

Do advisors respond to investors' preferences?

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Abstract: To understand if investment advisors are responsive to private investors' preferences, we send trained mystery shoppers to 414 investment consultations. Our findings show that investment advisors generally recommend products that match investors' risk preferences but only show limited consideration of investors' sustainability preferences even when preferences are explicitly signaled. We find a positive advisor attitude towards sustainable investments to be associated with a higher percentage of suitable product recommendations while a high reliance on a product portfolio from a single asset manager decreases the percentage of suitable product recommendations. Sustainability preferences that limit advisors' ability to make an offer are altered in legal preference documentation. Investment advisors working for banks that primarily sell products from a single asset manager are more likely to wrongly document investors' sustainability preferences. Inaccurate documentation persists even if advisors are monitored. These findings have important implications for regulators and investors. First, regulators should be aware that merely requiring investment advisors to query and document an investor's sustainability preference does not guarantee that preferences are considered in product recommendations. Second, investors with sustainability preferences should carefully consider whether the products recommended by investment advisors really fit their sustainability preferences before investing.

Keywords: Advisor misconduct, field study, investment advisory services, MiFID II, mystery shopping, private investors

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1. Introduction

Private investors are powerful financial market participants holding USD 463.6 trillion in assets (Shorrocks, Davies, and Lluberas 2022). Their preferences and decisions have a significant economic impact and increasingly attract scholarly interest (Bauer, Ruof, and Smeets 2021; Heeb et al. 2022). However many private investors do not make their decisions alone but rely on investment advisors to make investment decisions. This reliance assigns investment advisors an influential role, one in which they can potentially impact how investor preferences translate into investment choices.

The literature on investment advisors has showcased the importance of professional advice for private households while also highlighting potential pitfalls. Investment advisors help investors with low financial literacy to achieve better investment outcomes (Foerster et al. 2017; Gaudecker 2015) and reduce investors' anxiety (Gennaioli, Shleifer, and Vishny 2014). However, investment advisors, at times, act in the bank's rather than the client's best interest (Christoffersen, Evans, and Musto 2013; Hoechle et al. 2018; Inderst and Ottaviani 2009) and can hurt investors' performance (Bergstresser, Chalmers, and Tufano 2009; Chalmers and Reuter 2020; Hackethal, Haliassos, and Jappelli 2012; Hoechle et al. 2016; Linnainmaa, Melzer, and Previtero 2021). Investment advisors tend to sell products with higher commissions and products they personally invest in (Foerster et al. 2017; Inderst and Ottaviani 2009; Linnainmaa, Melzer, and Previtero 2021). Yet, investors' preferences are growing in relevance given investors' willingness to pay premiums for their preferences (Heeb et al. 2022; Laudi, Smeets, and Weitzel 2023; Engler, Gutsche, and Smeets 2023). Investor preferences are commonly studied ex-post through fund flows or ex-ante in experimental settings (Hartzmark and Sussman 2019; Heeb et al. 2022). Inferring private investors' preferences from fund flows has limitations due to challenges in product accessibility and investment advisors' impact on client portfolios (Foerster *et al.*, 2017). Similarly, experimental findings do not always translate into real-world investment behavior due to experimental choice sets not being available in practice. Understanding what happens at the point of sale and how advisors translate private investors' preferences into investment recommendations is thereby crucial for theories explaining household portfolios. In this paper, we study the investment advisory process and

the resulting product recommendations to understand the degree to which investors' expressed preferences are associated with the products investment advisors recommend. We ask: **Are advisors responsive to private investors' preferences?**

To answer this question, we conduct a large and comprehensive field study using the mystery shopping approach (Blessing and Natter 2019; Finn and Kayande 1999). Between March 2023 and August 2023, we collected a data set of 414 investment consultations between private investors and investment advisors to gain insights into the investment product distribution process (i.e., investment advisory services). Our private investors are mystery shoppers who have undergone a multi-day training program. We developed and pre-tested the training and data collection process between October 2022 and December 2022. During the pre-test, we collected an additional 90 investment consultation observations which are not part of the final data set. The mystery shoppers are allocated different investor preference profiles. The profiles are designed based on EU regulations on product and preference classifications which allows us to unambiguously determine if the recommended products match investors' expressed preferences.

We find that on average, 87 percent of the products recommended by advisors matched investors' expressed risk preferences, whereas only 46 percent matched investors' desired sustainability preferences.

If the investment advisor failed to query sustainability preferences before recommending products (which is mandated by EU regulation), our investors were instructed to express their preferences without being asked. Such signaling of sustainability preferences does not increase the likelihood of receiving a suitable product recommendation. Investment advisors' lack of consideration of investors' sustainability preferences is at least partially driven by low product diversification as well as advisors falsely documenting investors' preferences. Sustainability preferences that limit advisors' ability to make an offer are altered in legal preference documentation. Investment advisors working for banks that primarily sell products from a single asset manager manipulate preferences the most. Inaccurate documentation persists even if advisors are monitored, and investors take an active role in expressing their preferences when investment advisors don't query them.

These findings have two important regulatory implications. First, even though investment advisors are mandated by EU regulation to query investors' sustainability preferences, the expressed preferences are unlikely to be matched to suitable products meaning private investors are not recommended the types of products they want. Second, the preferences

expressed by investors generally do not match those recorded in mandated consultation documentation making it hard to detect preferences inconsideration. This mismatch is at least partially driven by banks' low product diversification, suggesting that advisors falsely document preferences so they can still recommend products and make a sale. Current investor protection actions (e.g., consultation documentation and consultation monitoring) do not prevent advisor misconduct.

Our findings make contributions to two strands of literature. First, our work adds to the literature on investment advisor misconduct (e.g., Bergstresser, Chalmers, and Tufano 2009; Chalmers and Reuter 2020; Del Guercio, Reuter, and Tkac 2010; Egan 2019; Egan, Matvos, and Seru 2019; Hackethal, Haliassos, and Jappelli 2012; Hoechle et al. 2018; Linnainmaa, Melzer, and Previtero 2021). We extend this research by showing that investors' expressed sustainability preferences are not properly documented, and suitable products are often not recommended. Second, we contribute to the literature on pro-social preferences in investment decisions (Barber, Morse, and Yasuda 2021; Bauer, Ruof, and Smeets 2021; Hartzmark and Sussman 2019; Heeb et al. 2022; Riedl and Smeets 2017). Previous research shows that there are substantial financial flows toward sustainable funds (Hartzmark and Sussman 2019). While existing studies focus on measuring individual preferences and the sensitivity to different product characteristics (e.g., Bauer, Ruof, and Smeets 2021; Heeb et al. 2022), we provide evidence that, in practice, investors have limited access to products that meet their preferences. Our findings stress the importance of considering the accessibility of sustainability products alongside investor's preferences in investment decisions.

2. Study Design: Mystery Shopping

We study investment advisors' responsiveness to expressed preferences through a mystery shopping approach. Mystery shopping is a methodology to collect controlled data of private encounters and is applied to assess the effectiveness of consumer protection regulations and to gain insights into financial service quality (Finn and Kayande 1999). It is an established methodology in the financial industry to assess advisory quality and results of mystery shopping studies have played a central role in the introduction of regulation (European Commission 2018; Schrader 2006). Mystery shoppers act as customers to assess the quality of processes used in the delivery of service while paying attention to activities and procedures that do or do not happen (Wilson 1998). Mystery shopping is not about measuring the individual investment advisor's performance but about identifying systematic errors. Mystery shoppers check specific criteria pertaining to the standards of service during investment

consultations. In contrast to customer surveys, mystery shoppers can notice details that real customers usually cannot recall and offer a more objective perspective (Blessing and Natter 2019; Finn and Kayande 1999). Forms of mystery shopping vary from telephone calls to email checks and branch visits.

Mystery shopping for the present study took place both in-person at banks and virtually, online or by telephone.¹ Following the idea of mystery shopping, the investment advisors are not aware that they are in a test situation. The mystery shoppers were instructed to mimic the behavior of private investors. The investment consultations were arranged under the pretext that the private investor is currently a customer at an online-only bank but would like personal investment advice after receiving a lump sum of €20,000. The investment advisors know the mystery shoppers need an investment consultation.

2.1. Recruiting Mystery Shoppers

There are several operational challenges in recruiting mystery shoppers for complex encounters (European Commission 2018; Wilson 1998). Mystery shopping in the financial industry is an inherently complex process as investment products are complex and require a substantial level of financial literacy (Anderson and Robinson 2022; European Commission 2018; Filippini, Leippold, and Wekhof 2024; Lusardi and Mitchell 2008). Based on our market research, professional agencies offering mystery shopping services are likely not able to meet the quality standards required for mystery shopping in the financial industry as agencies provide little to no training to the shoppers and the ability to give directions to shoppers is very limited. Similar concerns were expressed by other scholars highlighting that cognitive overload, lack of diligence, and mystery shopper incompetence can undermine the reliability of mystery shopping results (Blessing and Natter 2019). Consequently, the data obtained from agency-led mystery shopping could be inaccurate since mystery shoppers potentially have little to no knowledge of the information they are evaluating. Therefore, we decided to collect our data without an agency and personally recruit and train all mystery shoppers.

We designed a multi-day training concept that consisted of five blocks. The first block consisted of training where we covered the concept of mystery shopping, its dos and don'ts, and how to record observations. The second block covered general financial literacy to ensure that the mystery shoppers have a reasonable level of knowledge about capital markets and basic financial products, e.g., active and passive funds. The third block covered sustainable investing

¹ The study was ethically approved by the central ethics committee of the University of Kassel.

(SI). We introduced different SI strategies such as exclusion criteria, ESG integration, engagement, and impact investing, and explained how these strategies are put into practice. The fourth block covered pertinent regulations including MiFID II, the Sustainable Finance Disclosure Regulation (SFDR), and the EU Taxonomy. In the fifth block, the mystery shoppers participated in staged mystery shopping visits where they got to practice and receive feedback. They also received guidance on what to pay particular attention to and how to fill out the online survey we developed. Overall, the training consisted of 30 hours in the classroom and additional prereading and study time. We got the training approved and registered at six different locations throughout Germany. In total, we recruited and trained 97 mystery shoppers across the six locations.

Before we conducted the study, we pretested our study design (i.e., mystery shopping training, data collection, and survey). Between October 2022 and December 2022, we ran one cycle of the training and collected data from 90 mystery shopping visits. The data collected in the pretest is not included in the sample of this study. After the pretest, we made some adjustments to the curriculum such as providing more training on general financial concepts and products. We also made changes to the data collection such as changing from paper-pencil surveys to an online-survey.

2.2. Mystery Shopper Instructions

The mystery shoppers were instructed to say that they inherited €20,000 and would like to make a one-time investment (not a monthly investment plan). The mystery shopper is currently a customer at an online-only bank where personal investment advice is not available, which is the reason for arranging the appointment. The investment horizon is long-term (at least 10 years). Currently, the mystery shoppers have a checking account and invest €35 a month in an index fund. The mystery shoppers are allocated one of three investor profiles. Regarding risk, all three have a moderate risk-level preference (classes 3, 4, and 5 on a 7-level scale). The sustainability preferences of the three investor profiles match product disclosure requirements by EU regulations. The EU regulations create a framework that clearly defines which preference a product is suitable for. Profile one expresses a preference for ESG-focused products, profile two a preference for E-focused products, and profile three a preference for products that reduce negative effects.

2.3. Survey

The mystery shoppers capture their observations immediately after each investment consultation. First, the mystery shoppers are instructed to record an audio file and briefly summarize the consultation and their impressions. This recording provides three advantages. First, it increases the objectivity of the mystery shopper's evaluation (Wilson 1998). Second, we can use the recording to verify that the mystery shoppers' verbally expressed observations are consistent with the survey responses, which further increases our data quality. Third, we become aware of potential influences that may not be captured by the online survey.

Afterwards, the mystery shoppers fill out the survey which comprises three different parts. The first part collects general information about the investment consultation such as the location of the consultation, the date of the consultation, the advisor's gender, and the mystery shopper's gender. In the second part, we capture whether the investment advisors query their preferences without the intervention of the mystery shoppers. The mystery shoppers also evaluate the advisor's product knowledge and attitude. In the final part, mystery shoppers document all product recommendations from the consultation (see Figure 1).

Please indicate which products were recommended to you!

	ISIN/WKN	Product Name
Product recommendation 1	<input type="text"/>	<input type="text"/>
Product recommendation 2	<input type="text"/>	<input type="text"/>
Product recommendation 3	<input type="text"/>	<input type="text"/>
Product recommendation 4	<input type="text"/>	<input type="text"/>
Product recommendation 5	<input type="text"/>	<input type="text"/>

Figure 1: Collecting mystery shoppers' product recommendations

2.4. Survey variables

The variables used in our analyses are presented in detail in the following section. To measure how responsive advisors are to investors' preferences, we analyze advisors' product recommendations and evaluate how many products are suitable for investors' expressed risk

and sustainability preferences. We use fund-type data from Thomson Reuters Refinitiv Workspace² to determine for which preference each financial product is suitable. Based on this information, we calculate the following three variables: *Sustainability Preference Consideration*, *Legally Documented Sustainability Preference Consideration*, and *Risk Preference Consideration*. The variable *Sustainability Preference Consideration* measures the share of recommended products that correctly match the investors' stated sustainability preference. This variable is truncated between 0 and 1 and takes, for example, the value 0.75 if 75 percent of the recommended products suit the expressed preference. In contrast to the variable *Sustainability Preference Consideration*, we calculate the variable *Legally Documented Sustainability Preference Consideration* not based on the investor's stated sustainability preference, but based on the sustainability preference documented in the legally mandatory suitability declarations by the advisor. This variable measures the share of recommended products that correctly match the investors' sustainability preference documented in the respective suitability declaration. This variable is truncated between 0 and 1. The variable *Risk Preference Consideration* measures the share of recommended products that correctly match the expressed risk preference. This variable is truncated between 0 and 1 and takes, for example, the value 0.80 if 80 percent of the recommended products suit the expressed risk preference correctly.

Furthermore, we instructed our private investors to actively intervene during the product recommendation stage and request the consideration of their sustainability preference by signaling a strong desire to invest sustainably if the advisor did not ask about it during the consultation. The dummy variable *Signaling* takes the value one if the private investor intervened during the product recommendation stage and signaled a strong interest to invest sustainably and zero otherwise. Previous studies have shown that advisors' attitudes, beliefs, and preferences influence their advice and the respective product recommendations (Linnainmaa, Melzer, and Previtero 2021; Paetzold, Busch, and Chesney 2015; Šindelář 2022). To capture the attitude of advisors towards SI, we use two items. The variable *Advisor's SI attitude* indicates the mystery shoppers' average agreement to the following two items on a five-point Likert scale (1 do not agree at all, ..., 5 fully agree). The first item reflects the private investor's response to the statement: "The investment advisor seemed motivated when starting with the topic of sustainable investments." The second item reflects the private investor's

² If the required data for the financial product is not available from Refinitiv Workspace, we collected the information manually from the respective fund prospectuses.

response to the statement: “I had the impression that the investment advisor tried to get me enthusiastic about sustainable investments.”

Previous studies show that the bank’s product offering influences advisors’ product recommendations (e.g. Egan 2019; Egan, Matvos, and Seru 2019). We constructed the dummy variable *High Asset Manager Concentration* to explore the effect of a predominant concentration of a bank’s product offering on one asset manager. This variable takes the value one if at least 70 percent of the bank’s product recommendations come from one asset manager and zero otherwise. Furthermore, we investigated the legally mandatory suitability declarations and manually checked whether or not the advisor had documented the private investor’s expressed sustainability preferences correctly. The dummy variable *Wrong Documentation* takes the value one if the advisor documented the sustainability preference incorrectly in the suitability declaration and zero otherwise.

Investment advice is not exclusively provided in person, but frequently provided by telephone or video consultation. According to the European regulatory requirements under MiFID II, banks are obligated to comply with increased monitoring and recording obligations in such cases. If the investment consultation takes place by telephone or video, banks are obliged to make an audio record of the entire conversation (MIFID II 2014). Thus, in such cases, the advisor is subject to additional monitoring. We constructed a dummy variable to analyze the effect of this regulatory monitoring mechanism. The dummy variable *Monitoring* takes the value one if the investment consultation was recorded by the bank.

We follow prior studies in this field (e.g., Egan, Matvos, and Seru 2019; Foerster et al. 2017; Laudi, Smeets, and Weitzel 2023; Linnainmaa, Melzer, and Previtero 2021; Paetzold, Busch, and Chesney 2015; Pinar, Eser, and Strasser 2009) and use the following variables to control for the advisor characteristics in our analyses: *Male advisor* and *Advisor Tenure*. The dummy variable *Male Advisor* takes the value of one if the advisor is male and zero otherwise. We instructed our private investors to ask the advisor during the investment consultation about the length of time he or she has been working in the advisory service. The variable *Advisor Tenure* measures the number of years the advisor has worked as an advisor.

In addition, we use the following two variables to control for the private investor characteristics: *Male Investor* and *Investor’s Sustainability Preference*. *Male Investor* is a dummy variable that takes the value one if the private investor is male and zero otherwise. In line with the three types of sustainability preferences defined in the EU under MiFID II, we have included the nominal variable *Investor’s Sustainability Preference* that takes the following three specifications: (1) ESG-focused if the private investor indicates a preference

for ESG-oriented products during the investment interview, (2) E-focused if the private investor expresses a preference for environmentally-oriented investments, and (3) Negative impact reduction if the private investor expresses a preference for negative impact reduction. To control for potential differences that might occur during the data collection period, we included the variable *Time Period*. This dummy variable takes the value of one if the consultation takes place in the second half of the data collection (after May 2023) and zero otherwise.

2.5. Sample

The data set was collected between March and August 2023 in Germany and includes a total of 341 observations.³ In the following section, we present the summary statistics for the variables used in our analysis. Table 1 provides the summary statistics for the investment consultation characteristics.

The average advisor has 13 years of experience. Despite the slightly higher share of male advisors, we are not concerned about the representativeness of our dataset as men are overrepresented in this role, as shown by previous studies (Linnainmaa, Melzer, and Previtiero 2021; e.g., Hoechle et al. 2018; Paetzold, Busch, and Chesney 2015; Laudi, Smeets, and Weitzel 2023). The variable Advisor's SI Attitude falls in the middle category on a five-point Likert scale (mean=2.75). The majority of observations come from banks with a higher reliance on a single asset manager. 22 percent of the consultations were monitored. The average investor was male and went to an investment consultation between June and August of 2023. Investors signaled their sustainability preferences in 19 percent of the investment consultations and advisors inaccurately documented expressed sustainability preferences in 78 percent of the observations.

³ Our original data set consisted of 453 investment consultations carried out by 97 private investors. We took the following steps to clean the data. First, observations where the private investor did not finish the survey were deleted. Second, if the private investors submitted the same survey twice, both observations were deleted unless all survey responses were consistent in which case only the duplicate was deleted. As a result, 39 (8.61 percent) of the consultations were excluded. After cleaning the data set, we were left with 414 observations. After removing consultations where we were unable to identify at least one product recommendation, our sample consisted of 341 observations. We further constrain this sample to observations where the investment advisor provided the investors with the suitability documentation protocol, which leaves us with a maximum of 227 observations for the part of the analysis based on this protocol.

Table 1: Summary statistics

	Observations	Mean	Std. Dev.	Min	Max
Advisor Tenure	297	13.00	9.86	0	41
Advisor SI Attitude	340	2.75	1.12	1	5
High Asset Manager Concentration	304	0.78	0.42	0	1
Male Advisor	341	0.56	0.50	0	1
Male Investor	341	0.57	0.50	0	1
Monitoring	341	0.22	0.42	0	1
Signaling	341	0.19	0.40	0	1
Time Period(after May 2023)	341	0.51	0.50	0	1
Wrong Documentation	219	0.78	0.41	0	1

Notes: This table reports the summary statistics for the investment consultation characteristics used in our empirical analysis. We report the number of observations and the mean for all variables. We also report the standard deviation (Std. Dev.), minimum value (Min), and maximum value (Max). All variables are defined in Section 2.4.

3. Results

3.1. Do advisors respond to investors' stated preferences when recommending financial products to them?

We begin our analysis with an examination of how well investment advisors respond to investors' stated risk and sustainability preferences in their product recommendations. As a measure of advisors' responsiveness, we use the consideration of investor's stated preferences in the respective product recommendations. The two plots in Figure 2 illustrate the advisors' average risk preference consideration as well as the average sustainability preference consideration with respect to the recommended products. Whiskers depicting the 95 percent confidence interval are placed above the mean for the respective variable. On average, 87 percent of the products recommended by advisors matched investors' expressed risk preferences, whereas only 46 percent matched investors' desired sustainability preferences.

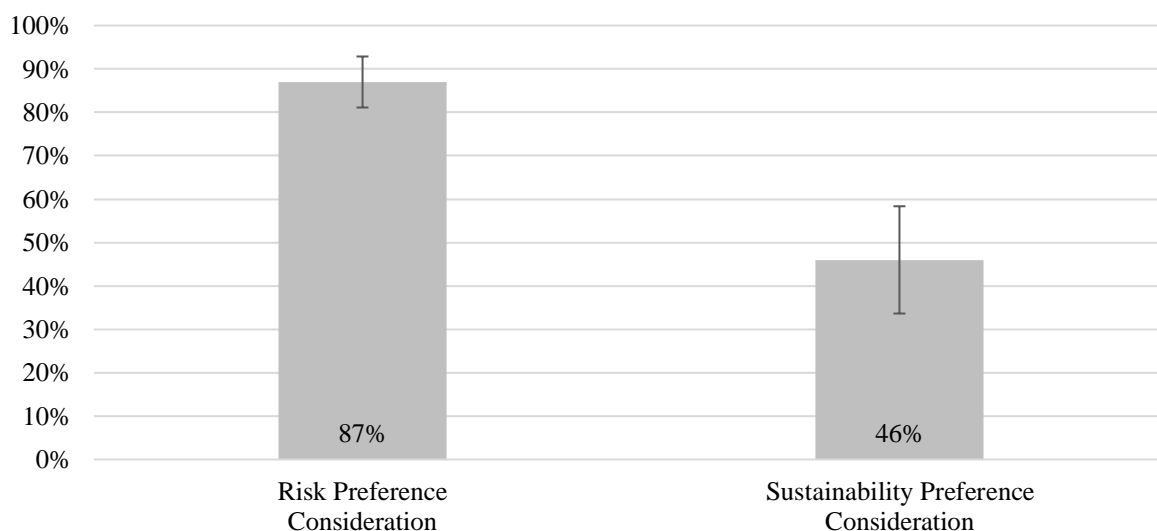


Figure 2: Advisors’ average consideration of investors’ preferences

Notes: The figure depicts the average risk preference consideration and the average sustainability preference consideration. Whiskers depicting the 95 percent confidence interval. The statistics are based on the 205 observations where investors were given a suitability assessment document and where we were able to match the product recommendation to a sustainability and risk classification. All variables are defined in Section 2.4.

Next, we test the difference in the mean between the risk preference and sustainability preference consideration and provide descriptive statistics in Table 2. Descriptive statistics for risk preference consideration and sustainability preference consideration are found in column 1 and column 2 respectively. The test statistics for the conducted t-test and Man-Whitney U-test with stars for significance levels can be found at the bottom of the table. As previously seen in Figure 2, the average risk preference consideration is almost twice as large as the average sustainability preference consideration, while the standard deviation is less than half the size. The descriptive statistics show that the risk preference distribution is much tighter around the mean than the sustainability preference distribution. Both tests indicate that the average risk preference consideration is higher than the mean sustainability preference consideration. We interpret the findings from Figure 2 and Table 2 as evidence that advisors care less about investors’ sustainability preferences when recommending products than their risk preferences. The next step in our analysis is to investigate what explains advisors’ sustainability preference consideration during the product recommendation stage.

Result I: *When recommending financial products, advisors respond more strongly to investors’ risk preferences than to their sustainability preferences!*

Table 2: Risk and Sustainability Preference Consideration

	Risk Preference Consideration	Sustainability Preference Consideration
Observations	205	205
Mean	0.87	0.46
Std. Dev.	0.21	0.45
Min	0	0
Max	1	1
1 st -quartile	0.75	0
Median	1	0.33
3 rd -quartile	1	1
Two-sample t-test		6.29***
Wilcoxon-test		3,840.50***

Notes: This table presents descriptive statistics of risk preference consideration and sustainability preference consideration. All values are rounded to two decimal places. The means between the first and second were tested using a one-sided two-sample t-test and a Wilcoxon test. All variables are defined in Section 2.4. *p<0.1; **p<0.05; ***p<0.01.

3.2. What affects advisors' consideration of investors' sustainability preferences?

Based on our previous findings, we are curious to investigate why, on average, only around one in two products recommended to investors match their sustainability preferences. We formally investigate the determinants of sustainability preference consideration using the following model:

$$\begin{aligned}
 \text{Sustainability Preference Consideration}_i &= \alpha + \beta_1 * \text{Signaling}_i + \beta_2 * \text{Advisor's SI Attitude}_i + \beta_3 * \text{Wrong Documentation}_i \\
 &+ \beta_4 * \text{High Asset Manager Concentration}_i + \beta_5 * \text{Male Advisor}_i + \beta_6 \\
 &* \text{Advisor Tenure}_i + \beta_7 * \text{Time Control}_i + \beta_8 * \phi + \epsilon_i
 \end{aligned}$$

where the *Sustainability Preference Consideration*_{*i*} that investor *i* receives is determined by *Signaling*_{*i*} ∈ {1 if the investor intervened during the product recommendation stage and expressed a strong desire to invest sustainably, 0 otherwise}, *Advisor's SI Attitude*_{*i*} ∈ {is an index variable calculated to capture the investment advisor's attitude towards sustainable financial products}, *Wrong Documentaion*_{*i*} ∈ {1 if the advisor documented investor's

sustainability preference incorrectly in the suitability declaration, 0 otherwise}, *High Asset Manager Concentration* $\in \{1$ if at least 70 percent of the bank's product recommendations come from one asset manager, 0 otherwise}, *Male Advisor* $\in \{1$ if the advisor was male, 0 if the advisor was female}, *Advisor Tenure* \in is in years, *Time Control* $\in \{1$ if the investment consultation took place after May 2023, 0 otherwise}, and ϕ {a vector of investor characteristic controls including investor gender and sustainability preference}.

Table 3 presents the results of Tobit regressions where the dependent variable is Sustainability Preference Consideration. We introduce each of the four variables of interest on their own before running a specification with the complete model from above (column 5).

Table 3: What affects advisors' consideration of investors' sustainability preferences?

	Sustainability Preference Consideration				
	(1)	(2)	(3)	(4)	(5)
Signaling	-0.05 (0.20)				0.14 (0.27)
Advisor SI Attitude		0.21*** (0.06)			0.20** (0.09)
High Asset Manager Concentration			-0.73*** (0.17)		-0.67*** (0.19)
Wrong Documentation				0.02 (0.27)	0.19 (0.28)
Male Advisor	-0.05 (0.15)	-0.02 (0.14)	-0.03 (0.15)	-0.10 (0.19)	0.03 (0.17)
Advisor Tenure	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.01 (0.01)
Constant	-0.92*** (0.26)	-1.41*** (0.31)	-0.31 (0.28)	-0.87* (0.45)	-0.88* (0.47)
Investor Controls	Yes	Yes	Yes	Yes	Yes
Time Control	Yes	Yes	Yes	Yes	Yes
Pseudo-R ²	0.61	0.63	0.74	0.92	0.96
Observations	297	297	265	187	169

Notes: This table presents the results of Tobit regressions where the dependent variable is Sustainability Preference Consideration. Sustainability Preference Consideration measures the share of recommended products that correctly match the investors' stated sustainability preference. Signaling takes the value one if the private investor intervened during the product recommendation stage and signaled a strong interest to invest sustainably and zero otherwise. Advisor's SI Attitude is an index variable calculated to capture an advisor's attitude toward sustainable products. High Asset Manager Concentration takes the value one if at least 70 percent of the bank's product recommendations came from one asset manager and zero otherwise. Wrong Documentation takes the value one if the advisor documented the sustainability preference incorrectly in the suitability declaration and zero otherwise. Male Advisor takes the value one if the advisor is male and zero otherwise. Advisor Tenure is the length of time in years the advisor has been working in the advisory service. Investor Controls are a vector of investor characteristics including Investor gender and Investor Sustainability Preference. Time Control takes the value of one if the consultation takes place in the second half of the data collection (after May 2023) and zero otherwise. All variables are defined in Section 2.4. Heteroscedasticity robust standard errors clustered at the investor level are reported in parentheses. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. All values are rounded to two decimal places.

We control for investor characteristics and time period in each specification. The Pseudo- R^2 ranges from 0.61 to a high of 0.97 in the complete model. There are 297 observations in the first two columns; the sample is reduced to 265 observations in column 3 since the asset manager concentration variable was calculated for the most frequented 9 banks in our sample; wrong documentation further reduces the sample since investment advisors did not always provide investors with a suitability assessment protocol; the complete model is based on a sample of 169 observations with complete cases⁴ for all the variables in the model.

We limit our interpretations to the full model specification in column 5. The signaling variable is not significant meaning we do not find evidence that investment advisors recommend more suitable products to investors if the investors intervene during the investment consultation to ensure that the investment advisor is aware of their sustainability preference. Advisor SI Attitude is significantly positive indicating that advisors with a positive attitude towards sustainable products recommend products that are on average 20 percentage points more suited to investors' preferences. High asset manager concentration is associated with a significant decline in sustainability preference consideration of 67 percentage points on average. We interpret this finding as an indication that investment advisors who work at banks that mainly recommend products from a single asset manager have fewer suitable products to recommend to investors and consequently recommend unsuitable products.

⁴ The results in columns 1 to 4 in Table 2 are robust to reducing the sample to the 169 observations in column 5.

Result II: *Advisors' attitude toward sustainable investments is associated with a higher percentage of suitable product recommendations while reliance on products from a single asset manager decreases the percentage.*

3.3. What affects advisors' wrong documentation of investors' sustainability preferences?

The next step in our analysis investigates the determinants of advisors' wrong documentation. We are interested in exploring why investment advisors miss the mark when documenting investors' sustainability preferences. We formally examine this question using the following model:

$$Wrong\ Documentation_i = \alpha + \beta_1 * Monitoring_i + \beta_2 * High\ Asset\ Manager\ Concentration_i + \beta_3 * Male\ Advisor_i + \beta_4 * Advisor\ Tenure_i + \beta_5 * Time\ Control_i + \beta_6 * \phi + \epsilon_i$$

where the *Wrong Documentation_i* of investor *i*'s expressed sustainability preference is determined by *Monitoring_i* ∈ {1 if the consultation was recorded by the bank, 0 otherwise}, *High Asset Manager Concentration_i* ∈ {1 if at least 70 percent of the bank's product recommendations come from one asset manager, 0 otherwise}, *Male Advisor_i* ∈ {1 if the advisor was male, 0 if the advisor was female}, *Advisor Tenure_i* is in years, *Time Control_i* ∈ {1 if the investment consultation took place after May 2023, 0 otherwise}, and ϕ (a vector of investor characteristic controls including investor gender and a sustainability preference).

Table 4 presents the average marginal effects of a binomial logistic regression model where the dependent variable Wrong Documentation takes the value one if the advisor documented the investor's sustainability preference incorrectly in the suitability declaration and zero otherwise. We introduce each of the four variables of interest on their own before running a complete model specification (column 5). We control for investor characteristics and time period in each specification. The Pseudo-R² ranges from 0.36 to a high of 0.54 in the complete model. There are 192 observations⁵ in the first three columns; the sample is reduced to 174 observations in columns 4 and 5 since the asset manager concentration variable was calculated for the most frequented nine banks in our sample.⁶

⁵ Our universe of investment consultations with a suitability assessment protocol and non-missing values in independent variables.

⁶ The results in columns 1 to 4 in Table 3 are robust to reducing the sample to the 174 observations in column 5.

Table 4: What affects advisors' wrong documentation of investors' sustainability preferences?

	Wrong Documentation				
	(1)	(2)	(3)	(4)	(5)
Monitoring	0.04 (0.07)				0.05 (0.07)
Signaling		0.17*** (0.05)			0.18*** (0.04)
Advisor SI Attitude			0.00 (0.03)		0.02 (0.03)
High Asset Manager Concentration				0.25*** (0.08)	0.25*** (0.08)
Male Advisor	0.04 (0.06)	0.05 (0.06)	0.04 (0.06)	0.04 (0.06)	0.05 (0.06)
Advisor Tenure	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.01** (0.00)	0.01** (0.00)
Investor Controls	Yes	Yes	Yes	Yes	Yes
Time Control	Yes	Yes	Yes	Yes	Yes
Pseudo-R ²	0.36	0.38	0.36	0.52	0.54
Observations	192	192	192	174	174

Notes: This table presents the average marginal effects of a binomial logistic regression model where the dependent variable is Wrong Documentation. Wrong Documentation takes the value one if the advisor documented the investor's sustainability preference incorrectly in the suitability declaration and zero otherwise. Monitoring takes the value one if the investment consultation was recorded by the bank. Signaling takes the value one if the private investor intervened during the product recommendation stage and signaled a strong interest to invest sustainably and zero otherwise. Advisor's SI Attitude is an index variable calculated to capture an advisor's attitude toward sustainable products. High Asset Manager Concentration takes the value one if at least 70 percent of the bank's product recommendations came from one asset manager and zero otherwise. takes the value one if the advisor documented the sustainability preference incorrectly in the suitability declaration and zero otherwise. Male Advisor takes the value of one if the advisor is male and zero otherwise. Advisor Tenure is the length of time in years the advisor has been working in the advisory service. Investor Controls are a vector of investor characteristics including Investor gender and Investor Sustainability Preference. Time Control takes

the value of one if the consultation takes place in the second half of the data collection (after May 2023) and zero otherwise. All variables are defined in Section 2.4. Heteroscedasticity robust standard errors clustered at the investor level are reported in parentheses. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. All values are rounded to two decimal places.

We again limit ourselves to interpreting the full specification model in column 5 of Table 3. Monitoring is insignificant meaning we do not find evidence that investment advisors are either more or less likely to accurately record investors' sustainability preferences if the bank records the consultation. We interpret this finding or rather lack thereof as an indication that contrary to expectations investor protection might not be fortified by monitoring investment consultations. However, investor sustainability preference signaling increases the chance of inaccurate documentation by 18 percentage points. We interpret this finding as evidence that investment advisors inaccurately document investors' sustainability preferences in the suitability protocol even if investors actively intervene and signal their sustainability preferences. One possible reason for this finding might be that investment advisors acknowledge investors' sustainability preferences but nevertheless inaccurately record this preference to be able to recommend either sustainable or non-sustainable products. Furthermore, we find that investment advisors who work at banks with a high asset manager concentration are more likely to inaccurately document investors' sustainability preferences. This finding further indicates that an overreliance on a single asset manager is associated with investors not getting what they want, which is in line with our previous findings in Table 3. Advisor tenure is also significant, positive indicating a 0.7 percentage-point increase in the likelihood of inaccurate documentation for every additional year an investment advisor has been in the field.

Result III: *Advisors are more likely to wrongly document investors' stated sustainability preferences if investors signal their preferences or if they work at a bank that primarily recommends products from one asset manager.*

3.4. Do investment advisors recommend suitable products based on wrongly documented sustainability preferences?

The final step in our analysis investigates whether the wrong documentation of investors' sustainability preferences is associated with a higher degree of sustainability

preference consideration based on the recorded preference. In other words, we investigate whether the investment advisors change an investor's preference and then recommend products suited to this inaccurate preference. We calculate the sustainability preference consideration based on the sustainability preference documented in the suitability declaration and regress it on the model from section 3.2. We follow the same methodology laid out in section 3.2 and present the results of Tobit regression in Table 5, which is laid out like Table 3. Pseudo-R² values range from 0.42 to a high of 0.61 in the full specification (column 5) and observations start at 189 and end at 169⁷ in the full specification.

As in the preceding two tables, we only interpret the full model specification. One finding stands out from the rest both in terms of magnitude and significance: wrong documentation is associated with a 99 percent-point increase in the percentage of products that match investors' preferences. We interpret this finding as evidence that investment advisors inaccurately document investors' preferences and recommend products suited to those inaccurate preferences. It is important to note that we can not determine a causal relationship but the sheer magnitude of the increase in suitable products after sustainable preferences are wrongly recorded leads one to ponder whether investment advisors knowingly change investors' preferences to recommend a set of suitable products to them. Advisor tenure is associated with a 3 percentage-point increase in the sustainability preference consideration for a one-year increase in the investment advisors' tenure. Advisor SI Attitude and High Asset Manager Concentration are both only significant at the 10 percent level and we consequently refrain from interpreting them although they have the expected signs as in Table 3.

Result IV: *Wrong documentation of investors' sustainability preferences is associated with more suitable product recommendations matching these inaccurate preferences.*

⁷ The results in columns 1 to 4 in Table 4 are robust to reducing the sample to the 169 observations in column 5.

Table 5: What affects advisors' legally documented consideration of investors' sustainability preferences?

	Legally Documented Sustainability Preference Consideration				
	(1)	(2)	(3)	(4)	(5)
Signaling	-0.10 (0.43)				0.06 (0.34)
Advisor SI Attitude		0.37** (0.16)			0.28* (0.15)
High Asset Manager Concentration			-0.45 (0.28)		-0.61* (0.31)
Wrong Documentation				0.79** (0.32)	0.99*** (0.36)
Male Advisor	0.09 (0.30)	0.14 (0.29)	0.20 (0.30)	0.08 (0.28)	0.20 (0.27)
Advisor Tenure	0.04*** (0.02)	0.04*** (0.02)	0.04*** (0.01)	0.04** (0.01)	0.029** (0.01)
Constant	0.91* (0.55)	-0.03 (0.57)	1.11** (0.49)	0.28 (0.46)	-0.29 (0.68)
Investor Controls	Yes	Yes	Yes	Yes	Yes
Time Control	Yes	Yes	Yes	Yes	Yes
Pseudo-R ²	0.42	0.45	0.55	0.46	0.61
Observations	189	189	171	187	169

Notes: This table presents the results of Tobit regressions where the dependent variable is Legally Documented Sustainability Preference Consideration. Legally Documented Sustainability Preference Consideration measures the share of recommended products that correctly match the investors' sustainability preference documented in the suitability declaration. Signaling takes the value one if the private investor intervened during the product recommendation stage and signaled a strong interest to invest sustainably and zero otherwise. Advisor's SI Attitude is an index variable calculated to capture an advisor's attitude toward sustainable products. High Asset Manager Concentration takes the value one if at least 70 percent of the bank's product recommendations came from one asset manager and zero otherwise. Wrong Documentation takes the value one if the advisor documented

the sustainability preference incorrectly in the suitability declaration and zero otherwise. Male Advisor takes the value of one if the advisor is male and zero otherwise. Advisor Tenure is the length of time in years the advisor has been working in the advisory service. Investor Controls are a vector of investor characteristics including Investor gender and Investor Sustainability Preference. Time Control takes the value of one if the consultation takes place in the second half of the data collection (after May 2023) and zero otherwise. All variables are defined in Section 2.4. Heteroscedasticity robust standard errors clustered at the investor level are reported in parentheses. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. All values are rounded to two decimal places.

4. Conclusion

This study investigates investment advisors' consideration of private investors' preferences. We find that investment advisors recommend products that match private investors' risk preferences but only show limited consideration of private investors' sustainability preferences. Our findings make two important contributions.

First, we contribute to the literature on advisor misconduct in bilateral advisor-client relationships. Previous research has shown that in situations with conflicting interests between advisors and clients, advisors often offer self-serving advice (Bergstresser, Chalmers, and Tufano 2009; Chalmers and Reuter 2020; Egan 2019; Hackethal, Haliassos, and Jappelli 2012; Hoechle et al. 2018). Several studies have also shown that financial professionals may destroy value for their clients by underperforming benchmarks after fees (Del Guercio, Reuter, and Tkac 2010; Linnainmaa, Melzer, and Previtero 2021). Investors with lower financial literacy are particularly affected as they are more likely to pay higher fees and investment advisors seem to take advantage of that by extracting additional profits from clients with lower financial literacy (Egan, Matvos, and Seru 2019). Our findings add to the research on advisor misconduct by showing that investors' expressed sustainability preferences are altered in documentation and suitable products are often not recommended. Wrong documentation appears to be driven by product availability as sustainability preferences that limit advisors' ability to make an offer are altered in legal preference documentation.. Advisors working for banks that only sell products from one asset manager and thereby have smaller product shelves manipulate the most. Neither intervention by the investor, nor monitoring advisors impacts the results. Current regulatory investor protection measures such as documentation in the form of suitability declarations or monitoring through recording consultations don't prevent advisor misconduct. Our second contribution to the literature is on pro-social preferences in investment decisions. Prior studies have shown that there are substantial financial flows towards sustainable funds

(Hartzmark and Sussman 2019) and that private investors are willing to pay higher fees and forgo financial return for their pro-social preferences (Bauer, Ruof, and Smeets 2021; Engler, Gutsche, and Smeets 2023; Heeb et al. 2022). Studies exploring pro-social preferences put an increasing focus on measuring individual preferences and the sensitivity to different product characteristics (Bauer, Ruof, and Smeets 2021; Heeb et al. 2022). However, our findings show that investors have very little access to products that meet their preferences, even if the preferences are explicitly expressed. Our findings stress the importance of considering the accessibility of sustainability products alongside investor's pro-social preferences in investment decisions. Our study demonstrates that private investors do not always get the type of sustainable investment product they ask for.

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