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Leveraging the Competition: How Wealth Managers Can Use Robo-Advisors to their Advantage

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LEVERAGING THE COMPETITION: HOW WEALTH MANAGERS CAN USE ROBO-ADVISORS TO
THEIR ADVANTAGE

by

Chase Rourke

A thesis submitted in partial fulfillment of the requirements
for graduation with Honors in the Finance

Jeffrey Hart
Thesis Mentor

Spring 2019

All requirements for graduation with Honors in the
Finance have been completed.

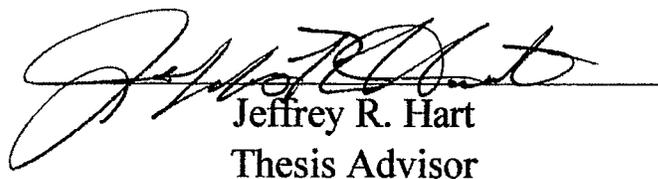
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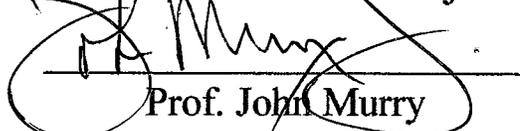
**A thesis submitted in partial fulfillment of the requirements for
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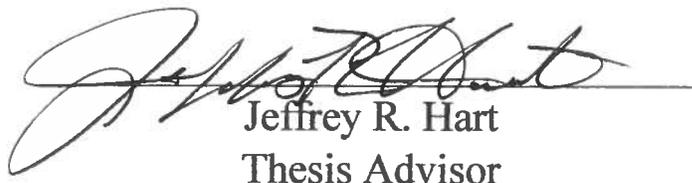
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Leveraging the Competition: How Wealth Managers Can Use Robo-Advisors to their Advantage

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Abstract

This paper investigates the threat of robo-advisors to the wealth management industry as trends show the increased propensity of the Millennial and Gen Z generations to migrate away from traditional financial advisors. It also presents potential topics for future research related to the matter. A primary goal of robo-advisors is to minimize costs and avoid conflicts of interest, all while appealing to a growing population of technologically savvy investors. Thus, consumer preferences, particularly those of the Millennial and Gen Z generation, and their willingness to “bare-all” to a computer-based algorithm lies at the center of the debate regarding the threat of robo-advisors to the wealth management industry, and what can be done by human advisors to adapt. This consumer willingness will be explored. Furthermore, in order for robo-advisors to subvert traditional financial advisors, they must achieve returns consistent to or greater than those of their human counterparts, and must also uphold a fiduciary standard when providing investment advice. This paper aims to summarize the arguments for and against the widespread use of robo-advisors, their potential to subvert their human counterparts, and the likelihood of younger generations to migrate towards these services through an expansive review of existing

research on the subject. Finally, due to the complexity revolving around an ever-changing technological network and a continually evolving financial regulatory environment, future research should be aimed at exploring the impact of any new developments with robo-advisors from a generational trend, technological advancement, or regulatory change perspective.

1. Introduction

As an online, algorithm-based application that provides a recommended asset allocation set depending on an investor's response to a series of questions, robo-advisors have been disrupting the wealth management industry and threatening the livelihood of over 200,000 fiduciaries throughout the US since their inception in 2008. A primary advantage of robo-advisors, as touted by the US Department of Labor ("DOL"), is their ability to minimize costs and avoid conflicts of interest throughout the wealth management process. However, some critics have disagreed with this suggestion, claiming that robo-advisors actually perform substandard in these areas as compared to human advisors. While the jury is still out as to whether robo-advisors provide benefits equal to or beyond those of traditional financial advisors, a growing body of research suggests that the future of the wealth management industry lies in a hybrid combination of the two. However, as technology, consumer preferences, and the financial regulations continue to evolve, regularly reviewing updated research is necessary to remain adequately informed.

This study does not attempt to measure the performance of robo-advisors or their ability to outperform traditional financial advisors on an investment return basis. Before being able to determine their performance against traditional advisors, it is important to understand the extent

to which robo-advisors have been implemented and have been accepted by consumers in the wealth management industry.

The research is divided into sections as follows. First, the paper reviews existing academic literature regarding the genesis of robo-advisors and the ways in which they currently operate within the financial services industry. To arrive at the most pragmatic working definition of the term “robo-advisor”, the review considers both research and definitions provided by highly regulated, governed, or widely respected entities, including but not limited to, the Securities and Exchange Commission, the Department of Labor, the Financial Industry Regulatory Authority, other academic researchers, and the like. Research into robo-advisors shows that, while differing in various technicalities, most definitions combine three key elements which are discussed in the research. Establishing an agreeable definition of robo-advisors provides insight to their primary purpose and the way that they will be analyzed in the context of this research paper.

Robo-advisors have experienced rapid growth since their inception in 2008. This paper adds depth to a growing body of research about the future of robo-advisors by reviewing, combining, and analyzing various studies conducted by both financial services firms and academic researchers about how generational cohorts, consumer preferences, and technology all play a major role in the growth of robo-advisors on a global basis. Younger age cohorts, specifically the millennial and generation z age cohorts, who in the past have participated less in the wealth management process, are increasing their earning power, inheriting wealth, and becoming more involved with investing. Research indicates that these age cohorts are more likely to invest for the first time if they can do so through their smartphone without the need for

an in-person, face-to-face relationship. Furthermore, research has taken multiple approaches to determining the relationship between millennial investors and robo-advisors, their newfound desire to participate in the market, and how it impacts wealth managers. On a more general basis, this section considers the implications that the millennial and generation z cohorts have on the future of robo-advisors.

Third and finally, the paper considers the shortcomings and advantages of robo-advisors as compared to human financial advisors by both analyzing and probing existing research. While the notion that robo-advisors are disrupting the wealth management industry is a consensus among industry professionals and researchers, the areas in which one outperforms the other, and thus which advisor platform holds the competitive advantage, are not widely agreed upon. In recent years, a growing body of research suggests that the future of the wealth management industry lies not within choosing one or the other, but by combining the two to create a cost-efficient, highly-performing hybrid advisor platform, all while upholding a fiduciary standard for the client. The paper discusses research on these topics and posits areas for potential research in the future on the topic.

2. About the Robos

2.1 Defining “Robo-Advisor”

The term “robo-advisor” is widely used in modern business publications and the news, but has much less coverage on an academic basis. While the term takes many different meanings in the former contexts, academically, the definition of the term “robo” within financial services was first explored in a 2002 edition of the *Financial Planning Magazine* by Richard J. Koreto,

who understood the term “robo” as “automation with no human interaction¹”. Introduced in 2008 as a business model, robo-advisors became known as an extension of Loreto's definition, which was the automation of financial advice with no human interaction. Since then, academics have questioned whether no-human interaction actually holds true when it comes to the operation of robo-advisors, as some types of robo-advisors are advisor assisted.

In their 2016 Report on Digital Investment Advice, the Financial Industry Regulatory Authority (“FINRA”) defined robo-advisors, or “robos”, as both “digital investment advice tools” and as “client-facing tools that incorporate the first six activities of the investment advice value chain²”. In 2017, the Securities and Exchange Commission (“SEC”) also provided a general definition of robo-advisors as “an automated digital investment advisory program”, which “use innovative technologies to provide discretionary asset management services to their clients through online algorithmic-based programs³”.

As regulations change and robo-advisor technology develops, it is clear that there is no single, standard academic definition of the term. However, it is clear that most definitions of the term include three key elements: the notion that the platform is digital, automated, and provides financial advice. Thus, for the purposes of this paper, the term “robo-advisor” follows the express definition put forth by the SEC in 2017, as an automated digital investment advisory program.

¹ See “The Place of Robo-Advisors in the UK Independent Financial Advice Market. Substitute or Complement?” by Tatiana Nikiforova for more information on automation and the definitions used by Loreto in his research.

² The investment advice value chain, established by FINRA in the 2016 Report on Digital Investment Advice, outlines seven core activities in managing an investor’s portfolio: customer profiling, asset allocation, portfolio selection, trade execution, portfolio rebalancing, tax-loss harvesting, and portfolio analysis.

³ See <https://www.sec.gov/investment/im-guidance-2017-02.pdf>

2.2 Robo-Advisor Overview

As a business model, robo-advisors were introduced in the US in 2008, first by a company known as Betterment, where they were used as an online interface by which to manage and balance a client's assets. Another early adopter of the technology was Wealthfront, a financial services company which used robo-advisors in a similar capacity, and helped popularize the technology with the general population. In the US, there are now currently 200 robo-advisors⁴ (Statista, 2017).

Using a robo-advisor usually requires that the client complete a series of questions via an online questionnaire regarding their age, time horizon, risk appetite, financial investment goals, and other information about their life and current situation. Their responses to the questionnaire is then inputted into an algorithm, which selects a model portfolio that best fits their investment goals.

While robo-advisors can be used for a wide range of purposes, there are three main business models that have become most popular in the financial services industry.

The first is a fully-automated robo-advisor, which is delivered to the investor as an interactive secure website, allowing the investor to manage their finances, invest, and perform every function themselves without the need for interaction with a human financial advisor. Within this business model, there are two classifications that differentiate the function of the robo-advisors and the functions that they are technologically optimized to achieve for the investor (Bhatnagar, 2016). The first, known by the wealth management industry as a “robo-rebalancer”, works to achieve a given asset allocation and maintains this balance by

⁴ Statistic taken from Statista's 2017 Report titled “Number of robo advisors worldwide as of April 2017, by country”. See Statista's In Depth: FinTech 2019 report for more information regarding the number of robo advisors worldwide.

continually reallocating the client's assets based on a theoretical formula built into the algorithm. The second type, commonly referred to as a "robo-specialist", is designed to perform some level of specialized investment function for the investor. Often, these "robo-specialists" are tax-efficient and look to find ways to maximize an investor's returns through the minimization of the tax burden on the investor.

The second business model is an advisor-assisted robo-advisory platform. Here, a financial advisor works in conjunction with the algorithm to provide financial advice digitally to the investor. Depending on the clients' needs and the complexity of their goals or financial situation, the human advisor may be more or less involved in the financial planning process.

The third business model consists of financial advisor support with guided advice. Recently coined the "hybrid advice model", under this model financial advisors generate financial advice with the assistance of robo-technology. Here, the financial advisor is a key component of the service being provided to the client, and takes advantage of the complex algorithms used by robo-advisors to enhance productivity, reduce cost, and retain the client relationship more effectively.

2.3 Where Robos Prevail

The first advantage of robo-advisors is their ability to minimize costs, particularly through their implementation of a passive investment strategy. All robo advisors follow a passive investing strategy. Passive investing, which functions by trying to replicate a given strategic asset allocation, or market portfolio, has been heavily researched and is widely viewed as being a much lower-cost investing strategy than active investing, and often yields similar or greater

returns once costs are considered⁵. Numerous research has shown that active funds, on average, underperform a passive fund benchmark. Furthermore, when active funds do outperform their benchmark, this performance does not often persist, with a high probability that if a given active fund outperforms the benchmark in one year, it will underperform the benchmark in the succeeding year. The evidence of these patterns throughout the market suggests that outperforming the benchmark is a result of luck rather than skill⁶. Furthermore, it is a very difficult task to find and select the active managers that are successful. Even if it were possible, many researchers show that their methods for selecting funds are flawed— in particular, using the past performance of funds as criteria for their selection, which is known to be the primary method used by many active managers. Regardless, even assuming that active managers are able to outperform the benchmark on a consistent basis, they often charge high management fees that negate any excess return that would have been earned by the investor. And, as the fund continues to outperform the benchmark, these managers will charge continually higher fees resulting in progressively higher costs to the investor and exponentially decreasing returns through the effect of compound interest. Therefore, it is because of their passive investing strategy (Modern Portfolio Theory), and ability to select funds that do not require the manpower and level of research that active funds do, that robo advisors are able to minimize costs to the investor.

A second advantage of robo-advisors is that they can avoid conflicts of interest and behavioral biases, which can be costly. According to DALBAR's Quantitative Analysis of

⁵ See the Standard & Poor's Indices versus Active Funds Scorecard (SPIVA) for more information regarding the debate about active versus passive investing, which has served as the de facto scorekeeper of the active versus passive debate since their first publication 16 years ago.

⁶See “*Untangling Skill and Luck. Legg Mason Capital Management White Paper (2010)*” by M.J. Mauboussin and “*Robo-Advisors vs. Traditional Investment Advisors - an Unequal Game*” by Philippe Rohner and Matthias W. Uhl, which establishes the basis for the argument as to why outperforming the benchmark falls under luck as opposed to skill.

Investor Behavior, there are a number of behavioral biases by which investors may suffer, which include loss aversion, anchoring, narrow framing, herding, regret, lack of diversification, media response, and overconfidence⁷. Often times, investors are prone to at least one or multiple of these biases, all of which have proven incorrect or costly. In addition, many investors attempt to time the market, a task which is difficult, if not impossible, to do correctly on a consistent basis. In attempting to time the market, many investors miss out on returns when a given stock rebounds after a period of downfall. In order to remove these costly mistakes, investors must find a way to prevent themselves from acting with emotions and falling prone to behavioral biases. One solution to this problem is robo-advisors. Because robo-advisors are algorithm-driven, they do not experience the emotions or have the capacity to fall victim to a behavioral bias in the way that both investors and traditional financial advisors may. With a passive investing strategy that continually rebalances an investor's portfolio based off of market moves, as opposed to a market-timing strategy, robo-advisors can enable investors to remove behavioral biases from their investing activities.

Third, robo-advisors are available 24/7. Because they are an internet-based application, investors can access their investments, receive advice, and perform other functions relating to their finances at any time of the day. While this may be beneficial for a variety of reasons, perhaps the most important is that this feature aids in the attraction and retention of clients, and also allows clients to stay informed at all times.

While there are other potential advantages to using robo-advisors rather than traditional financial advisors, many of them are more frequently disputed throughout research. On a general

⁷ For further information regarding behavioral biases and their definitions, see the 2017 DALBAR Quantitative Analysis of Investor Behavior.

basis, the cost-efficiency of a robo-advisors passive investment strategy, their ability to reduce or completely avoid behavioral biases, and 24/7 availability are more widely agreed upon by a growing body of research.

2.4 Where Robo's Fall Short– the Fiduciary Standard

Today's investment advisors and certified financial planners are held to the fiduciary standard of care when offering personalized financial advices to clients. This duty, which requires that the advisor must always act in the clients best interest, essentially means that the advisor cannot take unfair advantage of the client's trust and must avoid conflicts of interest. When it comes to robo advice, regulators and researchers are left scratching their heads as to how and when to regulate, and whether they uphold the fiduciary standard.

Perhaps it is their inability to answer the question that tells us all we need to know about robo advisors and the fiduciary standard. In their 2017 Report on Digital Investment Advice, FINRA addressed various features of robo-advisors, including their ability to fulfill the fiduciary duty. Whilst not explicitly stating that robo advisors do not meet the fiduciary standard of care, the report did discuss various areas of concern regarding robo-advisors as they relate to the standard. The report expresses that human judgement by a trained financial professional is an important element of the fiduciary standard. Through their analysis of the current robo-advisor, FINRA found that robo-advisors do not provide portfolio analysis, except when used as a tool by financial advisors to provide investment advice. Portfolio analysis, which is one of the core activities in managing a client's portfolio as outlined by FINRA, is an important step of the financial planning process to assist clients in reaching their goals. Without portfolio analysis, an

advisor cannot be entirely confident that the advice is suitable for a particular client. As explained by Melanie L. Fein in her analysis of the 2017 FINRA Report, portfolio analysis, in a fiduciary context:

“requires the application of well-accepted principles of modern portfolio theory. Those principles require an analysis of the risk and reward features of an investment not in isolation but in the context of the portfolio as a whole and as a part of an overall investment strategy for a particular client or account.”

If robo-advisors are unable to provide portfolio analysis without the assistance of a financial advisor, it raises the question as to whether they are able to meet the fiduciary standard upheld by traditional financial advisors.

Furthermore, in the interest of upholding the fiduciary standard, financial advisors must give clients information on the investment firm, the services it provides, and costs associated with it, which generally leads to providing the client with a prospectus or other related documents⁸. However, this information must also be portrayed in a way that investors can comprehend it, and reasonably understand the nature of and the risks associated with the products being offered. While this can be tricky for traditional financial advisors, many researchers are more concerned about this duty when it comes to robo-advisors. With a human advisor, clients have the ability to converse and ask questions to develop a thorough understanding of the documents. In an automated, digital investing platform without human interaction, it is highly probable that clients will either skim, misunderstand, or skip over this information.

⁸ See “ROBO-ADVISORS AND INVESTORS: ENHANCING HUMAN-ROBOT INTERACTION THROUGH INFORMATION DESIGN” by Marika Salo and Helena Haapio, which discusses this process further.

Regardless of whether or not robo-advisors uphold the fiduciary standard, the regulatory environment is one that is constantly changing and evolving. It is important that the customer and the advisor be aware of, and understand, the algorithms used by a robo-advisor to make an decision when given investment advice from the platform.

3. Millennial and Gen Z Trends in Investing

3.1 Key Trends

Generational cohorts and their investing trends offer key insights to the future of the robo-advisor platform and its potential to subvert traditional financial advisors. As millennials, those born 1981 and 1996, and generation z, those born in 1997 or after, begin to age, build their careers, and inherit wealth from the baby boomer generation, their financial influence is becoming increasingly more apparent. In 2015, millennials numbered 83.1 million in the US, representing over one quarter of the nation's population; exceeding the size of the baby boomer generation by 7.7 million⁹. By 2020, it is estimated that millennials and baby boomers will retain over half of all investable assets, accounting for over \$35 trillion USD. With their allegiance to technology and increasing earning power, many financial advisors question how the emergence of robo-advisor technology will impact the wealth management industry.

As an investing group, members of the millennial and generation z age cohorts are more optimistic, willing to take on risk, and invest in different or alternative asset classes than their baby boomer counterparts, according to the 2017 Global Investment Survey conducted by Legg Mason. According to the survey, over two-thirds (68%) of millennials prefer to manage all

⁹ According to Neal E. Cutler in his article on Financial Gerontology, titled "Millennials and Finance: The 'Amazon' Generation" in the Journal of Financial Services Professionals.

personal finances, including both banking and investments, all within the same app or website on their mobile device, compared to 52% investors globally as a whole. Since robo-advisors can be accessed online in a way that traditional financial advisors cannot, this supports a growing body of research that suggests that members of the younger generation have an increased propensity to migrate away from traditional financial advisors and towards an automated platform for investing.

While robo-advisors may seem attractive to investors for a variety of reasons, it is trust, or a lack thereof, in AI machines that is perhaps one factor that is prohibiting robo-advisors from subverting human advisors completely, as over 70% of investors globally believe that personal customer service with the human touch cannot be replaced with technology. This, combined with another 58% of investors who feel would feel uneasy if there was not a human available to confer with about managing their investments, bodes well for the future traditional financial advisors, who have the ability to empathize with investors in a way that robo-advisors cannot.

Nevertheless, robo-advisor services continue to be well on the rise, with a global assets under management of \$200 billion in 2017 projected to grow vastly, to between \$2.2 to \$3.7 trillion by 2020. In 2025, this amount is expected to compound to nearly \$16 trillion, which begs the following question: how willing are millennials to use robo-advisors as their primary investing medium?

3.2 Consumer Willingness to Use Robo-Advisors

The 2017 Global Investment Survey provides more potential insight to the question posed above. According to the survey, while there was still some resistance to automation when it

comes to investing, there was also a large degree of acceptance for the technology, particularly with millennials, with 64% holding the opinion that the investment management industry should embrace the technology. Furthermore, half (50%) of the millennial generation surveyed stated that they plan to increase the proportion of investments that they have managed by robo advisors within five years time, compared to only 24% of baby boomers who feel they will do the same. These statistics help form the bigger picture about robo-advisor adoption, and the reality that millennial investors, by and large, are willing and wanting to use robo-advisors as their primary means of investing their assets, which is driven by their desire to control all of their finances from their mobile devices. Additionally, while it is true that robo-advisors are still in their infancy stage, and that an unquantified degree of resistance to automated investing exists on a global basis, 50% of millennial investors surveyed stated that they would increase their overall investment activity if it was through a robo-advisor.

While it is not possible to definitively quantify the exact degree of consumer willingness to “bare-all” to robo-advisors, the trends that have been recognized do show that all age cohorts, and specifically the millennial cohort, are exhibiting an increased degree of acceptance of robo-advisors as time progresses and they become offered more on a widespread basis.

4. Bridging the Gap– A Hybrid Model for Financial Advising

In recent years, a growing body of research suggests that the future of the wealth management industry lies not within choosing either a robo-advisor or an in-person financial advisor, but by combining the two to create a cost-efficient, highly-performing hybrid advisor platform. Robo-advisors can be leveraged by traditional financial advisors to gain more

customers by attracting a demographic not already covered, and to provide the investor a more client-centric experience. By combining certain features of the robo-advisory platform into their own advising, human financial advisors can spend more time doing what they do best— focusing on social and emotional values, building client relationships, and allowing the low-cost robo-advisors to handle the economic values.

Robo-advisor services can best be utilized by financial advisors in steps two, three, and six of the financial planning process¹⁰.

Step 2, which is to gather data on the client, can be completed easily by robo-advisors. Instead of spending valuable time collecting generic information about clients, financial planners can employ robo-advisors to do the same job on a much more efficient basis. Since robo-advisory platforms require forms to be filled out in order for them to make investment advice, traditional financial advisors can personalize these forms as they see fit, and administer them to the client electronically via the robo-advisors to collect the necessary data on the client.

Once the information is collected, the robo-advisor can also be used in Step 3 of the financial planning process, which is to analyze the data and strategize. As opposed to researching different asset allocations and investment funds, a financial advisor can use a robo-advisor to assist them, by having the robo find and present to them an array of asset allocations or investment portfolio sets that would fit within the scope of the client's financial needs and risk tolerance on a much more efficient basis. Robo-advisors, which follow the Modern Portfolio Theory, typically invest in ETFs to build a diversified portfolio. With over 5,000 ETFs globally to choose from, a financial advisor or investor could spend insurmountable amounts of time

¹⁰ Visit the CFP Board website for for the six steps of the financial planning process. <https://www.cfp.net/for-cfp-professionals/professional-standards-enforcement/current-standards-of-professional-conduct/compliance-resources/frequently-asked-questions/financial-planning>

analyzing and choosing an ETF to invest in. Because the robo-advisor is algorithmically optimized to find ETFs that will offer a highly diversified portfolio that will meet the risk tolerance of an individual investor, traditional financial advisors can benefit heavily from the time-saved by leveraging robo-advisors in this area. The financial advisor can then take these optimized investment sets and customize them further if necessary to help the client reach their goals. By using the robo-advisors in this step, financial advisors can again focus on their strong-suit, which is to grow the client relationship, establish a strong emotional connection, and build trust.

Furthermore, robo-advisors can be used in Step 6 of the financial planning process, which is to continually monitor and review the financial plan. As discussed previously, one advantage of robo-advisors is their ability to avoid behavioral biases, and to continually rebalance a client portfolio to help the client reach their goals regardless of market conditions. Over time, as the value of individual ETFs within an investor's portfolio move up and down, the portfolio drifts away from the target weights. While more volatile, stocks often rise more than bonds do over the long term. If the investor does not rebalance, the stock portion of the investor's portfolio will consume more of the overall portfolio than the bonds portion. In order to maintain a target balance, robo-advisors can instantly identify when the portfolio weights are starting to drift and rebalance accordingly. While human intervention is sometimes needed, using the robo-advisor to help rebalance and monitor the client's portfolio will help the human financial advisor avoid costly mistakes, save time, and serve the client's needs more efficiently.

In general, by implementing robo-advisor technology into their own financial planning process, traditional financial advisors can benefit in three primary ways. The first is that, by

combining face-to-face client meetings with digital interaction, advisors can cater to the specific needs of each client on a much more consistent basis. In addition, by embracing the robo-advisor technology, financial advisors can capture new demographics like Gen X and Y, who traditionally carry low investment balances and prefer having 24/7 technological access to their investments. Finally, traditional financial advisors can take advantage of the additional hours provided to them through the help of robo advisors, to push sales, improve client relationships, and build trust with the clients¹¹.

5. Conclusion

5.1 Summary of Findings

Overall, research indicates that millennials, and members of age cohorts born after the millennial group, are increasingly moving towards investing via robo-advisor platforms. With lower balances to invest, their need for a low-fee investment service and desire for 24/7, online access to their assets, robo-advisors are an obvious solution to meet these needs. However, after breaking down the data and research relating to the topic, it is apparent that robo-advisors are still in their infancy stages, and will require years of development before the possibility of them completely subverting traditional financial advisors can even be considered a realistic possibility.

After conducting an analysis of both theoretical and empirical research, the paper established that robo-advisors offer three key advantages over traditional financial advisors: their ability to minimize costs to the investors through a passive investing strategy, to avoid conflicts of interest and behavioral biases, and to provide 24/7 accessibility to clients. However, by the

¹¹ Based off of findings from “The Place of Robo-Advisors in the UK Independent Financial Advice Market. Substitute or Complement?” by Tatiana Nikorofova (2017).

same token, the research established a major downfall of robo-advisors: their potential inability to uphold the fiduciary standard amid concerns that they are unable to provide portfolio analysis to the investor. While both types of financial advisors, human and robotic, have their pros and cons, it is important that clients understand the nature and risks associated with various investment products or advice being offered.

Finally, the research identified that traditional financial advisors can leverage robo advisor technology to their advantage, by incorporating the technology into their own financial planning process. In doing so, the research establishes that financial advisors will benefit in three ways. The first is that by combining face-to-face client meetings with digital interaction, advisors can cater to the specific needs of each client on a much more consistent basis. Second, by embracing the robo-advisor technology, financial advisors can capture new demographics like Gen X and Y, prefer having 24/7 technological access to their investments and traditionally carry low investment balances. Finally, implementing robo-advisors into various steps of the financial planning process will save traditional financial advisors many hours of work, hours that they can now spend pushing sales, improving client relationships, and building trust with the clients.

5.2 Areas of Further Research

The research compiled in this paper, in conjunction with existing literature on the topic, raises questions to be explored in future research.

There is still much ambiguity regarding robo-advisors and the fiduciary standard. While FINRA and other regulatory authorities have conducted their own research on the topic, these authorities, by and large, have failed to explicitly support or reject the notion that robo-advisors

uphold the fiduciary standard. Therefore, I suggest that future research probe further into the fiduciary standard of care and analyze how the robo-advisor platform fits, or does not fit, into this criteria.

Furthermore, due to the nature of government and legislative systems, the regulatory environment is constantly changing and evolving. As regulations change on investment or financial advisors, as well as on artificial intelligence, it is important for researchers to analyze financial advising platforms in the context of new regulations. I recommend that future research be aimed at exploring the impacts of any new regulations on the robo-advisor platform and how it relates to the future of the platform in the wealth management industry.

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