Client Involvement in Expert Advice – Antibiotics in Finance?

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ABSTRACT

We use minutes from 17,000 financial advisory sessions and corresponding client portfolio data to study how active client involvement affects advisor recommendations and portfolio outcomes. We find that advisors confronted with acquiescent clients stick to their standards and recommend expensive but well diversified mutual fund portfolios. However, if clients take an active role in the meetings, advisors deviate markedly from their standards, resulting in poorer portfolio diversification and lower Sharpe ratios. Our findings that advisors cater to client requests parallel the phenomenon of doctors prescribing antibiotics to insistent patients even if inappropriate, and imply that pandering diminishes the quality of advice.

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I. Introduction

The reluctance of individual investors to follow advice may reduce the quality of advice they receive as, in order to close a deal, advisors may decide to go along even with unsound client requests.

John Campbell, Ely Lecture 2016

In many countries households rely on a financial advisor when making important financial decisions. The economics and finance literature so far has mostly focused on the supply side of this important service, emphasizing the principal-agent conflict that underlies the client-advisor relationship. With the advisor acting as both advisor and sales agent, advisor recommendations are conjectured to be biased by financial incentives paid by product providers. At the same time, lay investors often prove too credulous or unable to discern sales talk from unbiased advice (Inderst and Ottaviani, 2009, 2012a,b).[1]

To date, little attention has been dedicated to the demand side of financial advice. However, recent empirical studies focusing on individual investors' use of financial advice find that investors may be unwilling to follow advice, even if it is of high quality (Bhattacharya, Hackethal, Kaesler, Loos, and Meyer, 2012; Stolper, 2017). Campbell (2016) warns that investors' reluctance to follow expert recommendations may reduce the quality of advice they receive because, to close a deal, advisors may decide to pander to unsound client requests, such as those regarding investments in "hot assets" (Gennaioli, Shleifer, and Vishny, 2015), instead of instructing them about the benefits of diversification. As available data sets do not allow disentangling client from advisor inputs into the process of advice, detailed empirical evidence on how these features of the client-advisor interaction shape advice outcomes is presently limited.

This paper investigates the role of client involvement in the process and outcome of financial advice. We analyze how advisors who otherwise follow a highly standardized, ready-made advisory approach react if clients confront them with investment ideas or question the advisor's suggestions. We also assess the implications for portfolio outcomes and client satisfaction. Our analyses are based on a novel data set derived from the minutes of about 17,000 clientadvisor interactions at a large German branch bank between 2010 and 2013. Since January 2010, written minutes of financial advisory sessions have been mandated by law for all financial advisors in Germany. These written records not only provide detail on the client-advisor interaction, but notably inform on

[1]Besides, the theoretical literature points to liability or reputational concerns as well as altruistic preferences as factors shaping advisor recommendations. Recent empirical contributions emphasize advisor preferences and misguided beliefs on appropriate investment strategies as a determinant of advice (Foerster, Linnainmaa, Melzer, and Previtero, 2017; Linnainmaa, Melzer, and Previtero, 2016). The empirical literature also has attributed differences in portfolio structures and performance between advised and self-directed accounts to supply-side factors only. Empirical evidence from individual investor data (Hoechle, Ruenzi, Schaub, and Schmid, 2017, 2016; Chalmers and Reuter, 2015; Hackethal, Haliassos, and Jappelli, 2012a; Karabulut, 2013) and fund-level data (Christoffersen, Evans, and Musto, 2013; Christoffersen et al., 2013; Bergstresser, Chalmers, and Tufano, 2009) suggests that brokers and financial advisors take negative impact on their clients' portfolio performance, but have a soothing effect on common behavioral biases such as underdiversification (Hoechle et al., 2016; Gaudecker, 2015; Hackethal et al., 2012a), home bias (Kramer, 2012; Bluethgen, Gintschel, Hackethal, and Mueller, 2008) and the disposition effect (Hoechle et al., 2016; Shapira and Venezia, 2001) and generally improve financial planning (Finke, 2013; Lusardi and Mitchell, 2011).

instances of client involvement in the advisory process and advisors' respective responses. We link the information from the advisory minutes to administrative bank data on the history of client portfolio holdings, security transactions and relevant client characteristics.

As a result of regulatory tightening and ensuing compliance concerns, bank financial advice has become highly standardized, especially in the retail segment. The internal guidelines of the sample bank, which is representative for the German market, ask advisors to match their clients with a portfolio either composed of the bank's own asset management funds or a number of actively managed funds from other providers pre-selected by the central investment committee of the bank. However, the advisor is free to discuss any other investment and product ideas clients bring forward on their own initiative. Hence, input from both the advisor and the client may affect final recommendations. As an important feature, the advisory minutes document the financial products discussed during a meeting as well as the final recommendations along with the advisor's stated justification for recommending a given product to the client. In a double-rater process, we use manual text analysis and search these statements for signals of explicit requests and investment ideas clients introduced during the meeting.[2] Overall, 8% of the 6,204 sample clients approach their advisor at least once with an own idea. At the recommendation level, client ideas account for 3% of the 25,200 purchase recommendations in the sample. Besides examining explicit client ideas, we also analyze other variables that indicate client involvement into the process of financial advice. These variables include a client's share of security purchases conducted without advisor input as a measure of independence, a dummy equal to one if a client has experience in trading complex securities such as options as a measure of sophistication, and a client's gender as a proxy for (perceived) confidence. Finally, we follow Mullainathan, Noeth, and Schoar (2012) in assuming that advisors read clients' implicit investment preferences from their existing portfolio allocations at entering the meeting.

We hypothesize that advisors deviate from the bank's standard advisory approach in response to both explicit client requests and existing investment strategies that are orthogonal to the bank's standard approach, which is dominated by actively managed funds. In particular, advisors may pander to client requests even in cases where deviant product recommendations reinforce existing investment biases. Ex ante, however, we are agnostic on the sign of the effect client involvement takes on portfolio outcomes. If involved clients exhibit skill in picking securities or insist on deviating from the bank's standard product solution to circumvent high annual portfolio fees, deviant strategies may well achieve better after-fee results.

In line with our hypothesis, we find that part of the variation in advisor recommendations can be attributed to explicit client requests and implicit investment priors controlling for clients' risk preferences and unobserved advisor heterogeneity. Advisor recommendations to clients who get more involved in the process of advice show larger deviations from the bank's ready-made high-cost portfolio approach that is sold with the promise of "peace of mind." We provide evidence that the

[2]Examples of such text excerpts are *"Purchase was on explicit client request."*, or the even more explicit *"Searching the Internet, the client has selected the stock of Nestle and asked for the bank's assessment of the stock."* or *"The client wants to invest 18,000 euros and pre-selected a Jamaican bond."*

bank's standard products have little appeal to more demanding clients who take a more active role in the advisory process. As a result, they are less likely to follow the bank's "one-size-fits-all" advice. Instead, more involved clients are likely to receive recommendations for more idiosyncratic products such as single stocks, single-sector funds or domestic equity products, even if these aggravate pre-existing under-diversification biases. Ultimately, we find higher client involvement to harm portfolio outcomes: While involved clients save on annual portfolio costs by shunning expensive fund-based asset-management solutions, their portfolios ultimately result less diversified. While involvement does not significantly affect portfolio net returns, it results in higher portfolio return volatility after controlling for risk preferences. This translates into inferior after-fee risk-return trade-offs (Sharpe ratios), compared to peers passively selecting into the bank's high-cost standard portfolio. In addition, analysis of surveyed client satisfaction points to the success of advisors in catering to different clienteles using different recommendation strategies. We do not find any difference in client satisfaction between clients who actively involve themselves in the advisory process and clients who passively consume the bank's standard advice.

To the best of our knowledge, we are the first to empirically study strategic client-advisor interaction in a real-world setting. Our paper is closest to the audit study by Mullainathan et al. (2012) on financial advisors in the US. The authors study the quality of financial advice given to mystery shoppers who follow a scripted behavior during advisory meetings. Results show that, although advisor recommendations primarily aim to maximize the advisor's own financial interests, they also take into account a client's existing portfolio composition. Our setting differs from that of Mullainathan et al. (2012) in that we focus on real heterogeneity in advisory clienteles and actual instances of client involvement in the process of financial advice.

A small number of related papers study client-advisor interaction in an experimental setting using an artificial demand-side. Anagol, Cole, and Sarkar (2017) run a field experiment with commission-compensated agents in the Indian life insurance market. The authors find that sales agents respond to customers' self-reported and mistaken beliefs about what product best suits their needs, even in cases where the more suitable product would earn the sales agent a higher commission. Complementary evidence from lab experiments is provided by Agnew, Bateman, Eckert, Iskhakov, Louviere, and Thorp (2017). The authors show in an online video experiment that a catering strategy in which advisors early on provide advice in line with client expectations positively influences perceptions of advisor trustworthiness and competence, irrespective of the quality of subsequent recommendations. However, none of these studies has looked at actual client-advisor encounters. Relatedly, Gennaioli et al. (2015) present a model on financial advice in which financial advisors have strong incentives to pander to clients' irrational desire to invest in overvalued assets, as this generates high fee income.

Our findings also contribute to the general literature on individuals' use of expert advice. Experimental studies on general advice taking show that advisees tend to overvalue their own opinion relative to advisor input and discount the advice received the more, the more distant it is from their priors (Yaniv, 2004; Yaniv and Milyavsky, 2007; Sniezek and Buckley, 1995). In the context

of financial advice, investors who are overconfident with regard to their private information (Guiso and Jappelli, 2006) or their financial literacy (Anderson, Baker, and Robinson, 2017) prove less willing to rely on an advisor. Similarly, Borgsen, Glaser, and Weber (2012) report that clients approaching their advisor with the motivation of obtaining reassurance for their own investment idea are less likely to follow the recommendations they receive.

The phenomenon of potentially harmful client involvement in expert advice also applies to other contexts. As a prominent example, numerous medical studies find a significant share of antibiotics prescriptions to be inappropriate, exposing patients to adverse side effects and ultimately contributing to the development of resistances. Doctors cite patient requests as one of the reasons for inappropriate prescriptions, such as in the case of viral illnesses, for which antibiotics provide no benefit.[3] Hence, lay advisees may take a negative impact on the quality of professional advice.

With increased access to information facilitated by the internet, the phenomenon of client involvement in expert advice is expected to become even more relevant in the future. Today, one in 20 internet queries is related to health issues (Eysenbach and Koehler, 2003). In many cases, patients approach their doctor with a specific diagnosis already in mind after consulting "Doctor Google."[4] Analogously, increased access to financial information via the internet and mobile devices affects the way individuals make important financial decisions. A great many client ideas we extract from the minutes, especially in the case of single stock pickings, arise from clients' own information search on the internet. The vast amount of information available today facilitates investors' confirmation of their prior beliefs and may lead to their overconfidence regarding their investment skills (Barber and Odean, 2001), while in reality they fall prey to common investment mistakes. Still, to safeguard the client relationship, expert advisors may cater to advisees demand rather than educating them on their erroneous beliefs.

II. Data and Institutional Framework

A. Institutional and Regulatory Framework

Using data from a large German retail bank operating a nationwide branch network, we shed light on the process of bank financial advice as it is common in many other European economies such as Sweden, Italy, or France. Other than in the US, where financial advice to retail investors is primarily provided by independent financial advisors, banks dominate the market for retail financial advice in Europe.[5] In fact, most German households make financial decisions in cooperation with their house bank financial advisor.[6] At the sample bank, new clients are randomly assigned to

[3] Dekker, Verheij, and van der Velden (2015) for instance find that overprescribing was highest in cases where patients explicitly expected to obtain antibiotics to alleviate their suffering. See also Roberts, Albert, Johnson, and Hicks (2015), Shapiro, Hicks, Pavia, and Hersh (2014), and references therein.

[4] https://www.thetimes.co.uk/article/rise-of-cyberchondriacs-costs-taxpayers-millions-k3mg2cjpf

[5] With a high importance of independent financial advisors, the United Kingdom is an exception among European countries.

[6] Figures for German households relying on financial advice range from 60% to 80% across studies (Burke and Hung, 2015; Chater, Huck, and Inderst, 2010; Droesser, 2016), depending on the definition of the sources of advice. In

a designated advisor.[7] The average retail client in our sample consults with his bank financial advisor not more often than once a year, which is in line with national statistics.[8] Bank customers may conduct their financial transactions independently or may consult their advisor first. Complete delegation of financial decisions is rare in Germany and is mostly limited to the wealthiest customers (Hackethal, Inderst, and Meyer, 2012b).

As the events of the global financial crisis have put consumer financial protection to the top of policymakers' agenda, retail financial advisors in Germany have had to adapt to a series of new regulatory requirements. Since January 1, 2010, the German legislature has required written records of investment advisory meetings. By law, the minutes must inform as to the cause or motivation of the advisory session and its duration, the personal situation and specific needs of the client, the financial products discussed, and the advisor's final recommendations along with their justification.[9] The advisor must sign the protocol and hand a copy to the client prior to the execution of any trade advised.[10] The minutes are supervised and audited by the German Federal Supervisory Authority (BAFIN). Providing rich detail on the client-advisor interview, the records form a valuable basis for the analyses in this paper.

As a result of regulatory tightening and ensuing compliance concerns, large banks have standardized their financial advice, especially in the retail client segment. Advisors at the bank are supposed to lead the client through a highly structured advisory process, resulting in recommendations from a pre-selected list of actively managed mutual funds across different asset classes. The product list includes bank-owned products, but also funds from other providers that have been selected by the bank's central investment committee. Single stocks, index funds, and ETFs do not appear on the standard recommendation list. The high degree of standardization is reflected in the observed distribution of product recommendations across the product universe. The ten products recommended most often, as measured by their value share in total purchase recommendations, account for about half of the total. These popular products are all mutual funds from the standard fund menu; six of the ten are in-house products. Panel B of Figure AI in Appendix A illustrates this dominance of a small number of financial products.[11] The bank's standardized advisory model thus

addition, 66% of individual stocks, 72% of mutual funds and 72% of bonds sold to individual investors are distributed by banks (Chater et al., 2010). Participation in financial assets outside retirement accounts is low in Germany. Only 12% of German respondents report holding stocks or bonds, 10% report to hold investment funds in the Eurobarometer Survey in 2011.

[7]We do observe a decent number of advisor changes during our sample period, which according to the bank mostly result from an advisor leaving the branch or resigning. As a result of the random allocation procedure, a single advisor usually has a quite heterogeneous client portfolio, which is illustrated by the wide dispersion of the portfolio value in an advisor's client portfolio (see Panel A of Figure AI in Appendix A).

[8]In a representative survey administered to 1,800 German respondents 25% state to consult with their bank financial advisor once a year, 15% biannually or even more often. Only 19% report to never consult with a bank advisor (Droesser, 2016).

[9]§34(2a) WpHG (Securities Trading Act), §14(6) WpDVerOV (Regulation on Investment Services, Conduct, and Organization). In the circular (WA 31-Wp-2002-2009/0010) to all banks the German Federal Supervisory Authority (BAFIN) strongly demands free text entries to record the client's situation, particular client concerns and justifications for final recommendations.

[10]In the case of on-the-phone advice, the client may agree to initiate a transaction prior to receiving a copy of the protocol. The client has the right to cancel the transaction if the protocol is incomplete or incorrect.

[11]With fund recommendations (72% of purchase recommendations), standardization is even more pronounced: 177

concedes little discretion to the individual advisor. Therefore, we expect advisor-specific effects to play a much smaller role in advisory outcomes than in studies looking at independent advisors (Foerster et al., 2017; Linnainmaa et al., 2016). However, advisors have leeway to deviate from the standard recommendation list in response to (anticipated) client requests. Thus, if a client either explicitly or implicitly demands to purchase single stocks or warrants, the advisor is permitted to discuss corresponding product recommendations.

Sample advisors are full-time employees of the bank who have completed a three-year vocational training. They are paid a fixed wage in accordance with the collective wage agreement of the banking industry. Variable components of monthly pay must not amount to more than 10% of total salary and are typically a function of team or branch performance, acquisition of new client assets, and surveyed client satisfaction.[12] However, although advisors are not directly compensated for their individual sales performance, career concerns may provide indirect additional incentives (Hoechle et al., 2017). Advised bank customers pay for financial advice indirectly through product fees (Hackethal et al., 2012b) despite of efforts in other countries such as the United Kingdom and the United States to abolish inducements.

B. Client and Portfolio Characteristics

The final data set includes information on 16,933 advisory sessions with 6,204 clients and their 429 advisors distributed over the period from January 2010 to November 2013. We restrict our analysis to the sample bank's retail client segment. We exclude wealth management clients (clients with portfolio holdings of €500,000 and beyond) and business clients from our analysis, as advice to these client segments is likely to systematically differ from the service provided to retail clients. All clients in our sample interact with their advisor at least once over the sample period. Panel A of Table I shows that investors are split roughly equally by gender and are relatively old (the median investor is 65 years or older), which is also reflected by the high share of retirees in the sample.[13] Investors are rather risk averse; the median investor is willing to take on moderate financial risk and only one in four clients selects into the upper two (of four) risk categories. Only 3% of clients trade more complex products such as options or warrants.

[Insert Table I about here]

Panel B of Table I shows details on clients' portfolios and trading patterns. The average (median) portfolio holdings amount to €65,000 (€40,000). These figures compare to €54,200 (€16,600) in average (median) financial assets held by German households conditional on participation as estimated by the German Central Bank for 2014 (Deutsche Bundesbank, 2016). Most accounts

different mutual funds make up for 18,965 fund purchase recommendations in our sample and the ten most popular funds make up 68% of fund purchase recommendations.

[12] In addition, banks are allowed to pay their employees bonuses based on the success of the branch, the team and/or the entire bank. This bonus is not allowed to exceed 120% of a monthly gross salary.

[13] This feature is shared by comparable data sets on bank clients in Germany (Hackethal et al., 2012a)

concentrate on a small number of assets. The median investor holds about three different securities, two of which are mutual funds. With, on average, 63% of total value, mutual fund holdings dominate client portfolios. Fund holdings consists almost exclusively of actively managed mutual funds, closely mirroring the bank's standardized advisory approach. Low-cost index funds and exchange traded funds are almost entirely absent. In contrast, the bank's asset management funds make up 36% of fund holdings. These are balanced funds that come in different asset compositions, supposed to provide an "all-in-one" portfolio approach to different client risk categories. They carry high annual fees, typically in excess of 200 basis points, but come with the promise that an experienced fund manager continuously takes care of the portfolio's asset composition.

Over the sample period, about 84% of investors participate in equity markets through stocks, equity funds, or balanced funds, with an average equity share conditional on participation of 34%[14], in line with the rather low average risk appetite of sample investors. Single stocks on average account for 25% of client equity holdings, but are concentrated in only one-third of sample clients who actually hold single stocks. Equity portfolios exhibit strong home bias; German equity accounts for 21% of the average equity portfolio, which compares to Germany's share in the global market capitalization of just under 3%.[15] The tendency to concentrate their equity holdings in a small number of single stocks strongly correlates with clients' home bias.

With the median investor making one security purchase per year, the majority of sample clients are rather inactive investors. Given the low investor activity and the representative portfolio size, the portfolios held at the sample bank are unlikely to constitute play money accounts. As mentioned above, sample investors are free to conduct transactions without input of their advisor. However, almost 80% of security purchases are made on advice. This hides considerable heterogeneity in the intensity of advice usage. While 58% of clients never buy securities without expert advice, the remaining 42% make on average only one in two purchases on recommendation of an advisor.

Considerable variation also exists in the fees clients pay on their portfolios. Following Gaudecker (2015), we calculate fees paid in proportion to the value of portfolio holdings. Total portfolio costs comprise two components. Running fees refer to the product expenses charged on mutual fund holdings.[16] Transaction fees entail general brokerage fees charged by the bank as well as upfront loads charged by the bank for fund purchases. Running fees sum up to 0.9 percentage points per year on average. Average transaction fees amount to an extra 60 basis points per year, leaving the average client with annual portfolio costs of 1.5 percentage points of overall portfolio holdings.[17] The upper 25% of clients pay almost 2.1 percentage points or more annually. On average, clients earn a moderate return net of fees of 2% annually, accompanied by an annual portfolio volatility

[14]Following (Foerster et al., 2017), in calculating client holdings we assume that balanced funds invest half in equity, half in fixed income securities.

[15]See Worldbank (2016).

[16]Thus, annualized running fees for each client in a given month are calculated as $\sum_1^N x_{[i,t]} * TER_i / X_{i,t}$ where $x_{[i,t]}$ is the value of holdings in fund i in €in month t, TER_i is the total expense ratio (TER) of fund i, and $X_{[i,t]}$ is the overall value of the entire portfolio in month t, and N is the number of funds held in month t.

[17]This figure is in line with the estimate of total portfolio costs in Foerster et al. (2017) once considering that for the average investor in our sample, the portfolio share in mutual funds amounts to 63%. Both upfront-loads and total expense ratios are drivers of total portfolio costs.

of 6%, which results in an average Sharpe ratio of 45%.

C. Advisory Meetings and Recommendations

On average, clients have been with the bank for 20 years at the time of study (Panel C of Table I). For the average investor, the data include records of 2.8 advisory meetings over the four-year sample period. At the time of the meeting, the average investor has been with his advisor for 2.6 years. From the advisory minutes we extract additional information about the general circumstances of the meetings. Four in five consultations are initiated by the advisor. Usually, meetings take place face-to-face in one of the bank's branch offices and last longer than 30 minutes. The most common motivations for an interview are the availability of excess liquidity for new investments, a general portfolio check-up, or the current market situation.

We follow Hoechle et al. (2016) by concentrating on purchases, which make up 65% of all advisor recommendations. We take this focus because sales transactions may be driven by various forces that are hard to control for (e.g. client liquidity need or other personal events). On average, an advisory session results in 1.4 purchase recommendations (median is one) and over 70% of these recommendations refer to mutual funds. Advisors are requested by the bank to sell actively managed funds from the bank's standard menu of recommendations, featuring both the bank's own products and funds from other asset management companies of different asset classes and focus. The bank's focus lists are updated on a regular basis. 59% of all recommendations are taken from this standard menu, with the bank's own products constituting almost 50% of funds recommended. Panel C of Table I also informs about total expense ratios (TERs). The average TER across all fund recommendations amounts to 1.74% per year, ranging from 0.64% for the average money market fund to 1.4% for the average German equity fund to 2.28% for the average bank asset management fund. For comparison, the average TER charged in Germany for global (German) equity funds was 1.64% (1.37%) in 2010.[18] Investments in single stocks and purely domestic equity are recommended only sporadically.[19] Overall, descriptive statistics provide loose evidence that average client portfolio allocations reflect the bank's advisory model.

D. Client Involvement

Bucher-Koenen and Koenen (2015) describe the interaction between financial advisors and their clients in terms of a "push" and a "pull" component, referring to financial incentives and client characteristics that induce the advisor to adjust the advice provided ("push") and demand-side influences such as client questions and requests affecting the advice outcome ("pull"). Investment ideas clients introduce in the process of advice provide a direct measure for clients' preferences. A unique feature of our data is the information on the specific securities discussed during the meeting

[18] https://de.statista.com/statistik/daten/studie/158101/umfrage/kostenquote-nach-fondsarten-seit-2006/

[19] This pattern of advice aligns with existing studies documenting that financial advice contributes to better portfolio diversification (Gaudecker, 2015; Hoechle et al., 2016; Hackethal et al., 2012a; Bluethgen et al., 2008; Shapira and Venezia, 2001) and lower home bias (Kramer, 2012; Bluethgen et al., 2008). However, Hoechle et al. (2016) find no reduction in home bias through advice.

along with their justification given by the advisor. Justifications provided by the advisor typically emphasize the diversification potential of products discussed but also the potential benefits of actively managed funds ultimately promising the client peace of mind by not having to take care of his investments himself. However, the records also provide evidence of instances of client input into the advisory process, which may come in the form of specific client ideas or requests. We search for signals of such client inputs using textual analysis. As we do not intend to measure the tone within these justifications, we are not able to use positive and negative word lists from traditional dictionaries like the Harvard IV-4, which has been used in the financial context by others, such as Tetlock (2007) or Hillert, Niessen-Ruenzi, and Ruenzi (2016). Moreover, considerable individuality in formulations, typos, and abbreviations make a fully automated analysis unfeasible. Rather, we need to hand-collect any evidence of client input from the minutes.

In a first step, we screen the protocols for key terms and expressions that might point to active client input. Examples of such key expressions are "wish", "client's idea", "client wants to", "client insists", "client asked for", or "own research". In a second step, we manually check the search results to ensure that they capture genuine demand-side requests. In particular, we restrict our definition of client ideas to requests referring to definite products rather than, for instance, an entire asset class (e.g., "The client wishes to invest ina single stock") or an even more general request (e.g., "The client wishes to talk about his portfolio structure." or "The client wants to be informed about interesting investment possibilities and the advisor recommended ..."). Rather, to establish a client idea, statements from the minutes have to clearly identify a definite investment. Illustrative examples are: *"You wish to invest in stock xy and we provided you with our assessment of the firm"*, *"The XYZ investor's Club recommended this asset. This is why you wish to purchase it"* or *"The client wants to invest in this asset, because his son also has it in his portfolio."*. We list a series of the most common example phrases pointing to clients' own ideas in Appendix A2. Throughout our analyses, we use two measures of client ideas depending on the unit of observation in our analyses, which are conducted at either the level of the single recommendation or the client level. At the recommendation level, we define a dummy as being one if the specific advised transaction traces back to a client idea or specific request (3% of the 25,200 purchase recommendations). For regressions at the client level, we use a dummy equal to one if a client has at least one own idea throughout our sample period (8% of all clients). Table II provides information on differences between clients with and clients without ideas in our sample. More involved clients generally are more likely to be male, slightly younger, more educated and relatively more risk-tolerant investors. This characterization is in line with those clients being wealthier in terms of both income and portfolio size. Concerning their interactions with the bank, clients with ideas contact their advisor more often, are more likely to receive advice over the phone, and more often approach their advisors on their own initiative.

[Insert Table II about here]

To capture further dimensions of client involvement in advice, we define a number of alternative

measures relating to client involvement. First, to proxy for the degree of client independence from an advisor in making financial decisions, we use a client's share of self-directed security purchases that are conducted without an advisor. Panel B of Table I reveals that 22% of all purchases by clients in our sample are conducted without advisor input, and 44% of clients in the sample conduct at least one purchase on their own during the sample period. Second, we use gender as a proxy for perceived confidence. Several studies find that women are less confident in their financial decision making (see Bucher-Koenen and Koenen (2015) for a recent review of the literature). Our data set is roughly equally split into male and female clients (see Panel A of Table I). Third, we control for client sophistication. According to German law, in every advisory meeting the advisor has to document on a standardized scale the client's experience with investment products. We define a dummy *sophistication* as being one if the client has experience with more complex financial products such as warrants, options, or futures, which holds true for 3% of clients in our sample. In providing service to more independent, confident, or experienced clients, the advisor may feel urged to deviate from the standard advisory approach as it is likely to leave more demanding clients unsatisfied. Given that these clients may well be able to execute trades on their own, the advisor may particularly fear that they may desert him, causing him to lose business.

III. Do advisors cater to more involved clients?

A. Deviation from the bank's standard

We begin our empirical analysis by examining factors that make advisors deviate from the standard menu of products to recommend. We expect a higher deviation for more involved clients and particularly for clients who (implicitly) signal preferences that are not in line with the standard menu, such as a preference for single stocks or bonds. The unit of observation is a single recommendation provided during one of client i's advisory meetings over the sample period. We regress an indicator for standard products on our main variables of interest and the set of additional controls in an OLS[20] regression model of the form

$$y_{ij} = \beta_{\mathbf{1}}\mathbf{I_{i,t}} + \beta_{\mathbf{2}}\mathbf{PF_{i,t-1}} + \beta_{\mathbf{3}}\mathbf{C_{i,t-1}} + \beta_{\mathbf{4}}\mathbf{X_j} + \mu_{\mathbf{t}} + \mu_{\mathbf{a}} + \epsilon_i \tag{1}$$

The dependent variable is an indicator of whether the product recommended to client i during the meeting j is included in the bank's standard product menu. $\mathbf{I_i}$ contains our measures for client involvement. In the baseline specification, it reduces to a dummy taking on a value of one for clients for whom at least one purchase recommendation can be traced back to an idea of the client. In further specifications, we add alternative measures for client involvement (client independence in making financial decisions, gender as a measure for confidence, and experience in trading complex securities as a proxy for client financial sophistication). $\mathbf{PF_{i,t-1}}$ captures the client's portfolio shares

[20]For robustness, we estimate all specifications using a logit model. Results (available on request) remain qualitatively similar.

in different asset types (single stocks, single bonds, home equity, other financial instruments) upon entering the meeting. Portfolio fund shares upon entering the meeting are omitted. $\mathbf{C_{i,t-1}}$ contains additional controls for a client's personal and financial characteristics, in particular a client's log financial wealth with the bank, age category, risk tolerance, and job situation. For the categorical variables, being aged under 50, being in the lowest risk category, and being retired are the omitted categories. We include additional variables to control for the circumstances of the meeting ($\mathbf{X_j}$). These are a dummy for whether advice was received in person rather than on the phone, whether the meeting was initiated by the client rather than by the bank or the advisor, and the length of the relationship a client had with his advisor upon entering the meeting. $\mu_\mathbf{t}$ controls for year-times-month fixed effects. Following Foerster et al. (2017), we include advisor fixed effects $\mu_\mathbf{a}$ to control for unobserved advisor heterogeneity. Standard errors are clustered at the advisor level. Results are robust to clustering standard errors at the branch level.

[Insert Table III about here]

Results are reported in Panel A of Table III. Column (1) reports the results without additional controls (except for the month x year fixed effects). The negative coefficient on the client with ideas indicator confirms our hypothesis that a client introducing his own investment ideas causes advisor recommendations to deviate from the standard recommendation menu. The effect is economically large, with a client with ideas being 12 percentage points less likely to be recommended a standard product – a 20% reduction in probability in relative terms. Adding alternative measures for client involvement as well as controls and fixed effects in Columns (2) through (5) only slightly reduces the effect of a client having own ideas. Thus, the results show that clients actively providing input in the advisory meeting co-design advisor recommendations. Supportive evidence in line with this notion comes from the coefficients on our alternative measures of client involvement (Column 2). Acting more independently, being more confident (male), and/or being more sophisticated (experienced with complex securities) all reduce the probability of being offered a standard product. Column (3) adds the client's portfolio shares upon entering the meeting. In particular, we control for a client's share in single stocks, single bonds, and other financial instruments (e.g., warrants and certificates) as well as for the share of domestic equity in all equity holdings. The omitted category is a client's portfolio fund share upon entering the meeting. Following Mullainathan et al. (2012), we conjecture that advisors might try to read clients' preferences from their existing portfolio compositions and investment strategies. Higher non-fund portfolios are assumed to signal a stronger aversion to the one-size-fits-all fund-based investment approach of the bank. The results in Column (3) provide evidence that advisors indeed react to these signals. For example, a 10% increase in the single stock share upon entering the advisory meeting reduces the probability of being recommended a standard product by about 1 percentage point, after controlling for clients' explicit client requests and client risk preferences. Effects on previous bond shares and other product shares are about twice as large. Results on involvement measures and previous portfolio shares stay almost unchanged when additional controls are added in Column (4). Adding advisor-fixed effects in Column (5), except for

stocks, drives down the magnitude of the coefficients on the previous portfolio shares, but preserves the significantly negative effect of explicit client ideas and non-standard portfolio structures on the probability of being recommended a standard product.

Throughout our analyses, we regard the final recommendations documented in the minutes as a consensus between the advisor and the client since the intention of the protocol is to document the final outcome of the advisory meeting.[21] If the general idea of a consensus holds true, we do not expect clients to differ in their propensity to execute advisor recommendations. However, clients with ideas may be less likely to follow standard recommendations, as these conventional products may not fit the taste of these more demanding clients. If clients with ideas were indeed less likely to ultimately buy the bank's standard products, advisors would have an additional incentive to strategically deviate from the standard and tilt their recommendations toward intervening clients' perceived or explicitly stated preferences. To test this conjecture, we regress an indicator of whether clients finally execute a recommendation on a dummy indicating whether a client has introduced his own ideas during one of his advisory meetings recorded in the sample and the set of additional controls. Regressions are estimated using OLS. Standard errors are clustered at the client level. Results are reported in Panel B of Table III. The coefficient on the indicator for clients introducing their own ideas does not differ statistically from zero, indicating that clients with ideas in general are not more or less likely to follow their advisor's recommendations. Interestingly, the coefficients on the alternative involvement measures are all negative and highly significant. Clients who are comfortable with investing on their own and clients accustomed to investing in complex financial products are significantly less likely to follow their advisor's recommendation. The negative effect of being male on adherence to advice is considerably smaller, yet still highly significant. On the other hand, the positive and significant coefficient on the standard recommendation indicator shows that, in general, adherence is significantly higher in the case of bank standard products. This effect is likely to be driven by the fact that these conventional securities are customarily offered to more indifferent clients who more strongly depend on their advisor in making their financial decisions. However, the negative coefficient on the interaction of a client having his own ideas and the recommendation being in a standard product in Column (3) reveals that clients with ideas are indeed 3 percentage points less likely to follow a recommendation if the product forms part of the bank's standard menu.

We run a number of robustness tests. To assess whether the results in Panel A of Table III are driven by recommendations that ultimately are not executed (and thus have no impact on clients' portfolios), we rerun our baseline regression with the sub-sample of recommendations that are implemented within 30 days after the advisory meeting. Column (1) in Panel C of Table III shows

[21]The idea that the minutes document a consensus rather than a general choice set of investment alternatives from which the client subsequently chooses is supported by the fact that about 75% of recommendations are implemented within 30 days after the advisory meeting - a large share relative to the adherence rates found in related studies. Borgsen et al. (2012), studying more general advice from a consumer protection center, find that about one in two recommendations is followed. Stolper (2017) reports that two-thirds of clients at a German advisory firm ignore the advice given. Most extreme, Bhattacharya et al. (2012) find that only about 5% of clients at a German brokerage accept to receive free unbiased advice, yet hardly follow through.

that the effect on client ideas hardly changes. Second, even if our results are robust to the inclusion of advisor fixed effects, advisors still may perceive the need to pander to client ideas, especially early in a client relationship, in order to win a customer, while steering clients into products that earn the highest fees later on (Mullainathan et al., 2012). In Columns (2) through (4) we test this by including a dummy variable equal to one if the advisor has changed compared to the previous meeting as well as different interaction terms. We find that advisors generally are likely to start by presenting standard recommendations during a first encounter with a client. While clients with their own ideas or portfolio structures that deviate from the bank's fund approach again are found to be less likely to be presented with a standard recommendation, advisors' impulse to pander appears not to be significantly stronger during first encounters.

B. Involvement and product recommendations

The above results show that advisors are more likely to deviate from the bank's standard approach once clients actively involve themselves in the meetings or signal a preference for non-standard products. But what do advisors recommend to these clients instead? To further examine how advisors cater to explicit client requests and implicit investment preferences, we look at the type of product recommendations direct client involvement and exhibiting high portfolios shares in non-standard products upon entering the client meeting are conducive to. We are also interested in the interaction of the two effects. We hereby assume that advisors cater more strongly to more involved clients because they may feel the risk of losing the client if the outcome of the meeting is not in line with client preferences. We run cross-sectional regressions similar to our baseline specification in (1) using the probability of being recommended a single stock, bond, a domestic-equity product or a sector fund as dependent variables, respectively.

Results are presented in Table IV. Column (1) shows that the probability of being recommended a single stock increases strongly in the client introducing a definite investment idea during the meeting as well as in the client's portfolio share of single stocks upon entering the meeting, signaling a general preference for single-stock investments over ready-made fund solutions. In addition to the base effects, the interaction of the two measures is significantly positive. Thus, advisors are significantly more likely to go along with a client's request if the client shows strong preferences for a certain type of investments. Following a similar logic, we find positive interaction effects for the probability of being recommended a bond (Column (2)) and being recommended a domestic equity product (Column (3)). In line with the observation that more involved clients seem to be averse to the ready-made portfolio solutions offered by the bank and would rather engage in the picking of single titles for their portfolios, client ideas are also associated with a higher probability to receive a recommendation for sector funds (Column (4)) that focus on specific industries.

[Insert Table IV about here]

In sum, the above discussion shows that clients who involve themselves in the process of financial advice are more likely to receive recommendations that are absent from the bank's standard

advisory menu. We show that deviations in recommendations are the result of explicit client inputs into the process of advice and advisors' responses to observed prior portfolio compositions despite the advisor's understanding that these investments may contribute little to a well-diversified portfolio. On the other hand, clients may get involved in advisor recommendations or opt for a do-it-yourself strategy to save on product costs. Moreover, if the more involved clients demonstrate skill in picking securities, they may end up better off than clients who passively follow the bank's standard recommendations. In a next step, we analyze resulting portfolio characteristics to assess the influence of client involvement on portfolio outcomes.

IV. Client involvement and the outcome of financial advice

A. Portfolio Structure and Portfolio Costs

As a function of their degree of involvement, different advisory clienteles tend to obtain quite different recommendations. A natural question arises as to whether active client participation in the advisory process ultimately benefits the client. In evaluating the quality of financial advice outcomes, we follow Mullainathan et al. (2012) in defining high-quality financial advice as financial advice that provides clients with a broadly diversified, low-cost portfolio. Importantly, diversification and portfolio fees are factors the advisor can control directly, while portfolio returns are partly subject to luck. Moreover, unlike portfolio returns and alphas, cost variables are directly observed and measured without noise. Finally, as argued by Grinblatt, Ikäheimo, Keloharju, and Knüpfer (2016), variations in risk-adjusted returns on mutual fund portfolios largely result from differences in fees. Given that the portfolios of sample clients are dominated by mutual funds (average portfolio fund share is 63%), which are responsible for the lion's share of overall portfolio fees paid, differences in portfolio fees may preview differences in ultimate portfolio performance.

The bank's standard financial advisory approach heavily emphasizes the distribution of actively managed funds, especially balanced funds. While these products provide ready-made diversification, they come at high costs in terms of both one-time upfront fees as well as high total expense ratios that are to be paid annually. Thus, more involved clients may deliberately opt for a do-it-yourself approach, assembling their portfolios themselves to save on fees. On the other hand, the focus on single investments may ultimately leave these clients less diversified. With regard to diversification, our analysis shows that recommendations to involved clients more often concern investments in single stocks, bonds, sector funds, and domestic equity products. Here, we analyze whether these decisions translate into significant differences in the overall portfolio structure. We run cross-sectional OLS regressions at the client level with a client's average portfolio diversification and cost characteristics as dependent variables. Besides controlling for our main variable of interest, client with ideas, we control for standard client personal and financial characteristics and bank branch fixed effects.[22] Standard errors are clustered at the branch level.

[22]Since 15% of clients in our sample are subject to an advisor change during our sample period, we control for branch fixed effects (107 branches) instead of advisor fixed effects. This strategy is further justified on the grounds

Columns (1) to (3) of Table V confirm the implications that have been suggested by the recommendation-level regressions: clients with ideas indeed show a poorer diversification on the (equity) portfolio level. Column (1) reveals that this is not reflected in a generally lower fund share but is caused by higher investments in single stocks as well as home equity. More precisely, having one's own ideas is associated with a 2.6 percentage points higher share in stocks and a 4.1 percentage points higher share in home equity, which is large given the respective base rates of 8% and 20%. Coefficients on the alternative measures of involvement also suggest that more active client involvement operates to reduce portfolio diversification. Trading without the advisor, being male, or being experienced in trading more complex products reduces portfolio fund shares by 4 to 16 percentage points on average and increases portfolio shares in single stocks and equity portfolio shares dedicated to domestic firms by economically large and statistically significant amounts.

[Insert Table V about here]

Columns (4) to (7) of Table V (Panel A) look at overall portfolio costs. We split overall portfolio costs into two components, transaction costs and running costs. Transaction costs are the sum of fees resulting from a client's trading activity and include upfront loads paid on mutual fund purchases as well as other transaction fees, such as order fees. Running costs are equivalent to the mutual fund total expense ratios (TERs) paid over the holding period and deducted from fund returns. We measure the cost components as shares of the average portfolio value in a given year and take the average for each client over all years the client remains in the sample. Column (4) reports that being a client with ideas is associated with 30 basis points higher transaction costs, which is an increase by 56% in relative terms. However, this difference is entirely explained by these clients' higher trading activity. Once the annual number of trades in Column (5) is controlled for, the difference turns insignificant. With respect to annual portfolio running fees, we do not find any evidence that clients with ideas buy less expensive funds (Column 6). This finding is surprising since the bank's own asset management funds, which are predominantly sold to less involved clients, charge considerably higher fees compared to other funds. For the alternative involvement measures, we find that all three are associated with lower annual running fees. The effect becomes significantly weaker if we control for the average fund share in Column (7), which reveals that differences are explained by higher fund shares rather than the active decision to select low-cost funds. Results concerning fees do not indicate a high cost sensitivity of clients with ideas. To analyze this finding in more detail, we turn back to the recommendation level and look at costs associated with the single recommendations.

We limit our analysis to fund recommendations. As a dependent variable, we use the annual total expense ratio (TER) in a regression using the same specification as in our baseline regression (1) above. In all regressions, we additionally include a fund's risk category since riskier funds often are also more expensive. Results are reported in Table V, Panel B. Column (1) reveals that clients with ideas generally receive fund recommendations with significantly lower expense ratios.

that a departing advisor is likely to be replaced by a colleague from the same branch.

However, the effect reverses once we control for recommendations in the bank's asset management funds in Column (2). In Column (3), we exclude recommendations in the bank's asset management funds from the sample. Both specifications show that, even if clients with ideas on average get funds with lower expense ratios recommended, the effect seems to be entirely driven by the high costs of bank asset management funds and not by aspects of cost sensitivity. Once we exclude bank asset management funds, clients with ideas select more expensive funds, holding the risk category constant. The effect is only six basis points, which is small compared to the base rate of 1.13% (average TER excluding bank asset management funds). A potential explanation is involved clients' preference for sector funds: the average sector fund in our recommendations has a TER of 1.96% compared to the average TER of an equity fund (excluding sector funds) of 1.65%, and the difference is significant at the 1% level.

B. Client Performance and Satisfaction

In a last set of analyses, we investigate the impact of client involvement on portfolio outcomes in terms of risk and returns. While the lower degree of delegated investment reduces overall annual fees paid on the portfolio, lower diversification is likely to increase portfolio risk and to weigh on the after-fee risk-return trade-off. Vice versa, more credulous clients who rather passively rely on the recommendations of financial advisors may end up with expensive ready-made balanced-fund portfolios. While high portfolio costs weigh negatively on the net return component, the lower risk of broadly diversified portfolios may act positively on net risk-return trade-offs.

We run client-level regressions of annual after-fee returns, portfolio volatility, and Sharpe ratios on our main variable of interest and additional controls. Monthly returns are computed on the basis of daily net returns. Daily net returns take into account any dividend payments and capital actions and are computed net of transactions fees, running fees, and bid-ask spreads. The returns are calculated by combining the information on each investor's transactions and beginning of month holdings (ISINs, volumes, transaction prices) with data from Thomson Reuters Datastream on historical security prices. Following Seasholes and Zhu (2010), we winsorize the time series of monthly returns at the 1% and 99% levels. The investor's net return is the annualized average of monthly returns. The portfolio standard deviation is based on the time-series of monthly net returns. Sharpe ratios are computed by dividing the net portfolio excess returns for investor j (return subtracting the three-month money-market rate) by the standard deviation of the excess returns of investor j. We also assess the performance of the clients portfolios using the alpha from a four-factor model (Carhart, 1997). In line with Calvet, Campbell, and Sodini (2007), we regard an internationally diversified portfolio as our benchmark. Therefore, we use the global factors provided on Kenneth French's website. We estimate the model over the entire time period for each client. We allow all factor betas to have a different slope in every year of observation to take into account that investors change their investment styles considerably over the investment period.

[Insert Table VI about here]

Table VI shows the results. We find that investors who take a more active role do not have portfolio returns that are significantly different from their peers who follow the bank's more expensive standard. In fact, the coefficient is even negative. More striking and well in line with previous analyses is our finding that, after controlling for a client's risk category, investors with own ideas hold more volatile portfolios. The portfolio volatility is 0.5 percentage points greater for clients with ideas relative to those without ideas, with the difference being significant at the 1%-level. Economically, this effect seems small. Importantly, however, the average portfolio volatility in our retail-banking sample is only about 6% per annum. Thus, the standard deviation for clients with ideas is about 8% larger in relative terms. This effect seems sizeable. Combining these two effects into a Sharpe ratio shows that the risk-return trade-off is significantly lower by about 6 percentage points for investors who take a more active role. Against an average Sharpe ratio of 45%, this reduction is economically relevant by 13%. The result also holds once we look at the four-factor alphas. Clients with ideas have an annual alpha that is on average .9 percentage points smaller than the alphas of clients without ideas.

Our analyses follow the idea that advisors pander to clients to maintain a long-term relationship with the client. Client satisfaction of involved clients is hence a natural outcome to explore. To test whether clients are satisfied with the bank and the financial advice they receive, we use the net promoter score, a survey-based concept assessing a participant's willingness to recommend a company (Reichheld, 2003), which is used by many companies and banks.[23] Our bank runs monthly waves asking a randomly selected group of 30,000 customers who had a personal interaction with the bank in the previous 8 weeks whether, on a scale from 0 to 10, they would recommend the bank to their friends or colleagues. In total, 1,618 clients in the sample are surveyed for their satisfaction in our data set. To proxy for customer satisfaction, we use the answers to the net promoter score questions and adjust each customer's score by subtracting the average score of all customers surveyed in a given month. Clients with ideas are as satisfied with the bank's services as their peers. This result provides suggestive evidence that advisors' strategy of approaching different clienteles with different products might pay off.

V. Conclusion

Using data from advisory minutes providing unique detail on the interaction between bank financial advisors and their customers during almost 17,000 advisory meetings at a large German bank, we provide evidence that advisors deviate from their standard approach to pander to explicit client requests and perceived client investment preferences. However, pandering leads to worse after-fee risk-return trade-offs compared to peers passively selecting into the bank's standard portfolio, even if this course is only second-best given the high fees the bank charges for these ready-made portfolio solutions.

[23]Research from the marketing literature evaluate the net promoter score as a valid measure to assess customer satisfaction (Keiningham, Cooil, Andreassen, and Aksoy, 2007)

Our findings parallel the medical literature. Numerous medical studies find a significant share of antibiotics prescriptions to be inappropriate, exposing patients to adverse side effects and ultimately contributing to the development of resistance. Doctors cite patient requests as one of the reasons for inappropriate prescriptions, for example in the case of viral illnesses, for which antibiotics provide no benefit. Rather than educating patients on their erroneous beliefs, medical experts may choose to cater to patient demand in an attempt to safeguard the patient relationship. Hence, lay advisees may exert a negative impact on the quality of professional advice. Our results suggest that these general phenomena carry over to individual investors and their interactions with professional financial advisors.

Attempts to regulate the market for financial advice so far have mainly focused on information provision to clients and on financial inducements paid by product providers to financial advisors. However, these pure supply-side remedies may not be of help, if clients intervene in the process of financial advice, potentially to their detriment. Advisors receiving a fixed fee for providing their service may even be more likely to pander to self-harming client requests. While advisors might be forced to strike a balance between immediate client satisfaction and long-run performance to preserve client relationships and attract future business, this restriction may not be binding. In particular, recent contributions have shown that poor-quality advice appears to have little impact on clients' willingness to continue to follow their advisor (Mullainathan et al., 2012; Hoechle et al., 2016; Agnew et al., 2017).

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Table I Descriptive Statistics

The table reports summary statistics on advised clients' characteristics (Panel A), their average portfolio holdings and trading patterns over the sample period (Panel B), summary statistics on the advisory interviews (Panel C), and on the recommendations by bank financial advisors during the counselling meetings (Panel D). See Table AII in Appendix A for a description of all variables used.

A. Clients	Mean	10%	Median	90%	Std. dev	N
male	0.52					6,204
age, under 50 years	0.20					6,204
age, 50 to 65 years	0.24					6,204
age, older than 65 years	0.56					6,204
occupation, manager	0.04					6,204
occupation, employed	0.32					6,204
occupation, retired	0.52					6,204
occupation, other job	0.13					6,204
household net monthly income	2,856	625	2,625	5,000	3,371	6,204
risk tolerance , low	0.22					6,204
risk tolerance, moderate	0.52					6,204
risk tolerance, high	0.15					6,204
risk tolerance, very high	0.12					6,204
sophisticated (security knowledge)	0.03					6,204

B. Client Portfolio and Trading Patterns	Mean	10%	Median	90%	Std. dev	N
avg. portfolio holdings [EUR]	65,246	9,602	39,704	156,622	71,881	6,204
avg. cash holdings [EUR]	15,320	650	7,075	37,942	26,266	6,204
avg. # assets	4.82	1.314	3.342	9.875	4.616	6,204
avg. # funds	2.33	0.414	1.872	4.736	2.012	6,204
avg. # stocks	1.16	0	0	3.420	3.064	6,204
avg. fund share (% of portfolio holdings)	0.63	0.12	0.67	1.00	0.32	6,204
of which:						
- balanced funds	0.34					6,204
- bond funds	0.09					6,204
- equity funds	0.16					6,204
- real estate funds	0.38					6,204
- other funds	0.04					6,204
avg. equity share	0.28	0	0.23	0.66	0.26	6,204
avg. equity share (cond. on equity)	*0.34*	*0.06*	*0.29*	*0.72*	*0.25*	*5,195*
avg. stocks in equity (cond. on equity)	*0.25*	*0*	*0.01*	*0.85*	*0.25*	*5,195*
avg. home equity share (cond. on equity)	*0.21*	*0*	*0*	*0.87*	*0.34*	*5,195*
% independent purchases	0.22	0.00	0.00	0.72	0.30	6,204
transaction fees p.a. (divided by portfolio value)	0.006	0	0.004	0.013	0.012	6,204
avg. running fees p.a. (divided by portfolio value)	0.009	0	0.009	0.017	0.059	6,204
net return p.a.	0.02	-0.01	0.02	0.07	0.04	6,204
portfolio volatility p.a.	0.06	0.02	0.05	0.13	0.04	6,204
Sharpe ratio p.a.	0.45	-0.15	0.44	1.05	0.49	6,204

C. Advisory Meetings	Mean	10%	Median	90%	Std. dev	N
client-bank relationship [years]	20.00	5.83	21.92	30.75	10.24	6,204
client-advisor relationship at advice	2.57					16,933
# advisory meetings over the sample period	2.79	1.000	2.000	6.000	2.358	6,204
avg. # advisory meetings/year	0.84	0	1	2	0.786	6,204
initiative client	0.19					16,933
advice in person	0.79					16,933
# purchases suggested/interview	1.48	1	1	3	0.98	16,933

D. Recommendations	Mean		N
standard recommendation	0.59		25,200
	share (eq. wght.)	ter (in %)	
funds	0.71	1.74	25,200
of which:			
- bank asset management funds	0.48	2.28	17,763
- equity funds	0.15	1.73	17,763
- bond funds	0.16	1.12	17,763
- real estate funds	0.17	1.03	17,763
- money market funds	0.04	0.64	17,763
single stocks	0.02		25,200
bonds	0.20		25,200
other	0.07		25,200
equity	0.46		25,200
of which:			
- domestic equity	0.10		11,542
- single stocks	0.05		11,542
client idea	0.03		25,200
client with ideas	0.08		6,204

Table II Client Characteristics by Involvement

The table contains descriptive statistics for 6,204 sample clients, comparing clients introducing own ideas during advisory meetings to more passive peers. We define a client having own ideas if any of the purchase recommendations received over the sample period results from the client's own idea, as states in the minutes. Client characteristics are time-invariant variables. Portfolio variables and variables of advice usage are measured as averages over the sample period. The column on the right shows the significance level from t-tests comparing clients with ideas against clients without own ideas. *, **, *** denote statistical significance at the ten, five, one percent level, respectively. See Table AII in Appendix A for a description of all variables used.

	Clients without ideas	Client with ideas	Significance
N	5,732	472	
male	0.515	0.597	***
independence (share self-directed trades)	0.213	0.331	***
sophisticated	0.027	0.097	***
risk tolerance, low or moderate	0.692	0.491	***
risk tolerance, high or very high	0.308	0.509	***
age, under 65 years	0.435	0.466	
occupation, employed	0.314	0.356	*
occupation, manager	0.036	0.049	
occupation, retired	0.522	0.479	*
household net monthly income	2,827	3,198	**
client-bank relationship	19.93	20.73	
portfolio value	62,220	101,978	***
# advisory sessions/year	0.827	1.347	***
% advice in person	0.825	0.767	***
%client-initiated sessions	0.184	0.322	***
# purchases/year	1,427	3,340	***
avg. size purchase	12,899	11,087	***

Table III, **Panel A.** Deviations from Standard Advisor Recommendations

This table reports results from cross-sectional regressions at the single-recommendation level (N = 25,200). The dependent variable is an indicator variable equal to one if the recommendation was to purchase a security from the standard menu of the bank. Independent variables are client involvement measures, client personal and portfolio attributes, and features of the advisory meeting. Regressions furthermore account for month-times-year and advisor fixed effects. Client idea is one for a recommendation that can be traced back to a client's own idea. Independence is the share of purchases made without advisory consultation compared to all purchases during the sample period. Sophisticated clients fall in the highest category of security knowledge. The male dummy is assumed to proxy for (perceived) client confidence. A clients portfolio value and portfolio shares are measured as of end of the month preceding the interview. Indicator variables for the lowest category are omitted. Standard errors are clustered at the advisor level. *, **, *** denote statistical significance at the 10, 5, and 1% level, respectively. See Table AII in Appendix A for a description of all variables used.

	(1)	(2)	(3)	(4)	(5)
	d(standard recommendations)				
client with ideas	-0.120***	-0.0931***	-0.0831***	-0.0820***	-0.0740***
	(0.0159)	(0.0154)	(0.0141)	(0.0140)	(0.0129)
independence		-0.125***	-0.0982***	-0.0935***	-0.0818***
		(0.0187)	(0.0173)	(0.0169)	(0.0155)
male		-0.0279***	-0.0241***	-0.0252***	-0.0247***
		(0.00819)	(0.00765)	(0.00706)	(0.00736)
sophisticated		-0.0721***	-0.0475**	-0.0264	-0.0411*
		(0.0233)	(0.0218)	(0.0224)	(0.0228)
stock share, t-1			-0.0933***	-0.0716***	-0.0871***
			(0.0239)	(0.0265)	(0.0269)
bond share, t-1			-0.201***	-0.182***	-0.124***
			(0.0189)	(0.0190)	(0.0171)
other share, t-1			-0.172***	-0.185***	-0.0986***
			(0.0299)	(0.0293)	(0.0246)
home equity share, t-1			-0.0575***	-0.0744***	-0.0700***
			(0.0141)	(0.0139)	(0.0134)
initiative client				-0.0189*	-0.0161*
				(0.0111)	(0.00947)
advice in person				0.0653***	0.0548***
				(0.0114)	(0.0109)
advisor-client relationship				-0.00322	-0.00703
				(0.00471)	(0.00628)

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ln(financial wealth)				-0.00489*	-0.00298
				(0.00263)	(0.00249)
client risk tolerance, moderate				0.118***	0.130***
				(0.0130)	(0.0135)
client risk tolerance, high				0.0984***	0.126***
				(0.0186)	(0.0177)
client risk tolerance, very high				0.0810***	0.109***
				(0.0230)	(0.0230)
age, 50 to 65				-0.0331**	-0.0334**
				(0.0135)	(0.0129)
age, over 65				-0.0500***	-0.0494***
				(0.0150)	(0.0144)
occupation, employed				-0.0248*	-0.0256**
				(0.0140)	(0.0128)
occupation, manager				-0.0411	-0.0455*
				(0.0262)	(0.0244)
occupation, other job				0.00994	0.00286
				(0.0136)	(0.0131)
first meeting				-0.157***	-0.0960***
				(0.0331)	(0.0306)
Constant	0.333*	0.357**	0.353**	0.339*	0.456***
	(0.176)	(0.175)	(0.175)	(0.178)	(0.162)
Month Fes	x	x	x	x	x
Advisor Fes					x
Observations	25,200	25,200	25,200	25,200	25,200
Adjusted R-squared	0.130	0.138	0.154	0.166	0.207

Table III, Panel B. Adherence to Standard Recommendations

This table reports results from cross-sectional regressions at the single recommendation level (N = 25,200). The dependent variable is an indicator variable equal to one if a client purchases the recommended security. Independent variables are client involvement measures, client personal and portfolio attributes, as well as features of the advisory meeting. Regressions furthermore account for month-times-year and advisor fixed effects. Client with ideas is one for clients for whom at least one purchase recommendation received over the sample period can be traced back to an own idea of the client. Independence is the share of purchases made without advisory consultation compared to all purchases during the sample period. Sophisticated clients that fall in the highest category of security knowledge. The male dummy is assumed to proxy for (perceived) client confidence. A clients portfolio value and portfolio shares are measured as of end of the month preceding the interview. Indicator variables for the lowest category are omitted. Standard errors are clustered at the advisor level. *, **, *** denote statistical significance at the 10, 5, and 1% level, respectively. See Table AII in Appendix A for a description of all variables used.

	(1)	(2)	(3)
		d(adherence)	
client with ideas	-0.00291	0.00210	0.0188
	(0.0148)	(0.0149)	(0.0178)
standard recommendation		0.0627***	0.0679***
		(0.00660)	(0.00697)
standard x client with ideas			-0.0323*
			(0.0192)
independence	-0.298***	-0.291***	-0.291***
	(0.0182)	(0.0181)	(0.0181)
sophisticated	-0.0884***	-0.0848***	-0.0853***
	(0.0286)	(0.0288)	(0.0287)
male	-0.0286***	-0.0267***	-0.0266***
	(0.00823)	(0.00821)	(0.00820)
Controls:	initiative client, advice in person, client-advisor relationship, ln financial wealth (t-1), risk tolerance, age category, job		
Month x year FEs	x	x	x
Advisor FEs	x	x	x
Observations	25,200	25,200	25,200
Adjusted R-squared	0.148	0.152	0.152

Table III, Panel C. Robustness

This table reports results from the baseline regression for two different subsamples. The first subsample in Columns (1) and (2) restricts the sample to recommendations that were actually executed within 30 days following on the advisory meeting. Columns (3) and (4) exclude first meetings with an advisor at the bank. Advisor change is a dummy equal to one if a client's advisor has changed since the last meeting. Apart from that, the specification is identical to that in Table III, Panel A. *, **, *** denote statistical significance at the ten, five and one percent level, respectively. See Table AII in Appendix A for a description of all variables used.

	(1)	(2)	(3)	(4)
	d(standard recommendation)			
	cond. on adherence		w/o first meetings	
client with ideas	-0.0782***	-0.0916***	-0.0885***	-0.0914***
	(0.0157)	(0.0148)	(0.0157)	(0.0148)
advisor change		0.0508***	0.0544***	0.0481***
		(0.0143)	(0.0151)	(0.0154)
client with ideas x advisor change			-0.0306	
			(0.0328)	
stock share, t-1 x advisor change				0.0299
				(0.0504)
stock share, t-1	-0.156***	-0.0647*	-0.0647*	-0.0685*
	(0.0300)	(0.0362)	(0.0363)	(0.0382)
Controls	x	x	x	x
Month FEs	x	x	x	x
Advisor FEs	x	x	x	x
Observations	18,281	16,133	16,133	16,133
Adjusted R-squared	0.212	0.223	0.223	0.223

Table IV Non-standard Advisor Recommendations

This table reports results from cross-sectional regressions at the single recommendation level (N = 25,200). The dependent variable is an indicator variable equal to one if a purchase recommendation refers to a single stock (Column 1), a single bond (Column 2), a domestic equity product (Column 3) or a sector fund (Column 4). Independent variables are client involvement measures, client personal and portfolio attributes, as well as features of the advisory meeting. Regressions furthermore account for month-times-year and advisor fixed effects. Client idea is one for a recommendation that can be traced back to a client's own idea. Independence is the share of purchases made without advisory consultation compared to all purchases during the sample period. Sophisticated clients fall in the highest category of security knowledge. The male dummy is assumed to proxy for (perceived) client confidence. A client's portfolio value and portfolio shares are measured as of the end of the month preceding the interview. Indicator variables for the lowest category are omitted. Standard errors are clustered at the advisor level. *, **, *** denote statistical significance at the 10, 5, and 1% percent level, respectively. See Table AII in Appendix A for a description of all variables used.

	(1) d(stock)	(2) d(bond)	(3) d(home equity)	(4) d(sector fund)
client idea	0.0863***	-0.0836***	0.0755***	0.152***
	(0.0229)	(0.0182)	(0.0239)	(0.0315)
client idea X stock share, t-1	0.345***			
	(0.0644)			
client idea X bond share, t-1		0.247***		
		(0.0759)		
client idea X home equity share, t-1			0.147**	
			(0.0605)	
stock share, t-1	0.0634***	0.0578***	0.00241	0.00529
	(0.0156)	(0.0222)	(0.0159)	(0.0225)
bond share, t-1	0.00743	0.134***	-0.000158	0.00358
	(0.00453)	(0.0153)	(0.00602)	(0.00949)
other share, t-1	-0.0219***	-0.0153	-0.000968	-0.00145
	(0.00637)	(0.0189)	(0.00952)	(0.0194)
home equity share, t-1	-0.00578	0.0350***	0.00561	0.000400
	(0.00526)	(0.00997)	(0.00661)	(0.00907)
independence	0.00106	0.0451***	0.00475	0.0173
	(0.00573)	(0.0128)	(0.00623)	(0.0111)
sophisticated	0.0308***	-0.0356**	0.0150	0.0206
	(0.0115)	(0.0160)	(0.0125)	(0.0153)
client male	0.00367	0.0141**	0.00298	0.0171***
	(0.00252)	(0.00586)	(0.00328)	(0.00626)
Controls:	initiative client, advice in person, client-advisor relationship, ln financial wealth (t-1), risk tolerance, age category, job			
Month FEs	x	x	x	x
Advisor FEs	x	x	x	x
Observations	25,200	25,200	25,200	11,131
Adjusted R-squared	0.138	0.165	0.092	0.121

Table V, Panel A. Portfolio Structure and Portfolio Costs

The table reports estimates from cross-sectional regressions of the portfolio attributes on client involvement measures, client personal and portfolio attributes, as well as features of the advisory meeting. Dependent variables are the portfolio shares in funds and single stocks, the share in equity holdings dedicated to domestic equity, transaction costs in as a percentage of portfolio value, as well as annual expenses on fund holdings as a percentage of portfolio holdings. Dependent variables are measured as averages over all months the client remains in the sample (N = 6,204). Client with ideas is one for clients for whom at least one purchase recommendation received over the sample period can be traced back to a client's own idea. Independence is the share of purchases made without advisory consultation compared to all purchases during the sample period. Sophisticated clients fall in the highest category of security knowledge. The male dummy is assumed to proxy for (perceived) client confidence. Remaining controls are either time-invariant or measured as averages over the sample period. Indicator variables for the lowest category are omitted. Standard errors are clustered at the branch level. *, **, *** denote statistical significance at the 10, 5, and 1% level, respectively. See Table AII in Appendix A for a description of all variables used.

	(1) share funds	(2) share stocks	(3) share home equity	(4) transaction costs	(5) transaction costs	(6) running fees	(7) running fees
client with ideas	-0.0218	0.0260***	0.0411***	0.308**	0.140	-0.0227	0.00584
	(0.0152)	(0.00877)	(0.0127)	(0.135)	(0.0953)	(0.0333)	(0.0229)
# trade p.a.					0.105***		
					(0.0369)		
avg. fund share							1.310***
							(0.0236)
independence	-0.0819***	0.158***	0.208***	-0.0925	-0.412***	-0.282***	-0.175***
	(0.0245)	(0.0112)	(0.0139)	(0.0618)	(0.0982)	(0.0384)	(0.0186)
male	-0.0383***	0.0189***	0.0333***	0.0123	0.00739	-0.0481***	0.00210
	(0.00839)	(0.00389)	(0.00716)	(0.0192)	(0.0179)	(0.0151)	(0.0115)
sophisticated	-0.164***	0.128***	0.0890***	0.660*	0.376	-0.243***	-0.0273
	(0.0441)	(0.0352)	(0.0329)	(0.334)	(0.274)	(0.0680)	(0.0235)
client-bank relationship	0.00105***	-0.0001	0.00102**	-0.00395***	-0.00283**	0.000213	-0.00117**
	(0.000382)	(0.000169)	(0.000417)	(0.00121)	(0.00134)	(0.000543)	(0.000553)

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client risk tolerance, moderate	0.108***	0.0324***	0.123***	0.143***	0.0856***	0.346***	0.204***
	(0.00923)	(0.00344)	(0.00855)	(0.0270)	(0.0288)	(0.0181)	(0.0122)
client risk tolerance, high	0.0960***	0.111***	0.226***	0.188***	0.0714	0.487***	0.361***
	(0.0205)	(0.00812)	(0.0120)	(0.0502)	(0.0645)	(0.0422)	(0.0202)
client risk tolerance, very high	-0.0117	0.250***	0.323***	0.473***	0.307***	0.356***	0.371***
	(0.0197)	(0.0175)	(0.0162)	(0.0904)	(0.0848)	(0.0466)	(0.0263)
age, 36 to 50	0.00428	0.00246	0.00512	0.0138	-0.0168	0.0180	0.0124
	(0.0171)	(0.0104)	(0.0207)	(0.0913)	(0.0840)	(0.0275)	(0.0181)
age, 50 to 65	-0.0135	0.0148*	0.00901	0.0609	0.0193	-0.0230	-0.00536
	(0.0130)	(0.00833)	(0.0166)	(0.102)	(0.0929)	(0.0222)	(0.0174)
age, over 65	-0.0259*	0.0165**	0.0225	0.0228	-0.00884	-0.0713**	-0.0373*
	(0.0131)	(0.00830)	(0.0145)	(0.0865)	(0.0804)	(0.0282)	(0.0208)
ln (financial wealth, 000s)	-0.0002***	0.0001***	0.0003***	-0.0012***	-0.0027***	-0.0002	0.0001
	(0.0001)	(0.0000)	(0.0001)	(0.0003)	(0.0008)	(0.0001)	(0.0001)
Constant	0.486***	0.0141	0.176***	0.602***	0.659***	0.516***	-0.120***
	(0.0214)	(0.0112)	(0.0175)	(0.102)	(0.0866)	(0.0359)	(0.0229)
Branch FEs	x	x	x	x	x	x	x
Observations	6,204	6,204	6,204	6,204	6,204	6,204	6,204
Adjusted R-squared	0.079	0.336	0.197	0.038	0.130	0.145	0.638

Table V, Panel B. Portfolio Structure and Portfolio Costs

This table reports results from cross-sectional regressions at the recommendation level. The dependent variable is the total expense ratio (TER) of the fund recommended. Independent variables are client involvement measures, client personal and portfolio attributes, as well as features of the advisory meeting. Regressions furthermore account for month-times-year and advisor fixed effects. Client idea is one for a recommendation that can be traced back to an own idea of the client. Independence is the share of purchases made without advisory consultation compared to all purchases during the sample period. Sophisticated clients that fall in the highest category of security knowledge. The male dummy is assumed to proxy for (perceived) client confidence. Bank-own asset management fund is an indicator that is one if the fund recommendation refers to a bank-own balanced fund product. We also include dummies controlling for a funds risk category. A client's portfolio value and portfolio shares are measured as of the end of the month preceding the interview. Indicator variables for the lowest category are omitted. Standard errors are clustered at the advisor level. *, **, *** denote statistical significance at the 10, 5, and 1% level, respectively. See Table AII in Appendix A for a description of all variables used.

	(1)	(2)	(3)
	Total Expense Ratio		
client idea	-0.124***	0.0938***	0.0600***
	(0.0327)	(0.0267)	(0.0226)
bank-own asset management fund		0.873***	
		(0.0233)	
fund risk category	0.254***	0.201***	0.164***
	(0.00517)	(0.00411)	(0.00338)
independence	-0.0635***	-0.0117	-0.0132
	(0.0206)	(0.0134)	(0.0120)
male	-0.00969	0.0215***	0.00892
	(0.00946)	(0.00629)	(0.00641)
sophisticated	-0.0743***	-0.0103	0.0131
	(0.0281)	(0.0199)	(0.0185)
Controls	client-bank relationship, risk tolerance, age category, ln(avg. financial wealth)		
Month FEs	x	x	x
Advisor FEs	x	x	x
Observations	16,569	16,569	9,196
Adjusted R-squared	0.500	0.764	0.659

Table VI Portfolio Outcomes and Client Satisfaction

The table presents results from cross-sectional regressions of client average annual after-fee portfolio returns (Column 1), monthly portfolio volatility (annualized) (Column 2), portfolio Sharpe ratios (Column 3), portfolio 4-factor alphas (Column 4) and monthly adjusted portfolio net promoter scores (NPS) (Column 5) on client involvement measures, client personal characteristics and portfolio attributes. Dependent variables are measured as averages over all months the client remains in the sample (N = 6,204). Client with ideas is one for clients for whom at least one purchase recommendation received over the sample period can be traced back to a client's own idea. Independence is the share of purchases made without advisory consultation compared to all purchases during the sample period. Sophisticated clients fall in the highest category of security knowledge. The male dummy is assumed to proxy for (perceived) client confidence. Remaining controls are either time-invariant or measured as averages over the sample period. Indicator variables for the lowest category are omitted. Standard errors are clustered at the branch level. *, **, *** denote statistical significance at the 10, 5, and 1% level, respectively. See Table AII in Appendix A for a description of all variables used.

	(1) portfolio net return p.a.	(2) portfolio volatility p.a.	(3) Sharpe ratio	(4) 4-factor alpha	(5) NPS (month-adjusted)
client with ideas	-0.000789	0.00534***	-0.0609***	-0.00929**	-0.0706
	(0.00212)	(0.00173)	(0.0201)	(0.00411)	(0.197)
independence	-0.00177	0.0127***	-0.0362	-0.00736	-0.434***
	(0.00244)	(0.00298)	(0.0264)	(0.00641)	(0.147)
client male	-0.000305	0.00671***	-0.0393***	-0.0121	-0.0226
	(0.000953)	(0.000948)	(0.0110)	(0.00869)	(0.143)
sophisticated	-0.00394	0.0159***	-0.0922**	0.0125	0.149
	(0.00494)	(0.00289)	(0.0427)	(0.00782)	(0.338)
performance past 12 months					5.126
					(9.106)
client-bank relationship	5.36e-05	-0.000136***	0.00112*	-0.000136	-0.00432
	(4.69e-05)	(3.67e-05)	(0.000580)	(0.000129)	(0.00400)
client risk tolerance, moderate	0.0108***	0.0190***	0.0719***	0.00384	-0.269**
	(0.00113)	(0.00137)	(0.0229)	(0.00294)	(0.111)
client risk tolerance, high	0.0208***	0.0501***	0.00158	-0.00945**	-0.192
	(0.00195)	(0.00257)	(0.0270)	(0.00430)	(0.204)
client risk tolerance, very high	0.0326***	0.0793***	0.0302	-0.00907	-0.475**
	(0.00305)	(0.00257)	(0.0273)	(0.00658)	(0.205)
age, 36 to 50	0.00147	0.000715	0.00145	0.00252	0.0345
	(0.00265)	(0.00258)	(0.0274)	(0.00459)	(0.301)
age, 50 to 65	-0.000459	0.00157	-0.0186	-0.00286	0.0711
	(0.00266)	(0.00194)	(0.0280)	(0.00677)	(0.327)
age, over 65	-0.000501	-0.00160	-0.0239	0.00830	0.0510
	(0.00274)	(0.00183)	(0.0291)	(0.00533)	(0.313)
ln (financial wealth, 000s)	0.000330***	-0.000250***	0.00197*	-0.000508***	0.000813
	(7.92e-05)	(7.42e-05)	(0.00117)	(0.000164)	(0.00985)
Constant	-0.0110***	0.0443***	0.288***	0.00518	-0.945**
	(0.00288)	(0.00217)	(0.0362)	(0.00716)	(0.445)
Branch Fes	Y	Y	Y	Y	Y
Observations	6,204	6,204	6,204	6,204	1,683
Adjusted R-squared	0.083	0.405	0.044	0.203	0.010

Appendix A. Additional Material

A1. Sample Record of an Advisory Interview

XY-Bank

Wednesday, 13 July 2011

Mrs Advisor and *Mrs Client* have conducted a consultative meeting concerning the i*nvestment account number* X12121. The meeting took place *in person*. It was *initiated by the bank* and took around 45 minutes. The reason for the meeting was the availability of new funds for investment. Your personal approach for the above mentioned account is a *long term investment horizon*, your *risk-return profile* is classified as growth with the intention to generate an above-average performance . . . According to your own disclosure, we confirm sufficient risk-bearing capacity . . . You are in the possession of adequate investment knowledge for products of risk category A-C.

Recommendation I – *Type*: purchase; *asset class*: fund
Name (ISIN): ARERO (LU0360863863)
Quantity: EUR 10,000
This recommendation is based the personal information you provided.

- According to our market expectations, this fund is to grow in value.
- This fund contributes to a diversification of the assets in your portfolio.

Recommendation II – *Type*: purchase; *asset class*: stock
Name (ISIN): Daimler AG (DE0007100000)
Quantity: EUR 3,500

- You asked for our assessment concerning the stock that you have monitored for some time.
- Based on your direct question about a speculative investment in a single stock, we named Daimler. We point out that an investment in the XYZ fund Germany would be more conservative due to its diversification potential.
- Although the client already holds a large position in this asset, she explicitly desires to further increase it.

Signature Advisor

A2. Examples of clients' own investment ideas

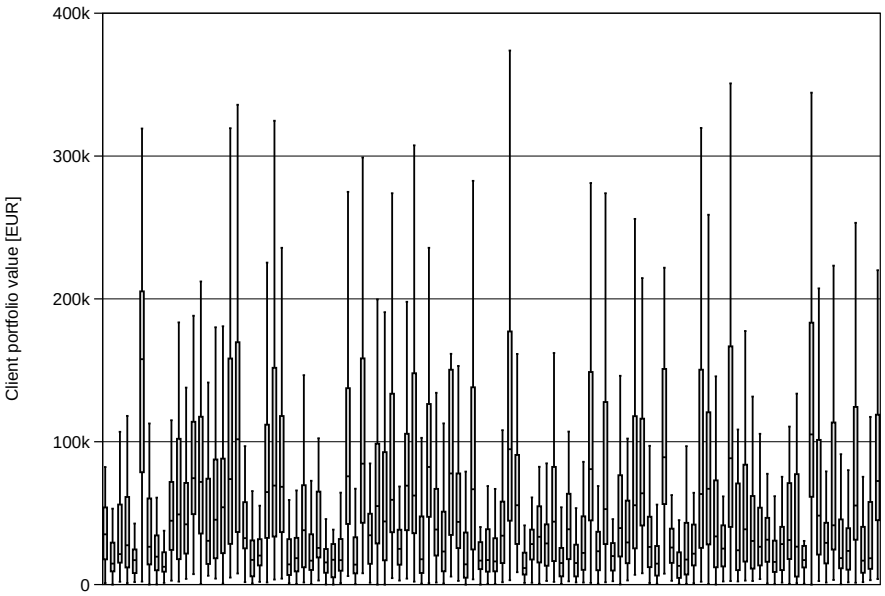
Table AI Examples of Clients' Own Investment Ideas.

The table shows examples of phrases taken from the stated justifications of advisors' recommendations in the advisory minutes that identify purchases that trace back to a client's own investment idea. The phrases have been translated from German into English.

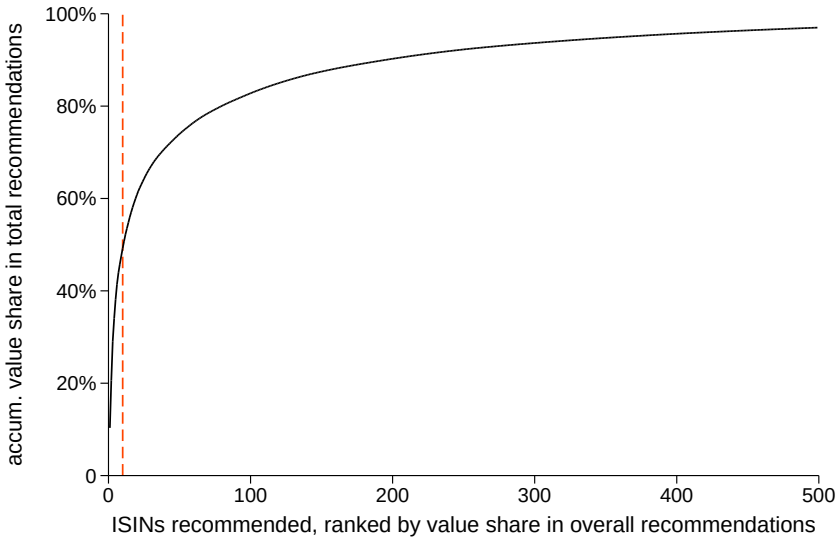
"Based on our experts' market assessment, the bank supports your idea to buy this asset."
"Client idea"/"Purchase was on explicit client request."
"Client explicitly asked for single stock recommendations."/"Instead of investing in a diversified fund, you asked for advice on single stocks."
"Client wishes to invest in an ecological fund."
"You picked this fund yourself."
"You wish to increase your position in this asset."
"You wish to invest in this stock and we provided you with our assessment of the firm."
"You seek to invest in a commodity fund."
"Against or recommendation to not overweight a single position, you wish to invest your entire liquid assets into that fund."
"Client wishes to invest in Chinese equity."
"You asked for information on that asset which was recommended to you by members of your family."
"The XYZ Investor's Club recommended this asset. This is why you whish to purchase it."
"You selected this stock as you are familiar with the company."
"The client wishes to invest in a German mutual fund, although this region is already overweighted in the portfolio."
"You asked for an equity fund with focus on India."
"Client wishes to invest only domestically."
"Client does not wish to invest internationally."
"You asked for an internationally diversified equity fund."

A3. Additional Figures and Tables

Figure AI. Standardized Financial Advice.



Panel A. Portfolio size by advisor. The graph shows the dispersion of portfolio values of clients' in a single advisor's client portfolio. The graph bases on portfolios of advisors with more than 30 clients.



Panel B. Products frequently recommended. The graph illustrates the dominance of a small number of financial products in advisor purchase recommendations. It shows the cumulative value share of single products recommended for purchase in overall advisor purchase recommendations. Products are ranked by their value share in overall purchase recommendations. The intersection with the broken red vertical line illustrates that the top ten products recommended most frequently already account for about half of all purchase recommendations.

A4. Variable Descriptions

Table AII Description of Variables

Variable name	Variable description	Level of measurement	Frequency of observation	Data source
Client characteristics				
Client with ideas	Dummy equal to one if at least one advisor recommendation the client receives over the sample period traces back to the client's own idea.	client	static	advisory minutes
Independent	Dummy equal to one if a client besides with the input of an advisor conducts unadvised, self-directed security purchases	client	static	bank admin data
Sophisticated (security knowledge)	Dummy equal to one one if a client falls into the highest level of security knowledge	client	static	
Male	Dummy equal to one if a client is male	client	static	bank admin data
Age	Client age category. Categories are under 50 years, 50 to 65 years, over 65 years	client	static	bank admin data
Occupation, manager	Dummy equal to one for clients holding a managing position	client	static	bank admin data
Occupation, employed	Dummy equal to one if a client is employed	client	static	bank admin data
Occupation, retired	Dummy equal to one if a client is retired	client	static	bank admin data
Occupation, other job	Dummy equal to one if a client has any other occupation(housewife, student, etc.)	client	static	bank admin data
Household net monthly income	Client monthly household net income category	client	static	bank admin data
Risk tolerance	Client risk tolerance category. Categories are low, moderate, high and very high	client	static	bank admin data
Client Portfolio Characteristics and Trading Patterns				
Portfolio value	Total value of a client's security holdings [EUR]. Does not include cash holdings	client	monthly	bank admin data
Cash holdings	Value of a client's total cash holdings (current accounts, savings accounts, term money accounts) [EUR]	client	monthly	bank admin data
ln (financial wealth)	Natural logarithm of the sum of portfolio value and cash holdings [EUR]	client	monthly	bank admin data
# assets	Number of distinct securities in a client's portfolio	client	monthly	bank admin data
# funds	Number of distinct fund products in a client's portfolio	client	monthly	bank admin data
# stocks	Number of distinct single stocks in a client's portfolio	client	monthly	bank admin data
Fund share	Value of mutual fund holdings divided by the value of a client's overall security holdings	client	monthly	bank admin data
Equity share	Value of equity holdings (single stocks, equity funds, balanced funds) divided by the value of a client's overall security holdings	client	monthly	bank admin data
Stock share	Value of single stock holdings divided by the value of a client's overall security holdings	client	monthly	bank admin data
Bond share	Value of bond holdings divided by the value of a client's overall security holdings	client	monthly	bank admin data

Table AII cont.

Variable name	Variable description	Level of measurement	Frequency of observation	Data source
Other share	Value of other security holdings divided by the value of a client's overall security holdings	client	monthly	bank admin data
Home equity share	Value of domestic equity products divided by the value of a client's equity holdings	client	monthly	bank admin data
# trades p.a.	Number of trades a client conducts over a year	client	daily	bank admin data
# purchases/year	Number of purchases a client conducts over a year	client	daily	bank admin data
% independent purchases	Share of trades/purchases an otherwise advised client conducts without	client	daily	bank admin data
% consulting his advisor first				
Transaction fees p.a.	Sum of transaction fees paid by client in a given year divided by the value of a client's portfolio holdings	client	daily	bank admin data
Running fees p.a.	Sum of total expenses (TER) paid on mutual fund holdings in a given year divided by the value of a client's portfolio holdings	client	daily	bank admin data
Net return p.a.	Portfolio return net of transaction costs and running fees	client	monthly	bank admin data
Portfolio volatility p.a.	Annual volatility of the portfolio net return	client	monthly	bank admin data
Sharpe ratio p.a.	Annual portfolio Sharpe ratio calculated as the portfolio net excess return divided by the portfolio volatility	client	monthly	bank admin data
Advisory meetings				
Client-bank relationship	Length of client-bank relationship since account opening in years	client	daily	bank admin data
Client-adivsor relationship at advice	Length of client-advisor relationship since last advisor change in years	meeting	daily	bank admin data
Advisor change	Dummy variable that equals one if an advisor change has taken place since the last meeting	meeting	daily	bank admin data
First meeting	Dummy variable that equals one if the first meeting with an advisor at the bank	meeting	daily	bank admin data
# advisory meetings	Number of advisory meetings over the sample period	client	daily	bank admin data
Recommendations				
Initiative client	Dummy equal to one if advisory meeting was initiated by the client rather than by the bank	meeting	at meeting	advisory minutes
Advice in person	Dummy equal to one if the advisory session took place in person rather than advice being received on the phone	meeting	at meeting	advisory minutes
# purchases suggested/interview	Number of security purchases suggested during an advsiory meeting	meeting	at meeting	advisory minutes
Standard recommendation	Dummy equal to one if the recommendation figures on the bank's standard menu	recommendation	at meeting	advisory minutes
Bank-own asset management fund	Dummy equal to one if the recommendation refers to a bank-own balanced fund	recommendation	at meeting	advisory minutes
Client idea	Dummy equal to one if the recommendation can be traced back to a client idea or specific request	recommendation	at meeting	advisory minutes