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# Preferences and Perceptions: An Experimental Analysis of Financial Advisory in Italy

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The views stated in this thesis are those of the author and not necessarily those of the supervisor, second reader, Erasmus School of Economics or Erasmus University Rotterdam.

## ABSTRACT

In this thesis, I investigate individual preferences for financial advisors in Italy, focusing on key characteristics such as age, gender, credentials, and advice quality. Through a discrete choice experiment involving over 150 Italians, participants watched videos of several advisors offering advice on different topics. Using logistic regression models, I show the influential nature of credentials, which can deceive also financially literate respondents, overshadowing the quality of the advice. Conversely, the influence of credentials was lower among risk-seeking respondents, who were better at discerning good from bad advice. Similarly, individuals who have had a financial advisor benefit from their prior experience, leading them to make better choices. Overall, the results reveal the ambiguous effect of financial literacy and show how individuals mainly rely on credentials to make professional choices, often leading to suboptimal outcomes.

**Keywords:** Financial Advisors, Financial Literacy, Advisor Credentials, Consumer Preferences, Risk Attitude

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## **CHAPTER 1** Introduction

Nowadays, advisors play a crucial role. With many options available, it is difficult for individuals to find the right advisor to trust with their finances. A survey by Morgan Stanley (2023) found that over 57% of high-net-worth U.S. investors consult financial advisors. Furthermore, awards like 'Forbes Best-In-State Wealth Advisors' further highlight advisors' importance in helping investors achieve goals and financial success (Businesswire, 2024). This study explores the relationship between financial advisors and their clients, specifically focusing on the effect of financial literacy, demographics, credentials, prior experience with consultants, and risk attitude. Indeed, according to Yahoo Finance (2024), failing to consider clients' behaviour toward risk can hinder effective financial planning.

This thesis investigates how several factors affect consumer preferences, client-advisor interactions, and financial outcomes. Existing literature on consumer behaviour focuses on the effects and dynamics of trust, financial literacy, and advisor selection. Agnew et al. (2018) serve as a foundational study and reveal that first impressions can significantly affect investors' preferences for financial advisors. They explore how client and advisor attributes, and advice quality influence the relationship between clients' preferences for financial advisors and their interactions with them. Stolper and Walter (2017) emphasise the importance of financial literacy in retirement planning, especially in countries like Italy, where changes in retirement systems have increased consumers' responsibility in the context of financial decision-making. Calcagno and Monticone (2015) use a theoretical approach to investigate the influence of financial literacy on the likelihood of seeking professional advice, suggesting that advisors tend to offer more information to financially literate investors. Consequently, higher financial literacy leads to a higher demand for professional financial advice. Madamba and Utkus (2017) employ qualitative interviews and a large-scale survey to explore trust dynamics between advisors and clients. On the one hand, they find that benevolence, integrity, and effective communication can enhance trust, and on the other hand, they caution against blind trust, as it may lead clients to overlook advisors' self-serving behaviour.

This paper explores consumer preferences when choosing financial advisors, examining how advice quality, as well as advisors' age, gender, and credentials, affect clients' decisions. Furthermore, it investigates whether preferences for advisors differ based on clients demographics, financial literacy, risk attitude and prior experience with an advisor. Unlike prior studies in the Australian context, such as Agnew et al. (2018), this research focuses on the Italian financial market, showing how cultural and regulatory differences affect preferences and interactions. Given this objective, the following central research question emerges: "How do specific attributes of financial advice and advisors influence consumer preferences when choosing between financial advisors in the Italian financial landscape?"

The methodology is inspired by Agnew et al.'s (2018) research and employs qualitative and quantitative approaches. To collect the data, I conducted an online discrete choice experiment (DCE) with over 150 Italian participants aged over 18. Prior to the actual choice sets, the experiment collected information about respondents' demographics and assessed their financial literacy level using Lusardi & Mitchell's (2011) "Big Five" questions. Subsequently, participants were exposed to four choice sets featuring videos of advisors who discussed different financial topics. This thesis analyses consumer preferences for financial advisors through several logistic regression models, which include variables for advisor demographics, advice quality, consumer demographics, risk attitude, financial literacy, and advisor presence. The analysis is anticipated to provide insightful findings. For instance, financial illiteracy is expected to affect the ability to distinguish good advice from wrong, with credentials influencing respondents' choices and evaluations. Due to Italy's lower financial literacy, manipulation tactics may be more effective compared to Australia. Hence, individuals with lower financial literacy may be more likely to be manipulated by advisors' demographics, such as age, gender, and credentials. Furthermore, clients with prior experience with financial advisors may be more able to detect bad advice and less dependable on advisors' features such as credentials. In this paper, I examine the complex relationship between consumers and financial advisors in Italy. Through empirical analysis and robust methodology, this thesis aims to improve our understanding of how these interactions work, help investors make better financial decisions and provide valuable insights for professionals and policymakers to improve personal finance outcomes.

#### **CHAPTER 2 Theoretical Framework**

Good financial advice can help individuals make difficult financial decisions, particularly in markets for retail financial services like investments or mortgages (Inderst & Ottaviani, 2012). The following section examines the complexities of financial advice and advisor selection. It addresses several key aspects: i. An introduction to financial advice and its advantages and barriers, ii. The role of financial literacy in the financial advice context, and iii. The factors influencing the client-advisor relationship, including trust and advisors' characteristics.

#### 2.1 Financial Advice: Background

Financial advice "involves both 'art' and science" (Levy, 2022). As a financial advisor, she defines financial advice as offering independent guidance that combines the economic principles of a well-structured portfolio with clients' financial goals and risk tolerance. Financial advice includes providing recommendations and strategies to help clients achieve goals such as retirement planning, investment diversification, and risk management (Tamplin, 2023). However, selecting the right financial advisor is a complex process. Individuals should define their financial needs and long-term goals and select advisors based on their background, experience, credentials and reputation. Unlike financial goals through strategic portfolio allocation, a financial advisor is a broader term that includes professionals who provide advice on life insurance, real estate, accounting, short-term trades, and banking as well (Majaski, 2023). Over the years, financial advisory has evolved significantly. Having started with basic investment guidance, it has expanded to cover many financial services, needing regular adjustments to stay aligned with ongoing life changes and developing market conditions.

Despite the clear benefits of financial advisory, common misconceptions exist. For instance, many believe that financial advisors are only for the wealthy and that all advisors provide unbiased advice. Indeed, there is ongoing debate about the value of financial advice, as some advisors might prioritise private interests over their clients' wellbeing. Nowadays, individuals deal with more complicated financial products and market conditions, which makes retirement planning even more challenging. Nevertheless, because of many barriers such as trust in financial advisors, financial capacity, and financial advice anxiety, many choose not to ask for professional consultancy (Westermann et al., 2020). For instance, people might feel uncomfortable sharing personal details or embarrassed about their financial situation. Agency problems and conflicts of interest may also affect investors and lead to suboptimal outcomes (Mullainathan, 2012). Advisors may not provide recommendations consistent with portfolio theory, even though they tailor the advice to their clients' demographics. Hackethal et al. (2012) confirm this behaviour and find that advisors may initially support clients' investment inclinations to create a connection and later provide advice misaligned with their preferences. Similarly,

Agnew et al. (2018) investigate how first impressions and catering to clients' views affect advice choices in following financial meetings. Regardless of the topic's complexity, consultants can influence investors' perceptions by providing favourable advice early on, making them perceive the following advice more positively. However, empirical evidence suggests that working with a financial advisor is associated with enhanced financial planning, such as setting precise goals, diversifying portfolios, establishing emergency funds, and increasing confidence in retirement planning (Marsden et al., 2011; Saphira & Venezia, 2001). Furthermore, financial advisors can help reduce behavioural biases like the disposition effect<sup>1</sup> and herding bias<sup>2</sup>. (Baker et al. 2019; Kramer, 2012; The Decision Lab, n.d.).

#### 2.2 Financial Advice-Seeking and Financial Literacy

When analysing the process of choosing a financial advisor, it is crucial to consider the role of financial literacy. The President's Advisory Council on Financial Literacy defines it as 'the ability to use knowledge and skills to manage financial resources effectively for a lifetime of wellbeing' (Monticone, 2010). Vince Shorb, CEO of the National Financial Educators Council, highlights that while college graduates spend years acquiring skills for higher salaries, professors give little attention to teaching them how to save, invest, and grow their money (Reliance Financial Services, 2021). Lusardi and Mitchell (2011) developed a set of questions to assess financial literacy using the US Health and Retirement Study (HRS). These questions measure individuals' understanding of basic economic concepts like interest compounding, inflation, and risk evaluation. Their investigation reveals that financial illiteracy is widespread globally, even in countries where financial markets are wellestablished. Calcagno and Monticone (2015) confirm these findings and find that the current gap in financial literacy presents a significant challenge, especially for specific demographic segments like women, older individuals, and those with lower incomes (Lusardi & Mitchell, 2011; Potrich et al., 2015). Professional guidance can help reduce financial literacy disparities, but the risk of biased advice still exists. For example, Agnew et al. (2018) underline the importance of financial advisors in addressing financial illiteracy, yet the quality and trustworthiness of financial advice are questioned.

Nevertheless, a solid financial literacy foundation might help individuals determine the quality and credibility of financial advice and help them make informed financial decisions. Therefore, I hypothesise:

**H1:** *A higher level of financial literacy is associated with a higher capability of discerning good from bad advice.* 

<sup>&</sup>lt;sup>1</sup> The tendency to prematurely sell assets that have generated profits while hanging onto assets that are losing value

<sup>&</sup>lt;sup>2</sup> Investor's tendency to blindly follow the crowd

Empirical data from the 2007 UniCredit Customers Survey, representing Italy's largest bank customers, suggests that financial advisors tend to provide more information to knowledgeable investors, which can potentially worsen knowledge disparities (Calcagno & Monticone, 2015). This tendency creates a Matthew effect, with the informed getting even more informed.

The relationship between advice-seeking behaviour, financial literacy, and advice quality is still a subject of ongoing debate. Theoretical modelling and empirical analysis suggest that investing in financial literacy might reduce the likelihood of consulting a financial advisor, implying a substitution relationship (Barthel & Lei, 2021). In contrast, Collins (2012) finds that financially literate individuals are more likely to ask for advice and participate in pension schemes, suggesting a complementary relationship. Nevertheless, results show that current advice models might compensate for the lack of financial knowledge only to a certain extent, especially among vulnerable people. Similarly, CONSOB's (Commissione Nazionale per le Società e la Borsa) investigation reveals a positive relationship between financial planning and financial literacy (Soccorso, 2022). However, many psychological barriers, such as cognitive biases, emotional influence, and psychological features, might significantly affect and hinder clients' effective financial decisions. Furthermore, Gentile et al. (2016) find that financial knowledge increases dependency on financial advisors. Financial literates often recognise the difficulties of making informed financial decisions, making them more interested in validating and boosting their knowledge with professional expertise.

Overall, financial knowledge might lead individuals to value professional advice more, but it does not guarantee that they can effectively determine the quality of the advice. Finally, Baker et al. (2019) conducted empirical research about the benefits of improving financial literacy to counteract behavioural biases. They find that financially literate investors might exhibit reduced vulnerability to advisor demographics as they tend to prioritise qualifications and advice quality over superficial characteristics like age or gender. Given these findings, I hypothesise:

# **H2:** A higher level of financial literacy is associated with a lower dependency on advisor's features, regardless of the advice's quality.

Further studies examine the importance of financial literacy in helping individuals make informed financial decisions, especially in countries experiencing pension reforms and changing investment environments. As individuals deal with increasingly difficult financial choices and become more responsible for managing their finances, professional advisors gain even more importance (Stolper & Walter, 2017).

#### 2.3 Financial Advice-Seeking and Attitude Toward Risk

Recent research highlights the significance of considering clients' risk tolerance and perception to provide suitable financial advice (Snider, 2024). Nguyen et al. (2016) describe *risk tolerance* as the maximum level of uncertainty an individual is willing to accept when making financial decisions. This concept is influenced by multiple personal and situational factors, such as the client's financial knowledge, trust in the financial advisor, and the duration of their relationship. Through theoretical modelling, the research explores how financial literacy is indirectly affected by the length of the client-advisor relationship and how it, in turn, influences asset allocation through risk tolerance. Results indicate that financially literate consumers tend to be more risk tolerant. Furthermore, the study also finds that demographic variables such as age, gender, education, and income significantly influences attitude toward risk. For instance, it tends to be higher among men, individuals with higher incomes, and those with at least a university degree. However, recent data shows a change in investment patterns in Italy, with safe investments increasing from 43.9% to 57% in 2022. This shift indicates an increase in risk aversion mainly due to the Russia-Ukraine war (Russo & Ferraresi, 2022).

Overconfidence plays a significant role in shaping individuals' risk attitudes, leading people to underestimate risks and overestimate their financial knowledge and ability to handle potential suboptimal outcomes. Gentile et al. (2016) examine the relationship between seeking financial advice, financial knowledge, and overconfidence among Italian financial investors. While financial literates are more likely to seek professional guidance, overconfidence can negatively impact the demand for financial advice. Similarly, Hsu (2022) explores the effect of several behavioural biases, in addition to overconfidence, such as self-attribution and mental accounting, on the propensity to seek financial advice. The findings show that overconfident individuals tend to prefer making investment decisions independently. However, overlooking the expertise and advice of financial advisors to improve decision-making and manage risks could lead to suboptimal investment outcomes. Therefore, the third hypothesis is:

H3: Risk-seeking individuals are less likely to select the correct advisor.

#### 2.4 Financial Advice-Seeking and Advisor Characteristics

Next, I will explore the factors influencing the interactions between financial advisors and their clients. Söderberg (2013) investigates how advisor attributes, such as gender and mood, affect consumer perceptions of financial risk, willingness to seek advice and advisor credibility. The study highlights the significant effect of advisor characteristics, notably gender, on consumers' financial decision-making process. Klein et al. (2021) confirm this finding. By using Adaptive Conjoint Analysis to uncover hidden preferences, they reveal a significant gender bias against female advisors,

particularly among male respondents. Furthermore, societal stereotypes and conventions usually associate age with wisdom and reliability, causing older advisors to be perceived as more trustworthy and inspire confidence among clients (Feng & MacGeorge, 2006). To this extent, individuals who lack prior experience with financial advisors may exhibit even higher dependability on the age and gender of advisors, leaning toward advisors who align with their demographic characteristics or societal norms. Consequently, I propose the fourth hypothesis:

**H4:** Individuals who have never had a financial advisor prefer male or older advisors over their female or younger counterparts, irrespective of advice quality.

The financial sector has seen a significant increase in the number of credentials available to financial advisors. Indeed, the Financial Industry Regulatory Authority has listed over 95 distinct professional designations for financial advisors (Zweig & Pilon, 2010). While some credentials require extensive study and examinations, others can be acquired with less effort. Given the large number of credentials, there needs to be more oversight regarding their use or potential misuse. For instance, some advisors tend to promote their credentials aggressively, leading them to mislead clients about their proficiency. To this extent, Carey and Webb (2017) find that many Ponzi schemes could have been uncovered earlier if investors had analysed advisors' credentials. Schemers often rely on credentials and other indicators of trustworthiness to deceive investors, highlighting their significant impact in creating false credibility. Agnew et al. (2018) study how individuals evaluate financial advice and advisors, focusing on credentials. The findings show that participants tend to prefer advisors who display credentials, regardless of the quality of advice or the advisor's characteristics. This preference holds even for individuals with better financial knowledge and more market experience, indicating the influential impact of credentials in financial advisory. Additionally, individuals who have never engaged with a financial advisor may be more inclined to trust advisors with credentials, as, without experience, credentials signal expertise and provide more reassurance Hence, I propose:

# **H5:** *Individuals who have never had a financial advisor prefer advisors who prominently display credentials.*

Due to the intrinsic nature of financial services, classified as 'high credence', trust is crucial when seeking financial advice (Westermann et al., 2020). Since it can be challenging to determine the quality of financial advice before using it and following advice involves taking a certain amount of risk, people must trust the advisor beforehand. 'The Money Doctor Model' hypothesises that trusting the financial advice helps decrease anxiety about financial risk (Gennaioli et al., 2015). As a result, trust enables individuals to invest in potentially beneficial investment opportunities they might otherwise avoid. Lachance and Tang (2012) present similar findings and consider trust to be influenced by factors like age, risk attitude, and financial literacy. They discovered that trust influences the demand for financial

advice more than demographic factors. Similarly, Madamba and Utkus (2017) delve into the nature of trust, focussing on its components and drivers. Their findings outline three main segments of trust: functional, emotional, and ethical. While functional aspects such as credentials and expertise are undeniably important, the research finds that emotional and ethical attributes play an even more significant role in building trust over time. For example, a press release of CONSOB (20212) highlights an increase in ESG investments from 60% in 2019 to 74% in 2021, mainly driven by younger individuals, university graduates and people who live in big cities, as they prioritise making positive environmental and social impacts through their investments. Hence, it becomes clear that financial advisors should promote ethical behaviour, transparent pricing, and fair compensation structures to foster long-term relationships with existing clients and appeal to a new generation of clients who prioritise alignment with their values.

### CHAPTER 3 Methods & Data

#### 3.1 Background: Italy

D'Alessio et al. (2021) analyse the 2020 Survey on the Financial Literacy of Italian Adults conducted by the Bank of Italy. Despite several challenges, there has been a slight improvement in financial literacy since 2017. Nevertheless, Italy still positions itself relatively low on the OECD ranking, possibly due to its lower education level and predominantly elderly population. Calcagno et al. (2017) find that Italian investors prefer making decisions independently rather than consulting professionals. This tendency stresses the need to make financial experts and transparent product information more accessible, especially for investors with lower financial literacy. In recent years, pension reforms have shifted more responsibility for retirement savings onto individuals, emphasising the need for improved financial knowledge. Data from the Bank of Italy's Survey on Household Income and Wealth (SHIW) reveals deficiencies in financial knowledge, particularly among women and less educated individuals, suggesting that financial literacy initiatives are needed (Fornero & Monticone, 2011). Italy is considering pension system reforms to extend working life, particularly in sectors experiencing labour shortages like healthcare (Serenelli, 2024). Furthermore, the shift toward defined contribution (DC) plans in Italy and other European countries represents a significant change. On the one hand, they offer flexibility and new opportunities for funds and financial advisors, but on the other hand, DC plans present challenges such as under-saving, poor investment decisions, and longevity risk (Lusardi & Mitchell, 2011; Marchetti, 1997; Balluffi, 2023). Recent data indicates that there has been a decrease in savings for pensions and old age in Italy (Russo & Ferraresi, 2023). From 15,6% in 2022 to 11,2% in 2023, this decrease might be due to economic uncertainty heightened by current geopolitical tensions, inflation and energy crisis, and the repercussions of the COVID-19 pandemic. Despite the complexities and the need to make better informed financial decisions, the analysis reveals that only 17.1% of Italian respondents consulted a financial advisor after the peak in inflation rates. This low rate might be explained by a common perception that the service might not be necessary for small amounts of liquidity or simple financial instruments. It becomes clear that the growing complexity of financial decisions, increased investment risks, and expanded options in retirement planning increase the need for financial advisors. They guide investors in the currently complex world of finance, helping individuals understand their options, assess their financial goals, and create personalised strategies to reach their retirement goals effectively. effectively.

#### 3.2 Procedure

#### 3.2.1 Sample

The study recruited 217 participants through direct and indirect communication, mainly focusing on Italian respondents. After excluding international participants, respondents who did not complete the survey, and those who spent too long on the financial literacy test, the final sample consisted of 158 participants.

#### **3.2.2 Descriptive Statistics**

The descriptive statistics in Table 3.1 show that most of the 158 participants were in the age bracket 19-30 (56.9%), and about 20.8% were males. The average self-assessment of the risk attitude was about 5.569 out of 10, with 10 indicating extreme risk-seeking behaviour. Approximately 77.7% passed the financial literacy assessment, answering at least three of the five questions correctly, and 30.5% answered all five questions correctly. About 32.5% currently have or had a financial advisor. Regarding answering the choice sets correctly about 72.1% and 81.7% provided the correct answers to the first and fourth choice sets, respectively. Approximately 48.2% and 63.5% answered the second and third choice sets correctly. About 63.5% chose the male advisor when there was a choice between female and male (Choice Set 2 and/or 3), while 15.2% and 17.8% selected the male and old advisor, respectively, even though the advice provided was wrong. Finally, 73.1% chose the advisor displaying credentials when this advisor was incorrect only in Choice Set 2.

Variables	Ν	Mean	Std. dev.	Min	Max
Male	158	0.208	0.407	0	1
Age					
19-30	158	0.569	0.497	0	1
31-50	158	0.107	0.309	0	1
>50	158	0.325	0.470	0	1
Risk attitude	158	5.569	2.023	1	10
Risk attitude x ln(Risk attitude)	158	9.964	5.323	0	23.026
Advisor present	158	0.325	0.470	0	1
FinTest	158	0.777	0.418	0	1
'Big 5'	158	0.305	0.461	0	1
Choice set 1 correct	158	0.721	0.450	0	1
Choice set 2 correct	158	0.482	0.501	0	1
Choice set 3 correct	158	0.635	0.483	0	1
Choice set 4 correct	158	0.817	0.387	0	1
Chose Male	158	0.635	0.483	0	1
Chose Old Wrong 4	158	0.178	0.383	0	1
Chose Male Wrong 3	158	0.152	0.360	0	1
Chose Credentials Wrong 2	158	0.518	0.501	0	1
Chose Credentials Wrong	158	0.731	0.446	0	1

Table 3.1: Descriptive Statistics of the Variables

Notes: The table shows descriptive statistics of the variables used. The data were collected through an online survey administered to a representative sample of the adult population. The total number of respondents included in the analysis is 158. All variables except for Risk Attitude are binary and represented as percentages and frequencies. 'Male' denotes the gender of respondents, where 1 represents male and 0 represents female. Age is binary and categorized into three groups: 'Age1' indicates respondents aged between 19 and 30 years, 'Age2' includes those aged between 31 and 50 years, and 'Age3' includes respondents over 50 years. 'Risk attitude' measures the respondent's willingness to take risks on a scale from, 1 to 10. 'Advisor' is binary and indicates whether respondents have or had a financial advisor (1) or not (0). 'Fintest' is binary and indicates whether the respondent answered at least 3 of the 'Big 5' questions correctly (1) or not (0). 'Big 5' is binary and indicates whether the respondent answered all 5 financial literacy questions correctly (1) or not (0). 'Choice Set 1 correct', 'Choice Set 2 correct', 'Choice Set 3 correct', and 'Choice Set 4 correct' indicates whether the participant answered the respective choice set correctly (1 for yes and 0 for no). 'Chose Male' is binary and represents the aggregate measure of whether respondents chose a male advisor in Choice Set 2 or/and 3 (1 for yes and 0 for no). 'Chose Old Wrong 4', 'Chose Male Wrong 3', and 'Chose Credentials Wrong 2' are binary variables indicating whether the respondent chose suboptimal advisors based on gender, age, or credentials in Choice Set 4, 3 and 2 respectively, coded as 1 if the older, the male, or the advisor with credentials was selected and 0 otherwise. 'Chose Credentials Wrong' is binary and represents the aggregate measure of whether respondents chose an advisor with credentials in choice sets 2 or/and 3 (1 for yes and 0 for no).

#### 3.2.3 Survey Design

The central part of this study used an online Discrete Choice Experiment (DCE) on Qualtrics. It started with an introductory text explaining the task, followed by videos of financial advisors discussing four financial topics: debt management, investment selection, mortgages, and diversification. I created the videos using Colossyan, an AI platform with real actors. For each financial topic, two different advisors provided advice. Each advisor was assigned randomly to two financial topics, resulting in

eight advice sessions and four videos. Furthermore, each session randomly designated the advisors as either Advisor 1 or Advisor 2. Participants saw the videos randomly, starting with the session by Advisor 1 and then by Advisor 2. Each choice set presented correct (good) and incorrect (bad) advice. After each choice set, respondents had to select the advisor they preferred based on the quality of advice and advisors' features.

I created the advisors' profiles based on three key characteristics: age, gender, and credentials. Considering gender and age is essential because first, it helps identify biases in a male-dominated industry, and second, older individuals are often seen as more experienced (Feng & MacGeorge, 2006). Agnew et al. (2018) pretested advisor names to ensure equal levels of likability and trust. As a result, the advisors were Michael Adams (younger male), Claire Harris (younger female), David Forbes (older male), and Elizabeth Turner (older female). I focused on credentials as the primary signal of expertise, labelling advisors as "Certified Financial Planner" (CFP), a benchmark of excellence in financial planning recently introduced in Italy (FBSP, 2023). I chose the four financial topics to be straightforward and relevant to the Italian financial landscape, ensuring there was only one correct answer per topic. Drawing from Agnew et al. (2016), topics included "paying down debt" and "diversification", as only about one-third recognize the benefits of diversification. The first topic focused on credit card debt and avoiding unnecessary fees and interest. To ensure relevance to Italian respondents, I developed two additional topics. "Investment selection" covers the choice between stocks and bonds, highlighting the long-term outperformance of stocks. "Fixed- and variable-rate mortgages" addresses Italy's significant mortgage market, with approximately 3.5 million households out of 25.7 million holding mortgages (Baroni, 2023). These topics are among the most discussed financial issues. Nevertheless, understanding them requires sufficient financial literacy. Appendix B presents the choice sets, advisor profiles, advice on the topics, and screenshots of the AI-generated videos. After the experiment, participants could see the correct advice, rate the survey on a scale from 1 to 10, and provide recommendations for improvement.

#### 3.2.4 Demographic Information and Financial Literacy Assessment

Participants provided some demographic information, including whether they were Italian, their age, and gender. Respondents also indicated their risk tolerance on a scale from 1 to 10, with 10 indicating extreme risk-seeking behaviour. Existing literature on financial advice often assumes similar motivations among investors. However, Amarel and Kolsarici (2020), reveal different investor groups, possibly due to financial complexity. Hence, advisors should tailor plans to individual risk profiles, building trust through performance and communication. Participants were then asked about their history with financial advisors and how they initially connected with them. Feng and MacGeorge (2006) found that prior experience with financial advisors reduces the impact of advisor's attributes on decision-making. Lastly, participants engaged in a financial literacy assessment, answering the "Big

Five" questions developed by Lusardi and Mitchell (2011). These questions covered various financial concepts such as interest compounding, inflation, risk diversification, bond prices, and mortgages (Appendix A).

#### 3.2.5 Model Explanation

I conducted three logistic regression models to test the hypotheses and analyse the effect of the advisor's and respondent's characteristics (Appendix C). Subsequently, I calculated the marginal effects for each regression model. Before proceeding with the regressions, I rigorously assessed the assumptions underlying logistic regressions, as outlined by Stoltzfus (2011). Initially, I transformed the dependent and most independent variables into binary variables. Then, I scrutinized the linearity assumption for continuous variables. The detailed results of this test can be found in Table 4.4, in the Results section. Since only one continuous variable, 'Risk attitude' was present, I introduced an interaction term between this variable and its natural logarithm. During the regression analysis, it became evident that Model 4.3 violates the linearity assumption. To address this issue, I created a variable indicating the squared term of 'Risk attitude'. However, including this transformation resulted in changes to the significance of several predictors and introduced moderate multicollinearity, as indicated by an increase in the variance inflation factor (VIF) from 1.38 to 6.58. Consequently, I opted not to include the polynomial of Risk attitude in the regressions. Next, I conducted further checks to ensure multicollinearity was not problematic. By computing and examining the VIFs for each predictor, I identified two variables with VIF values exceeding ten and subsequently excluded them from the regression analysis. Additionally, in line with standard practices for logistic regression analysis, I determined the appropriate sample size based on the events per variable (EPV) ratio (van Smeden et al., 2019):

$$\frac{(10*number of predictors)}{0.5} \tag{1.}$$

Given the inclusion of six predictors, the recommended sample size amounted to a minimum of 120 participants.

For the first analysis, I focused on two distinct choice sets and for each choice set I developed two models. More specifically, Models 2.1.1 and 2.1.2 focus on Choice Set 2, whereas Models 2.2.1 and 2.2.2 analyse Choice Set 4. The choice set is indicated by the subscript 'i'. These models examine how respondents' features influence their likelihood of selecting the correct advisor. The dependent variable in this model is binary, indicating whether an individual selected the 'good' advisor (1) or not (0). The primary independent variable is 'FinTest', which indicates whether the respondent passed the financial literacy assessment by correctly answering at least 3 of the 'Big 5' questions (1) or not (0). Control variables are almost all binary and include age, gender, and whether the respondent has or had a

financial advisor. 'Male' is coded as 1 for male and 0 otherwise. Age is represented by three binary variables: 'Age1' for respondents aged 19-30 (1) or not (0), 'Age2' for respondents aged 31-50 (1) or not (0), and the reference category 'Age3' being those over 50. Models 2.1.2 and 2.2.2 also consider 'Risk attitude', measured on a scale from 1 to 10, with 10 indicating extreme risk-seeking behaviour and 'Advisor', indicating whether the respondent has or had a financial advisor (1) or not (0).

The logistic regression equations for the first analysis are specified as follows:

 $Logit(P(CorrectAdvice_{i} = 1)) = \beta 0 + \beta 1 * FinTest + \beta 2 * Male + \beta 3 * Age1 + \beta 4 *$  $Age2 + \varepsilon i \qquad (2.1.1 \& 2.2.1.)$ 

$$Logit(P(CorrectAdvice_{i} = 1)) = \beta 0 + \beta 1 * FinTest + \beta 2 * Male + \beta 3 * Age1 + \beta 4 *$$
$$Age2 + +\beta 5 * RiskAttitude + \beta 6 * Advisor + \epsilon i$$
(2.1.2 & 2.2.2.)

The second analysis focuses on how respondents' characteristics affect the likelihood of choosing a male advisor when there was a choice between male and female, regardless of the advice's quality. The dependent variable is binary, indicating whether the respondent chose the male advisor in choice sets where both male and female advisors were present (Choice Set 2 and/or 3). Model 3.1 analyses 'Fintest', 'Male' and 'Age', whereas Model 3.2 considers all control variables described previously.

The logistic regression equations for this analysis are:

$$Logit(P(ChoseMale = 1)) = \beta 0 + \beta 1 * FinTest + \beta 2 * Male + \beta 3 * Age1 + \beta 4 * Age2 + \varepsilon i$$
(3.1)

$$Logit(P(ChoseMale = 1)) = \beta 0 + \beta 1 * FinTest + \beta 2 * Male + \beta 3 * Age1 + \beta 4 * Age2 + \beta 5 * RiskAttitude + \beta 6 * Advisor + \epsilon i$$
(3.2)

The third and final analysis evaluates the effect of respondents' characteristics on selecting a suboptimal advisor based on credentials, gender, and age. For Models 4.1 and 4.2 the dependent variable is binary, indicating whether the respondent chose the advisor displaying credentials when this advisor was incorrect. More specifically, Model 4.1 analyses Choice Set 2, whereas Model 4.2 focuses on Choice Set 2 or 3 or both. Model 4.3 indicates whether the respondent chose the male advisor when the male advisor was incorrect in Choice Set 3. Finally, Model 4.4 examines whether the participant chose the older advisor when the older advisor was incorrect in Choice Set 4. Each dependent variable is coded as (1) if the respondent made the suboptimal choice and (0) otherwise. For this analysis, the models consider all independent variables mentioned previously.

The logistic regression equations for this analysis are:

 $Logit(P(ChoseCredentialsWrong_{i} = 1)) = \beta 0 + \beta 1 * FinTest + \beta 2 * Male + \beta 3 *$  $Age1 + \beta 4 * Age2 + \beta 5 * RiskAttitude + \beta 6 * Advisor + \varepsilon i$ (4.1 & 4.2)

 $Logit(P(ChoseMaleWrong = 1)) = \beta 0 + \beta 1 * FinTest + \beta 2 * Male + \beta 3 * Age1 + \beta 4 * Age2 + \beta 5 * RiskAttitude + \beta 6 * Advisor + \epsilon i$ (4.3)

 $Logit(P(ChoseOldWrong = 1)) = \beta 0 + \beta 1 * FinTest + \beta 2 * Male + \beta 3 * Age1 + \beta 4 *$  $Age2 + \beta 5 * RiskAttitude + \beta 6 * Advisor + \varepsilon i$ (4.4)

Finally, I analysed the models' Pearson goodness-of-fit. The test revealed that two of the five models (2.2 and 4.4) suggested a lack of fit.

## **CHAPTER 4** Results

#### 4.1 Hypothesis Testing

Table 4.1 unveils the marginal effects post-estimation of four logistic regression models, shedding light on the factors influencing the propensity to select the correct advisor in Choice Sets 2 and 4. The log-odds for these models are presented in Table 3.2 in Appendix C. Notably, Model 2.1.1 reveals that approximately 5.5% of the variation in the likelihood of choosing the incorrect advisor in Choice Set 2 is explained by the variables in the model. Results indicate that younger individuals, aged between 19 and 30 are 21.2 percentage points more likely to make the correct choice compared to respondents over 50, holding the other variables constant. This effect is statistically significant at a 5% level. This result is confirmed by Model 2.1.2. Its pseudo-R-squared value of 0.086 reveals that approximately 8.6% of the variation in the outcome is explained by the predictors included in the model.

			Depende	nt variable
	Correc	t Advisor	Correct	Advisor
	L	ogit	Le	ogit
	(2.1.1)	(2.1.2)	(2.2.1)	(2.2.2)
FinTest	-0.097 (0.086)	-0.536* (0.088)	-0.009 (0.063)	-0.020 (0.064)
Male	0.107 (0.092)	0.100 (0.094)	-0.052 (0.060)	-0.069 (0.063)
Age 1	0.212** (0.079)	0.298** (0.089)	-0.265** (0.088)	-0.243** (0.094)
Age 2	0.088 (0.122)	0.107 (0.123)	-0.011 (0.131)	-0.103 (0.132)
Risk attitude		0.031* (0.018)		0.017 (0.015)
Advisor		0.178** (0.091)		0.041 (0.080)

Table 4.1: Marginal Effects of Respondent Characteristics on Choosing the Correct Advisor

*Note*: This table presents the marginal effects of respondent characteristics on the propensity to choose the correct advisor in Choice Set 2 and 4 (Models 2.1.1 & 2.1.2, and 2.2.1 & 2.2.2, respectively). Data were collected through an online survey administered to a representative sample of the adult population. The total number of respondents included in the analysis is 158. The Pseudo R<sup>2</sup> for Models 2.1.1, 2.1.2, 2.2.1, and 2.2.2 are 0.055, 0.086, 0.100, and 0.1099 respectively. The dependent variable, 'Correct Advisor' is a binary variable indicating whether the participant selected the right advisor. All independent variables except for 'Risk attitude' are binary. 'FinTest' indicates whether the participant passed the financial literacy assessment, answering three out of five questions correctly. 'Male' denotes the gender of respondents, where 1 represents male and 0 represents female. Age is binary and categorized into three groups: 'Age1' indicates respondents aged between 19 and 30 years, 'Age2' includes those aged between 31 and 50 years, and the reference category 'Age3' includes respondents over 50 years. 'Risk attitude' measures the respondent's willingness to take risks on a scale from, 1 to 10. 'Advisor' is binary and indicates whether respondents have or had a financial advisor (1) or not (0). Standard errors are in parenthesis. The significance levels are denoted as follows: \*p<0.1; \*\*p<0.05; \*\*\*p<0.001.

Indeed, 'Age1' increases the probability of choosing the correct advisor in Choice Set 2 by approximately 29.8 percentage points compared to respondents over 50, holding the other variables constant. This effect is statistically significant at the 5% level. Additionally, 'Risk attitude', 'FinTest' and 'Advisor' all exhibit significance at a 10% level. Specifically, for every additional point on the risk attitude scale, the probability of choosing the correct advisor increases by 3.1 percentage points. This outcome partially contradicts Hypothesis 3, stating that risk-seeking individuals are less likely to select the correct advisor. Compared to respondents who have not engaged with financial advisors yet, individuals who have or had a financial advisor are more likely to select the correct advisor by about 17.8 percentage points. Conversely, passing the financial literacy test decreases the likelihood of selecting the correct advisor by approximately 53.6 percentage points. In Model 2.2.1 and 2.2.2, the pseudo-R-squared value of 0.100 and 0.1099 suggests that the variables included explain about 10% and 10.99% of the variation in choosing the correct advisor in Choice Set 4, respectively. Unlike Model 2.1.1, Model 2.2.1 indicates that compared to individuals aged 50, participants between 19 and 30 are 26.5 percentage points less likely to make the correct advisor choice. The effect is significant at a 5% level. Similarly, Model 2.2.2 shows that younger individuals have a 24.3 percentage points lower probability of selecting the correct advisor, also being significant at a 5% level. From this analysis, the negative effect of financial literacy on the likelihood of selecting the correct advisor in Choice Set 2 (Model 2.1.2) coupled with the non-significant effect in Model 2.2.2 only partially rejects Hypothesis 1, stating that financially literate individuals are more likely to discern good from bad advice.

Table 4.2 presents the post-estimation marginal effects of two logistic regression models examining how respondents' characteristics influence their likelihood of choosing a male advisor. The log-odds for the models are presented in Table 3.3 in Appendix C. The research findings suggest that for Model 3.1, approximately 8.1% of the variance in male selection can be explained by the variables included in the model.

	Depen	dent variable	
	Chose male Logit		
	(3.1)	(3.2)	
FinTest	-0.144	-0.171*	
Male	(0.874) 0.092	(0.090) 0.088	
Age1	(0.095) 0.222**	(0.098) 0.247**	
Age2	(0.071) 0.017	(0.080) 0.019	
Distrattituda	(0.109)	(0.111)	
Risk attitude		(0.015)	
Advisor		0.055 (0.083)	

Table 4.2: Marginal Effects of Respondent Characteristics on Choosing the Male Advisor

*Note*: This table presents the marginal effects of respondent characteristics on the propensity to choose the male advisor. Data were collected through an online survey administered to a representative sample of the adult population. The total number of respondents included in the analysis is 158. The Pseudo R<sup>2</sup> for Models 3.1 and 3.2 are 0.081 and 0.087, respectively. The dependent variable, 'Chose Male' is a binary variable indicating whether the participant selected the male advisor in Choice Set 2 and/or 3. All independent variables except for 'Risk attitude' are binary. 'FinTest' indicates whether the participant passed the financial literacy assessment, answering three out of five questions correctly. 'Male' denotes the gender of respondents, where 1 represents male and 0 represents female. Age is binary and categorized into three groups: 'Age1' indicates respondents aged between 19 and 30 years, 'Age2' includes those aged between 31 and 50 years, and the reference category 'Age3' includes respondents over 50 years. 'Risk attitude' measures the respondent's willingness to take risks on a scale from, 1 to 10. 'Advisor' is binary and indicates whether respondents have or had a financial advisor (1) or not (0). Standard errors are in parenthesis. The significance levels are denoted as follows: \*p<0.1; \*\*p<0.05; \*\*\*p<0.001.

According to results from Model 3.1, respondents aged between 19 and 30 are 22.2 percentage points more likely to select the male advisor compared to individuals over 50. This result is significant at a 5% level. Model's 3.2 Pseudo-R-squared is 0.087, indicating that approximately 8.7% of the variance in male selection can be explained by the variables included in the model. Like Model 3.1, results show a positive relationship between younger individuals and their propensity to select the male advisor. Indeed, compared to participants over 50, individuals between 19 and 30 are 24.7 percentage points more likely to choose a male advisor, being significant at a 5% level. Moreover, passing the financial literacy assessment decreases the probability of selecting a male advisor by 17.1 percentage points, being significant at a 10% level. This results partially supports Hypothesis 2, which states that a higher level of financial literacy is associated with a lower dependency on advisor's characteristics, irrespective of the advice's quality.

Table 4.3 examines the post-estimation marginal effects of four regression models analysing how respondent characteristics affect their likelihood of making incorrect choices based on specific

advisor's features across different choice sets. Table 3.4 in Appendix C presents the log-odds results from the four logistic regression models. The dependent variables indicate the incorrect choice based on different features. Model 4.1 examines the propensity to choose the advisor displaying credentials incorrectly in Choice Set 2. With a pseudo-R-squared of 0.086, the variables in the model can explain approximately 8.6% of the variance in selecting the advisor with credentials incorrectly.

	Dependent variable:				
	Chose credentials	Chose credentials	Chose male	Chose old	
	wrong	wrong -	wrong	wrong	
	Logit	aggregate	Logit	Logit	
		Logit			
	(4.1)	(4.2)	(4.3)	(4.4)	
FinTest	0.154*	0.015	-0.001	0.042	
	(0.087)	(0.078)	(0.063)	(0.063)	
Male	-0.100	-0.023	-0.018	0.057	
	(0.094)	(0.082)	(0.070)	(0.061)	
Age 1	-0.298**	-0.217**	-0.028	0.305**	
-	(0.089)	(0.091)	(0.067)	(0.106)	
Age 2	-0.107	-0.203*	-0.094	0.166	
-	(0.123)	(0.111)	(0.108)	(0.138)	
Risk attitude	-0.031*	-0.018	0.871	-0.012	
	(0.018)	(0.016)	(0.095)	(0.014)	
Advisor	-0.178**	-0.091	-0.133*	-0.022	
	(0.091)	(0.082)	(0.075)	(0.078)	

Table 4.3: Marginal Effects of Respondent Characteristics on Choosing the Incorrect Advisor based on Key Features

*Note*: This table presents the marginal effects of respondent characteristics on the propensity to choose the suboptimal advisor based on credentials, gender and age. Data were collected through an online survey administered to a representative sample of the adult population. The total number of respondents included in the analysis is 158. The Pseudo R<sup>2</sup> for Models 4.1, 4.2, 4.3, and 4.4 are 0.086, 0.044, 0.044, and 0.126, respectively. The dependent variables are different types on incorrect choices: choosing an advisor displaying credentials incorrectly in choice set 2 (Model 4.1), choosing an advisor displaying credentials incorrectly in choice set 2 (Model 4.2), choosing a male advisor incorrectly in choice set 3 (Model 4.3), and choosing a male advisor incorrectly in choice set 4 (Model 4.4). All independent variables except for 'Risk attitude' are binary. 'FinTest' indicates whether the participant passed the financial literacy assessment, answering three out of five questions correctly. 'Male' denotes the gender of respondents, where 1 represents male and 0 represents female. Age is binary and categorized into three groups: 'Age1' indicates respondents aged between 19 and 30 years, 'Age2' includes those aged between 31 and 50 years, and the reference category 'Age3' includes respondents over 50 years. 'Risk attitude' measures the respondent's willingness to take risks on a scale from, 1 to 10. 'Advisor' is binary and indicates whether respondents have or had a financial advisor (1) or not (0). Standard errors are in parenthesis. The significance levels are denoted as follows: \*p<0.1; \*p<0.05; \*\*p<0.05; \*\*p<0.001.

Notably, passing the financial literacy assessment increases the probability of inaccurately choosing an advisor with credentials by approximately 15.4 percentage points, a significant effect at a 10% level. This result partially rejects Hypothesis 2, which states that greater financial literacy is associated with a decreased reliance on advisor features, regardless of the advice's quality. Furthermore, results indicate that one additional point on the risk attitude scale decreases the propensity to incorrectly choose an advisor with credentials by 3.1 percentage points. The effect is significant at a

10% level. Similarly, respondents who reported having or having had an advisor are approximately 17.8 percentage points less likely to select the wrong advisor based on credentials compared to participants who have not engaged with financial advisors yet. This finding partially supports Hypothesis 5, stating that non-advised individuals prefer advisors who prominently display credentials, irrespective of the quality of the advice. Results show that younger respondents between 19 and 30 are about 29.8 percentage points less likely to select the advisor with credentials incorrectly than respondents over 50, being significant at a 5% level. This trend is evident in Model 4.2, which analyses the propensity to incorrectly choose an advisor with credentials in Choice Set 2 or 3 or both. Specifically, compared to participants over 50 years old, they are about 21.7 percentage points less likely to make the incorrect choice based on credentials. Similarly, results show that individuals between 31 and 50 are approximately 20.3 percentage points less likely to choose the wrong advisor based on credentials in either or both Choice Set 2 and 3 compared to participants over 50. Model 4.3 studies the propensity to choose the male advisor incorrectly in Choice Set 3. With a pseudo-R-squared of about 0.438, 4.38% of the variation in the likelihood of incorrectly choosing the male advisor can be explained by the variables in the model. Similar to Model's 4.1 findings, respondents who reported having or having had a financial advisor are about 13.3 percentage points less likely to incorrectly choose the male advisor than individuals who never had experience with a financial advisor. This effect is significant at a 10% level and partially confirms Hypothesis 4, stating that non-advised individuals prefer male or older financial advisors over their female or younger counterparts, irrespective of advice quality. Finally, Model 4.4 analyses the likelihood of selecting an older advisor incorrectly in Choice Set 4. Its pseudo-R-squared of about 0.1261 indicates that approximately 12.61% of the variation in the likelihood of incorrectly selecting the old advisor can be explained by the variables included. Conversely, results show that respondents between 19 and 30 are about 30.5 percentage points more likely to be deceived by an older advisor than individuals over 50. This effect is significant at a 5% level and partially confirms Hypothesis 4, suggesting a preference for male or older advisors among non-advised individuals, irrespective of the advice's quality.

Table 4.4 presents the post-estimation marginal effects of four regression models analysing how respondent characteristics affect their likelihood of making incorrect choices based on specific advisor's features across different choice sets. Unlike Table 4.3, Table 4.4 includes an interaction term between risk attitude and its natural logarithm to test the linearity assumption, as described in the Methods section (Chapter 3).

	Dependent variable:				
	Chose credentials	Chose credentials	Chose male	Chose old	
	wrong	wrong aggregate	wrong	wrong	
	Logit	Logit	Logit	Logit	
	(4.1)	(4.2)	(4.3)	(4.4)	
FinTest	0.153*	0.021*	1.083	0.035	
	(0.087)	(0.077)	(0.415)	(0.063)	
Male	-0.102	-0.023	-0.018	0.054	
	(0.094)	(0.081)	(0.070)	(0.061)	
Age 1	-0.298**	-0.222**	-0.031	0.307**	
	(0.089)	(0.092)	(0.067)	(0.105)	
Age 2	0.102*	-0.218*	-0.089	0.189	
	(0.124)	(0.112)	(0.109)	(0.137)	
Risk attitude	0.031	-0.197	0.056	0.308*	
	(0.168)	(0.176)	(0.126)	(0.187)	
Risk attitude x ln(Risk	-0.024	0.067	-0.029	-0.121*	
attitude)	(0.064)	(0.065)	(0.049)	(0.070)	
Advisor	-0.174*	-0.109*	-0.130*	0.008	
	(0.091)	(0.084)	(0.076)	(0.080)	

Table 4.4: Testing for Linearity: Marginal Effects of Respondent Characteristics on Choosing the Incorrect Advisor based on Key Features

Note: This table presents the marginal effect of respondent's characteristics on the propensity to choose the wrong advisor based on age, gender and credentials. Data were collected through an online survey administered to a representative sample of the adult population. The total number of respondents included in the analysis is 158. The Pseudo R<sup>2</sup> for Models 4.1, 4.2, 4.3, and 4.4 are 0.049, 0.087, 0.046, and 0.147, respectively. The dependent variables are different types on incorrect choices: choosing an advisor displaying credentials incorrectly in Choice Set 2, choosing an advisor displaying credentials incorrectly in choice set 2 and/or 3, choosing a male advisor incorrectly in choice set 3, and choosing a male advisor incorrectly in choice set 4 (Model 4.1, 4.2, 4.3, and 4.4 respectively). All independent variables except for 'Risk attitude' are binary. 'FinTest' indicates whether the participant passed the financial literacy assessment, answering three out of five questions correctly. 'Male' denotes the gender of respondents, where 1 represents male and 0 represents female. Age is binary and categorized into three groups: 'Age1' indicates respondents aged between 19 and 30 years, 'Age2' includes those aged between 31 and 50 years, and the reference category 'Age3' includes respondents over 50 years. 'Risk attitude' measures the respondent's willingness to take risks on a scale from, 1 to 10. 'Risk attitude x ln (Risk attitude)' represents interaction term between 'Risk attitude' and its natural logarithm. 'Advisor' is binary and indicates whether respondents have or had a financial advisor (1) or not (0). Standard errors are in parenthesis. The significance levels are denoted as follows: \*p<0.1; \*\*p<0.05; \*\*\*p<0.001.

The results show that adding this interaction term maintains consistency across the two analyses, though there are some variations in the significance levels of financial literacy, male, age, and having an advisor. Focusing on 'Risk attitude', the results vary significantly across the analyses. For instance, Model 4. indicates that a unit increase in risk-seeking behaviour increases the likelihood of incorrectly choosing the older advisor by approximately 30.8 percentage points. Finally, the interaction term captures potential non-linear effects of 'Risk attitude' on this likelihood. In Model 4.4, the interaction term is significant at the 10% level, revealing a non-linear relationship in the context of choosing the older advisor incorrectly, the negative coefficient of the interaction term tends to reduce the overall positive effect of 'Risk attitude' on the likelihood of choosing the older advisor incorrectly. To support these findings, Figure 4.1 presents the marginal effects of the interaction term on the likelihood of choosing the older advisor incorrectly.



Figure 4.1: Marginal Effects of Interaction Term Incorrect Older Advisor Selection. Notes: The graph shows the marginal effect of the interaction term 'Risk attitude x ln(Risk attitude)' on the likelihood of choosing the incorrect advisor. Data were collected through an online survey administered to a representative sample of the adult population. The total number of respondents included in the analysis is 158. The X-axis plots 'Risk attitude', ranging from 1 to 10, with 10 indicating extreme Risk-seeking behaviour. The Y-axis represents the marginal effect of the interaction term on the likelihood to select the older advisor incorrectly in Choice Set 2.

The horizontal axis represents the level of Risk attitude, ranging from 1 to 10, with higher values indicating a greater willingness to take risks. The vertical axis shows the marginal effect of the interaction term on the likelihood of choosing the older advisor incorrectly. The graph indicates a convex shape where the likelihood of choosing the older advisor incorrectly initially decreases as Risk attitude increases from very low values to reaching its minimum (around a Risk attitude level of five). At a Risk attitude level of five, the interaction term mitigates the positive effect of Risk attitude alone. Indeed, despite Risk attitude alone having a positive effect, the interaction term's negative coefficient mitigates this effect, resulting in a minimum effect of the likelihood of choosing the older advisor incorrectly at a Risk attitude level of five. Beyond this point, the marginal effect rises as Risk attitude increases, as indicated by the positive coefficient of 0.307 in Table 4.4. Overall, the interaction term adjusts the relationship by reducing the overall positive impact of Risk attitude at both lower and higher levels.

Finally, I performed a robustness check, focusing on participants who answered all five financial literacy questions correctly. Table 4.5 presents the post-estimation marginal effects of four logistic regression models examining how respondents' characteristics influence their likelihood of choosing the correct advisor.

			Depende	ent variable
	Correct Advisor Logit		Correct	t Advisor ogit
	(2.1.1)	(2.1.2)	(2.2.1)	(2.2.2)
Male	-0.076 (0.197)	-0.076 (0.123)	0.118 (0.088)	0.236 (0.147)
Age 1	0.249 (0.172)	0.250 (0.187)	-0.390*** (0.063)	-0.500*** (0.138)
Age 2	0.057 (0.185)	-0.048 (0.182)	-	-
Risk attitude		0.081** (0.029)		-0.051 (0.035)
Advisor		-0.040 (0.155)		-

Table 4.5: Marginal Effects of Respondent Characteristics on Choosing the Correct Advisor

*Note*: This table presents the marginal effects of characteristics of respondents who answered all 'Big 5' questions correctly on the propensity to choose the correct advisor in choice sets 2 and 4 (Models 2.1 and 2.2, respectively). Data were collected through an online survey administered to a representative sample of the adult population. The total number of respondents included in the analysis is 158. The Pseudo R<sup>2</sup> of Models 2.1.1, 2.1.2, 2.2.1, and 2.2.2 are 0.030, 0.107, 0.352, and 0.252, respectively. The dependent variable, 'Correct Advisor' is a binary variable indicating whether the participant selected the right advisor. All independent variables except for 'Risk attitude' are binary. 'Male' denotes the gender of respondents, where 1 represents male and 0 represents female. Age is binary and categorized into three groups: 'Age1' indicates respondents aged between 19 and 30 years, 'Age2' includes those aged between 31 and 50 years, and the reference category 'Age3' includes respondents over 50 years. 'Risk attitude' measures the respondents have or had a financial advisor (1) or not (0). Standard errors are in parenthesis. The significance levels are denoted as follows: \*p<0.1; \*\*p<0.05; \*\*\*p<0.001.

Like Model 2.1.2 in Table 4.1, results show a positive relationship between risk-seeking behaviour and the likelihood of choosing the correct advisor in Choice Set 2. More specifically, a unit increase in the risk-attitude scale increases the propensity of making the correct advisor choice by about 8.1 percentage points. This result is significant at a 5% level. Furthermore, Models 2.2.1 and 2.2.2 show that individuals between 19 and 30 are 39 percentage points and 50 percentage points less likely to make the correct advisor choice than respondents over 50, which is significant at a 1% level. These findings further support the results from Table 4.1.

Results from Model 3.1 indicate that a younger respondent, aged between 19 and 30, is 42.4 percentage points more likely to choose a male advisor than an individual over 50 (Table 4.6, Appendix E). This effect is significant at a 5% level and is almost double the effect when considering the entire sample in Table 4.2. To a similar extent the robustness check for Model 3.2 shows that younger individuals who answered all five financial literacy questions correctly are 23.5 percentage points more likely to choose a male advisor than an individual over 50, being significant at 5% level. Furthermore, when considering only the portion of the sample answering the 'Big 5' questions correctly, Model 3.2

shows that risk-seeking behaviour increases the likelihood of choosing the male advisor by about 5.3 percentage points. Finally, contrary to Table 4.3, the robustness check for Model 4.1 shows that having or having had a financial advisor increases the likelihood of choosing the advisor displaying credentials incorrectly by 4 percentage points compared to never having established a relationship with a financial advisor (Table 4.7, Appendix E). This controversiality is also evident in Model 4.3. More specifically, individuals who passed the 'Big 5' questions and reported having or having had a financial advisor are about 7 percentage points more likely to select the incorrect advisor based on gender. Nevertheless, the robustness check for Model 4.4 confirms the findings in Table 4.3, indicating that younger individuals are about 50 percentage points more likely to choose the older advisor incorrectly than respondents over 50.

## **CHAPTER 5** Discussion & Conclusion

The analysis shows that preferences for financial advisors are significantly influenced by the respondents' financial literacy, risk attitude, demographics, and prior experience with advisors. Individuals who already have or had financial advisors were more likely to select the right advisor and less likely to be deceived by factors like gender. This finding is supported by Klein et al. (2016) and Feng and MacGeorge (2006), who found that having prior experience with professionals might reduce the effect of an advisor's attributes on clients' decisions. Similarly, my analysis indicates that individuals who have never engaged with a financial advisor tend to be more influenced and misled by credentials. Indeed, Agnew et al. (2018) find that those individuals tend to prefer advisors who display credentials, regardless of the quality of the advice. The reason behind this might be that individuals who have already worked with a consultant before, have possibly gained more knowledge, making them more able to assess advisors' expertise and the quality of advice. In contrast, those lacking experience may trust advisors displaying credentials more, perceiving credentials as a signal of expertise. In contrast to Gentile et al. (2016), risk-seeking individuals were better at distinguishing good from bad recommendations and less likely to rely on credentials. Specifically, as risk-seekers tend to be more proactive when making financial decisions, they are likely to have gained more experience and exposure to several financial situations and investment opportunities. Additionally, as they tend to make independent decisions and focus on their judgement, individuals with higher risk attitudes are less likely to rely on external factors like credentials. The interaction term between risk attitude and its logarithm underlines the significant effect of risk attitude on individual preferences, specifically when considering age. After introducing the interaction term, risk attitude positively affected the likelihood of choosing the older advisor when they gave incorrect advice. This result could be explained by the fact that risk-seeking individuals may view older advisors as having more experience or stability, aligning with their preference for taking risks. However, this positive effect is partially mitigated by the negative coefficient of the interaction term. For individuals who tend to be indifferent to risk, the interaction term offsets the positive effect of 'Risk attitude' on the likelihood of choosing the older advisor incorrectly. These findings emphasize the importance of considering clients' risk behaviour when providing targeted financial advice. In contrast to Agnew et al. (2018), this analysis shows that individuals with higher financial literacy are less likely to select the advisor providing the correct advice and more likely to be deceived by credentials. The findings come from Choice Set 2, which evaluated the choice between stocks and bonds. This choice set was perceived as the hardest, seeing less than 50% of respondents choosing the correct advisor and 52% making the wrong choice based on credentials, suggesting that even knowledgeable individuals could struggle under cognitive load (Gentile et al., 2016). The difficulty of this choice set questions the benefits and advantages of financial literacy in financial advisory. Indeed, under complex circumstances, financial literacy alone may not be sufficient in making optimal decisions. Different behavioural biases might explain and support these

outcomes. For instance, participants who scored higher on the financial literacy assessment may be overconfident in their financial knowledge, believing they can identify the correct advice without thoroughly considering all available information. Moreover, they may be more likely to experience cognitive biases like confirmation or anchoring bias. Specifically, they might prefer advice that aligns with their preferences or focus on specific characteristics like credentials. This can prevent them from considering and objectively analysing all information. Finally, cognitive load and fatigue may influence the ability to select the correct advisor, especially for those who scored higher on the financial literacy test. Indeed, despite being more knowledgeable, they may find it more difficult to process and evaluate the information effectively, potentially leading them to make suboptimal decisions. To this extent, Baker et al. (2019) find that higher levels of financial literacy might decrease the influence of advisor demographics like age and gender. Nevertheless, clients tend to prioritize and pay more attention to qualifications. This analysis highlights the influential nature of credentials as a signal of expertise, competence and trustworthiness, instilling confidence in the advisor's ability to provide informed recommendations. However, further investigation is needed to understand the relationship between credentials and financial literacy and the extent to which credentials counteract the positive effect of financial literacy on making correct decisions. The study shows that younger participants often selected male and older advisors, even if they gave incorrect advice. This might be due to societal stereotypes and common beliefs about gender and age. As they likely lack experience with financial advisors, younger people might rely more heavily on these norms. However, the findings regarding younger individuals contradict themselves, highlighting the need for further research.

It is essential to address the limitations of this study. The relatively small and gender-imbalanced sample might limit the generalizability of the findings and introduce biases that can affect the analysis. The AI-generated videos may lack interpersonal dynamics and important aspects of real-life advisorclient interactions. Moreover, self-reported risk attitudes may not accurately reflect the actual risk-taking behaviour of respondents. Performing a short test to assess participants' risk attitudes could provide a more accurate representation of their risk behaviour and enhance the interpretability of the results. Furthermore, a trade-off between linearity between the variables and multicollinearity had to be made. Specifically, addressing non-linearity in one model led to moderate multicollinearity and insignificance of several factors across most models. However, since non-linearity was not critical to the central research question and the model still provided reasonable estimates, the issue was not addressed. Additionally, some models indicated a lack of fit, potentially questioning the validity of the analyses. Therefore, interpretations should be made with caution.

Future research could expand on these findings and explore a broader range of advisor characteristics and their interactions with client demographics. Analyzing the interaction effects between respondents' characteristics might be interesting. Finally, replicating the experimental design over time and in a more realistic setting to understand whether preferences can be manipulated, might better capture the complexities of client-advisor relationships in Italy. Given the study's findings, financial advisors should consider risk attitudes when tailoring advice to their clients to enhance client trust and satisfaction. Moreover, to reduce and mitigate the cognitive biases of their clients and help consumers make informed decisions, professional advisors should prioritize presenting different perspectives and encouraging critical evaluation of all options. Policymakers are recommended to improve disclosure requirements of advisor credentials and ensure adherence to ethical norms and standards. Improving regulatory oversight is crucial to prevent advisors from misleading investors about their experience and not acting in their client's best interest to mitigate cases of conflicts of interest and maintain integrity within the financial advisory sector.

In conclusion, this thesis investigated the factors influencing individual preferences for financial advisors in Italy, focusing on key characteristics: credentials, age, and gender. Prior research found that financial literacy helps people in their decision-making process. Nevertheless, it is unclear if this holds in all cases or if other factors might diminish or even counteract this positive impact. Until now, no studies have assessed how advisors' and clients' features affect individual preferences for financial advisors in Italy. To address this, the study posed the question: "How do specific attributes of financial advice and advisors influence consumer preferences when choosing between financial advisors in the Italian financial landscape?". A unique online discrete choice experiment (DCE) was conducted with over 150 Italian adults. Before making their choices, the experiment collected respondents' demographics and risk attitudes, and assessed their financial literacy level. The study shows that better financial literacy increases the probability of making wrong choices and being misled by credentials. Conversely, being more drawn to taking risks helps individuals to differentiate between good and bad advice and rely less on credentials. Similarly, respondents with prior experience with financial advisors were less misled by advisors' characteristics, helping them make more accurate decisions. The analysis emphasizes the ambiguous impact of financial literacy while stressing the influential effect of credentials. Combined with previous research from Australia, it is evident that credentials can help clients choose qualified advisors and provide a competitive advantage to advisors. Nevertheless, more research on the effect of financial literacy is needed to determine the extent of its influence and confirm the findings related to credentials. The implications derived from the findings are relevant to both financial advisors and policymakers. Results show that tailoring advice to clients' preferences, personality types, and risk attitudes can enhance decision-making processes and financial outcomes. Further research in this field is essential to discover new strategies for improving financial decisionmaking and advisor-client interactions. Addressing the limitations and building on these insights will improve our understanding of financial advisory and enhance practices in this field.

## REFERENCES

- Agnew, J. R., Bateman, H., Eckert, C., Iskhakov, F., Louviere, J., & Thorp, S. (2018). First impressions matter: An experimental investigation of online financial advice. *Management Science*, 64(1), 288-307.
- Baglioni, A., Colombo, L., & Piccirilli, G. (2018). On the anatomy of financial literacy in Italy. *Economic Notes: Review of Banking, Finance and Monetary Economics*, 47(2-3), 245-304.
- Baker, H. K., Kumar, S., Goyal, N., & Gaur, V. (2019). How financial literacy and demographic variables relate to behavioral biases. *Managerial Finance*, 45(1), 124-146.
- Balluffi, S. (2023) Pension Reform in Continental Europe: A Major Opportunity for Funds and Financial Advisors. *Opimas*. Retrieved from https://www.opimas.com/research/916/ detail/
- Barthel, A. C., & Lei, S. (2021). Investment in financial literacy and financial advice-seeking: Substitutes or complements?. *The Quarterly Review of Economics and Finance*, 81, 385-396.
- Baroni, P. (2023). Mutui, italiani sommersi dai debiti: un milione di persone non riesce a pagare le rate. La Stampa. Retrieved from https://www.lastampa.it/economia/2023/07/09/ news/mutui\_italiani\_sommersi\_dai\_debiti\_un\_milione\_di\_persone\_non\_riesce\_a\_pagare\_le\_rate 12930992/#:~:text=Su%20un%20totale%20di%2025,251%2C2%20miliardi%20di%20euro.
- Bebchuk, L. A., Cohen, A., & Hirst, S. (2017). The agency problems of institutional investors. *Journal of Economic Perspectives*, *31*(3), 89-112.
- Calcagno, R., Giofré, M., & Urzì-Brancati, M. C. (2017). To trust is good, but to control is better: How investors discipline financial advisors' activity. *Journal of Economic Behavior & Organization*, 140, 287-316.
- Calcagno, R., & Monticone, C. (2015). Financial literacy and the demand for financial advice. *Journal of Banking & Finance*, *50*, 363-380.
- Carey, C., & Webb, J. K. (2017). Ponzi schemes and the roles of trust creation and maintenance. Journal of Financial Crime, 24(4), 589-600.
- Collins, J. M. (2012). Financial advice: A substitute for financial literacy?. *Financial services review*, *21*(4), 307.
- Consob (2022). Principali Tendenze in Tema di Investimenti Sostenibili e Criptoattività. *Consob*. Retrieved from https://www.consob.it/web/area-pubblica/rapporto-sostenibili-cripto
- D'Alessio, G., De Bonis, R., Neri, A., & Rampazzi, C. (2021). Financial literacy in Italy: The results of the Bank of Italy's 2020 survey. *Politica economica*, *37*(2), 215-252.
- FBSB (2023). CFP certification launches in Italy. Retrieved from https://fpsb.org/news/cfp certification-launches-in-italy/

- Feng, B., & MacGeorge, E. L. (2006). Predicting receptiveness to advice: Characteristics of the problem, the advice-giver, and the recipient. *Southern Communication Journal*, 71(1), 67-85.
- Fornero, E., & Monticone, C. (2011). Financial literacy and pension plan participation in Italy. *Journal of Pension Economics & Finance*, *10*(4), 547-564.
- Gennaioli, N., Shleifer, A., & Vishny, R. (2015). Money doctors. *The Journal of Finance*, 70(1) 91-114.
- Gentile, M., Linciano, N., & Soccorso, P. (2016). Financial advice seeking, financial knowledge and overconfidence. Evidence from Italy, Consob Research Papers, 83.
- Hackethal, A., Haliassos, M., & Jappelli, T. (2012). Financial advisors: A case of babysitters?. *Journal of Banking & Finance, 36*(2), 509-524.
- Hsu, Y. L. (2022). Financial advice seeking and behavioral bias. Finance Research Letters, 46, 102505.
- Klein, G., Shtudiner, Z., & Zwilling, M. (2021). Uncovering gender bias in attitudes towards financial advisors. *Journal of Economic Behavior & Organization*, 189, 257-273.
- Kostelic, K. (2019). Advisor choice: influences of personality traits, general attitudes and suggested biases. *Eurasian journal of business and management*, 7(1), 31-43.
- Kramer, M. M. (2012). Financial advice and individual investor portfolio performance. *Financial Management*, *41*(2), 395-428
- Lachance, M. E., & Tang, N. (2012). Financial advice and trust. *Financial Services Review*, 21(3), 209.
- Levy, D: (2022). Financial Advice: An Art or a Science?. *Wealthspire Advisors*. Retrieved from https://www.wealthspire.com/blog/financial-advice-art-or-science/
- Lusardi, A., & Mitchell, O. S. (2011). Financial literacy around the world: an overview. *Journal* of pension economics & finance, 10(4), 497-508.
- Madamba, A., & Utkus, S. P. (2017). Trust and financial advice. Vanguard Research.
- Majaski, C. (2023). Financial Planner vs. Financial Advisor: What's the Difference?. Investopedia. Retrieved from https://www.investopedia.com/articles/personal-finance/040215/financial advisor-vs-financial-planner.asp
- Marchetini, P. (1997). Italy: the future is DC. *IPE*. Retrieved from https://www.ipe.com/italy the-future-is-dc/11385.article
- Marsden, M., Zick, C. D., & Mayer, R. N. (2011). The value of seeking financial advice. Journal of family and economic issues, 32, 625-643.

- Monticone, C. (2010). Financial Literacy and Financial Advice. Universita degli Studi di Torino.
- Mullainathan, S., Noeth, M., & Schoar, A. (2012). *The market for financial advice: An audit study* (No. w17929). National Bureau of Economic Research.
- Nguyen, L., Gallery, G., & Newton, C. (2016). The influence of financial risk tolerance on investment decision-making in a financial advice context. *Australasian Accounting, Business and Finance Journal, 10*(3), 3-22.
- Potrich, A. C. G., Vieira, K. M., & Kirch, G. (2015). Determinants of financial literacy: Analysis of the influence of socioeconomic and demographic variables. *Revista Contabilidade & Finanças, 26*, 362-377.
- Reliance Financial Services (2021). *Financial Literacy Quotes. Reliance Financial Services*. Retrieved from https://www.reliancefinancialadvisor.com/financial-literacy-quotes
- Russo, G. & Ferraresi, P. M. (2022). Indagine sul Risparmio e sulle scelte finanziarie degli italiani. *Intesa SanPaolo e Centro Einaudi*. Retrieved from https://www.centroeinaudi.it/images/abook\_file/Indagine\_sul\_risparmio\_2022.pdf
- Russo, G. & Ferraresi, P. M. (2023). Indagine sul Risparmio e sulle scelte finanziarie degli italiani. *Intesa SanPaolo e Centro Einaudi*. Retrieved from https://group.intesasanpaolo.com/content/dam/portalgroup/repositorydocumenti/research/it/indag ne-risparmio/2023/Indagine%20Risparmio\_2023.pdf
- Serenelli, L. (2024). Italian government plans pension reform for longer working life. *IPE*. Retrieved from https://www.ipe.com/news/italian-government-plans-pension-reform-for-longerworking-life/10071041.article
- Shapira, Z., & Venezia, I. (2001). Patterns of behavior of professionally managed and independent investors. *Journal of Banking & Finance*, 25(8), 1573-1587.
- Snider, S. (2024). Ask an Advisor: Should a Financial Advisor Ask for My Risk Tolerance or Use Their Own 'Proven' Investment Strategy?. *Yahoo Finance*. Retrieved from https://it.finance.yahoo.com/news/ask-advisor-financial-advisor-ask-161806413.html
- Stolper, O. A., & Walter, A. (2017). Financial literacy, financial advice, and financial behavior. *Journal of business economics*, 87, 581-643.
- Soccorso, P. (2022). Pianificazione finanziaria. Consob. Retrieved from https://www.consob.it/documents/1912911/2058255/20230216\_Soccorso.pdf/5b020843-fb77 47a8-7cc6-f3e571fa27ec?t=1676538920503
- Söderberg, I. L. (2013). Relationships between advisor characteristics and consumer perceptions. *International Journal of Bank Marketing*, *31*(3), 147-166.

- Tamplin, T. (2023). Financial Advice. *Finance Strategists*. Retrieved from https://www.financestrategists.com/financial-advisor/financial-planning/financial advice/#:~:text=Financial%20advice%20is%20professional%20guidance,%2C%20tax%20planni ng%2C%20and%20more.
- The Decision Lab (n.d). Why do we tend to hold on to losing investments?. *The Decision Lab* Retrieved from https://thedecisionlab.com/biases/disposition-effect#
- van Smeden, M., Moons, K. G., de Groot, J. A., Collins, G. S., Altman, D. G., Eijkemans, M. J., & Reitsma, J. B. (2019). Sample size for binary logistic prediction models: beyond events per variable criteria. Statistical methods in medical research, 28(8), 2455-2474.

Zweig, J., & Pilon, M. (2010). Is your adviser pumping up his credentials. Wall Street Journal, 88.

# **APPENDIX A 'Big Five' Financial Literacy Questions**

1. Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?

#### A) More than \$102

B) Exactly \$102C) Less than \$102D) Don't know

- 2. "Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, with the money in this account, would you be able to buy..."
  - A) More than today
    B) Exactly the same as today
    C) Less than today
    D) Don't know
- 3. If interest rates rise, what will typically happen to bond prices?

A) They will riseB) They will fall

- C) They will stay the same
- D) There is no relationship between bond prices and the interest rate
- E) Don't know
- 4. A 15-year mortgage typically requires higher monthly payments than a 30-year mortgage, but the total interest paid over the life of the loan will be less.
  - A) True
  - B) False
  - C) Don't know
- 5. Buying a single company's stock usually provides a safer return than a stock mutual fund.
  - A) TrueB) FalseC) Don't know

# **APPENDIX B Choice Sets, Advisors' Profiles & Advice**

## 1 Paying Down Debt

You accumulated some large outstanding credit card debt with a high-interest rate. Recently, you have inherited some money and would like to know what to do with it. The next two financial advisers will recommend what you should do.

	Advisor			
	Elizabeth Turner	Claire Harris		
Gender	Female	Female		
Age	Old	Young		
Credentials	Yes	No		
Quality of advice	Good	Bad		
Advice	I understand that you have some large credit card debt but recently inherited money. SepSaving the money in a savings account might seem like a good idea, but the interest you'll earn is much less than what you're paying on a credit card instead. It's smarter to use the money to pay off your credit card debt.	<ul> <li>Saving large sums of money can be challenging so it's important to prioritize your savings goals. I recommend you ignore your st credit card debt for now and put your inheritance in a separate savings account.</li> <li>Claire</li> </ul>		
	Elizabeth Turner Gender: Female Age: Older Credentials: Yes	Claire Harris Gender: Female Age: Younger Credentials: No		
		Provinces advice ore paying down debt		

#### 2 Investment Selection

As retirement approaches, you're seeking to make wise choices regarding your investment portfolio. You're faced with the decision of allocating your savings to either bonds or stocks to strike a balance between stability and growth.

Elizabeth

Gender: Female

Age: Older Credentials: Yes

Saving

Turner

Claire

Harris

Gender: Female

Age: Younger Credentials: No 

	Advisor			
	Elizabeth Turner	David Forbes		
Gender	Female	Male		
Age	Old	Old		
Credentials	Yes	No		
Quality of advice	Bad	Good		
Advice	With retirement on the horizon, it's natural to prioritize the safety of your investments.As you approach retirement important to consider the important to consider the term growth potential of y investments. Stocks histor outperform bonds in the la retirement portfolios. By focusing on bonds, you can protect your capital and minimize the impact of market fluctuations, providing stability and security for your retirement goals.As you approach retirement important to consider the important to consider the term growth potential of y investments. Stocks histor outperform bonds in the la growth. I recommend prioritizing stocks in your investment plan to help you purchasing power over tin withstand inflation and m your retirement goals.			
	Elizabeth         Cander: Female         Age: Older         Credentials: Yes	David Forbes Gender: Male Age: Older Credentials: No		
	<section-header></section-header>	David       Image: Contrast of the con		

## **3** Fixed-Rate and Variable-Rate Mortgages

You are planning to buy a new home and need to secure a mortgage to finance it. Given the current low interest rates, you're unsure whether to opt for a fixed-rate or variable-rate mortgage. You want to make the best decision to ensure your financial stability in the long term

	Advisor			
	Claire Harris	Micheal Adams		
Gender	Female	Female		
Age	Young	Old		
Credentials	No	Yes		
Quality of advice	Good	Bad		
Advice	I understand you're looking to get a mortgage for your new home. While variable-rate mortgages may seem attractive in light of the low rates, I advise opting for a fixed-rate mortgage, even though it may be pricier than variable-rate mortgages. Fixed-rate mortgages provide stability and protection against potential rat hikes that could make paymen more difficult to manage. If interest rates continue to decrease, we can explore the option of refinancing.	I understand you're looking to get a mortgage for your new home. Considering the long- term nature of mortgages, spanning 20-30 years, and the current low interest rates, I suggest opting for a variable- rate mortgage. This choice will ensure lower monthly payments. If rates rise in the future, we can transition to a fixed-rate mortgage.		
	Claire Harris Gender: Female Age: Younger Credentials: No provides advice on: fixed-rate and variable-rate mortgages	Michael Adams Gender: Male Age: Younger Credentials: Yes		
	Claire harris Bender: Female Bee: Younger Create internet mortgage provide stability and protection examts	Michael       Conder: Male         Age: Younger       Conder: Stale         Yourgeneities advocations: Yes       Conder: Stale		

#### Diversification

In this scenario, you are considering investing in the share market. The next two financial advisers will recommend what you should do about it

	Advisor			
	David Forbes		Micheal Ad	ams
Gender	Male		Male	
Age	Old		Young	
Credentials	No		Yes	
Quality of advice	Bad		Good	
Advice	Did you know th invest in shares, go up and down invest in someth and can easily m Therefore, I reco investing your n most reliable and company on the	hat when you their prices can ? It is good to ing you know honitor. commend honey in the d valuable market.	Did you know invest in shar go up and do this out, it's a spread your f different type various indus recommend of investments	w that when you res, their prices can own? To balance a good idea to money across es of shares in stries. So, I diversifying your to reduce risks.
	David Forbes Gender: Male Age: Older Credentials: No	C	Michael Adams Gender: Male Age: Younger Credentials: Yes	Contraction of the second seco
	David Forbes Gender: Male Age: Older Credentials: No	E to freek it sparscharg you know	Michael Adams Gender: Male Age: Younger Credentials: Yes	Af a good idea to spread your money across entrypes of shares knowned

## **APPENDIX C Logistic Regressions**

		Dependent variable				
	Correct Advisor		Correct	Advisor		
	Logit		Lo	ogit		
	(2.1.1)	(2.1.2)	(2.2.1)	(2.2.2)		
Constant	0.663	0.224**	21.913***	10.316**		
	(0.291)	(0.139)	(16.038)	(9.231)		
FinTest	0.657	0.499*	0.938	0.862		
	(0.247)	(0.203)	(0.434)	(0.406)		
Male	1.591	1.572	0.682	0.598		
	(0.644)	(0.675)	(0.302)	(0.282)		
Age 1	2.502**	3.837**	0.144**	0.165**		
	(0.918)	(1.700)	(0.095)	(0.117)		
Age 2	1.464	1.623	0.451	0.468		
	(0.780)	(0.909)	(0.433)	(0.457)		
Risk attitude		1.150* (0.094)		1.133 (0.123)		
Advisor		2.237* (0.948)		1.356 (0.802)		

Table 3.2: Logistic Regression Analysis of Choosing the Correct Advisor

*Note*: This table presents the log-odds of the effect of respondent's characteristics on the propensity to choose the correct advisor in choice set 2 and 4 (Model 1.2 and 1.4 respectively). The data were collected through an online survey administered to a representative sample of the adult population. The total number of respondents included in the analysis is 158. The dependent variable, 'Correct Advisor' is a binary variable indicating whether the participant selected the right advisor. All independent variables except for 'Risk attitude' are binary. 'FinTest' indicates whether the participant passed the financial literacy assessment, answering three out of five questions correctly. 'Male' denotes the gender of respondents, where 1 represents male and 0 represents female. Age is binary and categorized into three groups: 'Age1' indicates respondents aged between 19 and 30 years, 'Age2' includes those aged between 31 and 50 years, and the reference category 'Age3' includes respondents over 50 years. 'Risk attitude' measures the respondent's willingness to take risks on a scale from, 1 to 10. 'Advisor' is binary and indicates whether respondents have or had a financial advisor (1) or not (0). Standard errors are in parenthesis. The significance levels are denoted as follows: \*p<0.1; \*\*p<0.05; \*\*\*p<0.001.

	Dependent variable		
	Chose male Logit		
	(3.1)	(3.2)	
Constant	1.567	0.992	
	(0.734)	(0.604)	
FinTest	0.499	0.437*	
	(0.215)	(0.197)	
Male	1.558	1.530	
	(0.720)	(0.729)	
Age1	2.909**	3.309**	
C	(1.084)	(1.389)	
Age2	1.084	1.099	
0	(0.570)	(0.589)	
Risk attitude		1.076	
		(0.088)	
Advisor		1.305	
		(0.525)	

Table 3.3: Logistic Regression Analysis of Choosing a Male Advisor

*Note*: This table presents the log-odds of the effect of respondent's characteristics on the propensity to choose the male advisor. The data were collected through an online survey administered to a representative sample of the adult population. The total number of respondents included in the analysis is 158. The dependent variable, 'Chose Male' is a binary variable indicating whether the participant selected the male advisor in choice set 2 and/or 3. All independent variables except for 'Risk attitude' are binary. 'FinTest' indicates whether the participant passed the financial literacy assessment, answering three out of five questions correctly. 'Male' denotes the gender of respondents, where 1 represents male and 0 represents female. Age is binary and categorized into three groups: 'Age1' indicates respondents aged between 19 and 30 years, 'Age2' includes those aged between 31 and 50 years, and the reference category 'Age3' includes respondents over 50 years. 'Risk attitude' measures the respondent's willingness to take risks on a scale from, 1 to 10. 'Advisor' is binary and indicates whether respondents have or had a financial advisor (1) or not (0). Standard errors are in parenthesis. The significance levels are denoted as follows: \*p<0.1; \*\*p<0.05; \*\*\*p<0.001.

Dependent variable:				
	Chose credentials	Chose credentials	Chose male	Chose old
	wrong	wrong aggregate	wrong	wrong
	Logit	Logit	Logit	Logit
	(3.3.2)	(3.3.2.3)	(3.3.3)	(3.3.4)
FinTest	2.000*	1.083	0.988	1.383
	(0.812)	(0.449)	(0.499)	(0.668)
Male	0.636	0.885	0868	1.551
	(0.273)	(0.389)	(0.487)	(0.729)
Age 1	0.261**	0.313**	0.797	10.297**
	(0.115)	(0.158)	(0.430)	(8.464)
Age 2	0.616	0.338*	0.470	3.556
-	(0.345)	(0.205)	(0.410)	(3.751)
Risk attitude	0.869*	0.906	0.871	0.915
	(0.071)	(0.080)	(0.095)	(1.008)
Advisor	0.447*	0.613	0.344*	0.844
	(0.189)	(0.271)	(0.208)	(0.503)
Constant	4.468**	12.332**	0.624	0.042**
	(2.782)	(8.678)	(0.473)	(0.042)

Table 3.4: Logistic Regression Analysis of Incorrect Advisor Selection based on Key Features

*Note*: This table presents the log-odds of the effect of respondent's characteristics on the propensity to choose the wrong advisor based on age, gender and credentials. The data were collected through an online survey administered to a representative sample of the adult population. The total number of respondents included in the analysis is 158. The dependent variables are different types on incorrect choices: choosing an advisor displaying credentials incorrectly in choice set 2, choosing an advisor displaying credentials incorrectly in choice set 2, choosing an advisor displaying credentials incorrectly in choice set 2, choosing an advisor displaying credentials incorrectly in choice set 2, and/or 3, choosing a male advisor incorrectly in choice set 3, and choosing a male advisor incorrectly in choice set 4 (Model 3.2, 3.2.3, 3.3, and 3.4 respectively). All independent variables except for 'Risk attitude' are binary. 'FinTest' indicates whether the participant passed the financial literacy assessment, answering three out of five questions correctly. 'Male' denotes the gender of respondents, where 1 represents male and 0 represents female. Age is binary and categorized into three groups: 'Age1' indicates respondents aged between 19 and 30 years, 'Age2' includes those aged between 31 and 50 years, and the reference category 'Age3' includes respondents over 50 years. 'Risk attitude' measures the respondent's willingness to take risks on a scale from, 1 to 10. 'Advisor' is binary and indicates whether respondents have or had a financial advisor (1) or not (0). Standard errors are in parenthesis. The significance levels are denoted as follows: \*p<0.1; \*\*p<0.05; \*\*\*p<0.001.

# **APPENDIX D Testing for Underlying Assumptions**

Table 4.4: Testing for Linearity: Logistic Regression Analysis of Incorrect Advisor Selection based on Key Features

	Dependent variable:			
	Chose credentials	Chose credentials	Chose male	Chose old
	wrong	wrong aggregate	wrong	wrong
	Logit	Logit	Logit	Logit
	(4.1)	(4.2)	(4.3)	(4.4)
FinTest	1.993*	1.083	0.979	1.313
	(0.809)	(0.415)	(0.495)	(0.651)
Male	0.632	0.884	0862	1.529
	(0.356)	(0.387)	(0.485)	(0.734)
Age 1	0.261**	0.304**	0.779	11.059**
-	(0.115)	(0.155)	(0.422)	(9.274)
Age 2	0.632	0.310*	0.490	4.394
-	(0.356)	(0.192)	(0.429)	(4.716)
Risk attitude	1.148	0.347	1.575	11.114
	(0.872)	(0.330)	(1.587)	(16.475)
Risk attitude x ln(Risk	0.899	1.435	0.792	0.388*
attitude)	(0.260)	(0.508)	(0.312)	(0.216)
Advisor	0.444*	0.613	0.351*	1.063
	(0.194)	(0.271)	(0.214)	(0.666)
Constant	2.727	74.694**	0.234	0.000**
	(4.014)	(145.739)	(0.431)	(0.001)

Note: This table presents the log-odds of the effect of respondent's characteristics on the propensity to choose the wrong advisor based on age, gender and credentials. The data were collected through an online survey administered to a representative sample of the adult population. The total number of respondents included in the analysis is 158. The Pseudo R<sup>2</sup> for Models 4.1, 4.2, 4.3, and 4.4 are 0.049, 0.087, 0.046, and 0.147, respectively. The dependent variables are different types on incorrect choices: choosing an advisor displaying credentials incorrectly in choice set 2, choosing an advisor displaying credentials incorrectly in choice set 2 and/or 3, choosing a male advisor incorrectly in choice set 3, and choosing a male advisor incorrectly in choice set 4 (Model 4.1, 4.2, 4.3, and 4.4 respectively). All independent variables except for 'Risk attitude' are binary. 'FinTest' indicates whether the participant passed the financial literacy assessment, answering three out of five questions correctly. 'Male' denotes the gender of respondents, where 1 represents male and 0 represents female. Age is binary and categorized into three groups: 'Age1' indicates respondents aged between 19 and 30 years, 'Age2' includes those aged between 31 and 50 years, and the reference category 'Age3' includes respondents over 50 years. 'Risk attitude' measures the respondent's willingness to take risks on a scale from, 1 to 10. 'Risk attitude x ln (Risk attitude)' represents interaction term between 'Risk attitude' and its natural logarithm. 'Advisor' is binary and indicates whether respondents have or had a financial advisor (1) or not (0). Standard errors are in parenthesis. The significance levels are denoted as follows: \*p<0.1; \*\*p<0.05; \*\*\*p<0.001.

# **APPENDIX E Robustness Check: 'Big 5' Correct**

	Dependent variable Chose male <i>Logit</i>		
_			
	(3.1)	(3.2)	
Male	0.111	0.133	
Age1	0.424**	0.235**	
Age2	(0.167) -0.014	(0.165) -0.074	
Diala attituda	(0.162)	(0.166)	
Risk attitude		(0.033*	
Advisor		0.012 (0.137)	

Table 4.6: Marginal Effects of Respondent Characteristics on Choosing the Male Advisor

*Note*: This table presents the marginal effects of characteristics of respondents who answered all 'Big 5' questions correctly on the propensity to choose the male advisor. Data were collected through an online survey administered to a representative sample of the adult population. The total number of respondents included in the analysis is 158. The Pseudo R<sup>2</sup> of Models 3.1 and 3.2 are 0.159 and 0.198, respectively. The dependent variable, 'Chose Male' is a binary variable indicating whether the participant selected the male advisor in choice set 2 and/or 3. All independent variables except for 'Risk attitude' are binary. 'Male' denotes the gender of respondents, where 1 represents male and 0 represents female. Age is binary and categorized into three groups: 'Age1' indicates respondents aged between 19 and 30 years, 'Age2' includes those aged between 31 and 50 years, and the reference category 'Age3' includes respondents over 50 years. 'Risk attitude' measures the respondent's willingness to take risks on a scale from, 1 to 10. 'Risk attitude x ln (Risk attitude)' represents have or had a financial advisor (1) or not (0). Standard errors are in parenthesis. The significance levels are denoted as follows: \*p<0.1; \*\*p<0.05; \*\*\*p<0.001.

	Dependent variable:			
	Chose credentials	Chose credentials	Chose male	Chose old
	wrong	wrong - aggregate	wrong	wrong
	Logit	Logit	Logit	Logit
	(4.1)	(4.2)	(4.3)	(4.4)
Male	0.076	-0.241	0.133	-0.236
	(0.193)	(0.168)	(0.123)	(0.147)
Age 1	-0.250	0.112	0.179	0.500***
	(0.187)	(0.175)	(0.147)	(0.138)
Age 2	0.047	0.095	-	-
-	(0.182)	(0.167)		
Risk attitude	-0.081**	-0.075**	-0.033	0.051
	(0.029)	(0.030)	(0.027)	(0.035)
Advisor	0.040**	0.117	0.070*	-
	(0.155)	(0.140)	(0.164)	

Table 4.7: Marginal Effects of Respondent Characteristics on Choosing the Incorrect Advisor based on Key Features

*Note*: This table presents the marginal effects of characteristics of respondents who answered all 'Big 5' questions correctly on the propensity to choose the suboptimal advisor based on credentials, gender and age. Data were collected through an online survey administered to a representative sample of the adult population. The total number of respondents included in the analysis is 158. The Pseudo R<sup>2</sup> for Models 4.1, 4.2, 4.3, and 4.4 are 0.107, 0.116, 0.198, and 0.252, respectively. The dependent variables are different types on incorrect choices: choosing an advisor displaying credentials incorrectly in choice set 2 (Model 4.1), choosing an advisor displaying credentials incorrectly in choice set 2 (Model 4.1), choosing an advisor displaying credentials incorrectly in choice set 4 (Model 4.4). All independent variables except for 'Risk attitude' are binary. 'Male' denotes the gender of respondents, where 1 represents male and 0 represents female. Age is binary and categorized into three groups: 'Age1' indicates respondents aged between 19 and 30 years, 'Age2' includes those aged between 31 and 50 years, and the reference category 'Age3' includes respondents over 50 years. 'Risk attitude' measures the respondent's willingness to take risks on a scale from, 1 to 10. 'Risk attitude x ln (Risk attitude)' represents have or had a financial advisor (1) or not (0). Standard errors are in parenthesis. The significance levels are denoted as follows: \*p<0.1; \*\*p<0.05; \*\*\*p<0.001.