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Strategies in Applying Securities Laws to Digital Investment Advice

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Investment advisers have used digital investment advisory techniques for decades, and in many ways their use and growth have been at the vanguard of technological development. These techniques are varied but include automated (or robo) investment advice techniques and the use of sophisticated computer algorithms in the investment process. In more recent years, investment advisers have been developing investment techniques involving artificial intelligence (AI) and machine learning (ML). Collectively, we refer to advice provided using these techniques as digital investment advice (DIA).

The growth in use and sophistication of DIA has caught the attention of the Securities and Exchange Commission (SEC), which has focused on its regulatory implications in a number of initiatives and published releases in the past several years. In 2017, the Staff of the SEC Division of Investment Management published a Guidance Update on robo-advisers (Robo Guidance), which focused on robo-advisers' disclosure obligations, the suitability of their investment advice and the effectiveness of their compliance programs.[1] In 2021, the Staff of the SEC Division of Examinations published a Risk Alert with the Staff's observations on recent examinations of robo-advisers, which the Staff called the Electronic Investment Advice Initiative, that focused on oversight of the automated investment advisory function, compliance with the adviser's fiduciary duty of care and suitability, and the use of robo-advisers in discretionary advisory programs, among other matters (Robo Risk Alert).[2] The SEC also has brought a number of enforcement actions against robo-advisers in the past several years, which have focused on disclosure obligations, conflicts of interest and compliance policies and procedures.[3] In 2021, the SEC also published a Request for Information on Digital Engagement Practices that discussed, as well as included a significant number of requests for information and comments on, the use of technology by investment advisers to develop and provide investment advice (Digital Practices RFI).[4]

These releases represent a serious effort to grapple with the application of the regulatory framework created by the Investment Advisers Act of 1940 (Advisers Act) and the Investment Company Act of 1940 (1940 Act) to DIA.[5] However, these Acts substantially pre-date the rise of DIA, and yet the SEC and its Staff continue to seek to apply regulatory concepts and tools developed for investment advice that is formulated and provided by humans—particularly the fiduciary duty of care—rather than seeking to fully adapt them to the distinct and innovative benefits that DIA can bring to investors or to evolutions in technology and investor preferences. The SEC's lag in adapting the Advisers Act and 1940 Act regulatory frameworks to DIA places legal and compliance professionals in a particularly difficult position. While there are reasonable interpretations of the relevant securities law duties that are adapted to the circumstances of DIA, until the SEC and its Staff adopt these or similar interpretations, legal and compliance professionals considering DIA will have to exercise a degree of judgment in an environment of regulatory uncertainty.

As we noted in an article in the July 2022, issue of *The Investment Lawyer,*[6] (Dechert EIA article) the SEC's and the Staff's response to these challenges demonstrates a preference to apply the same detailed fiduciary guidance to DIA that it has commonly applied to more traditional advisory services.[7] However, it is becoming clearer that the SEC and the Staff are finding what many investment advisers already know: a regulatory framework that focuses on the human characteristic of trustworthiness (which is central to acting as a fiduciary) often cannot be easily and directly applied to algorithm- and machine-learning-based services. In actuality, the strengths of automated investment services (for example, their scalability, replicability and consistency in application) have tended to be treated in the existing regulatory framework as in tension with or even contrary to an adviser's fiduciary duty of care (for example, by viewing consistency and scalability as potentially contrary to providing advice that is suitable for a particular client). Moreover, the fiduciary rubric does not fully recognize that algorithms and machines can be more logical, predictable and traceable than human decisionmakers, and can be tested, monitored and adjusted in light of their performance. Thus, algorithms and machines can be more accountable, but as we discuss below, the regulatory framework tends to penalize DIA rather than reward it for this characteristic.

In this article, we summarize a number of themes in the SEC's and its Staff's application of the Advisers Act and 1940 Act regulatory schemes to DIA, analyze the issues these themes create, and propose adaptions of these regulatory principles, both for legal and compliance professionals, as well as for potential SEC interpretive actions. In general, the SEC's and Staff's approach to the fiduciary duty of care has pushed DIA to be more like traditional human advice (more customized, higher touch, less replicable), while their treatment of DIA as a compliance matter imposes a higher burden than for other advisers. We instead suggest a better view: DIA is a part of the investment function, and DIA compliance should be structured accordingly and consistently with its features.

Robo-Advisers and Suitability

In a 2019 interpretive release (the Fiduciary Interpretation), the SEC states that investment advisers are subject to federal fiduciary duties that consist of a duty of care and a duty of loyalty, which, taken together, require an adviser to act in the best interest of its client at all times.[8]

As articulated by the SEC in the Fiduciary Interpretation, the fiduciary duty of care includes a duty to provide suitable investment advice to each client. The SEC conceptualizes suitability as a duty to provide individually tailored advice to each client, based on a reasonable understanding of the client's "investment profile," and states that an adviser can form a reasonable understanding of a retail client's investment profile by making a reasonable inquiry as to the client's financial situation, level of financial sophistication, investment experience, and financial goals when advising retail clients.

The Fiduciary Interpretation explains by way of example that "an adviser undertaking to formulate a comprehensive financial plan for a retail client generally would need to obtain a range of personal and financial information about the client such as current income, investments, assets and debts, marital status, tax status, insurance policies, and financial goals" and in doing so acknowledges this quantity of information should scale to the advisory relationship.[9] The Fiduciary Interpretation further explains that, in forming a reasonable belief that advice is in a retail client's best interest, an adviser must consider, in connection with the retail client's investment profile, whether the retail client is willing to tolerate the risks associated with the investments or overall strategy and whether the potential benefits justify the associated risks. In the Fiduciary Interpretation, the SEC expressly stated that these obligations apply to robo-advisers.[10]

Robo-advisers generally gather the information for a client's investment profile through the use of online questionnaires; some robo-advisers also use analytics based on other data gathered relating to the client or as a supplement to a questionnaire. As we note in the Dechert EIA Article, one observed effect of the Robo Guidance, the Robo Risk Alert and the EIA Initiative has been to apply pressure to make these questionnaires longer, more detailed and more interactive, and to implement policies and procedures designed to assure that each client's best interest is being served.

For example, the Robo Risk Alert stated that some questionnaires were "not designed to provide a client with the opportunity to give additional information or context." The Staff also indicated that some robo-advisers may not: (1) follow-up with clients about their responses; (2) address inconsistencies in client responses; or (3) provide assistance to a client filling out a questionnaire.[11] However, whether these steps are necessary or appropriate depends on the client's and the adviser's circumstances, and building these steps into a questionnaire or on-boarding process may incur costs (which likely would be reflected in the adviser's fees) or make the process more burdensome and less useful. This pressure implies a regulatory bias that the gathering or use of more data will always benefit the client, perhaps through perceived opportunities to customize a strategy to their needs; however, this stance assumes that DIA requires the same framework as human interaction, which often is neither necessary nor in the client's best interest when DIA is used to select strategies or investments.

The rigid application of the SEC's and Staff's framework in this way is in tension with the strengths of automated investment services (that is, scalability, replicability, and consistency). There is a balance to be struck regarding the degree of detailed personal information that is necessary to bring the benefits of automation to bear in an individualized context, while avoiding unnecessary interactions that add to cost and, in some cases, could result in a less effective investment profile. The proper balance turns on the nature and model of the services each adviser provides, and to which each client agrees, rather than a single, regulatory interpretation of fiduciary duty. If the SEC or Staff press too hard towards a human component (or replication of human interaction), it risks disrupting this balance.

The SEC noted in the Fiduciary Interpretation that the Advisers Act fiduciary duty is flexible and principles-based and depends on the client's circumstances, particularly the agreed-on scope of the adviser-client relationship.[12] Under this principle, each robo-adviser should be given reasonable flexibility in determining whether it has sufficient data to form an investment profile and to meet the duty of suitability in light of the nature of its offering. For some (perhaps many) robo-advisers it should be reasonable to use a smaller set of data and a shorter questionnaire to form an investment profile. It also should be reasonable to interpret the duty of suitability to allow robo-advisers to find, under certain circumstances, that certain model portfolios are suitable for investors whose profiles fall within certain categories based on ranges of investor characteristics.

For example, where an adviser has available a range of model portfolios that take differing incremental approaches in balancing risk, reward and other financial characteristics, it often will be the case that the adviser could reasonably conclude that one or more of those models is suitable for a client whose investment profile fits with the characteristics of the model, without individual customization. While suitability is an element of the advisers' fiduciary duty of care, precision and full customization are not. A program that offers a reasonable number and diversity of models, at least one of which would be suitable for a broad swath of investors, should be sufficient to meet this duty without further customization.

The SEC also notes in the Fiduciary Interpretation that "[t]he fiduciary duty follows the contours of the relationship between the adviser and its client, and the adviser and its client may shape that relationship by agreement, provided that there is full and fair disclosure and informed consent."[13] Thus, if an adviser determines that smaller data sets, shorter questionnaires or application of models to a range of profiles is appropriate, and fully and fairly discloses its practices, the robo-adviser should be able to reasonably conclude that the client has shaped the contours of their relationship with the adviser by expressly agreeing to the service as described.

We believe that these positions are consistent with the fiduciary duties owed by advisers and that they are good policy, balancing investor protection with innovation. It would provide helpful clarity for the SEC to expressly adopt these positions through interpretive guidance. However, even before it does, it should be reasonable for robo-advisors, depending on the circumstances, to take these positions.

Robo-Advisers and Virtual Investment Companies

The SEC takes the position that a program where clients' accounts (1) are managed on a discretionary basis in accordance with pre-selected investment objectives, (2) receive the same investment advice, and (3) may hold the same or substantially the same securities in their accounts, could meet the general definition of an investment company under the 1940 Act.[14] In light of this position, many sponsors of and advisers to such programs seek to rely on the safe harbor provided by Rule 3a-4 to avoid their programs potentially being deemed an improperly unregistered investment company.

Rule 3a-4 provides a non-exclusive safe harbor from the definition of "investment company" under the 1940 Act and the registration requirements under Section 5 of the Securities Act of 1933 for programs meeting its terms. Among other provisions, to remain within the safe harbor: (1) each client's account must be managed on the basis of the client's financial situation and investment objectives; (2) the client must receive "individualized investment advice;" (3) clients must have the ability to impose reasonable restrictions on their accounts; (4) clients must be provided with a quarterly account statement; (5) personnel of program sponsors and managers who are knowledgeable about the client's account must be reasonably available to the client for consultation; and (6) clients must retain certain "indicia of ownership" of all securities and funds in their respective accounts.[15]

Rule 3a-4 was adopted over 25 years ago and in the context of traditional managed account and wrap-fee programs, prior to the recent growth of DIA in use and sophistication.[16] Nonetheless, the SEC Staff appears in many cases to strictly apply Rule 3a-4 and its conditions, without proper consideration of the evolution of the industry. Although the Rule's preamble states that it is a non-exclusive safe harbor, the Staff's sometimes skeptical scrutiny of accounts in effect places practical pressure on investment advisers, including robo-advisers, to comply strictly with the rule's conditions. For example, in the Robo Risk Alert, the Staff (echoing their comments on suitability, discussed above) observed that some advisers relied on questionnaires that "included a very limited number of data points, potentially increasing the risk of not providing clients with individualized advice (as is required to rely on Rule 3a-4) or acting in their clients' best interests." The Staff also described as an issue the practice of providing robo-advisor clients "with limited or no access to advisory personnel knowledgeable about the account and its management."[17] As we discuss below, the Staff's seemingly strict reading of the "non-exclusive" safe harbor of Rule 3a-4 in the context of DIA, can have counterproductive effects.

Reasonable Restrictions

A formalistic application of the reasonable restriction requirement impedes the purpose and strengths of the robo-advisory model, particularly scalability, replicability, consistency and the resulting economies. As a result, robo-advisers can find it difficult to implement this requirement in a manner that serves the interests of participants. Consider the statements in the Robo Risk Alert implying that the Staff believes that requiring a client to select a different model portfolio is not consistent with Rule 3a-4. These Staff statements are not supported by the plain text of the rule and do not reflect the reality of these programs, which is that scalability and economies are achieved through a set menu of models, often comprised of funds and/or exchange-traded funds (ETFs). As such, if a client's requested restriction would impose material additional programming and managerial costs on the model portfolio program and could impede the scalability of the program, the restriction would not be reasonable and thus need not be accepted.

A principles-based approach to the "reasonable restrictions" requirement would be consistent with the plain language of the Rule and allow the market for these programs to develop in a way that leverages the advantages of DIA while mitigating risks and improving investor experience. Similarly, it should be reasonable to treat Rule 3a-4 as the *non-exclusive* safe harbor that the SEC stated it to be: Compliance with the conditions of the rule that remain relevant in the context of electronic investment advice, plus compliance in spirit if not in letter with other conditions (in particular, "reasonable restrictions"), should still be sufficient to establish that a robo-adviser's program is not a virtual investment company.

For these reasons, it should be reasonable to consider the impact of a potential restriction on the scalability and efficiencies of the robo-adviser model when determining whether that restriction (or means of addressing it) is reasonable. Similarly, it should be reasonable for the adviser to require a client to select a different model portfolio if the client's requested restriction would impose material additional programming and/or managerial costs on its model portfolio program. While we believe that the SEC can and should as a matter of policy provide clarity and expressly adopt such an interpretation, we also believe that it should be reasonable for robo-advisers to take these positions even in the absence of such guidance.

More fundamentally, the SEC should consider eliminating the reasonable restriction requirement from Rule 3a-4 for all programs. Requiring an adviser or sponsor to accept restrictions is not necessary to provide sufficiently individualized treatment, and it is unwarranted to apply the full panoply of 1940 Act regulation to separate accounts that are managed similarly when each is suitable for the relevant program participant and each participant retains the indicia of individual ownership of the assets in its account.

Availability of Manager Personnel for Consultation

The condition of Rule 3a-4 that a program sponsor make reasonably available to clients for consultation personnel of the manager who are knowledgeable about the clients' accounts also works against the scalability and economics of the robo-adviser model. As noted above, the Robo Risk Alert has made clear that the Staff is checking to see whether robo-advisers are providing and not limiting such access. However, robo-advisers would face higher burdens and costs in providing access to human portfolio managers whom it might not otherwise have hired, requiring human interaction ignores that there are alternate means of communication, some of which might be more timely, and preferred by clients who seek robo-advisor programs.

It should be reasonable to interpret Rule 3a-4 as permitting this requirement to be met through online communications of the same type that a robo-adviser uses to serve the client in its program. For example, if the disclosures to the client reasonably lead to the expectation that they are participating in a purely automated program, then it is reasonable for the client to have explanatory interactions with online materials (such as videos and FAQs) and chatbots. While many advisory clients want a hybrid robo/human experience and pay additional fees for it, others do not care to interact with a human and do not wish to pay additional fees for a service that is not desired; the Staff's expectation here essentially forces the adviser to give the client a hybrid experience, potentially without paying for it or by charging more than the client wants to pay. The Staff's expectation also does not account for the variety in DIA programs. For example, the adviser might rely on a third-party platform/custodian to provide certain types of communications to the client.

Amending the rule to instead permit online and other forms of automated interaction and/or the consultation to be provided by others associated with the program would balance innovation with investor protection. If the SEC is not willing to amend the rule, it would still be reasonable for the Staff or an adviser to view the rule's condition that "personnel of the manager . . . are reasonably available to the client for consultation" as including online materials/interfaces or allowing for flexibility for communications to be handled by the sponsor or another person connected to the program in certain circumstances. Moreover, since Rule 3a-4 was intended by the SEC as a *non-exclusive* safe harbor, compliance with the other conditions of the rule, plus compliance in spirit if not in letter with this condition, should still be sufficient to establish that the robo-adviser's program is not a virtual investment company.

DIA, the Fiduciary Duty of Care and the Treatment of Errors

The Advisers Act does not contain any specific provisions defining a "trade error" or "investment error" or addressing an investment adviser's responsibility for such errors, and the SEC has not formally expressed a position on such errors.[18] Nonetheless, the SEC Staff has interpreted an investment adviser's fiduciary duties under federal law to mean that, assuming the adviser has violated its standard of care and, even more important, assuming an actual "error" has occurred, the adviser is responsible for resulting losses.[19] While SEC Staff practice can vary, the Staff often applies a negligence standard to trade errors and other errors made by investment advisers in implementing investment advice, based on their fiduciary duty of care.[20]

Because of the inherent difficulties in knowing another person's interior thoughts, this duty has historically applied not to investment decisions themselves, but rather to their implementation. For example, a trade error resulting from executing trades different from those ordered by the portfolio manager can be a breach of fiduciary duty; however, a bad investment decision or risk miscalculation by that same portfolio manager is generally and practically not treated as a breach of the duty of care for traditional advisers.[21] In contrast, in the context of DIA, errors in coding that result in a bad investment decision or a risk miscalculation equivalent to that which might traditionally be made by a human portfolio manager have resulted in enforcement action founded on a breach of the duty of care. This differential treatment seems to be a product of the fact that coded processes create a record, whereas interior, mental processes do not.

This phenomenon is illustrated by an SEC enforcement action against AXA Rosenberg, in which the SEC charged that coding errors that produced unexpected investment results breached the duty of care and involved governance and procedural failures.[22] Specifically, the *AXA Rosenberg* case centered on an alleged scaling error that underweighted a risk management algorithm's effect on portfolio construction, allegedly leading to a riskier or more volatile portfolio than was intended. It was possible for the SEC to view the error as material and disclosable only because the code itself was recorded; the SEC would not be able to perceive or regulate a similar human error, for example, one where a portfolio manager simply underestimated in his or her head the degree of risk in the market and the portfolio.

The *AXA Rosenberg* case is representative of a larger pattern in SEC enforcement actions involving coding errors. The SEC has brought a number of actions alleging that coding errors resulted in violations of regulatory provisions (other than the fiduciary duty of care) and do not involve coding errors in the investment process. These cases are analogous in that they involve the SEC applying a negligence-based framework to coding errors related to regulated activity (in a range of contexts) of investment advisers and other regulated firms.[23] They also demonstrate a similar SEC posture toward such errors: the fact that code was recorded made the error knowable, discoverable and addressable in a way that human errors would not be. In each of these cases, an SEC enforcement action would have been unlikely if the underlying conduct was centered on human error.

Notably, ignoring red flags has been a common allegation in cases centered on coding errors, typically as follows: personnel at the firm allegedly were aware of the relevant coding issues but chose not to act and/or not to disclose the error.[24] However, the alleged errors only became red flags, that is, knowable issues that could be subjects of governance processes and institutional scrutiny, because they were recorded in code. A similar human error, which could involve a failure in highly complex, human mental processes that are generally untraceable, would almost certainly be revealed (if at all) only with hindsight based on the result of the decision, and it almost certainly would not be traceable to a particular mistake in either the information considered or the portfolio manager's specific mental processes. Such human errors, though analogous to a coding failure, are treated as a misjudgment of the type that is routine for portfolio managers, more properly the subject of a performance review than an investigation or compliance inquiry with legal and regulatory implications.

Unfortunately, the SEC's enforcement actions in this area have created confusion and uncertainty. Unintuitively, they create a double standard in that it appears that conduct that would not result in enforcement if performed by a human could be subject to an enforcement action if captured in code. Moreover, many advisers have already developed internal governance, controls and processes to address the risks created by coding errors. Such procedures can include governance mechanisms and bodies; controls and checks related to the design of investment models; protocols and practices for coordinating, programming, checking and debugging code; data review and integrity; procedures for the escalation of issues; and post-implementation back-testing, monitoring, correction and improvement of coding flaws and errors.[25] Even the best in class personnel, technology and procedures cannot prevent all errors, but such procedures allow for errors to be promptly discovered and appropriately handled.

Rather than looking to whether there is documentation of a coding error, the SEC could instead focus on whether the adviser's procedures for managing the risk of coding errors are reasonable. For example, the SEC could bring clarity and balance to the duty of care as it relates to DIA by stating that if the adviser using DIA has reasonable coding controls and processes, portfolio management coding errors are presumptively no more breaches of the duty of care or material disclosure matters than commensurate errors of human judgment.

Ultimately, each adviser is responsible for designing and implementing controls and processes that are reasonable in relation to its business. Absent clear guidance from the SEC, one possible, balanced but conservative approach for investment advisers using DIA techniques could be to adopt portfolio management policies and procedures that (1) seek to implement internal quality controls and measures reasonably designed to identify, prevent and mitigate, to the extent practicable, errors in PM-related coding; (2) provide for appropriate review and escalation of coding errors once discovered; (3) provide standards and processes for assessing the materiality of such coding errors; and (4) provide guidance and processes for when reimbursing or disclosing such errors to clients is appropriate.[26] These would not be compliance policies or procedures, to avoid converting what should properly be understood as portfolio management errors into securities law violations. However, to meet its obligations under the compliance rules, the adviser could also implement compliance policies and procedures in which the compliance department monitors, reviews and/or participates in these portfolio management procedures but does not take the lead. (For more on this distinction, see Compliance Procedures Addressing DIA below.)

Artificial Intelligence and the Duty of Care

These issues are presented in different form for the adviser that uses AI/ML in formulating investment advice. The differentiating factors derive from what have come to be called the "AI control problem," the "AI explainability problem" and the "AI data/input problem":[27]

1. The "AI control problem" is the risk that AI systems will program themselves in ways outside of the control, expectations or objectives of their human creators. A corollary problem is that an AI system that is designed to optimize one objective may impede or harm other, unspecified objectives of its human creators.
2. The "AI explainability problem" is the related issue that AI/ML systems are complex, black box models, and the mechanism by which they reach a result are often or generally not understandable or explainable to humans. These mechanisms cannot be understood or explained as "reasoning" but rather as extremely powerful pattern recognition, often at levels far beyond what humans are capable of. A corollary problem is that decisions that are not understandable to humans may lack legitimacy and trustworthiness.
3. The "AI data/input problem" derives from the fact that most machine/deep learning systems currently are neural networks that learn to recognize patterns from being inputted massively large data sets. The patterns they recognize are thus a function of the data that is inputted, and thus a data set that is high quality and free of unknown biases is key to an AI system effectively and appropriately achieving its objectives.

In response to these three problems, quality controls around AI/ML have tended to focus on the inputs (data) to models and outputs from models (decisions). Anomalous outputs (as determined by human monitors) lead to re-examining the inputs and the design parameters for issues and then trying to correct or adjust them.

AI/ML systems have not yet become prevalent among investment advisers but, as it seems likely that they will, these three AI problems could generate distinct variations on the fiduciary duty of care issues discussed above. In particular, it could be more difficult for advisers using AI/ML to demonstrate to, and win the trust of, regulators and clients that investment-related errors are not negligent because they derived from a reasonable investment process.

To the extent that investment decisions are made by DIA using AI/ML rather than by a human portfolio manager, the adviser would not be able to reveal how the model reached its decision in the same way that traditional advisers can make human portfolio managers available to the SEC to explain their reasoning and their sources of information, and they would not be able to point to rule-based algorithms or code intended to fulfill the same functions.

In addition, it might not be detectable to the adviser or the SEC Staff if an AI/ML model does not reflect and effect the factors that the adviser considers to be important. Regulators are therefore likely to focus more on the adviser's controls around inputs and after-the-fact monitoring and testing procedures, which will put even more stress on these processes, with the regulatory and governance consequences of data issues and process mistakes being magnified. This dynamic could lead to undue pressure on the compliance team, who should not be expected to be sophisticated programmers. Thus, in this context, we believe that the proper role of the compliance team is to assist in designing a control environment and the monitoring thereof.

The DIA community and the SEC have yet to work through these questions in detail but, as AI/ML becomes more prevalent in investment advisers' processes over the next several years, there is little question that they will need to do so. In the meantime, there is some regulatory guidance (which still is incomplete and high-level) in an IOSCO report from September 2021.[28] Translating its recommendations (which are directed to national regulators) to principles and policies for advisers, one can derive one possible framework for AI/ML policies and procedures, as follows:

1. Designate senior managers responsible and accountable for the oversight of the development, testing, deployment, monitoring and controls of AI/ML.
2. Test and monitor AI/ML techniques to validate their outputs on an initial (pre-implementation) and regular basis, including how they behave in stressed market conditions and whether they comply with regulatory expectations.
3. Assure that the IA has personnel with sufficient skills, expertise and experience to develop, test, deploy, monitor and implement controls for the AI/ML techniques that the IA uses.
4. Implement appropriate controls to assure that the data that is input into AI/ML systems is of sufficient quality, minimizes inappropriate biases and is sufficiently broad for a well-founded application of AI/ML.
5. Monitor and oversee the conduct and performance of third-parties on which the IA relies in using AI/ML, including data providers.
6. Disclose the IA's reliance on AI/ML techniques and related risks.

As discussed below, it should be reasonable to treat policies and procedures established under this (or a similar) framework as portfolio management procedures and not compliance procedures (with the exception of disclosure policies and procedures). An adviser could also implement compliance policies and procedures in which the compliance department monitors, reviews and/or participates in these portfolio management procedures but does not take the lead.

Compliance Procedures Addressing DIA

In statements in the Robo Guidance and the Robo Risk Alert, the SEC Staff appears to have reinforced the DIA double standard by implying that advisers should have *compliance* policies, procedures and testing regimes to prevent coding and other DIA-related errors. In the Robo Guidance, the Staff suggested that robo-advisers should have policies and procedures "in addition to" procedures that address issues relevant to traditional investment advisers, and that such policies and procedures could address such areas as (among others): (1) "the development, testing, and backtesting of the algorithmic code and the post-implementation monitoring of its performance;" and (2) whether the questionnaire is eliciting sufficient information to allow the robo-adviser to conclude that its advice is and remains suitable. More recently, in the Robo Risk Alert, while the Staff recognized a "wide range" of practices, the Staff took issue with policies and procedures that were not "specific" to an adviser's use of a platform and/or other digital tools in that they did not consider whether "algorithms were performing as intended."

Given these statements, it is possible that the SEC and the Staff could consider errors and other issues in DIA code to be violations of the adviser's compliance policies and procedures (or evidence that such procedures are not reasonably designed and implemented) and thus of Rule 206(4)-7. DIA errors could thereby be potential securities law violations in a way that human errors would not.

It is reasonable for the SEC and its Staff to expect that investment advisers, as fiduciaries, have reasonable processes and practices to avoid errors in investment-related code and systems. However, treating a digital investment adviser's coding processes, testing and quality controls as compliance procedures, when human advisers' comparable practices are generally considered to be part of the investment process and supervision rather than compliance functions, could create an unintended and undesirable double standard. For advisers that use DIA to service clients, these processes are better understood, like their human analogs, as governance and supervisory processes, and they are better overseen and tested through processes separate from the adviser's compliance program—with those processes being subject to compliance review to assure that applicable legal requirements are met. Compounding this issue, if these processes were treated as part of, rather than as subject to, the compliance function, the SEC and front-line compliance professionals will face the same practical difficulty: How to effectively design, implement, monitor and test highly technical, code-based systems within the scope of a regulatory compliance program adopted under rules that were conceived in the context of traditional, human-based services. Respecting the distinction between coding and compliance will empower compliance professionals by centering their roles on their core areas of technical skill and authority.[29]

While the Risk Alert shows promising signs that the SEC and its Staff are developing an appreciation for these issues, some of the Staff's expectations (for example, assessing whether digital advisory programs are meeting clients' best interests as part of the compliance function) continue to treat investment functions as compliance matters and assume a degree of coordination among compliance, investment management and software development personnel that is not yet practicable. Moreover, they might be too rigid and inflexible to conform to the diversity of the different types of advisers and advisory models.

It should be reasonable for investment advisers using DIA to treat the governance, supervision and testing processes for investment-related code as processes that are separate and distinct from the adviser's formal compliance program, just as investment advisers relying on human portfolio managers do. Under similar reasoning, advisers using DIA should still implement a compliance program reasonably designed to assure compliance with portfolio management-related provisions of the securities laws, such as the 1940 Act diversification and concentration provisions and the Advisers Act trade allocation principles.

Unfortunately, the Staff statements noted above have introduced uncertainty for DIA advisers and legal and compliance professionals who oversee their compliance programs. Under a balanced but conservative approach, to address the use of DIA either to deliver services or as part of the investment function, an adviser could adopt a framework that addresses key points in building and maintaining a control environment related to the investment function, with the compliance function in an oversight and monitoring role. While compliance would not take the lead in performing these monitoring functions, it would remain part of the team that considers appropriate policies, be kept apprised of and monitor the control environment and assist in escalating and resolving errors.

Conclusion

The SEC's and Staff's recent statements are unlikely to be the final words on these topics. Continued development of technology and industry practices, and engagement between the industry and the Staff, necessarily will lead the SEC's and the Staff's views to evolve. There is promise and peril in the path forward. The applicable fiduciary and regulatory concepts are formulated as broad principles. Their malleability could enable the SEC to apply them overbroadly, but also could permit the SEC and the industry to adapt them to foster the continued development of DIA to take advantage of its distinct features.

The SEC's statutory mission includes both investor protection and maintaining fair, orderly and efficient markets, in part through fostering innovation and financial technology. The SEC has tended to see these two goals as in tension with each other in the DIA context and frequently has determined to broadly and strictly apply investor protection principles. However, the SEC and the industry can advance both goals if DIA is conceptualized not as human advice reduced to code but rather a different way to formulate and deliver investment advice, with its own characteristics requiring a different regulatory balance.

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NOTES

1 Robo-Advisers, SEC IM Guidance Update No. 2017-02, SEC Division of Investment Management (Feb. 2017) (Robo Guidance), available at *https://www.sec.gov/investment/im-guidance-2017-02.pdf*.

2 Observations from Examinations of Advisers that Provide Electronic Investment Advice, SEC Risk Alert, SEC Division of Examinations (Nov. 9, 2021) (Robo Risk Alert), available at *https://www.sec.gov/exams/announcement/risk-alert-electronic-investment-advice*. The authors summarize and analyze the Robo Risk Alert in a recent *Investment Lawyer* article that discusses some of the themes of this article: Mark. D. Perlow *et. al.*, "SEC EXAMS Risk Alert Regarding Electronic Investment Advice: Implications of Evolving Policies and Practices," *The Investment Lawyer*, Vol. 29, No. 7 (July 2022) (Dechert EIA Article).

3 *In re SoFi Wealth, LLC*, SEC Order, SEC Rel. No. IA-5826 (Aug. 18, 2021), available at *https://www.sec.gov/litigation/admin/2021/ia-5826.pdf*; *In re Wahed Invest LLC,* SEC Order, SEC Rel. No. IA-5959 (Feb. 10, 2022), available at *https://www.sec.gov/litigation/admin/2022/ia-5959.pdf; In re Charles Schwab & Co., Inc., Charles Schwab Investment Advisory, Inc. and Schwab Wealth Investment Advisory, Inc.*, SEC Order, SEC Rel. Nos. 34-95087 and IA-6047 (June 13, 2022), available at *https://www.sec.gov/litigation/admin/2022/34-95087.pdf*. These cases present different issues than the themes we address in this article.

4 SEC Requests Information and Comment on Broker-Dealer and Investment Adviser Digital Engagement Practices, Related Tools and Methods, and Regulatory Considerations and Potential Approaches; Information and Comments on Investment Adviser Use of Technology, SEC Press Release (Aug. 27, 2021), available at *https://www.sec.gov/news/press-release/2021-167*. Request for Information and Comments on Broker-Dealer and Investment Adviser Digital Engagement Practices, Related Tools and Methods, and Regulatory Considerations and Potential Approaches; *Information and Comments on Investment Adviser Use of Technology to Develop and Provide Investment Advice*, SEC Request for Information and Comment, SEC. Rel Nos. 34-92766 and IA-5833 (Aug. 27, 2021) (Digital Practices RFI), available at *https://www.sec.gov/rules/other/2021/34-92766.pdf*.

5 The SEC has acknowledged the potential benefits of DIA techniques, including lower costs to clients, user-friendly design features, greater accessibility to a larger client base, and lower susceptibility to behavioral biases and mistakes. Digital Practices RFI at 56-57. Indeed, as early as 1997, in the release adopting Rule 3a-4, the SEC recognized the potential benefits of scale that could be provided by "computer technology [which] may allow portfolio managers to render individualized treatment to relatively small accounts on a cost-effective basis" and cited these potential economies in supporting its determination to exclude from the rule a proposed requirement around minimum account size. *Status of Investment Advisory Programs Under the Investment Company Act of 1940*, SEC Final Rule, SEC Rel. Nos. IC-22579 and IA-1623 (Mar.

24, 1997), available at *https://www.sec.gov/rules/final/ic-22579.txt*. (Rule 3a-4 Adopting Release).

6 Mark D. Perlow *et. al.*, *supra* n.2.

7 Mark D. Perlow *et. al.*, *supra* n.2.

8 *Commission Interpretation Regarding Standard of Conduct for Investment Advisers*, SEC Interpretive Release, SEC Rel. No. IA-5248 (June 5, 2019) (Fiduciary Interpretation), available at *https://www.sec.gov/rules/interp/2019/ia-5248.pdf*.

9 *Id*. at 13-14. The release then explains that updating an investment profile "turns on what is reasonable under the circumstances", and "would not be needed with one-time investment advice." *Id*.at n.37.

10 *Id.* at n.27 (noting the interpretation "applies to automated advisers, which are often colloquially referred to as 'robo-advisers.' Automated advisers, like all SEC-registered investment advisers, are subject to all of the requirements of the Advisers Act, including the requirement that they provide advice consistent with the fiduciary duty they owe to their clients").

11 Similarly, the SEC in the Digital Practices RFI stated: "Increased reliance on automated investment advice may result in too much importance being placed on clients' responses to account opening questionnaires and other forms of automated client evaluation, which may not permit nuanced answers or determine when additional clarification or information could be necessary. This reliance may also result in a failure to detect changes in clients' circumstances that may warrant a change in investment strategy." Digital Practices RFI at 51.

12 Fiduciary Interpretation at 9-10, 13 ("[h]ow an adviser develops a reasonable understanding will vary based on the specific facts and circumstances, including the nature of the client, the scope of the adviser-client relationship, and the nature and complexity of the anticipated investment advice").

13 Fiduciary Interpretation at 9-10 ("the specific obligations that flow from the adviser's fiduciary duty depend upon what functions the adviser, as agent, has agreed to assume for the client, its principal").

14 *See*, *e.g.*, Rule 3a-4 Adopting Release at 4-7.

15 1940 Act Rule 3a-4. For more analysis of Rule 3a-4, *see* Dechert EIA Article.

16 We note that the Rule 3a-4 Adopting Release cited certain Staff positions regarding "computerized investment models" and reiterated the SEC's view that a manager's selection of "substantially the same securities in accordance with a . . . model . . . does not necessarily indicate that clients . . . have not received individualized treatment for purposes of the rule."

17 For more detail and analysis of the Staff's comments in this area, *see* Mark D. Perlow et al, *supra* n.2.

18 Robert W. Helm and Megan C. Johnson, "Dealing with Investment Errors," *The Investment Lawyer*, Vol. 20, No. 3 (March 2013).

19 Charles Lerner, SEC No-Action Letter (pub. avail Oct. 25, 1988), available at *http://www.brightlinesolutions.com/files/Plaze/NoAction%20Lerner%201988.pdf*.

20 *See* Robert E. Plaze, "Regulation of Investment Advisers by the U.S. Securities and Exchange Commission," Proskauer Rose LLP (June 2018) at 54-55, available at *https://www.proskauer.com/report/regulation-of-investment-advisers-by-the-us-securities-and-exchange-commission-june-2018*.

21 The discussion of the duty of care in the Fiduciary Interpretation focused on suitability, especially with regard to conflicted and complex products, and on best execution, but not on errors.

22 *In re AXA Rosenberg Group LLC, AXA Rosenberg Investment Management LLC, and Barr Rosenberg Research Center LLC*, SEC Order, SEC Rel. Nos. 33-9181, IA-3149 and IC-29574 (Feb. 3, 2011) (Axa Rosenberg), available at *https://www.sec.gov/litigation/admin/2011/33-9181.pdf*.

23 *In re Credit Suisse Securities (USA) LLC*, SEC Order, SEC Rel. Nos. 33-10565 an 34-84314 (Sept. 28, 2018); *In re Moody's Investors Service, Inc.*, SEC Order, SEC Rel. No. 34-83965 (Aug. 28, 2018), available at *https://www.sec.gov/litigation/admin/2018/34-83965.pdf*; *In re Prosper Funding LLC*, SEC Order, SEC Rel. No. 33-10630 (April 19, 2019) (Prosper), available at *https://www.sec.gov/litigation/admin/2019/33-10630.*

pdf. In each of these cases, the SEC interpreted and applied a reasonableness or negligence standard of care, a standard similar to that of the Advisers Act fiduciary duty of care. In the Credit Suisse and Prosper cases, the SEC brought negligence-based charges, and in the Moody's case, charges based on alleged violations of the credit rating agency internal control rules, which have an implied reasonability standard. Thus, these cases are analogous in that the SEC is applying a negligence-based framework to coding errors related to regulated activity (in a range of contexts) of investment advisers and other regulated firms.

24 *See*, *e.g.*, AXA Rosenberg, *supra* n.22, Prosper, *supra* n.23.

25 *See*, *e.g.*, Pittman, Edward L., "Quantitative Investment Models, Errors, and the Federal Securities Laws," *NYU J. of Law and Business*, Vol. 13 No. 3 (Spring 2017) at 663-676. Mr. Pittman's article includes a careful and detailed examination of quantitative managers' coding practices.

26 *See* Robo Risk Alert (discussing the Staff's recommendations related to testing of algorithms, which found that advisers employ a broad range of practices, and that advisers that performed algorithm-related testing at least quarterly, noting that it had observed certain commonly employed practices, including: testing performed by algorithm designers/software developers that included additional teams (*e.g.*, portfolio management, compliance either working independently or relying on other groups, internal audit, information technology); exception reporting or other reporting mechanisms that combined "high-level and account-specific results" that "often" were reviewed by algorithm designers/software developers; and compliance issues where "many" firms also included reviews by portfolio management or information technology).

27 *See*, *e.g.*, The use of artificial intelligence and machine learning by market intermediaries and asset managers, Final Report FR 06/2021, International Organization of Securities Commissions (IOSCO) (Sept. 2021) (IOSCO AI Report), available at *https://www.iosco.org/library/pubdocs/pdf/IOSCOPD684.pdf*; Request for Information and Comment on Financial Institutions' Use of Artificial Intelligence, including Machine Learning, Request for Information and Comment; Board of Governors of the Federal Reserve System, Bureau of Consumer Financial Protection, Federal Deposit Insurance Corporation, National Credit Union Administration, and Office of the Comptroller of the Currency, Docket ID OCC-2020-0049, Docket No. OP-1743, Docket No. CFPB-2021-0004, Docket No. NCUA-2021-0023 (Feb. 25, 2021), available at *https://www.govinfo.gov/content/pkg/FR-2021-06607.pdf*; Korinek, Anton, "Why we need a new agency to regulate advanced artificial intelligence: Lessons on AI Control from the Facebook Files," *Brookings Institution* (Dec. 8, 2021), available at *https://www.brookings.edu/research/why-we-need-a-new-agency-to-regulate-advanced-artificial-intelligence-lessons-on-ai-control-from-the-facebook-files/*; Arrieta, Alejandro Barredo, *et. al.*, "Explainable Artificial Intelligence (XAI): Concepts, taxonomies, opportunities and challenges toward responsible AI," *Information Fusion*, Vol. 58, 82-115 (June 2020).

28 *See* IOSCO AI Report at 17-21.

29 *See* OCIE Observations: Investment Adviser Compliance Programs, Risk Alert, SEC Office of Compliance Inspections and Examinations (Nov. 19, 2020), available at *https://www.sec.gov/files/Risk%20Alert%20IA%20Compliance%20Programs_0.pdf*; The Role of the CCO—Empowered, Senior and With Authority, Remarks of Peter Driscoll, Director of OCIE, National Investment Adviser/Investment Company Compliance Outreach Program (Nov. 19, 2020) (highlighting the importance of empowering CCOs, noting "[a]s the Commission stated, CCOs should be empowered, senior and have authority, but CCOs should not and cannot do it alone and should not and cannot be responsible for all compliance failures"), available at *https://www.sec.gov/news/speech/driscoll-role-cco-2020-11-19*.

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