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### The Regulation of Digital Investment Advice

Christine Lazaro

*St. John's University School of Law*

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# The Regulation of Digital Investment Advice

Christine Lazaro

## I. Introduction

Studies have shown that America is facing a “retirement savings crisis.”<sup>1</sup> As employers move away from defined benefit plans towards defined contribution plans, Americans are facing greater responsibility for managing their retirement savings. Many facing retirement do not have any savings, and of those that do, most do not have enough to support their standard of living throughout retirement.<sup>2</sup> According to one study, as of 2015, 57% of workers have less than \$25,000 in total household savings with 28% having less than \$1,000 in savings.<sup>3</sup>

It is also difficult for investors with a small amount saved to obtain investment advice because of the high account minimums for many financial advisors.<sup>4</sup> Studies have shown that only 20% of “mass affluent” Americans, those with \$250,000 to \$1 million in savings, utilize a financial advisor.<sup>5</sup> Additionally, some may find online advice to be more attractive and less intimidating, especially for younger investors.<sup>6</sup> This will become more important over the next several decades, as nearly \$30 trillion in assets is expected to transfer from baby boomers to more tech-savvy millennials.<sup>7</sup>

Digital investment advice, or robo-advice, is a growing trend in the financial services industry. It is expected that by 2022, robo-advisers will manage over \$4 trillion in assets.<sup>8</sup> In early 2018, Vanguard’s digital advice platform crossed the \$100 billion AUM marker.<sup>9</sup> At that time, Schwab’s digital advice services managed \$25 billion in assets, and Betterment, the largest independent robo-adviser, managed over \$10 billion in assets.<sup>10</sup>

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<sup>1</sup> See Jennifer L. Klass & Eric Perelman, *The Evolution of Advice: Digital Investment Advisers as Fiduciaries* 6, MORGAN, LEWIS & BROCKIUS LLP (Nov.-Dec. 2016), <https://www.morganlewis.com/~media/files/publication/outside%20publication/article/klass-perelman-evolution-of-advice-novdec2016.ashx>.

<sup>2</sup> *Id.*

<sup>3</sup> See BLACKROCK, *Digital Investment Advice: Robo Advisors Come of Age 2* (Sept. 2016), <https://www.blackrock.com/corporate/literature/whitepaper/viewpoint-digital-investment-advice-september-2016.pdf>.

<sup>4</sup> See Klass, *supra* n. 1.

<sup>5</sup> See EY, *Advice Goes Virtual* 8 (April 2015), [https://www.ey.com/Publication/vwLUAssets/Advice\\_goes\\_virtual\\_in\\_asset\\_management/\\$FILE/ey-digital-investment-services.pdf](https://www.ey.com/Publication/vwLUAssets/Advice_goes_virtual_in_asset_management/$FILE/ey-digital-investment-services.pdf).

<sup>6</sup> See BLACKROCK, *supra* n. 3, 7.

<sup>7</sup> See HEIDRICK & STRUGGLES, *Future of Digital Investment Advice* 4 (December 2016), [http://heidrick.com/~media/future\\_financial\\_advice/Future\\_of\\_digital\\_financial\\_advice.ashx](http://heidrick.com/~media/future_financial_advice/Future_of_digital_financial_advice.ashx).

<sup>8</sup> See Suleman Din & Sean Allocca, *Vanguard’s digital advice platform crosses \$100B*, FIN. PLANNING (Jan. 5, 2018), <https://www.financial-planning.com/news/vanguard-digital-advice-platform-hits-100-billion>.

<sup>9</sup> *Id.*

<sup>10</sup> *Id.*

According to EY, the average account size at robo-advisers is between \$20,000 and \$100,000, demonstrating capture of millennials and the lower segments of the market.<sup>11</sup> Betterment reports that, while the average age of its investors is around 35, 30% of its business comes from people over 50.<sup>12</sup>

Robo-advice has become an important tool in the advice toolbox. But what is robo-advice? How is it regulated? This article will address these two issues.

## II. What is Robo-Advice?

Robo-advice covers a wide range of services, however all involve advice derived from algorithms.<sup>13</sup> Robo-advice tends to differ with respect to three important aspects: “(1) end user of the digital advice; (2) range of investment advice and options provided; and (3) level of human investment adviser interaction.”<sup>14</sup>

With respect to the end user, it may be a financial advisor, or an investor, working alone or with a financial advisor.<sup>15</sup> Robo-advisers may integrate the advice platform with human investment advisers; offer digital advice with human support; or offer wholly digital advice.<sup>16</sup> In terms of the services offered, robo-advisers will provide personalized financial advice based on information provided by the customer.<sup>17</sup> However, many robo-advisers will limit recommendations to exchange-traded funds and mutual funds.<sup>18</sup> Last, the level of human interaction may vary by adviser. Even with purely digital advisers, humans must be involved in the design of the platforms and algorithms, as well as compliance to ensure the adviser complies with the relevant rules and regulations.<sup>19</sup> Some advisers also provide access to human investment advisers, but may limit the method and frequency of the contact.<sup>20</sup>

Robo-advisers often gather information about their clients through the use of on-line questionnaires. These questionnaires can vary in terms of the length and the types of information gathered.<sup>21</sup> Some ask for age, income, and financial goals; others seek additional information including investment horizon, risk tolerance, and expenses.<sup>22</sup> The SEC observed that sometimes the questionnaires do not offer the investor the opportunity to provide additional information; and some do not follow up to clarify

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<sup>11</sup> See EY, *supra* n. 5, 2.

<sup>12</sup> See Nicole G. Iannarone, *Computer as Confidant: Digital Investment Advice and the Fiduciary Standard*, 93 CHI.-KENT L. REV. 141, 144 (2018).

<sup>13</sup> *Id.*, 141.

<sup>14</sup> *Id.*, 149.

<sup>15</sup> *Id.*

<sup>16</sup> *Id.*, 150.

<sup>17</sup> *Id.*, 151.

<sup>18</sup> *Id.*

<sup>19</sup> *Id.*, 153.

<sup>20</sup> *Id.*

<sup>21</sup> See DIV. OF INV. MGMT., SEC, GUIDANCE UPDATE: NO. 2017-02 6 (2017) (“SEC Guidance”), <https://www.sec.gov/investment/im-guidance-2017-02.pdf>.

<sup>22</sup> *Id.*

answers or investigate seemingly inconsistent answers.<sup>23</sup> These issues represent a few of the challenges facing wholly digital robo-advisers.

### III. The Regulation of Robo-Advisers

Robo-advisers generally rely on Rule 3a-4 under the Investment Company Act of 1940.<sup>24</sup> This rule provides advisers that manage “discretionary investment advisory programs” with a safe harbor from being classified as an “investment company.”<sup>25</sup> The adviser must meet the following requirements, among others:

(1) each client's account in the program is managed on the basis of the client's financial situation and investment objectives and in accordance with any reasonable restrictions imposed by the client on the management of the account;

...

(2)(iv) the sponsor and personnel of the manager of the client's account who are knowledgeable about the account and its management are reasonably available to the client for consultation.<sup>26</sup>

Some critics argue that robo-advisers may not satisfy these requirements.<sup>27</sup> However, with respect to the provision of individualized advice, it is likely many robo-advisers are able to satisfy this requirement. Many robo-advisers do not require investors to determine their own risk tolerance and investment preferences – the robo-adviser will make recommendations based on the information provided by the investor in a questionnaire. Many robo-advisers will allow further customization by the investor. For example, “[d]igital advisers offer many features and tools that a client or adviser may use to personalize portfolios, including financial planning tools to inform portfolio selection; portfolio allocations that clients may customize to their desired asset class mix; the ability to retain legacy positions; sophisticated, technology-driven portfolio rebalancing based on market changes, cash in-flows and out-flows, and risk parameters; and asset placement and tax-loss harvesting services.”<sup>28</sup> As a result, the advice is personalized, and the client has the ability to further customize or restrict the advice.

With respect to the availability of robo-advisers, many are more available than human advisers. Rule 3a-4 does not specify the nature of the availability, making it possible for robo-advisers to meet this requirement through the use of the digital interface. For example, “[d]igital advisers typically provide their clients with around-the-clock access to a great deal of interactive real-time information about the holdings, performance and attributes of their account...Further, many digital advisers supplement their online

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<sup>23</sup> *Id.*

<sup>24</sup> 17 C.F.R. § 270.3a-4.

<sup>25</sup> *See* Klass, *supra* n. 1, 11.

<sup>26</sup> 17 C.F.R. § 270.3a-4(a)(1) and (a)(2)(iv).

<sup>27</sup> *See* Klass, *supra* n. 1, 11.

<sup>28</sup> *Id.*

offerings with telephone, email and chat features that allow clients to ask more specific questions about the management of their accounts in real time.”<sup>29</sup>

Although robo-advisers may rely on a safe harbor to avoid registration as an investment company, robo-advisers are regulated as investment advisers pursuant to the Investment Advisers Act of 1940 (the “Advisers Act”).<sup>30</sup> Accordingly, robo-advisers are subject to the same rules and regulations governing other registered investment advisers. Under the Advisers Act, an investment adviser is a fiduciary, and as such, the adviser is subject to a duty of care and a duty of loyalty.<sup>31</sup> “The duty of loyalty refers to the obligation to act loyally for the client’s benefit, which requires that the adviser place the client’s interests ahead of its own. The duty of care refers to the obligation to act with the care, competence, and diligence that would normally be exercised by a fiduciary in similar circumstances.”<sup>32</sup>

#### A. SEC Guidance

In 2017, the SEC issued guidance for robo-advisers with respect to three main areas:

1. The substance and presentation of disclosures to clients about the robo-adviser and the investment advisory services it offers;
2. The obligation to obtain information from clients to support the robo-adviser’s duty to provide suitable advice; and
3. The adoption and implementation of effective compliance programs reasonably designed to address particular concerns relevant to providing automated advice.<sup>33</sup>

This section will review each area of focus that the SEC identified.

##### a. Disclosure

Investment advisers have an obligation to make “full and fair disclosure of all material facts to, and to employ reasonable care to avoid misleading, clients.”<sup>34</sup> The SEC suggests that robo-advisers provide an explanation of its business practices to ensure that clients understand how the robo-adviser provides investment advice.<sup>35</sup> Specifically, the SEC suggests that robo-advisers provide the following information:

- A statement that an algorithm is used to manage individual client accounts;
- A description of the algorithmic functions used to manage client accounts (e.g., that the algorithm generates recommended portfolios;

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<sup>29</sup> *Id.*, 11-12.

<sup>30</sup> 15 U.S.C. § 80b-1, et al.

<sup>31</sup> *See* Klass, *supra* n. 1, 7.

<sup>32</sup> *Id.*

<sup>33</sup> SEC Guidance, *supra* n. 21, 2.

<sup>34</sup> *Id.*, 3.

<sup>35</sup> *Id.*

- that individual client accounts are invested and rebalanced by the algorithm);
- A description of the assumptions and limitations of the algorithm used to manage client accounts (e.g., if the algorithm is based on modern portfolio theory, a description of the assumptions behind and the limitations of that theory);
  - A description of the particular risks inherent in the use of an algorithm to manage client accounts (e.g., that the algorithm might rebalance client accounts without regard to market conditions or on a more frequent basis than the client might expect; that the algorithm may not address prolonged changes in market conditions);
  - A description of any circumstances that might cause the robo-adviser to override the algorithm used to manage client accounts (e.g., that the robo-adviser might halt trading or take other temporary defensive measures in stressed market conditions);
  - A description of any involvement by a third party in the development, management, or ownership of the algorithm used to manage client accounts, including an explanation of any conflicts of interest such an arrangement may create (e.g., if the third party offers the algorithm to the robo-adviser at a discount, but the algorithm directs clients into products from which the third party earns a fee);
  - An explanation of any fees the client will be charged directly by the robo-adviser, and of any other costs that the client may bear either directly or indirectly (e.g., fees or expenses clients may pay in connection with the advisory services provided, such as custodian or mutual fund expenses; brokerage and other transaction costs);
  - An explanation of the degree of human involvement in the oversight and management of individual client accounts (e.g., that investment advisory personnel oversee the algorithm but may not monitor each client's account);
  - A description of how the robo-adviser uses the information gathered from a client to generate a recommended portfolio and any limitations (e.g., if a questionnaire is used, that the responses to the questionnaire may be the sole basis for the robo-adviser's advice; if the robo-adviser has access to other client information or accounts, whether, and if so, how, that information is used in generating investment advice); and
  - An explanation of how and when a client should update information he or she has provided to the robo-adviser.<sup>36</sup>

The SEC is also concerned that certain disclosures may have the potential to mislead clients, accordingly, the SEC cautions against implying the following:

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<sup>36</sup> *Id.*, 3-4.

- The robo-adviser is providing a comprehensive financial plan if it is not in fact doing so (e.g., if the robo-adviser does not take into consideration a client’s tax situation or debt obligations, or if the investment advice is only targeted to meet a specific goal—such as paying for a large purchase or college tuition—without regard to the client’s broader financial situation);
- A tax-loss harvesting service also provides comprehensive tax advice; or
- Information other than that collected by the questionnaire (e.g., information concerning other client accounts held with the robo-adviser, its affiliates or third parties; information supplementally submitted by the client) is considered when generating investment recommendations if such information is not in fact considered.<sup>37</sup>

Finally, the SEC offers guidance with respect to the presentation and timing of disclosures. The SEC suggests that robo-advisers consider the following with respect to their disclosures:

- Whether key disclosures are presented prior to the sign-up process so that information necessary to make an informed investment decision is available to clients before they engage, and make any investment with, the robo-adviser;
- Whether key disclosures are specially emphasized (e.g., through design features such as pop-up boxes);
- Whether some disclosures should be accompanied by interactive text (e.g., through design features such as tooltips) or other means to provide additional details to clients who are seeking more information (e.g., through a “Frequently Asked Questions” section); and
- Whether the presentation and formatting of disclosure made available on a mobile platform have been appropriately adapted for that platform.<sup>38</sup>

In summary, a robo-adviser should disclose “the costs clients can incur (including fees), as well as other forms of compensation;” and “relevant technological, operational, and market risks” to its clients.<sup>39</sup>

#### b. Suitability

Investment advisers are obligated to act in their clients’ best interests and to provide only suitable investment advice.<sup>40</sup> As discussed above, robo-advisers rely on questionnaires to gather information from clients, which may pose issues unique to robo-advisers. The SEC suggests that robo-advisers consider the following when

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<sup>37</sup> *Id.*, 5.

<sup>38</sup> *Id.*, 5-6.

<sup>39</sup> Barbara Novick and Bo Lu, *Robo Advisors Come of Age: Part Two*, BLACKROCK (Mar. 6, 2017), <https://medium.com/@blackrock/robo-advisors-come-of-age-part-two-d5fa66b91cad>.

<sup>40</sup> SEC Guidance, *supra* n. 21, 6.

determining whether they have gathered sufficient information with which to make suitable recommendations:

- Whether the questions elicit sufficient information to allow the robo-adviser to conclude that its initial recommendations and ongoing investment advice are suitable and appropriate for that client based on his or her financial situation and investment objectives;
- Whether the questions in the questionnaire are sufficiently clear and/or whether the questionnaire is designed to provide additional clarification or examples to clients when necessary (e.g., through the use of design features, such as tool-tips or popup boxes); and
- Whether steps have been taken to address inconsistent client responses, such as:
  - Incorporating into the questionnaire design features to alert a client when his or her responses appear internally inconsistent and suggest that the client may wish to reconsider such responses; or
  - Implementing systems to automatically flag apparently inconsistent information provided by a client for review or follow-up by the robo-adviser.<sup>41</sup>

The SEC also discussed the ability of clients to modify the recommended investment strategy; however, often the client is not given the opportunity to discuss how such a variance impacts the overall suitability of the resulting portfolio. Accordingly, the SEC suggests that robo-advisers consider “providing commentary as to why it believes particular portfolios may be more appropriate for a given investment objective and risk profile.”<sup>42</sup>

### c. Compliance

Finally, the SEC provided guidance with respect to how a robo-adviser may develop an adequate compliance program. Like human investment advisers, robo-advisers must “adopt, implement, and annually review written policies and procedures that are reasonably designed to prevent violations of the Advisers Act and the rules thereunder, and that take into consideration the nature of the firm’s operations and the risk exposures created by such operations.”<sup>43</sup> In addition to the policies and procedures adopted by traditional investment advisers, the SEC recommends that robo-advisers address the following areas:

- The development, testing, and backtesting of the algorithmic code and the post-implementation monitoring of its performance (e.g., to ensure that the code is adequately tested before, and periodically after, it is

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<sup>41</sup> *Id.*, 6-7.

<sup>42</sup> *Id.*, 7.

<sup>43</sup> *Id.*



- integrated into the robo-advisers' platform; the code performs as represented; and any modifications to the code would not adversely affect client accounts);
- The questionnaire eliciting sufficient information to allow the robo-adviser to conclude that its initial recommendations and ongoing investment advice are suitable and appropriate for that client based on his or her financial situation and investment objectives;
  - The disclosure to clients of changes to the algorithmic code that may materially affect their portfolios;
  - The appropriate oversight of any third party that develops, owns, or manages the algorithmic code or software modules utilized by the robo-adviser;
  - The prevention and detection of, and response to, cybersecurity threats;
  - The use of social and other forms of electronic media in connection with the marketing of advisory services (e.g., websites; Twitter; compensation of bloggers to publicize services; "refer-a-friend" programs); and
  - The protection of client accounts and key advisory systems.<sup>44</sup>

Robo-advisers should consider the unique aspects of their business to ensure they have designed adequate compliance systems.

## B. FINRA Guidance

Similar to the SEC, FINRA has also offered guidance with respect to the governance and supervision of investment recommendations which utilize digital advice tools.<sup>45</sup> FINRA focused on two main aspects of governance and supervision: "1) the algorithms that drive digital investment tools; and 2) the construction of client portfolios, including potential conflicts of interest that may arise in those portfolios."<sup>46</sup>

### a. Algorithms

Algorithms are the core of digital investment advice. FINRA suggests that firms assess "whether the algorithm is consistent with the firm's investment and analytical approaches."<sup>47</sup> As an example, FINRA recognizes that the digital investment advice tool may be premised on Modern Portfolio Theory, and "use a passive, index-based approach to investing based on the risk tolerance of the client, while others incorporate active management of investment portfolios."<sup>48</sup> Accordingly, firms must understand the methodology embedded in the algorithm, including assumptions made, and determine

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<sup>44</sup> *Id.*, 8.

<sup>45</sup> See FINRA, *Report on Digital Investment Advice* (Mar. 2016) ("FINRA Report"), <https://www.finra.org/sites/default/files/digital-investment-advice-report.pdf>.

<sup>46</sup> *Id.*, 3.

<sup>47</sup> *Id.*

<sup>48</sup> *Id.*

whether it is what the firm desires.<sup>49</sup> Specifically, FINRA recommends that firms conduct both initial and on-going reviews of the algorithms:

- Initial reviews
  - Assessing whether the methodology a tool uses, including any related assumptions, is well-suited to the task;
  - Understanding the data inputs that will be used; and
  - Testing the output to assess whether it conforms with a firm's expectations.
- Ongoing reviews
  - Assessing whether the models a tool uses remain appropriate as market and other conditions evolve;
  - Testing the output of the tool on a regular basis to ensure that it is performing as intended; and
  - Identifying individuals who are responsible for supervising the tool.

Failure to adhere to these guidelines may result in an enforcement action. In 2011, the SEC instituted proceedings against AXA Rosenberg Group LLC, AXA Rosenberg Investment Management LLC (ARIM), and Barr Rosenberg Research Center LLC (BRRC).<sup>50</sup> ARIM was an institutional money manager that specialized in quantitative investment strategies; and BRRC developed the code used by the strategies.<sup>51</sup> In 2007, BRRC introduced an update to one of the components of the strategy which contained a material error.<sup>52</sup> However, although BRRC conducted simulations utilizing the new component, the simulations did not detect the error.<sup>53</sup> Although the error was eventually discovered, it took almost a year for the firms to disclose the error to the SEC, and then its clients.<sup>54</sup> The error caused over \$216 million in losses for the affected clients.<sup>55</sup> As a result, the firms were required to make restitution to the affected clients, retain an independent compliance consultant, and undergo periodic compliance reviews.<sup>56</sup> Firms can learn from this action – test the code and be upfront if something goes wrong.

#### b. Constructing Portfolios and Conflicts of Interest

The initial step in constructing a suitable portfolio is to adequately profile the customer. FINRA found that client-facing digital advice tools gathered information through

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<sup>49</sup> *Id.*, 4.

<sup>50</sup> SEC, *In the Matter of AXA Rosenberg Group LLC, AXA Rosenberg Investment Management LLC, and Barr Rosenberg Research Center LLC*, Release Nos. 33-9181; IA-3149; IC-29574, Admin. Proceeding File No. 3-14224, 2011 WL 4527701 (Feb. 3, 2011), <https://www.sec.gov/litigation/admin/2011/33-9181.pdf>.

<sup>51</sup> *Id.*, 2.

<sup>52</sup> *Id.*

<sup>53</sup> *Id.*, 4.

<sup>54</sup> *Id.*, 2-3

<sup>55</sup> *Id.*, 2.

<sup>56</sup> *Id.*, 10-14.

questionnaires containing a few as four and as many as twelve questions.<sup>57</sup> The questions fell into five broad categories, “personal information, financial information, investment objective, time horizon and risk tolerance.”<sup>58</sup> FINRA identified the following concerns regarding whether the digital tool would meet the customer-specific suitability obligation:

- Does the tool seek to obtain all of the required investment profile factors?
- If not, has the firm established a reasonable basis to believe that the particular factor is not necessary?
- How does the tool handle conflicting responses to customer profile questions?
- What are the criteria, assumptions and limitations for determining that a security or investment strategy is suitable for a customer?
- Does the tool favor any particular securities and, if yes, what is the basis for such treatment?
- Does the tool consider concentration levels and, if so, at what levels (e.g., particular securities, class of securities, industry sector)?<sup>59</sup>

Once the profile is obtained, a firm must assess the client’s risk tolerance. Risk tolerance may consist of both risk capacity and risk willingness. FINRA describes the two components as follows:

Risk capacity measures an investor’s ability to take risk or absorb loss. This can be a function of an investor’s time horizon, liquidity needs, investment objectives and financial situation. For example, a 25-year-old customer opening an account for the purpose of retirement likely has a greater risk capacity than a 25-year-old investing to finance graduate school education in three years.

Separately, a customer’s risk willingness measures the customer’s attitude towards risk. For example, a customer who is willing to absorb a potential 20 percent loss over one year in return for a higher upside potential has a higher risk willingness than a customer focused on principal protection. Problems can arise when risk willingness exceeds risk capacity.<sup>60</sup>

Risk tolerance may be self-assessed by the client by, for example, selecting a tolerance from a range of “conservative” to “aggressive.”<sup>61</sup> Other firms utilize scenarios or

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<sup>57</sup> FINRA Report, *supra* n. 45, 9.

<sup>58</sup> *Id.*

<sup>59</sup> *Id.*

<sup>60</sup> *Id.*

<sup>61</sup> *Id.*, 10.

hypotheticals which gage an investor's risk tolerance.<sup>62</sup> For example, a client may be asked how much money they are willing to risk to achieve a particular gain.<sup>63</sup>

Firms must also have some way of reconciling contradictory responses on the questionnaire. FINRA found that some firms "averaged contradictory responses" or "used the more conservative of the contradictory responses."<sup>64</sup> FINRA found issues with both practices, as they may result in a portfolio that does not align with the client's desired risk.<sup>65</sup> FINRA noted that firms may reconcile contradictory statements "through discussions with the customer, or, in a purely digital environment, by making a customer aware of contradictory responses and asking additional questions to resolve the inconsistency."<sup>66</sup>

Firms may also engage in automatic rebalancing of client portfolios. FINRA suggests that firms consider the following practices if it is going to engage in automatic rebalancing:

- Explicitly establishing customer intent that the automatic rebalancing should occur;
- Apprising the customer of the potential cost and tax implications of the rebalancing;
- Disclosing to customers how the rebalancing works, including:
  - If the firm uses drift thresholds, disclosing what the thresholds are and whether the thresholds vary by asset class;
  - If rebalancing is scheduled, disclosing whether rebalancing occurs monthly, quarterly or annually;
- Developing policies and procedures that define how the tool will act in the event of a major market movement; and
- Developing methods that minimize the tax impact of rebalancing.<sup>67</sup>

Last, firms must consider conflicts of interest present in robo-advice. Robo-advisers typically offer portfolios comprised primarily of ETFs that, "in comparison to mutual funds, offer little room for revenue streams and payment shares that would otherwise create a conflict of interest for investment advisers (e.g., 12b-1 fees, subtransfer agent fees)."<sup>68</sup> However, that does not mean that robo-advisers are completely free of conflicts.

FINRA recognizes two categories of conflicts: employee vs. client and firm vs. client.<sup>69</sup> FINRA describes the conflicts as follows:

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<sup>62</sup> *Id.*

<sup>63</sup> *Id.*

<sup>64</sup> *Id.*

<sup>65</sup> *Id.*

<sup>66</sup> *Id.*

<sup>67</sup> *Id.*, 11.

<sup>68</sup> Klass, *supra* n. 1, 9.

<sup>69</sup> FINRA Report, *supra* n. 45, 6.

Purely digital client-facing tools eliminate the first of these conflicts because financial professionals are not involved in the advice process. Hybrid digital platforms—those that include a role for a financial professional in providing advice—may face these conflicts, depending on the incentive structure for the financial professional. Firm vs. client conflicts, however, may remain present for both financial professional- and client-facing digital advice tools, for example if a firm offers products or services from an affiliate or receives payments or other benefits from providers of the products or services.<sup>70</sup>

FINRA found that some firms avoid conflicts by not using proprietary or affiliated funds or funds that provide revenue sharing payments.<sup>71</sup> Other firms opt for disclosure.<sup>72</sup> FINRA recommends that a robo-adviser disclose “if the digital advice tool favors certain securities and, if so, explain the reason for the selectivity and state, if applicable, that other investments not considered may have characteristics, such as cost structure, similar or superior to those being analyzed.”<sup>73</sup>

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<sup>70</sup> *Id.*

<sup>71</sup> *Id.*, 7.

<sup>72</sup> *Id.*

<sup>73</sup> *Id.*