De Lege Ferenda (2022) Vol V, Issue i, 20–34

Robo-Advisors: A Comparative Analysis in the Context of Fiduciary Law

KAN JIE MARCUS HO* AND MA CHAO JUN**

ABSTRACT

This article conducts a comparative analysis of robo-advisors in fiduciary law. Rapid technological evolution has ushered in an increased need for equity to evolve and embrace changes in the wealth management industry, with the rise of robo-advisors starting to challenge incumbents in rendering digital investment advice and personal portfolio management services. This article adopts a two-part analysis. First, the article canvasses a current financial perspective of the Robo-Advisor market in the banking industry. Second, the article examines the legal framework governing robo-advisors in the United States (US); in particular, the Investment Advisors Act of 1940 and various Securities Exchange Commission (SEC) regulations. In response to the concern that robo-advisors are unable to address market failures and meet the duty of care standard, this article argues that such contentions are unfounded, as US doctrine demonstrates. There, the fiduciary standard of care is malleable, and various SEC reports suggest modifications can be made to said standard of care to robo-advisors. Further, the duty of avoiding conflicts is unlikely to apply in the context of robo-advisors, so long as full and fair disclosure can be made. However, this paper acknowledges that black-box issues continue to plague the way robo-advisors operate, though one way out of this rabbit hole might be to encourage transparent AI development. Having explored US doctrine, this paper then seeks to bring the knowledge gained to both the UK and Singapore, where the Financial Conduct Authority (for the UK) and Monetary Authority of Singapore (for Singapore) have

* BA (Hons) (Law) (Cantab) (First Class Honours), LLM (Harvard) (Candidate).

** Bachelor of Business Management (Singapore Management University) (Candidate). We are grateful to the anonymous reviewers for their comments on earlier drafts. Any errors remain our own.

begun to look at potential ways forward to develop the law relating to robo-advisors. This paper concludes that fiduciary law provides the answer, for clearer disclosure requirements, coupled with stronger private-public understandings of regulatory requirements, would invite a new dawn in the wealth management industry.

Keywords: artificial intelligence law; comparative law; equity; fiduciary law; Robo-Advisors; financial regulation

I. Introduction

The advent of the fourth industrial revolution has heralded new solutions in the wealth management industry. As a rapidly emerging investment service challenging incumbents within the wealth management industry, robo-advisors are automated digital investment advisors, providing personal portfolio management services. After signing up for an account on a typical robo-advising platform that is rendered to clients online, clients undergo an online Know Your Customer (KYC) form, inputting their risk tolerance and financial goals. Utilizing the inputs, the robo-advisor's algorithms recommend the most suitable portfolios for each client and automatically invest in them.[1]

For clients, robo-advisors provide a simple, convenient alternative to low-interest savings accounts offered by banks. This is particularly important in the current environment, considering the low yields from fixed-income instruments. Furthermore, as algorithms replace the human element in managing portfolios, robo-advisors charge affordable management fees of around 0.25-0.50% per annum.[2] In essence, robo-advisors are straightforward investment instruments meant for passive, long-term investors. They are not used to generate short-term gains by regular trading.

This article will be divided into two parts. In the first, it seeks to explore the growth and use of robo-advisors in the United Kingdom ("UK") financial industry, with a particular focus on client segmentation, and the way forward for said innovation in the private banking arena. In the second, this article deep dives into the fascinating issues raised by robo-advisors in the domain of fiduciary law and examines how various jurisdictions—namely, the United States (US), UK, and Singapore - have sought to regulate said innovation to date. It will tap into the

1 Dinesh Dayani, 'Robo Advisors in Singapore (2021): What You Need to Know Before Investing' (*Yahoo!*, 23 October 2021) <https://sg.finance.yahoo.com/news/robo-advisors-singapore-2021-know-024018759.html> accessed 9 February 2022.

2 Miranda Marquit and Benjamin Curry, 'How To Invest With a Robo-Advisor' (*Forbes Advisor*, 13 May 2021) <www.forbes.com/advisor/investing/what-is-robo-advisor/> accessed 15 March 2022.

rich doctrine of the US and examine lessons for the remaining two jurisdictions in the final analysis.

II. ROBO-ADVISORS – A FINANCIAL PERSPECTIVE

A. POSITION AT PRESENT

In 2020, robo-advisors' assets under management (AUM) in the UK were about US$18 million. From 2022 to 2026, the AUM are projected to show an annual growth rate of 14.99%, resulting in a forecasted total amount of US$3,130 billion by 2026.[3]

Nutmeg was one of the very first UK robo-advisors to enter the scene. Since 2011, it has grown to become the largest with over £600 million AUM. Other main players include Moneyfarm, Scalable Capital and Wealthify. Most UK robo-advisors offer various types of accounts to their clients. The three main categories are Individual Savings Accounts (ISAs), pension accounts and general investment accounts. Essentially, ISAs are an investment class created by the UK government providing tax-free allowances of up to £20,000 annually.[4] Utilizing the money in their accounts, clients could then invest their money into the portfolios recommended to them by the robo-advisor's algorithm. Currently, most UK robo-advisors have a prefixed range of portfolios constructed to suit different investors' risk tolerance. For example, UK robo-advisor Wealthify has five investment plans for a general investment account, ranging from the "Cautious Plan" to the "Adventurous Plan".[5]

B. ROBO-ADVISORS: WHAT DO THEY OFFER?

As robo-advisors are passive investment vehicles that charge low fees, they mainly invest in exchange-traded funds (ETFs). An ETF is a type of security and exchange-traded product that is commonly traded on stock exchanges. Essentially, an ETF is a basket of securities traded like a stock on the exchange market. Although ETFs can be constructed to track anything including various investment strategies, they are most often used to track indices, industries,

---

3 Statista, 'Robo-Advisors—United Kingdom' (*Statista*) < www.statista.com/outlook/dmo/fintech/digital-investment/robo-advisors/worldwide?currency=usd> accessed 16 March 2022.

4 Andrew Meola, 'Nutmeg Investing Review 2020: Fees, Returns, Services, and Competitors' (*Business Insider*, 14 January 2020) <www.businessinsider.com/nutmeg-review> accessed 3 March 2021.

5 Damien Fahy, 'Wealthify Review – Is it the Right Investment Choice for You?' (*Money To The Masses, 10 March 2022*) < www.moneytothemasses.com/saving-for-your-future/investing/wealthify-review-is-it-the-right-investment-choice-for-you > accessed 16 March 2022.

commodities or other types of assets. The SPDR S&P 500 ETF (SPY) is a notable ETF used to track the S&P 500 index.[6]

On the contrary, mutual funds are rarely used by robo-advisors due to the need for active management. In an attempt to beat the market, mutual funds employ experienced human managers and advisors for active management. Therefore, they often charge higher management fees of 1–3% per annum to cover their costs. Some robo-advisor providers, however, do offer mutual funds as separate products to their clients.[7]

C. BANKING CLIENT SEGMENTATION

The personal banking industry can be segmented into three main profiles depending on their investable assets. First, the "Retail" profile corresponds to clients who have less than US$100,000 in investable assets; they make up the general population. They are only able to access basic investment products and tend to be very fee sensitive. This segment is commonly referred to as retail or consumer banking. Second, the "Affluent" profile represents clients who have US$100,000 to US$1 million investable assets. They generally want some control over their investments and are open to advice. Lastly, the "High-Net-Worth Individuals" (HNWIs) profile corresponds to clients who have over US$1 million investable assets and are able to access complex investment products entailing high risks.[8] Besides investment advice, they require holistic wealth management solutions such as tax guidance and estate and philanthropic planning. This segment is referred to as private banking.[9]

D. ROBO-ADVISORS: WHO ARE THEY FOR?

Currently, given the services they provide, robo-advisors mainly target the "Retail" and "Affluent" profiles. Driven by their desire for control, HNWIs prefer to make self-directed investments and thus find robo-advisors unattractive. In addition, HNWIs tend to have a higher risk tolerance and are constantly searching for strategies capable of consistently outperforming the market. On the contrary, the "Retail" and "Affluent" profiles find robo-advisors attractive

---

6 James Chen, 'Exchange-Traded Fund—ETFs' (*Investopedia*, 2 February 2021) <www.investopedia.com/terms/e/etf.asp> accessed 4 March 2021.

7 Marquit and Curry (n 2).

8 Christian Gilmour and others, 'Robots Are Here: The Rise of Robo-Advisors in Asia Pacific' (*Deloitte,* 2019) <www2.deloitte.com/content/dam/Deloitte/sg/Documents/financial-services/sea-fsi-robo-advisers-asia-pacific.pdf> accessed 4 March 2021.

9 Adam Hayes, 'High-Net-Worth Individuals (HNWI)' (*Investopedia*, 06 September 2021) <www.investopedia.com/terms/h/hnwi.asp> accessed 16 March 2022.

because of their simplicity and the low level of investor involvement required. Clients who lack financial knowledge can benefit from these automated digital investment advisors that charge low fees.

E. BENEFITS OF ROBO-ADVISORS

Besides being a straightforward and cost-effective investment option for clients, robo-advisors offer automated rebalancing and require low-to-no minimum balance. Algorithms ensure the clients' investment mix remains constant even if markets fluctuate.[10] Here, investment mix refers to the breakdown of asset classes such as stocks, bonds, and cash in a client's portfolio. Algorithms help rebalance and maintain a consistent percentage allocation to a particular asset class. Furthermore, with robo-advisors, clients are able to access basic financial planning guidance based on their risk profile. Robo-advisors provide asset allocation suggestions that help clients meet long-term financial goals without being exposed to behavioral biases that causes inefficiencies.[11]

F. DISADVANTAGES OF ROBO-ADVISORS

Robo-advisors can act as a double-edged sword. Due to their simplicity, robo-advisors induce investor passivity, leading to clients being unwilling to acquire more financial knowledge.[12] Most importantly, there is a lack of personalization as many UK robo-advisors are only able to offer a prefixed range of portfolios. Clients are simply grouped into categories and presented with a handful of portfolios to invest in based on general questions they answered in their KYC form. There are also constraints on investing in other asset classes that algorithms are not programmed to evaluate.[13] In addition, robo-advisors are impersonal. As past data are not guarantees of future performance, during market downturns like the Covid-19 sell-off, robo-advisors are unable to address their clients' emotions and provide nuanced personal guidance.

---

10 Marquit and Curry (n 2).

11 Jessica Bown and Georgie Frost 'What Is a Robo-Adviser?' (*The Times*, 22 December 2021) <www.thetimes.co.uk/money-mentor/article/robo-adviser/> accessed 16 March 2022.

12 Gordon Tan Kuo Siong, 'Commentary: Letting a Robo-Adviser Decide How to Invest Your Money is a Double-Edged Sword' (*Channel News Asia*, 29 January 2021) <www.channelnewsasia.com/news/commentary/robo-adviser-invest-stock-market-bank-finance-wealth-planning-13824986> accessed 5 March 2021.

13 Bown and Frost (n11).

G. Future of robo-advisors

At the current rate of development, robo-advisors will continue to appeal to the mass market only as many of them are unable to capture the nuances that private banking offers. Given the complexity of their financial situation pertaining to their wealth, private banking clients require tailored solutions for wealth management.

In the future, with increased personalization, robo-advisors may be integrated into private banks to reduce labor costs. However, with increased personalization, operating costs are bound to escalate as well. Due to the low management fees currently charged, the business models of many robo-advisors are unsustainable. Despite growing its customers from 50,000 to 85,000, in 2018, Nutmeg still reported operating widening losses from £12.3 million in 2017 to £18.6 million.[14] Rising regulatory costs, investments into both technology and employees have been major factors affecting profitability.[15]

In the coming years, a market consolidation is the most likely outcome. Given the unsustainable business models, incumbents will be forced to merge and combine forces. In addition, established private banks and wealth managers may cooperate with robo-advisors, forming a hybrid offering where client relationship managers will need to continually review clients' overall portfolio to optimize their investments.

III. Robo-Advisors and Fiduciary Law

The seminal English position on a fiduciary is set out by Lord Millet in *Bristol and West Building Society v Mothew*.[16] In sum, a fiduciary is "[one] who has undertaken to act for and on behalf of another in a particular matter in circumstances which gives rise to a relationship of trust and confidence".[17] This definition has been espoused by the England and Wales Law Commission as one that is not understood in isolation, but is instead better viewed as "legal Polyfilla," moulding itself flexibly around other legal structures, and sometimes filling in the gaps.[18] The first subsection will explore the doctrine in the United States, where the concept of fiduciary law as applicable to robo-advisors has developed to an advanced stage. The lessons

---

14 Jessica Clark, 'Nutmeg Widens Losses as Wealth Manager Targets New Customers' (*City A.M.*, 6 October 2019) < www.cityam.com/nutmeg-widens-losses-as-wealth-manager-targets-new-customers/> accessed 16 March 2022.

15 Alexander Jones, 'Why Robo-Advisors Are Struggling to Break Even' (*International Banker*, 3 July 2019) <https://internationalbanker.com/brokerage/why-robo-advisors-are-struggling-to-break-even/> accessed 5 March 2021.

16 *Bristol and West Building Society v Mothew* [1996] EWCA Civ 533.

17 ibid 711.

18 Law Commission, *Fiduciary Duties of Investment Intermediaries* (Law Com No 350, 2014) para 3.11.

gained from this deep dive will then be applied to the UK and Singapore contexts, with both jurisdictions still fresh on their quest to find a way to unravel the problems that have arisen following the emergence of robo-advisors.

A. UNITED STATES

The legal framework governing investment advisors in the United States is the Investment Advisers Act of 1940 (Advisors Act),[19] which frames the specific fiduciary obligations and duty of care standards imposed upon an investment advisor. However, the advent of robo-advisors has largely disrupted the orthodoxy of investment advisors being mere human entities, and this has brought problems for the Advisors Act. As aptly outlined by Huxley & Kim (2016), because robo-advisors do not and cannot reach the standard of the duty of care imposed on conventional investment advisors, the current legal standard is inapt to apply to them. This flows from the belief that robo-advisors typically generate results worse than their human counterparts.

This assertion is substantially shaky, for two counterarguments may be offered to shake the bedrock of this entrenched orthodoxy. First, as explained earlier, "Retail" and "Affluent" customers form the main substantive base of demand from robo-advisors. Jason Traff emphasises that most investment decisions can be conceptualised as "math problems".[20] Citing behavioural scientist Simon Swift, Traff contends that basic investment decisions can rightly be made by robo-advisors, hence providing the same services at a slashed cost compared with hiring an investment advisor. Secondly, Megan Ji asserts that robo-advisors can "rebalance and tax-loss harvest more efficiently than human advisers".[21] Viewed thus, a plausible argument may be made that robo-advisors are indeed capable of meeting the duty of care as set out by fiduciary law. This allows the incursion of robo-advisors to neatly fit within the ambit of fiduciary law.

Nevertheless, detractors of the adoption of robo-advisors have advanced a cautionary stance, especially amongst state-level authorities. The Massachusetts Securities Division has particularly disagreed against the entrance of robo-advisors into fiduciary law, taking a bright-line position that "fully automated robo-advisors" at present are "inherently unable to carry out

---

19 15 USC § 80b-1–21 (2012).

20 Jason D Traff, 'The Future of the Wealth Management Industry: Evolution or Revolution?' <https://dspace.mit.edu/handle/1721.1/104548> (MBA thesis, Massachusetts Institute of Technology 2016).

21 Megan Ji, 'Are Robots Good Fiduciaries? Regulating Robo-Advisors Under the Investment Advisers Act of 1940' (2017) 117 Colum L Rev 1543.

the fiduciary obligations of a state-registered investment advisor".[22] The crux of the argument put forward by detractors is that robo-advisors are ineffective in addressing market failure. This, Melanie Fein argues, is fatal to the ability for these entities to be conceptualised as fiduciaries.[23] Without doubt, Kara Stein posits that the issue of whether a fiduciary duty could be imposed on a robo-advisor is ambiguous. Instancing the scenario of a market crash, Stein cautions that robo-advisors will not be "on the phone providing counsel".[24] Indeed, Michael Wursthorn and Anne Tergensen are of the view that in times of crisis, a human advisor could guide individuals to avoid them taking rash action that could scar to their long-term interests.[25]

Moreover, the limited reach of questionnaires exposes a lacuna in terms of fulfilling the duty of care placed on conventional investment advisors. Fein asserts that "robo-advisors do not meet the high fiduciary standard of care that normally governs the provision of investment management services by a registered investment advisor or ERISA fiduciary".[26] This is undergirded by the argument that pre-prepared questions are otiose in ensuring that all vital information is captured, particularly relating to assets held outside a client's account. This is problematic because, as the Massachusetts Securities Division observed, "assets held outside of a client's account directly impact the client's total financial picture and, accordingly, the investment adviser's ability to personalise advice and make appropriate investment decisions".[27]

Taken together, the main arguments of dissenters are mainly that robo-advisors are unable to address market failure, nor can robo-advisors reach the fiduciary standard of care of a financial advisor. This paper nevertheless contends that this assertion is nothing but a hollow drum, as will be made clear in the next subsection.

---

22 Massachusetts Securities Division, 'Policy Statement: Robo-Advisers and State Investment Adviser Registration' (2016) <www.sec.state.ma.us/sct/sctpdf/policy-statement--robo-advisers-and-state-investment-adviser-registration.pdf> accessed 25 July 2021.

23 Melanie L Fein, 'Robo-Advisors: A Closer Look' (2015) <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2658701> accessed 25 July 2021.

24 Kara M Stein, 'Surfing the Wave: Technology, Innovation and Competition' (Harvard Law School Fidelity Guest Lecture Series, 9 November 2015) <www.sec.gov/news/speech/surfing-wave-technology-innovation-and-competition-remarks-harvard-law-schools-fidelity> accessed 25 July 2021.

25 Michael Wursthorn and Anne Tergesen, 'Robo Adviser Betterment Suspended Trading During "Brexit" Market Turmoil' (2016) <www.wsj.com/articles/robo-adviser-betterment-suspended-trading-during-brexit-market-turmoil-1466811073> accessed 25 July 2021.

26 Fein (n 23).

27 Massachusetts Securities Division (n 22).

B. THE FIDUCIARY STANDARD OF CARE

The Restatement of the Law (Third) Agency, §8.01 stresses that just as "fiduciary obligations [are] not monolithic in [their] operation…an agent's fiduciary duties to the principal [likewise] vary depending on the parties' agreement and the scope of the parties' relationship".[28] This echoes the mutable nature of fiduciary duties—for, as the common law recognises, fiduciary duties act as a gatekeeper, providing a level of security to stakeholders in situations where (i) market incentives are not effective in protecting an entrustor from a fiduciary's self-interest, and (ii) where an entrustor lacks the ability to self-protect. As Ji recognises, the acknowledgment of fiduciary duties in such scenarios encourages an entrustor and a fiduciary to continue interacting, which maximizes market efficiency in the long run. Indeed, Tamar Frankel stresses that the common law fiduciary duty recognises that it largely depends on the dynamic of a fiduciary's relationship. Citing *SEC v Chenery Corp* at 85–86,[29] Frankel argues that lawyers and doctors, for example, are held to high standards of fiduciary duties, because of the wide sphere of influence espoused by their services,[30] impacting their clients or patients to a large degree. Likewise, Frankel notes that US law holds investment advisors to a higher standard than corporate directors and officers. The House and Senate versions of the Advisers Bill has recognised the personalised nature of the relationship between an investment adviser and a client (the former using the words "personalised character" and the latter using the words "personalised relationship") which varies depending on the agreement finalised between the parties.[31] This idea was entrenched into case law following *SEC v Capital Gains Research Bureau*, where the Supreme Court performed a "remedial reading" of the Advisors Act 1940 in an effort to "preserve the personalised nature of the services of investment advisors".[32]

Viewed thus, it becomes apparent that the standard of care for an investment advisor is not set at such a high level as often assumed by detractors. Instead, it is adaptable and depends largely on the circumstances. Indeed, a Dodd-Frank study has observed that the US Securities and Exchange Commission has occasionally permitted investment advisers to disclaim responsibility should they provide advice on a sole component of a client's portfolio. Likewise, it has also allowed responsibility to be limited in cases where a client's financial plan is updated

---

28 *Restatement (Third) of Agency* §8.01 cmt c (2006).
29 *SEC v Chenery Corp* 318 US 80, 85–86 (1943).
30 Tamar Frankel, *Fiduciary Law* (OUP 2011) 43.
31 HR Rep No 76–2639, p 28 (1940) and S Rep No 76–1775, p 22 (1940).
32 *SEC v Capital Gains Research Bureau, Inc* 375 US 180, 191 (1963).

on a rolling basis, considering the fact that plans are only prepared pertaining to a point in time, and not indefinitely.[33]

Hitherto, no cogent authority in the law requires a detailed information gathering framework nor human judgment to be imbued in the financial advising process at present. Therefore, the application of said fiduciary duty to robo-advisors does not face any legal impediments going forward. Indeed, as the then SEC Chair Jo White opined, "in many respects our assessment of robo-advisors is no different than for a human-based investment advisor…there is variation in the content and flexibility of information gathered by robo-advisors before advice is given".[34] Support is indeed building up for the introduction of robo-advisors into the financial advisors landscape.

Notwithstanding, it remains apt to address one remaining dissent—that robo-advisors, nevertheless, are incapable of reaching the standard of care at present. However, as argued earlier, fiduciary standards are not cast in stone, and a modification of the duty of care can be possible. As Frankel correctly points out, fiduciary duties are better viewed as "form ready-made contracts" which are capable of being changed via agreement between the parties. In his view, five factors ought to guide the analysis of when fiduciary duties can be modified under the common law.[35] These are the following:

1. The entrustor has independent will such that he is able to properly enter into a contract;
2. The entrustor has full information about the conflict should conflicts of interests exist;
3. The fiduciary provides the entrustor with notice of the modification;
4. The substance of the modification is fair to the entrustor; and
5. The entrustor gives clear and specific consent to the modification.

Applying Frankel's five-pronged test, robo-advisors are clearly capable of jumping through all these hoops. On (1), clients clearly possess independent will in deciding between investment services; (2), the SEC has required Form ADVs to be filled out when a robo-advisor is deployed (Form ADVs is the uniform form that is used by investment advisors to register

[33] Staff of the US Securities and Exchange Commission, 'Study on Investment Advisers and Broker-Dealers' (2011) <www.sec.gov/files/913studyfinal.pdf> accessed 26 July 2021.

[34] Mary Jo White, 'Keynote Address at the SEC-Rock Centre on Corporate Governance Silicon Valley Initiative' (31 March 2016) <www.sec.gov/news/speech/chair-white-silicon-valley-initiative-3-31-16.html> accessed 29 July 2021.

[35] Frankel (n30) ch 4.

with both the Securities and Exchange Commission (SEC) and state securities authorities);[36] (3), notice is forthcoming, particularly given that any propounded modification would be a result of information provided through an online questionnaire, independent of any external human input; (4), said modification is on balance acceptable, particularly given lower service fees associated with the services of a robo-advisor; and (5), said clients access such services with full awareness of the capacities of a robo-advisor, and hence the requirement for "clear and specific consent" is satisfied. There is therefore a tenable argument that even if robo-advisors do not meet the duty of care of a financial advisor, modification of said duty is warranted in this scenario.

C. Avoiding conflicts of interest

Any discussion of fiduciary duties would be incomplete without an evaluation of conflicts of interests. Nevertheless, this is unlikely to be of issue in the context of robo-advisors. The starting point is the duty of loyalty, as outlined by the Restatement of the Law (Third) Agency, from §8.01-8.05, which requires a fiduciary to "refrain from acting adversely or in competition with [client's] interests" and omit using "[client's] property for the advisor's benefit or for a [third-party]". This is reflected in the Federal Regulatory framework, a largely disclosure-based regime which does not preclude an investment advisor from acting in the event of a conflict of interest, so long as full and fair disclosure is made to his clients.[37]

As made clear in Part I of this paper, robo-advisors mainly invest in ETFs. Such a portfolio, when juxtaposed with mutual funds, sees far and fewer opportunities for the inflow of revenue streams and payment shares which could risk creating conflicts of interest for robo-advisors. In the US, this could range from subtransfer agent fees to the 12b-1 fees. Moreover, any conflict concerns at the representative level are largely rendered irrelevant by human financial advisors stepping out of the picture, for a robo-advisor, programmed correctly, is unlikely to take sides in a transaction when acting in a representative capacity. This is because robo-advisors do not strive needlessly for incentive-based compensation, unlike humans which might be heavily swayed by such incentives. As the US Financial Industry Regulatory

[36] US Securities and Exchange Commission, 'Investor Bulletin: Form ADV—Investment Adviser Brochure and Brochure Supplement' (2016) <www.sec.gov/oiea/investor-alerts-bulletins/ib_formadv.html#:~:text=Form%20ADV%20is%20the%20uniform,SEC)%20and%20state%20securities%20authorities.&text=The%20brochure%20is%20the%20primary%20disclosure%20document%20for%20investment%20advisers> accessed 9 February 2022.

[37] US Securities and Exchange Commission, 'Final Rule: Amendments to Form ADV, Investment Advisers Act Rules' (Release No IA–4509) <www.sec.gov/rules/final/2010/ia-3060.pdf> accessed 29 July 2021.

Authority observes, "purely digital client-facing tools eliminate the [employee vs client] conflict because finance professionals are not involved in the advice process".[38] This view has been echoed by regulators, such as the Department of Labour Secretary Thomas E. Perez, who viewed robo-advisors as an entity able to render fiduciary investment advice at significantly lower fees than traditional advisors, as well as the Department of Labour (DOL) itself, which noted that "the marketplace for robo-advice is still evolving in ways that both appear to avoid conflicts of interest that would violate the prohibited transaction rules and minimize cost".[39]

Accompanying the fiduciary duty of loyalty sees the Best Interest Contract Exemption Rule, as propounded by the Department of Labour.[40] In essence, this rule enables selected entities to receive compensation in certain situations validly, without falling foul of a prohibited transaction when acting in the capacity of a fiduciary. This is, however, subject to certain caveats. Amongst other requirements, the rule mandates such entities to (i) acknowledge fiduciary status with respect to investment advice; (ii) adhere to Impartial Conduct Standards, which include giving advice that is in the retirement investor's best interest; (iii) charge no more than reasonable compensation; and (iv) make no misleading statements whatsoever about investment transactions, compensation, and conflicts of interest.

Notably, in its rulebook, the DOL hinted at the possibility for robo-advisors to be classified as "Level Fee Fiduciaries". The DOL has established that "such providers may rely on the exemption with respect to investment advice to engage the robo-advice provider for advisory or investment advice". Indeed, the DOL has drawn a distinction between robo-advisors that receive level compensation and those which receive nonlevel compensation, barring the latter from availing of the exemption. This is because the DOL views that opening the floodgates for the latter would "adversely affect the incentives currently shaping the market for robo-advice", particularly in the way robo-advisors are implemented in the current marketplace.

D. UNRAVELLED KNOTS

We may not be out of the woods yet. Notably, issues relating to conflicts of interest may continue lingering as a spectre. This is particularly apt on the issue of black box programming.

---

38 Financial Industry Regulator Authority, 'Report on Digital Investment Advice' (2016) <www.finra.org/sites/default/files/digital-investment-advice-report.pdf> accessed 29 July 2021.

39 Employee Benefits Security Administration, 'Best Interest Contract Exemption' (2016) <www.federalregister.gov/documents/2016/04/08/2016-07925/best-interest-contract-exemption> accessed 29 July 2021.

The current problem is that conflicts that are programmed into the algorithm of a robo-advisor, and conflicts that may affect how the algorithm is designed, are not required to be disclosed at present. Prima facie, a level of ambiguity continues to linger throughout most robo-advisor products. For example, Charles Schwab, in promoting the Schwab Intelligent Portfolios, states that the parameters are set based on "a disciplined portfolio construction methodology designed to balance performance with risk management appropriate for a client's goal, investing time frame, and personal risk tolerance, just as with other Schwab managed products."[41] Future Advisor, a robo-advisor owned by BlackRock, disclosed that "BlackRock, Inc. may receive directly or indirectly advisory fees and other compensation from the affiliated product that are in addition to the fees it will receive from the Adviser's client."[42] Along the same lines, Vanguard, in promoting its services, highlights that "competing interests that arise between [Vanguard] and its clients [are addressed] by relying on our time-tested investment philosophies and beliefs, such as the benefits of low costs, diversification, and indexing".[43]

From this brief survey, it remains unclear which specific conflicts are expected to be disclosed. Indeed, a mask continues to shroud the impact of conflicting interests, an issue which remains unaddressed by the SEC. In this regard, this paper argues that the SEC should explicitly require, going forward, that all robo-advisor owners disclose clearly whether a robo-advisor algorithm has been programmed to be biased, and if so, to what degree.

Ji makes a convincing point: the types of conflicts that a robo-advisor faces are not binary in nature. In his view, "conflicting incentives that exist, but that are not intentionally programmed into algorithms, should be disclosed as traditional investment advisor conflicts are". This is because such incentives "could subconsciously influence algorithm programmers, but it would be impossible to determine if they actually do and, if so, to what extent". In this regard, Schwab's approach is commendable to some extent. In its disclosure brochure, Schwab states that it

> makes a nominal calculation that fully offsets in the amount of 0.30% of the compensation that it or its affiliates receive from ETF transactions…[which

41 Charles Schwab and Co, 'Schwab Intelligent Portfolios and Schwab Intelligent Portfolio Premium' (2018) <www.schwab.com/public/file/SIP-SCHWAB-WEALTH-ADVISORY-DISCLOSURE-BROCHURE> accessed 14 August 2021 (Schwab).

42 FutureAdvisor, 'Form ADV Part 2A: The Brochure', p 5 (2016) <http://perma.cc/W6LE-F5HQ> accessed 14 August 2021.

43 Vanguard Advisers, Inc, 'Advisor Client Relationship Summary (Form CRS)' (2021) 17 <https://personal.vanguard.com/pdf/vpabroc.pdf> accessed 14 August 2021.

includes] advisory fees for managing Schwab ETFs and fees earned for providing services to third-party ETFs participating.[44]

Ji argues that Schwab has informed “clients as to how much it is earning on each portfolio, but it does not state how much clients are forgoing as a result of the conflict”. Viewed thus, further disclosure is preferable, particularly given the largely inexperienced client base in the industry for robo-advisors. This would alleviate the potential information gap, ensuring that such clients are better poised to evaluate the risks and rewards, particularly considering the conflicts of interest in a particular algorithm.

E. UNITED KINGDOM AND SINGAPORE

Both the United Kingdom and Singapore are at a crossroad relating to the regulation for robo-advisors. In the former, the Financial Conduct Authority remains the SEC parallel as the key regulator, whereas in the latter, the Singapore Monetary Authority of Singapore maintains the bastion regulating all financial activity within the city-state. Both authorities are of the view that the advent of robo-advisors is currently in its infancy.

In the UK, the HM Treasury and the FCA have released a Financial Advice and Markets Review in 2016[45], with the FCA thereafter following up with a targeted article strategizing the way forward for regulation.[46] The FCA continues to see robo-advisors as a “valuable vehicle to help tackle the issues faced by those consumers who are unserved or underserved by more traditional advice models,” and therefore seems to develop an “aims-focused approach.” Bob Ferguson has remarked that the UK approach will be very much dependent on “what the model [actually] generates”. Taken together, this paper views it likely that the UK regulatory space will likely be rife with activity in the coming years as technology accelerates in the private banking arena.

For Singapore, the legal basis governing robo-advisors is found in the Financial Advisers Act[47] and the Securities and Futures Act.[48] These are supplemented by MAS’s “Guidelines on

44 Schwab and Co (n 41) 9.
45 Financial Conduct Authority, ‘Financial Advice Market Review’ (2016) <https://www.fca.org.uk/publication/corporate/famr-final-report.pdf > accessed 14 August 2021.
46 Bob Ferguson, ‘Robo Advice: An FCA Perspective’ (Westminster and City: 2017 Annual Conference on Robo Advice and Investing: From Niche to Mainstream, 11 October 2017) <https://www.fca.org.uk/news/speeches/robo-advice-fca-perspective> accessed 14 August 2021.
47 Financial Advisers Act (Cap 110).
48 Securities and Futures Act (Cap 289).

Provision of Digital Advisory Services,"[49] which improves clarity about the rules and covers expectations on the supervision of algorithms. It is commendable that MAS has taken heed of the black box risk[50] and Ji's concerns relating to conflicts of interests.[51]

The Guidelines also enable robo-advisors to be licensed under the ambit of the Financial Advisors Act, so long as said entities are well equipped to gather customer data and perform a risk profile evaluation to prevent the incorrect type of investments from being recommended. All the same, the MAS has propounded a Fund Management Exception to enable robo-advisors to sidestep the requirement of having a corporate track record, with the necessary requirements outlined in Section I of the 2018 Guidelines.

Though UK and Singapore fiduciary laws are still very much at their genesis with respect to seeking the best approach to regulate robo-advisors, the experience of the US will prove helpful in the UK and Singapore's seafaring journey through uncharted waters.

IV. Conclusion

In the final analysis, this paper argued that robo-advisors are capable of respecting fiduciary law. Indeed, this paper has contended that fiduciary law is capable of handling technological developments, with robo-advisors lending themselves particularly well to trigger a modification of the fiduciary duty relating to investment advisers. At the same time, this paper has identified that although conflicts of interest may not be, at first glance, a stumbling block for robo-advisors, the issue of black-boxes and disclosure requirements ought to be ironed out further to prevent robo-advisors from hiding behind a mask, largely to the detriment of inexperienced investors. The lessons gained from US doctrine ought to be applied in both the UK and Singapore—and it is encouraging to see the MAS taking steps akin to that as recommended in this paper. As technology further evolves, balancing consumer security with innovation becomes an increasingly challenging task, although clearer disclosure requirements, coupled with stronger public-private understandings on regulatory requirements, will allow robo-advisors to flourish, heralding a new dawn in the wealth management industry.

---

49 Monetary Authority of Singapore, 'Guidelines on Provision of Digital Advisory Services' (2018) < https://www.mas.gov.sg/-/media/MAS/Regulations-and-Financial-Stability/Regulations-Guidance-and-Licensing/Securities-Futures-and-Fund-Management/Guidelines-on-Provision-of-Digital-Advisory-Services--CMGG02.pdf> accessed 14 August 2021.

50 ibid at [39].

51 ibid at [40]-[41].