹ To illustrate the over-reaching nature of the rule, as per the Release (page 44) "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."

person who is a person associated with the investment adviser") is overly broad and may pull in immaterial conflicts or conflicts that investors would not be deemed detrimental to their interests. For example, might an automated trading system be deemed to create a "conflict of interest" if it were designed to trade only during an advisor's (or its personnel's) business day so that the advisor's personnel would be awake to monitor the system? Trading only while existing team members are awake would eliminate the costs associated with hiring additional staff to monitor the system on a 24/7 basis. If this is done primarily for the adviser's personnel's benefit, so that they can sleep and have personal lives, then it would presumably be a conflict of interest that is required to be eliminated or neutralized (assuming some theoretical detriment to clients from trading only during business hours). How could the conflict be neutralized if it is not eliminated through the hiring of an overnight team?¹⁰ The irony here is that following the receipt of proper disclosure, investors would likely be fine with limiting trading through an automated platform to working hours since they don't expect their human investment advisory decision-makers to work 24/7. If the rules are enacted, we would suggest limiting the "conflicts of interest" concept to those conflicts that would be expected to have a material adverse impact on the advisor's client base as a whole, and a corresponding material benefit to the investment adviser, viewed over time.

We note that the proposed rules don't just use these terms that have uncertain limits, but combines these terms, such that the uncertainty compounds.

With respect to the Policies and Procedures Requirement, it is easier to propose such a requirement than it is to draft and implement the required policies. Has the SEC's examination team encountered advisers with policies and procedures in place that would meet the proposed requirements? We believe that chief compliance officers will be left guessing how to draft these policies and procedures, which will likely require teams with both a legal and technical background to properly create.

Cost of Compliance

As noted above, we believe that AI and other predictive data analytics are making quantum leaps. 11 In a few short years (or perhaps even months) AI technology is likely to be embedded into a myriad of new processes and objects and will become a ubiquitous part of everyday life. Perhaps in the near future, an investment adviser's compliance officer (or even the SEC's examination staff) will be a bot powered by artificial general intelligence. Perhaps that same bot (or another one) will drive the CIO to work and serve as the firm's IT help desk. This is no longer science fiction. Therefore, is impossible to estimate the time and expense that it will take to implement the proposed rules as technology becomes more complex. To illustrate this point, the Release (page 63) states:

¹⁰ The detriment to the clients would be impossible to measure with precision in this case. Therefore, how would it be neutralized if it is not eliminated through the hiring of a second (or possibly second and third) team?

¹¹ Experts have predicted various timelines for when "artificial general intelligence" (or human-like intelligence) will be achieved. Some have speculated that it will be achieved before the end of the decade. How can we predict the costs or time it would take to eliminate all conflicts associated with these systems.

Firms that use more advanced covered technologies may need to take additional steps to evaluate technology adequately and identify associated conflicts adequately. For example, a firm might instruct firm personnel with sufficient knowledge of both the applicable programming language and the firm's regulatory obligations to review the source code of the technology, review documentation regarding how the technology works, and review the data considered by the covered technology (as well as how it is weighted)."¹²

Who are these people? A team of regulatory experts and computer programmers with skills to dissect underlying code (where the licensor makes it available) in a complex AI system would be a rare find.¹³ If not already employed in-house, how much would such a team charge to consult with investment advisers? By the SEC's own admission, "there may be situations where a firm does not have full visibility into all aspects of how a covered technology functions, such as if the firm licensed it from a third party. However, a firm's lack of visibility would not absolve it of the responsibility to use a covered technology in investor interactions in compliance with the proposed conflicts rules."¹⁴ In these cases, the proposed technology presumably cannot be used. This disadvantages U.S. investment advisers as compared to their foreign competitors. It also places their clients in a disadvantageous position as compared to other securities market participants who are able to use a full range of AI tools. The investment advisory industry is a large industry in the U.S. that generates many high paying jobs and we cannot allow our own registrants to fall behind technologically.

The HFA believes that the private funds industry, the investing public and investment adviser personnel all benefit from the existence of smaller emerging managers. These managers are hampered by barriers to entry that are too high. The new rules would seem to have a disproportionate impact on smaller registrants that would like to extensively use covered technologies but do not have the in-house expertise or the budgets needed to hire consultants to conduct the required reviews.

Piling on of Additional Obligations and Risks to Investment Adviser Personnel

The Release cannot be viewed in a vacuum and needs to be viewed in the context of the additional proposed and final rules impacting investment advisers and private fund managers more specifically. ¹⁵ Compliance with new rules can strain compliance staff and others within a firm and seeking additional help can be costly. These covered technologies may be highly complex and technical. Compliance officers typically don't have backgrounds in these technical areas and will likely need to rely upon high-priced consultants, in-house computer scientists or other experts who

¹² Footnotes omitted.

¹³ The GPT 3 model is trained on 175 billion parameters while the GPT 4 model is trained on more than 1 trillion parameters. ChatGPT is trained on 300 billion words. ChatGPT has 570 gigabytes of text data. https://www.demandsage.com/chatgpt-

statistics/#:~:text=ChatGPT%20is%20trained%20on%20the,570%20gigabytes%20of%20text%20data. These systems can grown increasingly complex over time.

¹⁴ Release beginning on page 65. Footnotes have been omitted.

¹⁵ We agree with the points on the difficulty of digesting the myriad of proposed rules that were made in other comment letters, such as the Investment Company Institute comment letter to this Release. https://www.sec.gov/comments/s7-12-23/s71223-246959-547222.pdf

can lend their know-how (but are not necessarily equipped to assist with regulatory interpretation or guidance). In this regard, we find the Economic Analysis set out in the Release to be highly speculative. Experts cannot predict with any certainty what the AI landscape will look like one or two years from now, much less over a longer time horizon. For example, will artificial general intelligence be achieved in that time frame? How can we know what it will cost to analyze a class of technology if we can't predict what the technology will be? Advisors who are not heavy users of PDA-like technologies will likely become heavy users as AI is embedded into all aspects of life.

New rules create new risks associated with non-compliance, even for well-meaning compliance officers. ¹⁶ In the words of Commissioner Peirce in her statement regarding the Release, "What firm, large or small, would feel confident that it has a handle on what to expect when Examinations or Enforcement comes knocking? Will any but the largest firms have the personnel and resources needed to comply with the proposed evaluation and testing standards? Small firms will have to abandon worthwhile technologies that benefit investors and firms. Get out your abacuses, I guess." ¹⁷

Conclusion

We appreciate the opportunity to comment on the proposal set out in the Release. We will be available to the Commission or its Staff if we can be of assistance.

Sincerely,

Hedge Fund Association

Mitch Ackles

President

¹⁶ Although the SEC has on occasion attempted to reassure compliance officers about their own potential regulatory liability, violations committed in good faith can lead to career risks and other risks to compliance personnel.

¹⁷ https://www.sec.gov/news/statement/peirce-statement-predictive-data-analytics-072623 Footnotes omitted from quote.