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# Career Concerns, Risk-Taking, and Upward Mobility in the Financial Services Industry: Evidence from Top Ranked Financial Advisers\*

Jun Honda<sup>†</sup>
June 1, 2020

#### Abstract

We investigate career concerns of financial advisers with a focus on their risk-taking and upward mobility. We use matched employer-employee data for the universe of financial advisers with one well-known national ranking for top financial advisers. We find that at early career stages before being ranked, top advisers (i) are twice as likely to acquire a certain license to serve as investment adviser, (ii) encounter customer disputes way more frequently (up to seven times), and (iii) switch to a firm of 80% larger size as measured by total assets, than average advisers. We also find that top advisers manage high risks through labour-market penalty reduction associated with disciplinary actions. Lastly, using variations in firm policy for recruitment across firms, we provide evidence that reducing frictions in job mobility yields sorting dynamics that employers recruit high productive workers intensively within a short time window.

Key Words: Career Concerns, Financial Advisers, Job Mobility, Risk-Taking, Sorting.

JEL Classification: G24, J44, L22.

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#### 1 Introduction

In the US, there are over 600,000 currently registered financial advisers and of these advisers below 1% are selected as top ranked advisers across states in the prestigious annual rankings.<sup>1</sup> Their (reported team-based) asset under management exceeds a billion dollars on average and over 2 to 3 trillion dollars in total. They serve for a wide range of clients including retail investors, institutions, foundations, and (ultra-)high-net-worth clients, and are often viewed as high profile in the industry with their successful career. Unlike top managers (e.g. CEO and CFO) however, little is known about top ranked financial advisers, in particular, how they climb up the job ladder since entry in the industry. This paper examines their career development over time with a focus on: (i) human capital investment, namely acquiring a specific set of licenses; (ii) risk-taking as measured by the incidence of customer disputes on their compliance records and the associated labour market penalties (Becker, 1968); (iii) upward mobility as measured by firm size. In particular for job mobility, we utilize variations in firm policy for reducing industry-specific frictions in job mobility in order to examine sorting dynamics across firms that compete in recruiting top performers.

In the presence of career concerns (Fama, 1980; Holmström, 1999), advisers who seek to move up the job ladder may be willing to exert excessive effort in order to show their competence or ability by (i) acquiring a certain set of licenses as quickly as possible to be able to deal with large potential clients, as well as (ii) growing the demand for their services, especially at early career stages. If they are of the highly productive type and can succeed in accumulating large client assets to exceed a certain level of demand for their services, they would likely "impress" their managers with high performance. This may lead to promotion and give rise to their labour market advantages over average advisers (e.g. longer tenure, high demand for their services in the job market, moving up to a larger firm).

But at the same time with growing the demand for their services, they may encounter

¹ In this paper, we follow the recent literature (Egan, Matvos and Seru, 2019; Dimmock, Gerken and Graham, 2018a) and use the term financial adviser, to refer to representatives registered with the Financial Industry Regulatory Authority (FINRA). FINRA acts as a self-regulatory organization whereas the Securities and Exchange Commission (SEC) acts as the government agency as the ultimate regulator of the securities industry. For an overview of the latest summary statistics for financial advisers as well as firms in this industry, see, for instance, the FINRA annual industry snapshot (https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10001848). A set of the major rankings for financial advisers in the US, among others, is provided by Barron's (a registered trademark of Dow Jones & Company, L.P), Financial Times (Financial Times Ltd.), and Forbes (Forbes LLC). See Section 2.1 and the Online Appendix for the details.

more frequent incidence of customer disputes proportional to their client size. If this is the case, high performers are supposed to anticipate these costs and benefits associated with their upward mobility. As such, it is of interest to see how top performers can indeed move up with confronting potential harm of non-clean compliance records caused by frequent customer disputes, which can be denied or withdrawn without any further legal actions by customers. In particular, we examine a gap in the incidence of customer disputes as well as disciplinary actions (by employers and regulators) and the associated labour market penalties between top and average performers across different career stages.

When considering the job market, firms are willing to attract advisers who are productive and have large clients but at the same time they have incentives for imposing restrictions on client assets, by which they can prevent employees from transferring their client assets to a new firm when switching firms. In fact, the majority of firms impose restrictions on client assets (through Non-Solicitation Agreements), which leads to job mobility frictions. But the situation changed in the year 2004, and three large firms (Smith Barney, Merrill Lynch, and UBS) initiated the Protocol for Broker Recruiting (henceforth "the Protocol") to remove such restrictions with aiming for benefits of clients. Since then, a growing number of firms have joined the Protocol and reached over 1600 by the end of the year 2018. Since a subset of firms in the market have joined the Protocol across different time periods, we can utilize these variations to examine the effect of reducing job mobility frictions on sorting across firms over time. We expect that this is particularly relevant for advisers who have large clients and prefer a Protocol-member firm to a non-Protocol-member one if both are identical in terms of business model and scale. We also expect that firms are willing to recruit those advisers intensively after joining the Protocol, while confronting risks of losing productive employees due to poaching from other firms in the Protocol.

We address these by an empirical approach with a focus on the population average of top ranked advisers (a group of top performers). We mainly use a matched employer-employee data set for the vast majority of financial advisers in the US, which we construct using the FINRA BrokerCheck database. This offers detailed information on employment and registration history, professional licenses, and compliance records (e.g. customer disputes, disciplinary actions by employers and regulators). To identify top performers in the market, we use the Barron's national ranking for top financial advisers, which is the oldest and longest national ranking among all major rankings for top financial advisers in the US over the period 2004–2018 and provides a list of

top ranked advisers across all states. We match them to construct panel data over the period 2000–2018, which contains around 1.3 million financial advisers and roughly 13 million observations, of which 0.36% are attributed to top ranked advisers.

The primary goal of this paper is to examine the patterns of human capital investment, risk-taking, and upward mobility over time in the presence of career concerns, especially before becoming a top ranked adviser in the industry. In doing so, we consider two types: (i) "top ranked" advisers (High type in terms of productivity); (ii) average advisers (Low type). With this, we basically compare the formers with the latters who work for the same firm, at the same time, at the same location, and have the same industry experience to average out all firm-location-time-experience-specific unobservable characteristics. These fixed effects absorb, for example, time-varying firm-specific business models and sales practices across their branch offices, competition and global shocks (e.g. recession and financial crisis) across firms and regions, differences in corporate culture, state-specific regulation, social norms across counties, experience-related job assignment/client demand, and local economic conditions in demographics and labour.

We first find that at the early career stage (within 0-4 years of industry experience) before being ranked, top advisers are 2 times more likely than average ones to hold a particular set of licenses in order to serve as investment adviser and subsequently the gap declines over time but still persists with above 50%. We also find that top advisers are way more likely to encounter customer disputes than average, especially before being ranked, and the difference in the incidence of customer disputes between the two groups is maximized (up to 7 times) at the middle range of career stages within 5–9 years of industry experience. To examine upward mobility, we consider job-to-job transitions with controlling for original firm fixed effects, and find that top advisers switch to a new firm of 8 times larger size as measured by total assets at the early career stage and the difference persists despite declining over time.

These findings suggest that financial advisers who are eager to move up, are willing to acquire essential licenses to provide a wide range of financial products and services as investment adviser in order to expand the demand for their services as quickly as possible, and at the same time are more exposed to customer complaints and disputes than average with moving up to a larger corporation. Importantly, these gaps are large, pervasive, and persistent over time.

Nevertheless, their excessive risk-taking (high incidence of customer disputes) should come at a cost through reputation loss and the associated labour market penalties.

To address this, we examine their job separation as well as the size of the new firm when switching firms with/out the disclosure events, including employer or regulator disciplinary actions. We find that before being ranked, top advisers are 50% less likely than average to leave a firm following a disclosure event, while they are able to switch to a firm of a 50% (resp. 2.5 times) larger size regarding the number of advisers (resp. total assets), after controlling for original firm fixed effects.

Note that this is true for top advisers before being ranked. After being ranked, their labour market advantages get weaker, possibly because they become public figures in the industry and their compliance records are paid attention by retail investors or the public way more than before being ranked, which may cause larger reputation loss and associated potential harm on their employers and firms in the market. The bottom line is that top advisers can substantially mitigate the labour market penalties at least before being ranked, which suggests that they take this into account to move up the job ladder with managing risks of frequently occurring customer disputes by their labour-market advantages over others. This seems to be a consensus between top performers and firm employers in this industry.

Lastly, we use variations in firm policy for reducing job mobility frictions (regarding the transferability of client assets) in order to investigate the effect on sorting dynamics across firms. We focus on job-to-job transitions where advisers switch firms that are either in the Protocol with removing particular job mobility frictions or not in the Protocol without. We mainly find that (i) top advisers are 40% more likely to switch to a Protocol-member firm within the first 3 year window in the post-Protocol, (ii) the difference declines after the first 3 year window in the post-Protocol. We do no find that there is any significant difference in the pre-Protocol. This finding remains true after controlling for whether advisers worked for a firm in the Protocol before switching firms. Overall, our findings suggest that (i) there were frictions in job mobility related to non-compete (solicitation) agreements in the financial advisory services industry, (ii) reducing these frictions yields sorting of advisers across firms in the Protocol, and (iii) sorting is dynamic and firms recruit top advisers (high performers) more intensively within a relatively short time window after reducing frictions.

#### 1.1 Related Literature

In this section, we will refer to the closely related literature while discussing other relevant subjects in the concluding remarks.

Career Concerns, Managerial Policies, and Risk-Taking. Our paper investigates how much risk financial advisers are supposed to take in terms of regulatory compliance when having an implicit incentive for moving up the job ladder, and also how they manage such a risk under the industry-specific managerial policies.

There are a couple of related empirical work. Chevalier and Ellison (1999) consider a group of mutual fund managers whose actions and performance greatly affect their career prospects, and provide evidence on the relationship between a managerial (termination) policy and the associated pattern of risk-taking: (i) their job separation rate increases sharply with poor performance (the level of negative excess returns) while it is insensitive in case of positive performance; (ii) they hold less unsystematic risk and more conventional portfolios at early career stages as a fund manager in order to manage risks of job separation. As noted in their paper, however, we should be aware that fund mangers in their sample have already reached a relatively high position and may seek to maintain that high status.

In a similar vein, Hong and Kubik (2003) consider a group of securities analysts whose earning forecasts influence performance of their brokerage houses and is therefore a key factor for their career prospects. They examine patterns of their forecasts in the presence of career concerns along with their labour mobility across firms, and find that the analysts tend to make a biased forecast relative to a market-driven "reference point" in order to move up with favourable job separation (e.g. moving to a more prestigious brokerage house).

A key difference from their studies is that we consider a group of top ranked financial advisers and examine their careers not only after reaching a certain point (becoming a fund manager or a securities analyst) but from the very beginning to see if implicit incentives driven by career concerns would actually influence their risk-taking in terms of regulatory compliance over the course of career. In contrast with their studies, we cannot measure risk-taking by directly observing job-specific actions (e.g., portfolio choice or earning forecasts) while we attempt to measure it indirectly through individual-level compliance records. Our main finding suggests that financial advisers tend to bear more risks than average when moving up, especially at early career stages before reaching a high status, while they manage these risks with their labour market advantages.

To the best of our knowledge, this is the first study to examine the relationship between upward mobility in the financial services industry and the associated risktaking, which we measure by their compliance records. In particular, we pay attention to the group of top performers who serve as financial advisers in order to investigate their risk-exposure to the frequent occurrence of *individual-level* disclosure events in the presence of career concerns as well as their labour market advantages and penalty reduction.

Financial Adviser Misconduct. Qureshi and Sokobin (2015) is the first study to examine the majority of financial advisers in the US with using individual-level data through the FINRA's BrokerCheck database. They find that information on financial advisers can be useful for retail investors, in particular that prior records on misconduct-related disclosure events are indicative of recidivism and also that there is a positive correlation in the incidence of disclosure events between co-workers. Dimmock, Gerken and Graham (2018a) examine whether co-workers influence the incidence of financial adviser misconduct with the identification strategy using the cases of mergers, which is considered to be exogenous shocks to average advisers. They find that an adviser who leaves an office due to the merger is more likely to receive a misconduct-related disclosure in the subsequent years if the fraction of his/her co-workers at a new office who have prior records is higher than average.

More recently, Egan, Matvos and Seru (2019) built on the work by Qureshi and Sokobin (2015) with providing a comprehensive, systematic analysis to better understand the "market for financial adviser misconduct". Their main finding suggests that misconduct is prevalent and persistent across firms and locations over time, and provides evidence that some firms are tolerant of compliance records while others are not, due in part to heterogeneity in customer sophistication (financial literacy) across regions. Put differently, advisers are matched with firms in terms of tolerance, which leads to a market segmentation across firms in this industry.

There is a growing literature on individual-level financial misconduct based on FINRA and SEC (Form ADV filings and IAPD) databases.<sup>2</sup> Our paper complements the recent findings with a focus on a group of top ranked advisers who manage an unprecedented amount of client assets exceeding a couple of trillion dollars in total. We compare them with average advisers to quantify differences in their propensity for misconduct-related disclosure events and the associated labour-market penalties over the course of career. This sheds light on the penalty reduction for top (or high) performers.

<sup>&</sup>lt;sup>2</sup>See, among others, Charoenwong, Kwan and Umar (2019); Dimmock and Gerken (2018); Dimmock, Gerken and Van Alfen (2018b); Egan, Matvos and Seru (2018).

Job Mobility Frictions and Sorting in the Labour Market. Clifford and Gerken (2017) and Gurun et al. (2019) are the first to examine the effect of the Protocol for Broker Recruitting on job mobility of financial advisers. They both provide supportive evidence that the job mobility increased across Protocol-member firms relative to Non-Protocol member firms, after controlling for adviser fixed effects. Our findings are consistent with theirs but we do not control for adviser fixed effects, which is a limitation in our analysis. But instead, we can examine sorting dynamics across workers and firms by comparing top advisers with average ones.<sup>3</sup>

# 2 Data

Our dataset comprises (i) the Barron's national ranking for top financial advisers and (ii) the FINRA BrokerCheck database through Central Registration Depository (CRD).<sup>4</sup> Below we will explain the respective datasets in detail.

## 2.1 The National Ranking for Top Financial Advisers

In the US, there are currently three major national rankings for top financial advisers, namely, Barron's, Financial Times, and Forbes. Their selection criteria have common features but differ in terms of the minimum asset-under-management, minimum industry experience, compliance records, etc. The set of selected advisers are neither the same nor mutually exclusive, and there are differences in the number of listed advisers and the initiated year. For instance, Forbes has recently launched their ranking, which

<sup>&</sup>lt;sup>3</sup>Note that our data, the same as in Clifford and Gerken (2017) and Gurun et al. (2019), does not contain information on wages or earnings for advisers, which is a limitation for further exploring, for instance, whether non-Protocol-firms pay higher wages to advisers than Protocol-firms in order to compensate them for job mobility frictions. Nonetheless, when limiting attention to top ranked advisers, we can observe their reported team-based assets at the adviser level when being ranked. This information provides summary statistics that when switching firms, more than 70% of top ranked advisers increase their assets when moving to a Protocol-firm while roughly 50% of them do so when moving to a non-Protocol-firm. Note that this summary statistics is based on a small sample as there are not so many top ranked advisers who were ranked across multiple years and have switched firms while being ranked.

<sup>&</sup>lt;sup>4</sup>For the data usage regarding (i), we follow the Austrian federal copyright law (https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10001848). The right of "free use of works" (Freie Werknutzungen) applies to this research, which is stated in Section 42 (2) which allows us to produce individual copies (e.g. Barron's ranking tables) for research (non-commercial), and Section 40h. allows us to produce individual copies of "database work" (e.g. data/statistical analysis). Also, to use the FINRA BrokerCheck database (ii), we follow the FINRA BrokerCheck.finra.org/) for academic purposes.

is the largest among major national rankings; Barron's has initiated it in the year 2004 and kept updated up to the present. The Barron's ranking was initially limited in terms of size (e.g. top 100 financial advisers) over the period 2004–2008, whereas it has enlarged its scale to top 1000 since 2009 and further to top 1200 since 2014.

We use the Barron's (national) ranking across states over the period 2004–2018 as it is the oldest and longest ranking among the major rankings for top financial advisers in the US and suitable for our panel data analysis. Although there are muliple rankings available even when focusing on Barron's alone, we use three types of annual rankings: (i) Top 100 (over 2004–2008); (ii) Top 1000 (over 2009–2013) and Top 1200 (over 2014–2018); (iii) Top 100 Women (over 2006–2018). We manually collect the annual ranking tables and combine them altogether to construct the set of top ranked advisers. The majority of them were selected at least twice across multiple years, so that the average percentage of new entrants (first ever listed advisers) in the ranking over the period (excluding the first year of the respective ranking tables) is below 20% on average.

Each ranking table contains the list of top ranked advisers across states along with the following elements: (1) their names; (2) their working places (firm names and the location of their branch offices); (3) their current and last (if any) ranks; (4) their team-based characteristics (e.g. asset under management, types of clients, and the average client's account size). Importantly, both (1) and (2) are necessary to match top ranked advisers with the FINRA BrokerCheck database (described beloow) as the name alone is not sufficient. Note that in the main analysis we only use information on whether an adviser is in the ranking but not other characteristics in order to examine differences between top ranked and average advisers. See the Online Appendix where we provide summary statistics of other characteristics (size of assets and type of clients) and relationships between those characteristics.

#### 2.2 FINRA BrokerCheck Database for Financial Advisers

The second dataset, which is mainly based on Form U4 in the FINRA BrokerCheck database, provides detailed information for financial advisers, such as employment and registration history, licenses (qualification exams), and compliance records regarding disclosure events (e.g. customer disputes, disciplinary actions by employers and regu-

<sup>&</sup>lt;sup>5</sup>For instance, there are team- or firm-based rankings (Top RIA Firms; Top Wealth Management Firms).

lators, and criminal and financial matters).<sup>6</sup> Concerning employment history, there are two types of information: (i) "Registration History" and (ii) "Employment History". The former provides the list of registered securities firms where the broker is currently and/or was previously registered, whereas the latter provides the adviser's employment history for the last 10 years, both in and outside the securities industry, as reported on his or her last Form U4.<sup>7</sup> In our panel data, we use part (i) alone as in Egan et al. (2019).<sup>8</sup> Note that there is a limitation in the FINRA BrokerCheck database due to survivorship-bias, which depends on when data is collected (August 2018 in our case). We will refer to this in Section 2.3 when explaining our panel data.

In our data analysis, we control for firm-branch-cohort specific effects using firm-year-county-license-experience fixed effects. To this end, we look at their information on employment history, where we can see the time periods (on a monthly basis) that they have worked for any FINRA-member firm over time, as well as firm names and addresses (of branch offices) with each firm's unique identifier, the CRD number. For the information on location, we match a county-FIPS (Federal Information Processing Standard) code with each branch office's address. Also for the information on licenses, we look at the list of qualification exams, which is given in Form U4 for each adviser in our sample and shows the name of exams (e.g. Series 7) with their passed dates, and then assign a dummy variable for each exam, which is equal to one, if the adviser has passed the exam. Although there are over 60 different exams observed in our sample, we limit attention to the set of major exams (Series 6, 7, 24, 63, 65/66) as license fixed effects, together with using the total number of other exams as a control variable.<sup>9</sup>

<sup>&</sup>lt;sup>6</sup>Form U4 (https://www.finra.org/sites/default/files/form-u4.pdf) is "the Uniform Application for Securities Industry Registration or Transfer" and used to become registered in the appropriate jurisdictions and/or SROs.

<sup>&</sup>lt;sup>7</sup>Employment history (ii) includes full and part-time work, self-employment, military service, unemployment, and full-time education. The majority of financial advisers provide information on employment history for more than 10 years if it is applicable, due to severe consequences for failing to disclose information, which is a violation of Section 3(a)(39)(F) of the Securities Exchange Act of 1934 and can result in statutory disqualification.

<sup>&</sup>lt;sup>8</sup>I thank Mark Egan for sharing information on data construction.

<sup>&</sup>lt;sup>9</sup>The definitions of currently available licenses (qualification exams) are given on the FINRA website (https://www.finra.org/registration-exams-ce/qualification-exams). The definitions of major exams/licenses (Series 6, 7, 24, 63, 65, 66) are given in the appendix.

#### 2.3 Employer-Employee Mathched Panel Data

We manually match the two datasets described in subsection 2.1 and 2.2 to construct (unbalanced) employer-employee matched (adviser-year) panel data over the period 2000–2018.<sup>10</sup> Although the starting year of the ranking in our dataset is 2004, we set the initial year of our panel data to be earlier, as it is crucial in our analysis to include a time period where some top ranked advisers were at early career stages. Also, since the application system has changed from paper form to the web application in late 1999, we drop the observations before 2000, as in the recent work by Qureshi and Sokobin (2015) and other subsequent studies based on the FINRA BrokerCheck database.<sup>11</sup>

The vast majority of top ranked advisers are registered with FINRA and matched on employment history, while we dropped the remaining unmatched ones. After matching, we construct unbalanced adviser-year panel data over the period 2000–2018. The total number of observations amounts to around 12.9 million and contains roughly 1.3 million advisers, of which roughly half have left the industry (de-registered with FINRA) over the course of the period.

Surviviorship-Bias. In our full sample without any time restrictions, all observations prior to the year 2000 range from the year 1939 to 1999 and the total number of those observations amounts to roughly 5 million (see Panel (a) in Figure 1 for those over the period 1980–2018). Panels (b) and (c) in Figure 1 display the number of entries (the first-ever registration) and exits (the final de-registration) of financial advisers over the period 1980–2017, respectively, and indicate that there is significant survivorship-bias in our sample, which is mainly caused by omitted observations for financial advisers who left the securities industry with de-registrations prior to the year 2006 in our sample. In fact, Egan, Matvos and Seru (2018, 2019) and Gurun, Stoffman and Yonker

 $<sup>^{10}\</sup>mbox{We}$  manually collected the first dataset (the Barron's ranking tables over the period 2004–2018) in July 2019, and the second dataset (for the vast majority of financial advisers) in August 2018 through the FINRA BrokerCheck with following its terms of use for academic purposes.

<sup>&</sup>lt;sup>11</sup>Precisely, Qureshi and Sokobin (2015) use their sample over the period 2000–2013, and in the other subsequent studies, among others, Clifford and Gerken (2017) over 1999–2016, Dimmock and Gerken (2018) over 1999–2013, Dimmock, Gerken and Graham (2018a) over 1999–2011, Dimmock, Gerken and Van Alfen (2018b) over 1999–2017.

<sup>&</sup>lt;sup>12</sup>There is a difference in publicly available information on financial advisers, depending on their registration status: (i) a broker who is currently registered with FINRA or a national securities exchange, or who has been registered within the last 10 years; (ii) a broker whose registration with FINRA or a national securities exchange terminated more than 10 years ago. Since we collected data in August 2018, the number of financial advisers who left the securities industry with de-registrations prior to the year 2008 can be substantially smaller than

(2019) restrict their sample with a ten-year interval to mitigate survivorship-bias due to the information constraint imposed on the FINRA BrokerCheck database. For this reason, we control for cohort effects through year-experience fixed effects with firm-county-year-license ones (including those interactions) to compare top advisers with average ones. Also in the Online Appendix, we will show that the qualitative features of our main results remain unchanged when restricting the sample to observations over the period 2008–2018, despite having less precise estimation.

#### 2.4 Additional Data

Firm-Level Data. We collect additional firm-level data to supplement our panel data as in Clifford and Gerken (2017). To measure part of upward mobility, we obtain firms' financial information from Audit Analytics and SEC Form ADV.<sup>13</sup> The former provides information on (the year-ended) revenue and total assets, among others, which are based on the FOCUS report (SEC Rule 17a-5) for broker-dealer (FINRA-member) firms, whereas the latter information on (regulatory) assets under management and the total number of client accounts for investment advisory (SEC-member) firms.<sup>14</sup>

Gender Identification. The FINRA BrokerCheck database does not provide information on gender of financial advisers. To supplement this, we use the R package, gender (Mullen, 2018) to identify gender for the vast majority (95%) of advisers. With this, we are able to match the first names of the vast majority of advisers with historical datasets comprised of pairs of (time-dependent) names and the associated gender in order to predict whether they are male or female based on the matched frequency. We apply one of the datasets from the U.S. Social Security Administration to our dataset with imposing 80% accuracy and then identify the gender for approximately 95% of all advisers, of which females account for around 26%. Note that this remains almost the same even when using a higher accuracy, e.g., 90% instead of 80%. The main reason why we differentiate advisers by gender is to account for possible significant gender gaps

that after 2008 due in large part to omitted observations. See a brief overview of the information contained in the FINRA BrokerCheck database (https://www.finra.org/investors/learn-to-invest/choosing-investment-professional/about-brokercheck).

<sup>&</sup>lt;sup>13</sup>Audit Analytics (https://www.auditanalytics.com); SEC Form ADV (https://www.sec.gov/help/foiadocsinvafoiahtm.html).

<sup>&</sup>lt;sup>14</sup>Note that in the Form ADV we can see the identifiers of firms used in our panel data, while we can only see the firm names in Audit Analytics, so that we match (legal) firm names with those in FINRA BrokerCheck and the SEC Form ADV databases to assign financial information from Audit Analytics to firms in our data.

in career concerns, job mobility, and propensity for disclosure events as well as other characteristics in financial advisory services.

The Protocol for Broker Recruiting. To examine the effect of the protocol for broker recruiting on sorting advisers over time, we supplement our main data with the list of firms that have joined the protocol. We construct the list using the directory of signatories to the protocol, which is maintained by Carlie, Patchen, & Murphy LLP and provides us information on the legal firm name, the date that the firm joins, and the date that the firm withdraws if applicable. We match the list of firm names with those in our panel data to assign the dummy for whether a firm is in the protocol in a given year. In our data, the number of FINRA-member firms in the Protocol has reached over 600 by the end of 2017 and amounts to roughly 7% of all FINRA-member firms, where approximately 37% of advisers work.

#### 2.5 Types of Financial Advisers

In this paper, we mainly consider two types of financial advisers, top ranked advisers and average ones. We define a top ranked adviser as an adviser selected in the ranking for top financial advisers at least once over the course of career. In the following analysis, we distinguish them based on the timing of being listed in the ranking: (i) before being ranked; (ii) after being ranked. Since top advisers have significantly longer industry experiences than average advisers (see for summary statistics below), the dummy variable indicating before or after being top ranked may not be suitable to compare them with average advisers. As mentioned above, we will account for industry-experience fixed effects together with other multi-dimensional ones, and also provide an alternative analysis across multiple career stages based on years of industry experience instead of the (after-being-ranked) dummy variable. Note that below we sometimes call "top ranked adviser" as "top adviser" or "top performer" interchangeablly.

<sup>&</sup>lt;sup>15</sup>See the website (https://www.thebrokerprotocol.com/) for the directory of signatories to the protocol. We also obtain the list of withdrawn firms from the same website. Note that withdrawals from the Protocol occurred at the first time in the year 2017 and a small number of firms have withdrawn since then.

<sup>&</sup>lt;sup>16</sup>Besides these variations in firm policy for recruiting financial advisers (registered representatives) over time, there are also variations in Non-Compete Agreements (NCA) across states that some of them preclude NCA. Following the recent studies by Clifford and Gerken (2017) and Gurun et al. (2019), we account for these variations at state level.

# 2.6 Measure of Risk-Taking Based on Disclosure Events

According to the FINRA Form U4, there are 6 broad categories of disclosure events and other sub-categories within these 6 categories, which include customer distputes, employer disciplinary and regulatory actions, civil cases, and criminal charges. <sup>17</sup> In this study, we focus on two types of disclosure events: (i) Customer Disputes and (ii) Disciplinary Actions by employers and regulators. The former falls into six sub-categories (see Section B for the definition): Customer Dispute - (a) Settlement, (b) Award/Judgment, (c) Closed/No Actions, (d) Denied, (e) Dismissed, (f) Withdrawn. The latter falls into two categories: (g) Employer Separation After Allegations and (h) Regulatory - Final.

We measure an adviser's risk-taking by the (annual) incidence of these disclosure events as they could lead to labour market penalty and/or reputation loss that can prevent them from moving up following their disclosures. In doing so, we further divide these (i) and (ii) into smaller sets as follows: (i)-1. Customer Disputes with (pay) settlement, (a) and (b); (i)-2. Customer Disputes without settlement, (c)-(f); (ii)-1. Employer Disciplinary Action (g); (ii)-2. Regulatory Action (h). This is mainly because each of them can differ distinctly from one another, thereby leading to significantly different labour market consequences.

We denote the set of Customer Disputes with settlement (a)–(b), which are mentioned above, by

$$A_1 = \{ \text{Customer Disputes with settlement (a)-(b)} \},$$
 (1)

Customer Disputes without settlement (c)–(f) by

$$A_2 = \{ \text{Customer Disputes without settlement (c)-(f)} \},$$
 (2)

both customer disputes with/out settlement by

$$A = A_1 \cup A_2, \tag{3}$$

<sup>&</sup>lt;sup>17</sup>The broad six categories are: (i) Criminal Disclosure; (ii) Regulatory Action Disclosure; (iii) Civil Judicial Disclosure; (iv) Customer Compliant/Arbitration/Civil Litigation Disclosure; (v) Termination Disclosure; (vi) Financial Disclosure.

Employer Disciplinary Actions (g)

$$B = \{ \text{Employer Disciplinary Actions (g)} \}, \tag{4}$$

Regulatory Actions (h)

$$C = \{ \text{Regulatory Actions (h)} \}, \tag{5}$$

and the set of all these categories by

$$D = A_1 \cup A_2 \cup B \cup C. \tag{6}$$

These categories are directly related to financial advisory services and comprise the majority of disclosure events excluding financial matters (Financial - Final; Judgment/Lien).<sup>18</sup> Note that there is an additional disclosure category "Criminal - Final", which can be directly related to financial misconduct but we do not include these cases as they are a small fraction of all disclosure events, especially for top ranked advisers (see summary statistics below).

## 2.7 Summary Statistics for Advisers

Tables 1 and 2 provide summary statistics for observable characteristics and the incidence of all disclosure events, respectively, between average and top advisers.

Table 1 shows group differences in (i) industry experience and tenure, (ii) job transitions (job separation, new job finding rate conditional on separation, and firm size conditional on job-to-job transitions), (iii) firm size as measured by the total number of financial advisers, total assets, revenue, AUM (in millions of \$US), and the total number of client accounts (in thousands) at a given firm where an adviser works, (iv) the set of acquired major licenses (for dealing with a wide range of finacial products and services). We can see from the table that top ranked advisers (i) have (roughly) 10 years more experience in the industry, (ii) have 5 years longer tenure at a given firm, (iii) are roughly 28% more likely to be active as of the year 2018 (without exiting from

<sup>&</sup>lt;sup>18</sup>Financial matters could indirectly influence their advisory services (e.g. Dimmock, Gerken and Van Alfen, 2018b). But the incidence of related disclosure events (Financial - Final; Judgment/Lien) is actually much lower for top advisers than for average ones (see the Online Appendix). Since our main focus is on top advisers who are supposed to not be under financial distress, we do not examine these disclosure events in this paper.

the industry), (iv) are around 8% more likely to stay at a firm without job separation, (v) find a new job after job separation with a more than 30% higher likelihood, (vi) work for a firm of more than twice larger size, (vii) are at least 7% less likely to migrate across states/commuting zones/counties conditional on switching firms, (viii) are over 2 times more likely to have the license, Series 65/66, for serving as investment adviser, (viv) have around 45% larger number of licenses. All these indicate that there exists significant selection bias in the sample that top advisers have way longer industry experience than average ones, which yields differences in other characteristics. To mitigate this bias, we compare top advisers with average ones who have the same length of industry experience together with other fixed effects (see below for details). We also take into account different career stages (e.g. the first 5 years since entry in the industry), which we will formally define below. The fraction of observations for top ranked advisers in the sample is small, comprising only around 0.35% of all financial advisers in the sample.

Table 2 displays differences in the incidence of disclosure events that top advisers are (i) roughly 4 times more likely to receive customer disputes with settlement in set  $A_1$ , (ii) 5 times as likely to receive customer disputes without settlement in set  $A_2$ . Note that these numbers are based on the annual incidence but not on the cumulative numbers over industry experience. As mentioned above, these differences are also possibly due in a large part to selection bias that top advisers have longer industry experience.

# 2.8 Baseline Specification in the Linear Probability Model

We aim to compare the group of top ranked advisers with average ones who work for the same firm, at the same branch office (location), at the same time, and have the same set of licenses with the same length of industry experience, in order to average out firm-location-time-license-experience specific characteristics. Below we first introduce the notation used in estimation and subsequently the baseline model.

We denote (i) an adviser by i = 1, ..., I; (ii) a firm by j = 1, ..., J; (iii) a location (county FIPS) by h = 1, ..., H; (iv) dummy variable  $d_{i,l}$  for whether adviser i holds license l = 1, ..., 5 in the set of five major licenses (Series 63, 6, 7, 65/66, 24) and the set of these dummies  $d_i = (d_{i,1}, ..., d_{i,5})$ ; (v) the length of adviser i's industry experience

<sup>&</sup>lt;sup>19</sup>We can also use other measures for firm size, including revenue (the FOCUS report), AUM, and the total number of client assets (SEC Form ADV), to show the same qualitative features. See Section 2.4 for these data sources.

(in years) by  $m_i = 0, 1, ..., M$ ; (vi) time (year) by t over the period 2000–2018.<sup>20</sup> To simplify the notation below, we denote by g(i,t) a group of variables for adviser i at time t that comprise either (i) firm-county (j,h), (ii) firm-county-license  $(j,h,d_i)$ , or (iii) firm-county-license-experience  $(j,h,d_i,m_i)$ .

We consider a linear probability model where (i) the dependent variable  $Y_{it}$  with  $g(i,t) = (j,h,d_i,m_i)$  is a dummy for adviser i who has worked for firm j located in county h with the set of licenses and industry experience m at time t; (ii) the key independent variable of interest is a dummy variable, Top Adviser, that indicates whether adviser i is a top ranked adviser; (iii) another key independent variable is the interaction term, Top Adviser, k After, which is a dummy variable equal to one if adviser k is a top adviser after being ranked. From (ii) and (iii), the independent variable, Top Adviser, corresponds to the base group of top advisers before being ranked. To examine different career stages (e.g., within 0-4 years of industry experience), we only consider top advisers before being ranked using the term "Top Adviser (Before Being Ranked)".

Our baseline model is given as follows:

$$Y_{it} = \beta_1 \text{ Top Adviser}_i + \beta_2 \text{ Top Adviser}_i \times \text{After}_{it}$$
 (7)  
  $+ \beta X_{it} + \alpha_{g(i,t)} + \varepsilon_{it},$ 

where the dependent variable,  $Y_{it}$ , is a dummy variable and  $X_{it}$  is the vector of control variables,  $\alpha_{g(i,t)}$  the fixed effects regarding g(i,t) (e.g., firm × county × license × experience × time fixed effects when  $g(i,t) = (j,h,d_i,m_i)$ ), and  $\varepsilon_{it}$  an error term. With the baseline specifications,  $X_{it}$  includes (i) industry experience (in years) and its squared term, which are omitted in the presence of experience fixed effects, (ii) tenure (in years) at firm j in a given year t, and (iii) the dummy variables of major licenses, which are omitted in the presence of license fixed effects, (iv) the number of other non-major licenses. In the robustness check, we include other characteristics in  $X_{it}$ , such as the number of jobs across different firms and the cumulative number that adviser i has switched firms/states/commuting zones since entry in the industry up to year t. Since our panel data contains a small number of time periods (over 2000-2018) while it includes over 20,000 firms, we use standard errors clustered by firms (e.g. Abadie, Athey, Imbens and Wooldridge, 2017).

<sup>&</sup>lt;sup>20</sup>Note that our panel data is unbalanced and all advisers have potentially different industry experience (in years) and tenures across firms.

# 3 Patterns of Human Capital Investment, Risk-Taking, and Upward Mobility

We first examine whether there is a particular pattern of human capital investment, namely acquiring a specific set of licenses, in order to become a top performer, and secondly whether they are more likely than average to confront customer complaints and disputes, before and after being ranked. We analyze these with using the linear probability model given by (7), where we replace the dependent variable Y by relevant variables, such as license dummies and the incidence of customer disputes.

To complement this, we also take into account different career stages as measured by industry experience. Precisely, we denote by  $x \in \mathbb{N}_+$  industry experience (in years). To make sure that we have a large enough sample size at each career stage, we split X years of industry experience into  $\bar{x}$ -year windows as follows:

$$X_k = [\bar{x}(k-1), \bar{x}k-1], \tag{8}$$

where k = 1, ..., K and  $\bar{x}K - 1 \leq X$ . When considering different career stages, we focus on early career stages as we are mainly interested in career concerns and examine whether top performers have stronger incentives than average for expanding the demand for their services as quickly as possible. For this reason, we consider only top advisers before being ranked and compare them with average advisers.

As the last part of this section, we consider that firm size, which we measure by the total number of advisers and total assets (see Section 2.4), is a proxy for upward mobility, and will investigate upward mobility of top advisers relative to average.

# 3.1 Before and After Being Ranked

We first examine whether there are differences in patterns of investment in human capital or risk-taking between top and average advisers, before and after being ranked.

Human Capital Investment in Qualifications. There are a number of exams or qualifications (licenses) to deal with various types of financial products and services. From summary statistics (see Table 1), we know that the majority of top advisers hold the qualification (Series 65/66) to serve as investment adviser, which seems to play a central role in their career. For this reason, we focus on this specific exam to see if

there is a significant difference between top and average advsiers after controlling for multi-dimensional fixed effects along with observable characteristics. $^{21}$ 

We consider the linear probability model given by (7), where we replace the dependent variable Y with a dummy variable for whether adviser i holds Series 65/66 at time t. Table 3 provides the parameter estimates across different specifications, depending on adviser control variables (e.g. industry experience, tenure, other licenses) and degrees of fixed effects regarding firms, locations, time, licenses, and industry experience. We first look at the effect of the key independent variable of interest "Top Adviser", which represents the difference between average and top advisers before being ranked. Across all columns (1)–(5), the coefficient is positive and significant at any reasonable level, which indicates that before being ranked top advisers are more likely to hold a qualification for investment adviser than average. From column (2), we can see that adviser control variables substantially increases  $R^2$ . After controlling for firm-year-county fixed effects in column (3), the coefficient does not change much. If we look at the last column (5) where we control for firm-year-county-license-experience fixed effects, the coefficient is roughly 22% and significant at any reasonable level. With the mean of the dependent variable equal to approximaltely 31% this implies that (holding other factors fixed) top advisers are  $22/31 \approx 70\%$  more likely than average to hold Series 65/66, before being ranked.

Next, we consider the interaction term "Top Adviser × After". The sign of coefficient is initially positive in column (1) but turns to be negative in column (3). Also, the size is small relative to that of "Top Adviser". What we can infer from this is that the difference between two groups decreases over time but does not diminish and remains sizable with roughly 50%.

Risk-Taking: Incidence of Customer Complaints and Disputes. We focus on the set  $A = A_1 \cup A_2$  of customer disputes defined by (1)–(3), and measure risk-taking by the incidence of customer disputes. With this measure, we will see if top advisers are willing to take more risks than average before or after being ranked. We again consider the linear probability model given by (7), where we replace the dependent variable Y with "Disclosure<sub>it</sub>", a dummy equal to one if adviser i has encountered a customer dispute in  $A_1$  or  $A_2$  at least once at time (year) t.

Panels (a) and (b) in Table 4 provide the parameter estimates (only for the key

<sup>&</sup>lt;sup>21</sup>See the appendix for the definition of Series 65/66.

independent variables) in case of  $A_1$  and  $A_2$ , respectively. We first look at the coefficients of "Top Adviser" in Panel (a) and (b). They are all positive and significant at any reasonable level across columns (1)–(5). Unlike in the case of the license in the preceding section, the value of  $R^2$  does not dramatically increase with adviser control variables and even after controlling for firm-year-county fixed effects but becomes moderate with adding license and industry-experience fixed ones. The coefficients decrease as dimensions of fixed effects increase. To compare two groups of advisers with firm-year-county-license-experience fixed effects, we look at column (5) in both Panel (a) and (b), which indicates that top advisers are roughly 2.5 (resp. 4.5) times more likely than average to encounter customer disputes with (resp. without) settlements. This indicates that top advisers are way more likely to receive customer disputes than average and the majority of these disputes end up being denied or withdrawn without any further actions by customers. Put differently, top advisers are more likely to deal with customer disputes in such a way that they minimize damage to their compliance records.

Next, we consider the interaction term "Top Adviser × After". The coefficient in Panel (a) is negative in columns (1) and (2) before controlling for fixed effects but indistinguishable from zero after. In contrast, the coefficient in Panel (b) is negative across all columns and significant at any reasonable level. These imply that after being ranked top advisers are less likely to receive a customer dispute without settlement than before being ranked, which amounts to around 40% in column (5), and that even after being ranked they are roughly 3.5 times more likely than average to encounter a customer dispute in  $A_2$ .<sup>22</sup>

# 3.2 Across Different Career Stages

We complement the preceding analysis with investigating different career stages through 20 years of industry experience across 5-year windows. The main objective is to see whether there is a time-varying difference in human capital investment or risk-taking over the course of their career between average and top advisers before being ranked. In doing so, we reconsider the model (7) with two differences: (i) we omit the second term "Top Adviser  $\times$  After" with focusing on top advisers before being ranked;<sup>23</sup> (ii) we

<sup>&</sup>lt;sup>22</sup>These values are derived by  $100 \times (0.70/(1.50+0.34)) \approx 38\%$  and  $100 \times (1.84-0.69)/0.34 \approx 3.4$  times.

<sup>&</sup>lt;sup>23</sup>Note that in our sample top advisers have way longer industry experience than average and the mean of years of experience is around 20 years (see summary statitistics). This is the main reason

impose the constraint that adviser i must have industry experience x (= 0, 1, 2, ...) within 5-year window  $X_k$  defined by (8) for k = 1, 2, 3, 4.

Human Capital Investment. Table 5 provides the parameter estimates across 5-year windows over industry experience, where we provide two specifications in each window: (i) with advisor control variables without any fixed effects; (ii) with both control variables and firm-year-county-license-experience fixed effects. From the table, we can see that the mean of the dependent variable increases in the order of windows, which indicates that average advisers are more likely to hold the license Series 65/66 as they accumulate industry experience. Now take a look at the coefficient of the independent variable of "Top Adviser". The coefficient is all positive and significant at any reasonable level across columns (1)–(8). Moreover, the difference is maximized at the first 5-year window in columns (1) and (2) with top advisers being more than 2 times more likely to hold the license, which declines over time to roughly 55% at the last 5-year window.<sup>24</sup>

This implies that the majority of top advisers have started their career as investment adviser (with holding Series 65/66), which suggests that we should be aware of these differences. In the subsequent analysis, we will take this difference into account to compare top advisers with average ones by introducing a dummy variable for whether an adviser has held Series 65/66 within 2 years since entry in the industry, which we define as "Career Start as Investment Adviser".<sup>25</sup> Note that the above-mentioned qualitative feature remains true even when we limit the sample to observations for investment advisers who hold Series 65/66 at least once in their career.

Risk-Taking. We examine a difference in risk-taking between top and average advisers across different career stages. Panels (a) and (b) in Table 6 provide the parameter estimates. As mentioned above, we examine the coefficient of "Top Adviser" in the presence of a new dummy variable "Career Start as Investment Adviser" to match a group of advisers with the majority of top advisers. Similar to the pattern of human capital investment over time, the mean of the dependent variable increases in the order of 5-year

why we limit the sample to observations for top adviser before being ranked. Even if we include all observations for top advisers, the qualitative feature remains the same.

<sup>&</sup>lt;sup>24</sup>These values are derived as follows:  $(22.80 + 27.31)/22.80 \approx 2.2$  times; and  $100 \times 21.56/38.06 \approx 56\%$ .

<sup>&</sup>lt;sup>25</sup>The specific value, 2 years, is inconsequential. Our subsequent analysis remains true when considering a wide range of values instead of 2 years.

windows, which indicates that average advisers are more likely to encounter a customer complaint and/or dispute as they accumulate industry experience. Consider now the first 5-year window in columns (1) and (2). The coefficient of "Top Adviser" in Panel (a) is small and indistinguishable from zero at any conventional level, and similarly the one in Panel (b) is small once controlling for fixed effects and indistinguishable from zero. These imply that there is no significant gap in the incidence of customer disputes  $A_1$  and  $A_2$  between top and average advisers. Note that the coefficient of "Career Start as Investment Adviser" is positive in both Panels (a) and (b) and significant at the 5% level in Panel (b), which indicates that financial advisers who start their career as investment adviser encounter a customer complaint or dispute more frequently than other advisers. But the situation differs when looking at the second 5-year window in columns (3) and (4): The coefficient is positive and large in both  $A_1$  and  $A_2$ , and is also significant at the 5% level in the case of  $A_1$  and at any reasonable level in the case of  $A_2$ . When looking at other remaining columns (5)–(8), we can see that the size of coefficient declines over time.

Overall, we can see that the difference is maximized at the second 5-year window in both cases  $A_1$  and  $A_2$ : Especially in the case of  $A_2$ , top ranked advisers who have started career as investment adviser are roughly 8 times more likely to encounter a customer dispute than average.<sup>26</sup>

**Upward Mobility.** We next turn to examine whether there is a significant gap in upward mobility as measured by firm size, which we proxy as the number of advisers (#Advisers) and total assets (see Section 2.4 for details), between average and top advisers before being ranked. We denote "Firm Size" by

Firm Size 
$$\in \{ \# Advisers, Total Assets \}.$$
 (9)

Below we will first consider the gap in firm size unconditional on job transitions (Part (a)) and second the difference in new firm size when switching firms (Part (b)).

(a) Persistent Differences in Firm Size. We consider the preceding model by replacing the dependent variable with the (natural) logarithm of firm size,  $\ln (\text{Firm Size}_{it})$ , where adviser i works at time t, and removing only firm fixed-effects from multiple-dimensional fixed ones  $\alpha_{g(i,t)}$  for evaluating firm size. Panels (a) and (b) in Table 7

<sup>&</sup>lt;sup>26</sup>We derive this value by  $(0.38 + 2.36 + 0.36)/0.38 \approx 8.2$  times.

provide the paramter estimates. The mean of the dependent variable in both Panels (a) and (b) decline over time, which indicates that average advisers start working for a larger firm and switch to a new firm of smaller size in the subsequent years. The coefficient of "Top Adviser (Before Being Ranked)" is all positive and significant at any reasonable level across columns (1)–(8), where we provide two specifications in each window: (i) with advisor control variables without any fixed effects; (ii) with both control variables and year-county-license-experience fixed effects. Note that here we exclude firm fixed effects when considering the size of the current firm for which an adviser works in a given year, and also that below we will include the *original* firm fixed effects when considering the size of the new firm. The positive coefficient indicates that top advisers work for a firm of larger size relative to average: The difference in the case of (a) ranges from roughly 80% (larger size) at the first 5-year window in column (2) to more than 2.5 times at the later stage in columns (6) and (8), whereas the one in the case of (b) from roughly 8.5 times in column (8) to more than 10.5 times in column (6). These suggest that the gap in firm size defined by (9) persists over the entire range of industry experience.

(b) Selection of New Firms. We now restrict the sample to job-to-job transitions where advisers switch firms in order to see if there is a gap in selection of new firms between top and average advisers. Our analysis is based on the preceding model, conditional on that adviser i works for firm j in a given year t and then leaves the firm and finds a new job at a different firm  $j' \neq j$  in year t+1.<sup>27</sup> In this analysis, we replace the dependent variable with l (Firm l Sizel,l+1) and control for original firm fixed effects along with other fixed ones to average out the firm-specific characteristics.

Panels (a) and (b) in Table 8 provide the paramter estimates.<sup>28</sup> The mean of the dependent variable does not have a particular trend over time. The coefficient of "Top Adviser (Before Being Ranked)" is positive and significant at any reasonable level, and also the size tend to decrease across 5-year windows, which indicates that the difference in new firm size between top and average advisers is maximized at early career stages after controlling for multi-dimensional fixed effects: The difference in the case of (a) is

<sup>&</sup>lt;sup>27</sup>Note that we constructed our adviser-year panel data in such a way that we assign to an adviser a given firm with longer tenure in a given year if the adviser worked for multiple firms within the year. For this reason, when switching firms, there are adviser-year observations where advisers left a firm and found a new job at time t instead of t+1 and have worked for the new firm at t+1.

<sup>&</sup>lt;sup>28</sup>Note that observations in this model are way fewer than in the previous analysis as we limit the sample to observations when switching firms.

maximized with approximately 80% (larger size) at the first 5-year window in column (2) and declines to roughly 40% at the last 5-year window in column (8), and similarly the difference in the case of (b) is maximized with roughly 4 times in column (2) and decline to roughly 80% in column (8). These imply that when leaving the same firm, top advisers switched to a significantly larger firm than average at early career stages, and the difference becomes smaller at later stages.

# 4 Labour-Market Penalty Reduction

We have so far seen that before being ranked, top advisers are way more likely to encounter customer disputes defined by (1)–(3), in particular those without settlement in (2), and also that a gap in the incidence of those disclosures between top and average advisers is maximized at relatively early career stages, whereas top advisers work for and move up to a larger firm than average. To better understand their high risk-taking when moving up, we need to understand the labour market penalties associated with compliance records.<sup>29</sup>

A labour market penalty can be in the form of job separation or reputation loss through disclosure, which causes a difficulty in finding a new job in the industry and results in job transitions to a smaller or less prestigeous firm. We will investigate possible differences in these job transitions between top ranked and average advisers, especially when they encounter customer disputes and disciplinary actions by employers and regulators, in order to see if there is a labour-market penalty reduction in favour of top ranked advisers.

As mentioned in Section 2.3, there is survivorship bias when using data prior to the year 2008 but the qualitative features of all findings in the subsequent analysis remain the same even when limiting the sample to observations over the period 2008–2018 (see the Online Appendix).

# 4.1 Job Separation

We first examine to what extent disclosure events affect job separation at a given firm for advisers. For this, we re-consider the baseline model given by (7) with two differences:

<sup>&</sup>lt;sup>29</sup>For disclosure-related monetary cost, we find that the amount paid in customer disputes with settlement for top advisers is roughly twice as large as the one for average ones. See the Online Appendix for details.

(i) replacing the dependent variable with a dummy for whether adviser i leaves a firm (job separation) at time t+1, coditional on that s/he worked for the firm at time t;<sup>30</sup> (ii) we add the independent (dummy) variable for whether adviser i receives disclosures at time t as well as its interaction terms with "Top Adviser" and "Top Adviser × After". As before, we will focus on the set of disclosure events  $D = A_1 \cup A_2 \cup B \cup C$  defined by (1)–(6). Further, to highlight the relationship between disclosure events and job separation, we will limit attention to  $A_1 \cup C$  with excluding  $A_2 \cup B$  from D as a disclosure event in  $A_2$  does not closedly relate to job separation, the one in B always leads to termination by construction, and the one in C alone does not provide sufficient observations for estimation.

Formally, we denote by "Job Separation" and "Disclosure" the dependent and key independent variables, respectively, and then consider the following model:

Job Separation<sub>i,t+1</sub> = 
$$\beta_1$$
 Top Adviser<sub>i</sub> +  $\beta_2$  Top Adviser<sub>i</sub> × After<sub>it</sub> (10)  
+  $\beta_3$  Disclosure<sub>it</sub> +  $\beta_4$  Top Adviser<sub>i</sub> × Disclosure<sub>it</sub>  
+  $\beta_5$  Top Adviser<sub>i</sub> × After<sub>it</sub> × Disclosure<sub>it</sub>  
+  $\beta$   $X_{it}$  +  $\alpha_{g(i,t)}$  +  $\varepsilon_{it}$ ,

where the independent variables "Top Adviser<sub>i</sub>" and "Top Adviser<sub>i</sub> × After<sub>it</sub>" indicate whether top ranked advisers are more likely than average to stay at the same firm (with longer tenure). Besides these, there are three new terms at the right hand side: (i) "Disclosure<sub>it</sub>"; (ii) "Top Adviser<sub>i</sub> × Disclosure<sub>it</sub>"; (iii) "Top Adviser<sub>i</sub> × After<sub>it</sub> × Disclosure<sub>it</sub>". Each coefficient of these terms contributes to an increase or a decrease in the job separation rate. The term (i) is a dummy for whether adviser i encounters a disclosure event in  $A_1 \cup C$  at least once in year t and captures the baseline effect of disclosure events for all advisers;<sup>31</sup> (ii) is the interaction term between (i) and "Top Adviser" and yields a possible penalty gap in the probability of job separation between top advisers before being ranked and average ones; (iii) captures the penalty gap between top advisers before and after being ranked. The variable  $\alpha_{g(i,t)}$  contains firm-year-county-license-experience fixed effects.

Top advisers are most likely to remain in the industry without exiting after leaving

 $<sup>^{30}</sup>$ In our data, we consider that an adviser leaves a firm at time t+1 if the firm identifier (unique CRD number) at time t is not the same as the one at time t+1 (if there is any) or missing, provided that t is not the last year 2018 of our panel data.

<sup>&</sup>lt;sup>31</sup>Note that we do not separate  $A_1 \cup C$  in this section as sample size for top advisers in the case of C is not large enough to obtain stable standard errors. Nonetheless, the qualitative features of subsequent findings remain the same even when separating them.

a firm while average ones may exit from the industry, especially when receiving a disciplinary action in  $B \cup C$ . In the presence of this bias, we would likely end up with overestimation of the difference in job separation between top and average advisers if there is any. To mitigate this bias, we exclude observations where advisers exit from the industry at time t+1 in the model (10) and focus on differences in the job separation rate between top and average advisers conditional on that they do remain in the industry without exit. One of our main goals in this section is to investigate whether there is a labour market penalty reduction in the job separation rate associated with disclosure events. Even if we include observations with exit, the qualitative features remain the same and the difference gets larger than with excluding those observations.

Table 9 provides the parameter estimates. The coefficients of "Top Adviser" are all negative and significant at any reasonable level across all columns (1)–(5) and become stable after controlling for fixed effects in columns (3)–(5), which indicates that before being ranked top advisers are roughly 17% more likely than average to stay at a firm when there are no disclosure events in  $A_1 \cup C$ . In contrast, the coefficients of "Disclosure" are all positive, significant, and relatively stable across all columns, and they are more than half as much as the mean of the dependent variable, which implies that average advisers are at least 50% more likely to leave a firm following a disclosure event in  $A_1 \cup C$  than without.

To see if there is a difference in the labour market penalty between top and average advisers, we look at the coefficients of "Top Adviser × Disclosure" across columns. They are all negative and significant at any reasonable level, and are also nearly the same size as those of "Disclosure", which indicates that a substantial part of the labour market penalty can be reduced for top advisers before being ranked. After controlling for fixed effects in columns (3)–(5), top advisers are over 50% less likely to leave a firm than average ones. Even if *only* top advisers encounter a disclosure event in  $A_1 \cup C$ , they are still less likely to leave a firm. To account for the difference between before and after being ranked, we look at the coefficients of "Top Adviser × After × Disclosure", which are all positive and significant at any reasonable level. Their size is close to that of "Top Adviser × Disclosure", which suggests that the penalty reduction in job separation for top advisers is only valid before being ranked.

#### 4.2 Job-to-Job Transitions

We now turn to job-to-job transitions, conditional on job separation as considered in the previous section. We know that there is strong bias such that top advisers, especially before being ranked, tend to find a new job after leaving a firm with a way higher probability than average ones, some of whom exit from the industry.<sup>32</sup> For this reason, we do not consider a job finding rate to examine a difference in job-to-job transitions between two groups. Instead, we focus on differences in *new* firm size when switching firms after encountering disclosure events with controlling for original firm fixed effects, in order to investigate whether there is a labour market penalty reduction in firm size associated with those job-to-job transitions.

We slightly modify the preceding model (10) in such a way that we replace the dependent variable with the natural logarithm of new firm size as measured by the number of advisers and total assets (as in Section 3.2 for upward mobility) at time t+1, conditional on that adviser i works for firm j at time t and switches to new firm  $j'(\neq j)$  at t+1. We denote the new dependent variable by "Log(New Firm Size) $_{i,t+1}$ ", where group variable g(i,t) satisfies  $j \in g(i,t)$  and  $j' \in g(i,t+1)$  with  $j \neq j'$ . Note that this analysis excludes both cases of career interruptions and exit from the industry as it includes only observations where advisers always swtich to a new firm without losing a job after leaving a firm.<sup>33</sup> Since we limit the sample to job-to-job transitions, this reduces sample size to a large extent. To compensate for that, we consider that "Disclosure" in the model is a dummy variable for whether the adviser has received at least once a disclosure event in set  $A_1 \cup B \cup C = D \setminus A_2$ , which we denote by E below for simplicity.

The columns (1)–(5) in Table 10 provide the parameter estimates in the case of firm size as measured by the number of advisers whereas columns (6)–(10) those in the case of firm size by total assets (in millions of US dollars). Across all columns, the coefficients of "Top Adviser" are all positive and significant at any reasonable level. After controlling for fixed effects in columns (3)–(5) and (8)–(10), we find that before being ranked, top advisers switch to a firm of at least 50% larger size in the case of the number of advisers and 2.5 times larger size in the case of total assets, conditional on

<sup>&</sup>lt;sup>32</sup>We can formally show that top advisers find a new job following disclosure events with a higher probability than average, after controlling for multiple fixed effects with covariates.

<sup>&</sup>lt;sup>33</sup>Exit from the industry is based on the last observation for an adviser who has exited from the industry (by the final de-registration with FINRA over their career) prior to the last year 2018 of our data.

that they do not have any disclosure events in E.

When looking at columns (3) and (8),  $R^2$  drastically changes from around 0.1 to above 0.5, which indicates that controlling for original firm fixed effects together with year-county ones is crucial in evaluating a difference in firm size between two groups. In these columns, the coefficients of "Top Adviser × After" are negative and significant at the 5% level, while the sum of coefficients of "Top Adviser" and "Top Adviser × After" is positive. These imply that top advisers would likely switch to a firm of smaller size after being ranked than before but there is still a significant difference between top and average advisers. For example, the difference in firm size amounts to roughly 20% in the case of the number of advisers and to twice as much in the case of total assets.<sup>34</sup>

We now examine the labour market penalty associated with disclosure events in E. The coefficients of "Disclosure" are negative and significant at any reasonable level across all columns (1)–(10). If we consider columns (3) and (8), they are -0.46 and -0.92, respectively, and indicate that average advisers switch to a new firm of roughly 60% (resp. 2.5 times) smaller size with a disclosure event in E than without.<sup>35</sup> In contrast, the coefficients of Top Adviser × Disclosure are positive across all columns. Again when looking at columns (3) and (8), they are significant at the 5% and 1% level, respectively, and indicate that there is labour market penalty reduction in favour of top advisers and it is large enough to offset the penalty. Nevertheless, this is true only for top advisers before being ranked. The coefficients of Top Adviser × After × Disclosure are larger than those of Top Adviser × Disclosure across all columns except for the last column (10), which suggests that disclosure events in E come at a cost and top advisers have to move to a firm of smaller size after being ranked compared to before. The bottom line is that disclosure events cause severe labour market penalty but it can be reduced for top performers before being publicly recognized in the industry.

# 5 Reduction of Job Mobility Frictions and Sorting Dynamics

We examine the effect of reducing frictions in job mobility (through the Protocol for Broker Recruiting, henceforth "the Protocol") on sorting dynamics between Protocoland non-Protocol-member firms. To understand possible driving forces behind sort-

<sup>&</sup>lt;sup>34</sup>These values are derived by  $\exp(0.55 - 0.34) - 1 \approx 0.22$  and  $\exp(1.19 - 0.50) - 1 \approx 1$ .

<sup>&</sup>lt;sup>35</sup>These values are derived by  $\exp(0.46) - 1 \approx 0.58$  and  $\exp(0.92) - 1 \approx 1.51$ .

ing dynamics, we consider the Protocol-related incentives from both sides of advisers and firms. When switching firms, advisers can transfer their client accounts without restrictions or fear of legal recourse as long as both firms are in the Protocol. If firm characteristics are exactly the same between two firms, advisers prefer a Protocol-member firm to a non-Protocol-member firm. This is particularly so for advisers who have large clients (top advisers in our sample). Firms have incentives for joining the Protocol as they can attract advisers for recruiting, while at the same time they have to confront exactly the oppposite effect of advisers departing to other firms with their clients. Having these possible pros and cons, a subset of firms in the industry have joined the Protocol at a different point in time since the year 2004 to present. In our sample in the year 2016, the fraction of firms that are in the Protocol is around 7% whereas that of advisers who work for Protocol-member firms is 44%.

Below we will investigate the effect of firm-specific and time-varying Protocol membership on job transitions at *adviser level*, with focus on a possible difference in sorting between top and average advisers. In the subsequent analysis, we limit the sample to observations over the period 2001–2016 to account for job transitions in both Pre- and Post-Protocol across 3-year windows and to exclude the withdrawal of firms that have appeared since 2017.

#### 5.1 Job-to-Job Transitions in the Presence of Protocol

We first present summary statistics on job-to-job transitions across firms in order to highlight how financial advisers respond to firm policy changes before and after they join the Protocol. We differentiate both original and new firms in job-to-job transitions, depending on whether they become a Protocol-member. If a new firm joins the Protocol, we consider the Pre- and Post-Protocol across 3-year windows:

Table 11 shows summary statistics on job-to-job transitions between top and average advisers. From the table, we can first notice that when considering job transitions from original firms that are in the Protocol (see Case (1) in the table), there is a surge in the firm recruiting in Post-Protocol relative to Pre-Protocol, especially for the first 3-year window. We can also see significant differences in job transitions between top and average advisers: (i) The fraction of top advisers (both before and after being ranked) who work for Protocol-member firms is larger than that of average ones, especially for top adviser after being ranked, regardless of whether their original firm is in the Protocol or not (see both Cases (1) and (2)); (ii) When switching firms, the vast majority of top

advisers select a new firm in the Protocol (see Cases (1)-1 and (2)-1); (iii) Among those who switch to a Protocol-member firm, the fraction of top advisers who switch in the first Post-Protocol 3-year window is larger than that of average advisers.

In the subsequent analysis, we take these points into account to evaluate Post-Protocol sorting dynamics after controlling for firm-year-location specific effects in order to account for possible time-varying competition in recruiting among firms in the Protocol.

# 5.2 Sorting Dynamics in Post-Protocol

We expect that there is a significant difference in job-to-job transitions between Protocoland non-Protocol-member firms in the Post-Protocol Period, and also that the intensity of recruiting (sorting) in the Post-Protocol Period is larger for top advisers (especially for those before being ranked) than for average ones.

For notation, we denote  $\tilde{t}$  by the year that a given firm joins the Protocol and q(=1,2,3,4) by the Pre(Post)-Protocol Period: (i) q=1 corresponds to the Pre-Protocol 3-year window  $\tilde{t}-3 \leq t \leq \tilde{t}-1$ ; (ii) q=k (k=2,3,4) the (k-1) Post-Protocol 3-year window  $\tilde{t}+3(k-2) \leq t \leq \tilde{t}+3(k-2)+2$ . Using this notation, we consider the following model:

New Firm in the Protocol 
$$(q)_{i,t+1} = \beta_1 \text{ Top Adviser}_i + \beta_2 \text{ Protocol}_{it}$$
 (11)  
  $+ \beta X_{it} + \alpha_{q(i,t)} + \varepsilon_{it},$ 

where the dependent variable "New Firm in the Protocol  $(q)_{i,t+1}$ " is a dummy for whether new firm j' is at the q(=1,2,3,4) Pre- or Post-Protocol Period at time t+1, conditional on that adviser i worked for firm j at time t and switched to firm  $j' \neq j$  by the end of the year t+1; the independent variable "Top Adviser," is a dummy for whether adviser i is a top ranked adviser both before and after being ranked; "Protocol," is a dummy for whether (original) firm j is in the Protocol at time t;  $\alpha_{g(i,t)}$  captures fixed effects, which we introduce different specifications, depending on the objectives: (i) We separate (original) firm j fixed effects from year-county-experience (t, h, m) fixed effects in order to see if there is a significant difference in job transitions between Protocol- and non-Porotocol-member firms in the Post-Protocol Period; (ii) We use firm-year-county-license-experience fixed effects to examine whether there is a significant difference in job transitions to Protocol-member firms between top and average advisers.

Table 12 provides the parameter estimates. We first look at the coefficient of "Protocol" to see if there is an effect of Protocol on job mobility among average advisers. The coefficient is first negative in the Pre-Protocol Period (see column (2)), while it becomes positive in the first Post-Protocol window (column (5)), increases subsequently in the second (column (8)), and declines in the third window (column (11)). This indicates that firms could succeed in attracting advisers by entering into the Protocol at the aggregate level, and that (average) advisers are roughly 45% less likely to select a firm in the Pre-Protocol window relative to other firms while they are 30% more likely to choose the firm in the first Post-Protocol window, which increases to 70% in the second window and then decreases to the indistinguishable level from zero in the third.

We now turn to the coefficient of "Top Adviser" in order to investigate sorting dynamics with a focus on the comparison of top advisers with average ones. The coefficient is indistinguishable from zero in column (3), while becoming positive and significant at any reasonable level in column (6), and afterwards plummeting to the lower level, which is indistinguishable from zero in the last 3-year window in column (12). This implies that top advisers move to a new firm in the first Post-Protocol window roughly 40% more likely compared to average ones, while there are no statistically significant differences between the two groups in the Pre- and Post-Protocol windows except for the first 3-year window. This is in contrast with the pattern seen above for average advisers, which suggests that competition for recruiting top perfomers intensifies in the first 3-year window across Protocol-member firms, whereas it lasts longer for average advisers up to the second 3-year window due in part to a growing number of firms that joined the Protocol.

These findings suggest that (i) there are frictions in job mobility related to the Protocol for Broker Recruiting, more broadly speaking, non-compete (solicitation) agreements in the financial advisory services industry, (ii) reducing these frictions yields sorting of advisers across firms in the Protocol, (iii) sorting is dynamic and firms recruit top advisers (high performers) more intensively compared to average for a relatively short-time window after reducing frictions. The findings (i) and (ii) are consistent with the previous studies (Clifford and Gerken, 2017; Gurun et al., 2019) while (iii) is new and provides the first evidence on sorting dynamics induced by reduced frictions in job mobility for financial advisers.

# 6 Concluding Remarks

We have investigated career concerns of financial advisers by comparing top performers with average ones. We found that there are significant differences in their human capital investment (as measured by licenses), risk-taking (by the incidence of customer disputes), and upward mobility (by firm size) at relative early career stages, and that these differences between top and average advisers decline over time but persists. We also found labour market penalty reduction specific for top advisers when encountering customer disputes or disciplinary actions by employers and regulators. Using the events related to the protocol for broker recruiting, our paper provides suggestive evidence that reducing frictions in job mobility induces sorting of workers across firms that is dynamic over time.

Below we will mention a couple of subjects relevant to our findings in order.

Top Managers and Labour Market Discipline. In our main analysis, we compare top ranked advisers with average ones. As another reference group for top ranked advisers, we can also consider a set of top mangers (CEO and CFO) who are individually registered with FINRA as a financial adviser and at some point in time have served for FINRA- or SEC-member firms as a top manager.<sup>36</sup> We find that there are stark contrasts between top ranked advisers and top managers: Unlike the former group, at first glance there is no significant difference in risk-taking (as measured by the incidence of customer disputes) between top mangers and average advisers. Importantly, this depends heavily on the measurement of risk-taking as well as on firm size: We measure risk-taking by the incidence of regulatory actions and split firm size (based on #Advisers) into three groups (small, mid-size, large).<sup>37</sup> With these, after being in a management position, small-firm top mangers are 4 times more exposed to regulatory actions than average advisers, whereas their mid-size- or large-firm counterparts are less likely so. Also, top managers gain labour-market advantages in the absence of disclosure events similar to top advisers. Interestingly, there are differences in the labour market

<sup>&</sup>lt;sup>36</sup>To construct a list of top managers, we use information on the firm's ownership in Form BD (for firms registered with FINRA) and Form ADV (for firms registered with SEC and state securities authorities), both of which contain the list of executive officers with their unique identifiers in the Central Registration Depository (CRD), positions (job titles), and the position start dates, besides the list of (direct and indirect) owners.

<sup>&</sup>lt;sup>37</sup>We define firm size as in the FINRA industry snapshot (see footnote 1). There are three types of firm size: (i) small firm with 1–149 registered representatives (equivalent to "financial advisers" in our paper); (ii) mid-size firm with 150–499; (iii) large firm with 500 or more.

penalty reduction following regulatory actions: In most cases, they would likely remain at a firm after receiving a regulatory action, while there are no penalty reduction in finding a new job. This suggests that risk-taking behaviour and the associated labour-market penalty can significantly differ across career stages among financial advisers who become high profile in this industry.

Top mangers (especially for CEOs) and their corporate misconduct have been extensively investigated along with consequences in the labour market (Agrawal et al., 1999; Beneish, 1999; Desai et al., 2006; Feroz et al., 1991; Karpoff et al., 2008). Although the previous studies find mixed evidence on whether the market disciplines top managers, Karpoff, Lee and Martin (2008) point out that there was an issue at assessing the timing of job transitions and provide evidence that there are severe labour market penalties for CEOs after receiving regulatory (enforcement) actions.

We complement the literature with using individual-level compliance records instead of the corporate-level as well as with a focus on top managers who have worked as a financial adviser and served for private firms instead of public ones. In contrast to the previous studies, we consider their careers from the beginning before being in a management position. Our finding corroborates part of the previous studies, showing that top managers who encounter regulatory actions for their financial misconduct have to face severe labour-market penalties (job separation, in particular). In addition, we find that there is a penalty reduction for top managers relative to average financial advisers. Nonetheless, our result based on adviser-year panel data may differ from that based on monthly panel data and there may be hidden consequences that occur within a short time interval. We will examine this by re-constructing adviser-month panel data with the same sample for future work.

Cost Gap in Settlement. As mentioned in the introduction, top ranked advisers manage over a trillion dollars of client asset. Even before being ranked, we expect that they manage larger client asset than average in the course of career, which leads to higher pay settlement in the case of customer disputes.

We actually find that the money amount in settlement for top advisers is twice as large as average (see the Online Appendix for details). This suggests that consumer surplus loss in transactions with top advisers might be larger than with average ones, along with high incidence of customer disputes. Also, this suggests that firms have to confront more frequent allegations, complaints and disputes associated with higher costs when hiring a top ranked adviser than when hiring an average adviser, before

and after being ranked. If firms optimally maximize their profit, there should be a corresponding firm benefit from hiring the top adviser who produces higher sales profit, which exceeds or at least offsets cost associated with disputes.

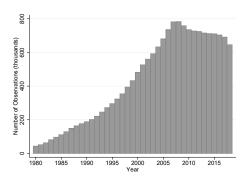
**Recidivism.** We have seen that top advisers are way more likely than average to take high risks with confronting customer disputes over the course of career. But does this still hold true if we limit attention to the set of advisers who have prior records on those disclosures, that is, the population of advisers with high propensity for misconduct?

The recent study (Egan, Matvos and Seru, 2016, Section 3.2) shows that financial advisers with prior misconduct records are over three times more likely than average to commit misconduct.<sup>38</sup> The majority of misconduct disclosures in their study come from customer disputes with settlement. Our finding showed that top advisers are more than twice as likely compared to average ones to receive customer disputes with/out settlement. Only looking at these, it is unclear whether top ranked advisers are still more likely than average to receive customer disputes, conditional on that both have prior records. To examine this, we reconsider a difference in the incidence of customer disputes with/out settlement between two groups by accounting for prior records, and still find a significant difference even after controlling for prior records (see the Online Appendix for details).

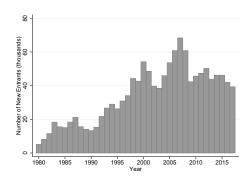
<sup>&</sup>lt;sup>38</sup>Note that our data supports their results and provides the same qualitative feature based on the same measure of misconduct used by Egan et al. (2016), despite having a slight difference in the estimates.

Figure 1: Observations, Entries, and Exits over the Period 1980–2018

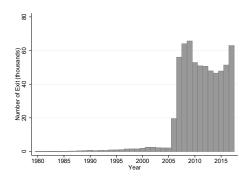
### (a) Adviser-Year Observations



### (b) Entry

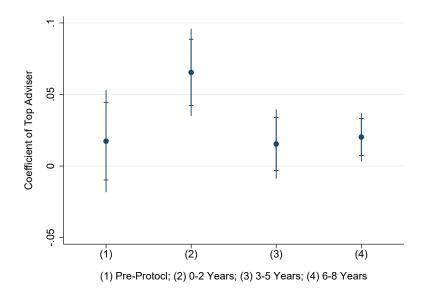


### (c) Exit



Note: We collected our data for financial advisers through the FINRA's BrokerCheck in August 2018 (with following the FINRA BrokerCheck® Terms of Use for academic purposes). All numbers of observations, new entrants, and exits are measured in thousands of adviser-year observations. An entry is defined as the first-ever registration with FINRA for every financial adviser (registered representative) in our sample, whereas an exit as the last-year observation for every financial adviser who has been de-registered with FINRA prior to 2018. Both observations of entries and exits in the year 2018 are excluded as our sample does not cover the end of 2018. Note that the number of exits in 2017 is relatively high as it can contain a set of financial advisers who left the industry and will come back in the subsequent years (e.g. in the year 2019).

Figure 2: Pre- and Post-Protocol: Sorting Dynamics



*Note*: Observations are based on adviser-year panel data over the period 2001-2016. The figure displays the coefficient of "Top Adviser" in the model given by (11) in Section 5.2.

Table 1: Summary Statistics for Employment History and Licenses/Qualifications

	Average	Adviser	Top A	Adviser	Difference
	Mean	Std. Dev.	Mean	Std. Dev.	Mean
Employment History and Status:					
Experience (years)	11.5	9.5	20.9	9.6	-9.4***
Tenure (years)	5.6	6.3	10.4	9.3	-4.8***
Currently Registered (in 2018)	63.2	48.2	91.2	28.3	-28.1***
Job Transitions (%):					
(1) Remain at a Firm	84.0	36.7	92.3	26.6	-8.3***
Firm Size:					
Number of Advisers	$7,\!821.1$	$9,\!179.7$	17,063.8	$11,\!080.7$	-9,281.0***
Total Assets (in millions of US dollars)	$37,\!653.4$	$87,\!540.1$	$99,\!306.8$	105,820.4	-61,894.2***
(2) Leave a Firm	16.0	36.7	7.7	26.6	8.3***
Conditional on Leaving a Firm:					
New Employment (%)	58.7	49.2	92.1	27.0	-33.4***
Original Firm Size:					
Number of Advisers	$6,\!171.3$	8,418.9	$12,\!420.8$	10,841.8	-6,267.3***
Total Assets (in millions of US dollars)	$42,\!572.3$	92,934.9	$142,\!462.5$	127,705.5	-100,166.0***
New Firm Size:					
Number of Advisers	6,634.2	$9,\!305.8$	$14,\!359.1$	10,968.6	-7,746.7***
Total Assets (in millions of US dollars)	$34,\!374.1$	83,991.3	$88,\!143.6$	111,335.8	-53,899.4***
Migration Across (%):					
States	41.5	49.3	33.9	47.4	7.6***
Commuting Zones	48.0	50.0	37.0	48.3	11.0***
Counties	56.2	49.6	41.0	49.2	15.2***
Licenses/Qualifications (%):					
Series 63 (General Securities Agent)	73.6	44.1	91.4	28.1	-17.8***
Series 7 (General Securities Representative)	64.5	47.8	93.2	25.2	-28.8***
Series 6 (Insurance and Annuities)	37.9	48.5	8.1	27.3	29.8***
Series 65/66 (Investment Adviser)	35.2	47.8	81.5	38.9	-46.4***
Series 24 (Principal/Supervisory Management)	13.4	34.1	12.7	33.2	0.7***
Total Number of Licenses	2.7	1.4	3.9	1.3	-1.2***
Observations	12,898,909		46,553		12,898,909

Note: Observations are based on the adviser-year panel data over the period 2000-2018. The column "Average Adviser" corresponds to all adviser-year observations; "Top Adviser" all top ranked advisers (before and after being ranked) over the period, conditional on that they are registered with FINRA. The last column displays T-test with unequal variances. The variable "Remain at a Firm" (for Job Transitions) is the percentage that an adviser who works for a firm in a given year (excluding the year 2018) remains at the firm in the following year; "Total Assets" (in millions of \$US) (for Firm Size) follows from financial information through the FOCUS report (see Section 2.4 for details). We adjust the values of Total Assets with the annual Consumer Price Index (CPI) over 2000-2018 provided by Bureau of Labor Statististics. "New Employment" the percentage that an adviser switches firms in the following year after working for a firm in a given year, conditional on that s/he leaves the firm by the end of the following year; "Migration Across States/Commuting Zones/Counties" is the percentage that an adviser has migrated from a given state (resp. commuting zone, county) to a different one when switching firms. To define commuting zones, we use the 2000 ERS Commuting Zones (CZs) provided by the United States Department of Agriculture. See the appendix for the definitions of licenses/qualifications.

Table 2: Summary Statistics for the Incidence of Disclosure Events

	Average	Adviser	Тор	Adviser	Difference
	Mean	Std.Dev.	Mean	Std.Dev.	Mean
Customer Disputes (%):					
Customer Disputes - Settled	0.32	5.65	1.37	11.64	-1.06***
Customer Disputes - Award/Judgment	0.03	1.73	0.15	3.87	-0.12***
Any Customer Dispute with Settlement	0.35	5.89	1.51	12.20	-1.17***
Customer Disputes - Denied	0.32	5.62	1.66	12.77	-1.35***
Customer Disputes - Closed-No Action	0.08	2.87	0.49	7.01	-0.41***
Customer Disputes - Dismissed	0.00	0.34	0.01	1.04	-0.01*
Customer Disputes - Withdrawn	0.02	1.25	0.11	3.24	-0.09***
Any Customer Disputes without Settlement	0.41	6.39	2.23	14.76	-1.83***
Customer Disputes - Pending	0.04	2.00	0.09	3.07	-0.05***
Any Customer Dispute	0.77	8.72	3.67	18.80	-2.91***
Disciplinary Actions (%):					
Employment Separation After Allegations	0.15	3.90	0.12	3.53	0.03
Regulatory - Final	0.12	3.42	0.16	3.96	-0.04*
Any Disciplinary Action	0.26	5.07	0.26	5.09	-0.00
Other Disclosure Events (%):					
Criminal Disposition - Final	0.03	1.73	0.01	1.14	0.02**
Civil - Final	0.00	0.62	0.00	0.46	0.00
Financial - Final	0.27	5.16	0.02	1.47	0.25***
Judgment/Lien	0.22	4.64	0.01	1.04	0.21***
Civil Bond	0.00	0.33	0.00	0.00	0.00***
Criminal - Pending	0.01	0.79	0.00	0.46	0.00
Civil - Pending	0.00	0.26	0.00	0.00	0.00***
Financial - Pending	0.03	1.69	0.00	0.46	0.03***
Regulatory - Pending	0.00	0.44	0.00	0.00	0.00***
Criminal - On Appeal	0.00	0.11	0.00	0.00	0.00***
Civil - On Appeal	0.00	0.11	0.00	0.00	0.00***
Regulatory - On Appeal	0.00	0.23	0.00	0.00	0.00***
Investigation	0.00	0.68	0.00	0.66	0.00
All Disclosure Events (%):			<u></u>		
Any Disclosure Event	1.52	12.22	3.93	19.43	-2.42***
Observations	12,898,909		$46,\!553$		12,898,909

Note: Observations are based on the adviser-year panel data over the period 2000-2018. The column "Average" includes all adviser-year observations; "Top Adviser" only top-ranked-adviser-year observations before and after they were ranked over the period, conditional on that they are registered with FINRA. The last column displays T-test with unequal variances. Each value indicates whether an adviser has encountered the corresponding disclosure at least once within a given year, and measures the annual incidence of the disclosure event at percentage points. There is one other disclosure category "Customer Dispute - Final" but our data does not contain any such instance.

Table 3: Differences in Qualification (Series 65/66 for Investment Adviser)

		Licens	e: Series 65/66	6 (%)	
	(1)	(2)	(3)	(4)	(5)
Top Adviser	43.37*** (3.28)	32.00*** (2.72)	18.98*** (2.07)	19.67*** (2.16)	21.92*** (2.42)
Top Adviser $\times$ After	5.82*** (1.92)	1.03 (1.88)	-5.06** (2.09)	-4.12** (1.98)	-6.11*** (1.73)
Series 63		-22.93*** (1.89)	-17.13*** (1.05)	•	
Series 7		44.43*** (1.85)	32.79*** (1.16)		
Series 6		10.79*** (1.36)	-0.23 $(0.62)$		
Series 24		-9.95*** (2.12)	-1.36** (0.63)		
Experience		0.62*** (0.15)	0.48*** (0.08)	0.84*** (0.09)	
Experience squared		-0.00 $(0.00)$	-0.02*** (0.00)	-0.03*** (0.00)	
Tenure		-4.04*** (0.51)	-7.27*** (0.54)	-6.13*** (0.58)	-4.67*** (0.57)
Female		$0.02 \\ (0.16)$	-0.15 $(0.10)$	-0.17* (0.09)	-0.28*** (0.10)
Number of Other Licenses		3.80*** (0.68)	5.23*** (0.29)	4.22*** (0.31)	3.64*** (0.51)
Cumulative Number of Switching Firms		0.60** (0.28)	1.53*** (0.19)	1.21*** (0.17)	0.99*** (0.23)
Cumulative Number of Migration Across States		3.65*** (0.48)	1.90*** (0.19)	1.84*** (0.17)	1.95*** (0.21)
Firm × Year × County FE Firm × Year × County × License FE Firm × Year × County × License × Experience FE			✓	✓	<b>√</b>
Observations $\mathbb{R}^2$ Mean of Dependent Variable	12,396,016 0.003 35.96	$12,396,016 \\ 0.217 \\ 35.96$	$11,632,150 \\ 0.472 \\ 36.02$	10,614,118 0.554 34.98	6,987,781 0.649 30.88

Note: Observations are based on adviser-year panel data over the period 2000-2018. The dependent variable is a dummy for whether an adviser holds the license, Series 65/66, at time t (see the appendix for the definition of Series 65/66). The variable "Cumulative Number of Switching Firms" is the cumulative number of switching firms in a given year since entry in the industy until the preceding year (with excluding that year); "Cumulative Number of Migration Across States" the cumulative number of migration across states in a given year since entry in the industy until the preceding year. "License FE" include the set of major licenses (Series 63, 6, 7, 24) but not other exams. "Experience FE" take into account the number of years of experience since entry in the industry. The coefficients are in percentage points. Standard errors are in brackets and clustered by firms.

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

Table 4: Incidence of Customer Disputes Before and After Being Ranked

### (a) Customer Disputes with Settlement in Set $A_1$

		Incidence o	f Customer Dis	sputes (%)	
	(1)	(2)	(3)	(4)	(5)
Top Adviser	1.30*** (0.09)	1.01*** (0.08)	0.72*** (0.08)	0.60*** (0.08)	0.45*** (0.12)
Top Adviser $\times$ After	-0.32** (0.13)	-0.40*** (0.13)	-0.00 $(0.12)$	0.10 $(0.12)$	0.27 $(0.21)$
Adviser Controls		✓	✓	✓	✓
$Firm \times Year \times County FE$			✓		
$\operatorname{Firm} \times \operatorname{Year} \times \operatorname{County} \times \operatorname{License} \operatorname{FE}$				$\checkmark$	
$\operatorname{Firm} \times \operatorname{Year} \times \operatorname{County} \times \operatorname{License} \times \operatorname{Experience} \operatorname{FE}$					✓
Observations	12,396,016	12,396,016	11,632,150	10,230,894	6,466,895
$R^2$	0.000	0.003	0.085	0.158	0.286
Mean of Dependent Variable	0.36	0.36	0.36	0.34	0.29

### (b) Customer Disputes without Settlement in Set $A_2$

		Incidence of	f Customer Dis	sputes (%)	
	(1)	(2)	(3)	(4)	(5)
Top Adviser	2.38*** (0.19)	2.02*** (0.16)	1.63*** (0.12)	1.49*** (0.11)	1.50*** (0.14)
Top Adviser $\times$ After	-1.31*** (0.22)	-1.35*** (0.23)	-0.77*** (0.15)	-0.63*** (0.13)	-0.70*** (0.14)
Adviser Controls		✓	✓	✓	✓
$Firm \times Year \times County FE$			$\checkmark$		
$Firm \times Year \times County \times License FE$				✓	
$\label{eq:Firm} \mbox{Firm} \times \mbox{Year} \times \mbox{County} \times \mbox{License} \times \mbox{Experience FE}$					✓
Observations	12,396,016	12,396,016	11,632,150	10,230,894	6,466,895
$R^2$	0.000	0.003	0.079	0.151	0.274
Mean of Dependent Variable	0.42	0.42	0.42	0.41	0.34

Note: Observations are based on adviser-year panel data over the period 2000-2018. The dependent variable is a dummy equal to one if an adviser has received a disclosure event in  $A_1$  in Panel (a) and in  $A_2$  in Panel (b) at least once in a given year, where  $A_1$  is the set of customer disputes with settlement and  $A_2$  the set of those without settlement (see Section 2.6 for these definitions). "Adviser Controls" include dummy variables of the major exams/license; the number of other licenses excluding the major ones; a female dummy; industry experience (without experience FEs); tenure; a female dummy; "Cumulative Number of Switching Firms" the cumulative number of switching firms in a given year since entry in the industy until the preceding year (with excluding that year); "Cumulative Number of Migration Across States" the cumulative number of migration across states in a given year since entry in the industy until the preceding year. "License FEs" include the set of major licenses (Series 63, 6, 7, 65/66, 24) but not other exams. "Experience FEs" take into account the number of years of experience since entry in the industry. The coefficients are in percentage points. Standard errors are in brackets and clustered by firms.

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

Table 5: Differences in Qualification for Series 65/66 Over 20-Year Industry Experience across 5-Year Windows

	> \	-		٥		\	1 1	)
	$0 \le x \le 4$	4	x ≥ c	1/9	$x \ge 0.1$	$\leq x \leq 14$	67 \( \geq x \geq \cdot 1	19
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Top Adviser (Before Being Ranked)	32.45*** (3.78)	27.31*** (3.90)	35.33*** (3.20)	24.72*** (3.82)	32.65*** (3.29)	21.97*** (3.50)	28.42*** (2.78)	21.56*** $(2.42)$
Series 63	-31.07*** (3.03)		-29.71*** (1.94)		-22.95*** (1.61)		-9.69*** (1.42)	
Series 7	41.30*** $(2.30)$		47.72*** (1.89)		49.09*** (1.92)		46.97*** (2.21)	
Series 6	12.17*** (1.40)		14.43*** (1.69)		12.84*** (1.72)		10.65*** (1.78)	
Series 24	-9.64*** (1.98)		-7.45*** (2.02)		-9.85*** (2.27)		-11.14*** (2.45)	
Experience	1.59*** $(0.27)$		0.42*** $(0.15)$		0.08 $(0.12)$		-0.14 (0.10)	
Tenure	-4.62*** (0.55)	-3.39*** $(0.54)$	-4.99*** (0.59)	-4.93*** (0.63)	-4.40*** (0.65)	-5.97*** (0.73)	-3.29*** (0.58)	-6.34*** (0.86)
Female	0.97*** $(0.33)$	-0.45*** $(0.14)$	0.27 $(0.21)$	-0.55***	0.13 $(0.16)$	-0.33*** (0.09)	-0.03 $(0.16)$	-0.32*** (0.11)
Number of Other Licenses	-2.38 (1.53)	2.14** $(0.86)$	0.43 $(0.87)$	2.66*** (0.66)	2.63*** (0.76)	3.32*** $(0.53)$	*	4.12*** (0.45)
Cumulative Number of Switching Firms	6.75*** $(0.89)$	3.62*** $(0.42)$	3.72*** (0.56)	2.00*** $(0.25)$	1.60*** $(0.43)$	1.42*** $(0.25)$		0.67*** $(0.24)$
Cumulative Number of Migration Across States	1.51* $(0.91)$	2.14*** $(0.37)$	2.48*** (0.72)	1.69*** $(0.28)$	3.41*** (0.67)	1.63*** $(0.22)$	4.63*** $(0.56)$	1.91*** (0.27)
Firm $\times$ Year $\times$ County $\times$ License $\times$ Experience FE Observations $R^2$ Mean of Dependent Variable	3,657,615 $0.322$ $25.45$	$\checkmark$ 2,664,413 0.701 22.80	2,606,353 0.256 35.34	72	4	✓ 1,088,176 1,629,282 0.618 0.146 34.79 42.08		783,964 0.584 38.06
Mean of Dependent Variable	25.45	22.80	35.34	30.16	40.29	34.79	42.08	38.06

of Switching Firms" is the cumulative number of switching firms in a given year since entry in the industy until the preceding year (with points. Standard errors are in brackets and clustered by firms. ams. "Experience FEs" take into account the number of years of experience since entry in the industry. The coefficients are in percentage since entry in the industy until the preceding year. "License FEs" include the set of major licenses (Series 63, 6, 7, 24) but not other exexcluding that year); "Cumulative Number of Migration Across States" the cumulative number of migration across states in a given year adviser holds the license, Series 65/66, at time t (see the appendix for the definition of Series 65/66). The variable "Cumulative Number Note: Observations are based on adviser-year panel data over the period 2000-2018. The dependent variable is a dummy for whether an

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

Table 6: Incidence of Customer Disputes over 20-Year Industry Experience across 5-Year Windows

## (a) Customer Disputes with Settlement

	$0 \le x \le 4$		$5 \le x \le 9$	≤ 9	$10 \le x \le 14$	≤ 14	$15 \le x \le 19$	≤ 19
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Top Adviser (Before Being Ranked)	$0.35 \\ (0.25)$	$0.35 \\ (0.37)$	1.12*** $(0.24)$	0.80** $(0.32)$	1.08*** $(0.24)$	0.69** $(0.35)$	0.69** 1.09*** 0.27* (0.35) (0.13) (0.16)	0.27* $(0.16)$
Career Start as Investment Adviser	0.09*** $(0.02)$	0.01 $(0.02)$	0.26*** $(0.05)$	0.26*** $(0.06)$	0.18*** $(0.04)$	0.22*** $(0.07)$	-0.07** (0.03)	0.13*** $(0.05)$
Adviser Controls	~	<	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<
$\begin{aligned} & \text{Firm}  \times  \text{Year}  \times  \text{County}  \times  \text{License}  \times  \text{Experience FE} \\ & \text{Observations} \end{aligned}$	3,657,615	$\frac{\checkmark}{2,573,792}$	2,606,353	<b>√</b> 1,499,646	2,035,744	<b>√</b> 989,706	1,629,282	<b>√</b> 694,692
$R^2$	0.001	0.205	0.002	0.252		0.283		0.299
Mean of Dependent Variable	0.09	0.08	0.31	0.29	0.44	0.40	0.55	0.53

# (b) Customer Disputes without Settlement

	$0 \le x \le 4$	_	$5 \le x \le 9$	$\leq 9$	$10 \le x$	$x \le 14$	$15 \le x \le 19$	≤ 19
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Top Adviser (Before Being Ranked)	0.74*** $(0.22)$	0.28 $(0.22)$	2.53*** (0.37)	2.36*** (0.41)	2.07*** (0.23)	1.51*** $(0.24)$	* 2.38*** (0.27)	(0.28)
Career Start as Investment Adviser	0.15*** $(0.03)$	0.06** $(0.02)$	0.41*** $(0.08)$	0.36*** $(0.10)$	0.19*** $(0.05)$	0.18**** $(0.06)$	-0.14*** (0.05)	0.15*** $(0.06)$
Adviser Controls  Firm Y Vear Y County Y License Y Experience FF	<	٠ <	<	٠ <	<	< <	<b>~</b>	٠ <
Observations	3,657,615	2,573,792	$2,\!606,\!353$	1,499,646	2,035,744	989,706	1,629,282	$694,\!692$
$R^2$	0.001	0.199	0.003			0.277		0.289
Mean of Dependent Variable	0.12	0.11	0.42	0.38	0.54	0.48	0.64	0.60

year); "Cumulative Number of Migration Across States" the cumulative number of migration across states in a given year since entry Firms" the cumulative number of switching firms in a given year since entry in the industy until the preceding year (with excluding that excluding the major ones; a female dummy; industry experience (without experience FEs); tenure; "Cumulative Number of Switching years after entry in the industy; "Adviser Controls" include dummy variables of the major exams/license; the number of other licenses Start as Investment Adviser" is a dummy for whether an adviser has held the license for investment adviser (Series 65/66) within two if an adviser has received a disclosure event in  $A_1$  in Panel (a). The variable and  $A_2$  in Panel (b) at least once in a given year, where points. Standard errors are in brackets and clustered by firms. "Experience FEs" take into account the number of years of experience since entry in the industry. The coefficients are in percentage in the industy until the preceding year. "License FEs" include the set of major licenses (Series 63, 6, 7, 65/66, 24) but not other exams The variable "Top Adviser (Before Being Ranked)" is a dummy for whether an adviser was top adviser before being ranked; "Career  $A_1$  is the set of customer disputes with settlement and  $A_2$  the set of those without settlement (see Section 2.6 for these definitions) Note: Observations are based on adviser-year panel data over the period 2000-2018. The dependent variable is a dummy equal to one

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

Table 7: Firm Size over Industry Experience across 5-Year Windows Unconditional on Job Transitions

### (a) Log(Number of Advisers)

	$0 \le x \le 4$	≤ 4	$5 \leq x \leq 9$	. ≤ 9	$10 \le x \le 1$	≤ 14	$15 \le x$	$15 \le x \le 19$
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Top Adviser (Before Being Ranked)	0.42**	0.60***	0.87***	0.81*** (0.10)	1.18*** (0.11)	0.97***	(0.11)	* 0.96*** (0.11)
Career Start as Investment Adviser	1.02*** $(0.13)$	0.28*** (0.07)	0.88*** $(0.09)$	-0.03 $(0.04)$	0.82*** $(0.11)$	-0.01 $(0.05)$	0.82*** $(0.15)$	0.00 $(0.05)$
$\begin{aligned} & \text{Adviser Controls} \\ & \text{Year} \times \text{County} \times \text{License} \times \text{Experience FE} \end{aligned}$	<	< <	<	< <	<	< <	<	< <
Observations $R^2$	3,657,615 $0.109$	3,351,286 $0.366$	2,606,353 $0.107$	2,315,554 $0.337$	2,035,744 $0.111$	$1,761,522 \\ 0.327 \\ 7.67$	2 1,629,282 1,375,548 0.121 0.337 7 5 7 7 5 8	1,375,548 $0.337$
Mean of Dependent Variable	7.87	7.89	7.73	7.74	7.65	7.67	7.57	7.58

## (b) Log(Total Assets) (in millions of \$US)

	$0 \le x \le 4$	≤ 4	$5 \le x \le 9$	$0 \leq 9$	$10 \le x$	$10 \le x \le 14$	$15 \le x \le 19$	≤ 19
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Top Adviser (Before Being Ranked)	2.69*** $(0.33)$	2.40*** (0.34)	2.98*** (0.27)	2.38*** (0.30)	3.09*** $(0.29)$	2.47*** $(0.34)$	2.85*** (0.28)	2.27*** $(0.31)$
Career Start as Investment Adviser	-0.22	0.09	-0.29	0.02	-0.09	0.12	0.10	0.08
	\	\	\		\	\	\	
Year $\times$ County $\times$ License $\times$ Experience FE		<		<		<		<
Observations	2,947,878	2,692,018	2,131,971	1,882,487	1,667,690	1,430,944	1,327,363	1,107,899
$R^2$	0.168	0.433		0.417	0.191	0.391		0.392
Mean of Dependent Variable	19.74	19.87	19.59	19.77	19.48	19.69	19.35	19.58
	1				1	1		

rience since entry in the industry. of major licenses (Series 63, 6, 7, 65/66, 24) but not other exams. "Experience FEs" take into account the number of years of expenumber of migration across states in a given year since entry in the industy until the preceding year. "License FEs" include the set of firm size as measured by "Number of Advisers" in Panel (a) and "Total Assets (in \$US)" in Panel (b), when adviser i workes Note: Observations are based on adviser-year panel data over the period 2000-2018. The dependent variable is the natural logarithm the industy until the preceding year (with excluding that year); "Cumulative Number of Migration Across States" the cumulative female dummy; "Cumulative Number of Switching Firms" the cumulative number of switching firms in a given year since entry in the number of other licenses excluding the major ones; a female dummy; industry experience (without experience FEs); tenure; a (Series 65/66) within two years after entry in the industy; "Adviser Controls" include dummy variables of the major exams/license; being ranked; "Career Start as Investment Adviser" is a dummy for whether an adviser has held the license for investment adviser for firm j at time t. The variable "Top Adviser (Before Being Ranked)" is a dummy for whether an adviser was top adviser before

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

Table 8: New Firm Size over Industry Experience across 5-Year Windows Conditional on Switching Firms

### (a) Log(Number of Advisers)

	$0 \le x \le 4$	1 4	$5 \leq x \leq 9$	l	$10 \le x \le 1$	≤ 14	$15 \leq x \leq$	$\leq 19$
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Top Adviser (Before Being Ranked)	0.55*** $(0.18)$	0.60*** $(0.15)$	1.09*** $(0.11)$	0.46*** $(0.09)$	1.24*** $(0.10)$	0.45*** (0.09)	1.19*** (0.22)	0.32*** $(0.08)$
Career Start as Investment Adviser	1.00*** $(0.05)$	0.35*** $(0.04)$	0.89*** $(0.05)$	-0.01 $(0.05)$	0.88*** $(0.08)$	0.01 $(0.04)$	0.66*** $(0.10)$	0.08** $(0.04)$
Adviser Controls  Original Firm × Von × Country × Liconso × Evenorismos FF	<b>~</b>	. •	<b>~</b>	` <	<	` <	•	` <
Observations	348,579	194,079	261,402	113,945	182,486	61,069	134,185	38,527
$R^2$	0.090	0.525	0.088	0.585	0.097	0.629		0.645
Mean of Dependent Variable	7.45	7.61	7.26	7.55	7.14	7.63	6.98	7.53

## (b) Log(Total Assets) (in millions of \$US)

	$0 \le x \le 4$	_	$5 \le x \le 9$	l	$10 \le x \le 14$	≤ 14	$15 \le x \le 19$	≤ 19
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Top Adviser (Before Being Ranked)	2.52*** (0.39)	1.57*** (0.28)	3.23*** (0.33)	0.92*** $(0.20)$	3.04*** $(0.24)$	1.01*** (0.27)	2.64*** (0.30)	0.59***
Career Start as Investment Adviser	$0.05 \\ (0.13)$	0.43*** $(0.10)$	0.07 $(0.14)$	0.01 $(0.09)$	0.19 $(0.13)$	0.07 $(0.10)$	-0.01 $(0.15)$	0.01 $(0.13)$
Adviser Controls	<	<	<	<	<	<	<	۲
Original Firm $\times$ Year $\times$ County $\times$ License $\times$ Experience FE Observations	298,414	<b>√</b> 163,695	$224,\!136$	<b>√</b> 95,703	154,349		30	<b>√</b> 30,759
$R^2$	0.056	0.599		0.662	0.113	0.701	0.124	0.712
Mean of Dependent Variable	19.57	20.00	19.44	20.23	19.18			19.93

since entry in the industry. major licenses (Series 63, 6, 7, 65/66, 24) but not other exams. "Experience FEs" take into account the number of years of experience year); "Cumulative Number of Migration Across States" the cumulative number of migration across states in a given year since entry in Firms" the cumulative number of switching firms in a given year since entry in the industy until the preceding year (with excluding that major ones; a female dummy; industry experience (without experience FEs); tenure; a female dummy; "Cumulative Number of Switching entry in the industy; "Adviser Controls" include dummy variables of the major exams/license; the number of other licenses excluding the variable "Top Adviser (Before Being Ranked)" is a dummy for whether an adviser was top adviser before being ranked; "Career Start as worked for firm j at time t, left the firm by the end of year t+1, and finds a new job at firm  $j' \neq j$  at time t+1 (new employment). The new firm size as measured by "Number of Advisers" in Panel (a) and "Total Assets (in \$US)" in Panel (b), conditional on that an adviser the industy until the preceding year. "Original Firm FEs" are fixed effects for original firm j at time t. "License FEs" include the set of Investment Adviser" is a dummy for whether an adviser has held the license for investment adviser (Series 65/66) within two years after Note: Observations are based on adviser-year panel data over the period 2000-2018. The dependent variable is the natural logarithm of

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table 9: Job Separation Following Disclosure Events in Set  $A_1 \cup C$ 

		Job	Separation (%	)	
	(1)	(2)	(3)	(4)	(5)
Top Adviser	-8.25*** (1.49)	-6.31*** (0.81)	-2.70*** (0.47)	-3.08*** (0.44)	-3.09*** (0.58)
Top Adviser $\times$ After	-0.42 (1.22)	0.68 $(1.82)$	-1.12** (0.57)	-0.17 $(0.48)$	0.19 $(0.63)$
Disclosure	13.61*** (0.78)	14.21*** (0.64)	9.29*** (0.43)	9.80*** (0.52)	11.81*** (0.71)
Top Adviser $\times$ Disclosure	-9.55*** (1.94)	-9.96*** (1.96)	-8.87*** (1.08)	-9.11*** (1.06)	-9.48*** (1.85)
Top Adviser $\times$ After $\times$ Disclosure	9.94*** (2.47)	9.14*** (2.62)	7.95*** (2.01)	8.09*** (1.73)	9.34*** (2.01)
Adviser Controls		✓	✓	✓	<b>√</b>
$Firm \times Year \times County FE$			$\checkmark$		
$\operatorname{Firm} \times \operatorname{Year} \times \operatorname{County} \times \operatorname{License} \operatorname{FE}$				✓	
$\label{eq:Firm} \mbox{Firm} \times \mbox{Year} \times \mbox{County} \times \mbox{License} \times \mbox{Experience FE}$					$\checkmark$
Observations	11,750,331	11,750,331	11,030,563	9,694,596	6,149,623
$R^2$	0.001	0.010	0.286	0.340	0.426
Mean of Dependent Variable	15.99	15.99	16.25	16.38	17.02

Note: Observations are based on adviser-year panel data over the period 2000-2018. The dependent variable is a dummy that indicates whether an adviser leaves a firm at time (year) t+1 (job separation) with/out a disclosure event in set  $A_1 \cup C$  at time t, where  $A_1$  is the set of customer disputes with settlement and C the set of regulatory actions (see Section 2.6 for these definitions). The variable "Disclosure" is a dummy for whether an adviser has received a disclosure event in  $A_1 \cup C$  at least once at time t; "Initial Career Choice as Investment Adviser" is a dummy for whether an adviser has held the license for investment adviser (Series 65/66) within two years after entry in the industy; "Adviser Controls" include the following variables: a gender dummy, experience and its squared term (without experience FEs), tenure, dummies for major licenses (Series 63, 6, 7, 65/66, 24) (without license FEs), the number of other licenses excluding the major ones, and a dummy for whether the adviser has started career as investment adviser within 2 years since entry in the industry. "License FEs" include the set of major licenses (Series 63, 6, 7, 65/66, 24) but not other exams. "Experience FEs" take into account the number of years of experience since entry in the industry. The coefficients are in percentage points. Standard errors are in brackets and clustered by firms.

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

Table 10: New Firm Size Following Disclosure Events  $E = A_1 \cup B \cup C$ 

		Log(Numb)	Log(Number of Advisers)	sers)		Log(To	Total Assets) (in millions of US dollars)	(in million	as of US do	ollars)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	8	(9)	(10)
Top Adviser	1.48*** (0.13)	1.15***	0.55***	0.55*** 0.48*** 0.43*** 3.89* (0.06) (0.04) (0.06) (0.31)	0.43***	(0.31)	0.55**** $0.48****$ $0.43****$ $3.89****$ $3.07****$ $1.19***$ $1.13****$ $0.92***$ $0.06)$ $(0.04)$ $(0.06)$ $(0.31)$ $(0.24)$ $(0.12)$ $(0.13)$ $(0.15)$	(0.12)	(0.13)	(0.15)
Top Adviser $\times$ After	-0.11 $(0.21)$	-0.15 $(0.22)$	-0.34**> (0.10)	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	(0.09)		(0.49) (0.22) (0.25) (0.24)	-0.50** (0.22)	-0.50** -0.59** -0.64*** (0.22) (0.25) (0.24)	-0.64** $(0.24)$
Disclosure	-0.59*** (0.07)	-0.59*** (0.05)		-0.46*** -0.40*** -0.30*** -1.44° (0.03) (0.03) (0.03) (0.17)	* -0.30** (0.03)	*** -1.44** (0.17)	***-1.40***-0.92***-0.85***-0.74*** (0.12) (0.06) (0.07) (0.07)	* -0.92*** (0.06)	* -0.85*** (0.07)	* -0.74** (0.07)
Top Adviser $\times$ Disclosure	0.79*** $(0.23)$	1.01*** $(0.24)$	$\begin{array}{cccc} 1.01*** & 0.44** & 0.37* \\ (0.24) & (0.21) & (0.21) \end{array}$	0.37* $(0.21)$	0.09 $(0.29)$	1.47*** (0.43)	$1.47^{***}$ $1.36^{***}$ $1.09^{***}$ $1.09^{***}$ $1.30^{***}$ $(0.43)$ $(0.45)$ $(0.34)$ $(0.33)$ $(0.38)$	1.36*** 1.09*** 1.09*** 1.30* (0.45) (0.34) (0.33) (0.38)	(0.33)	(0.38)
Top Adviser $\times$ After $\times$ Disclosure	-1.05** $(0.41)$	-1.24*** $(0.41)$	-0.86** $(0.39)$	-0.84* $(0.45)$	-0.24 $(0.47)$	-0.81 (0.78)	-0.74 $(0.76)$	-0.74 -0.94* -1.59** -0.80 (0.76) (0.55) (0.76) (1.25)	-1.59** -0.80 (0.76) (1.25)	-0.80 (1.25)
Adviser Controls		<	<	<	<		<	<	<	<
(Original) Firm × Year × County FE Firm × Year × County × License FE			<	<				<	<	
$Firm \times Year \times County \times License \times Experience FE$					<					<
Observations	.0	0	$\infty$	2	$\circ$	935,483	935,483 827,672 661,543 365,359	827,672	661,543	365,359
$R^2$	0.002	0.110	0.500	0.546	0.584	0.004	0.092			0.649
Mean of Dependent Variable	7.23	7.23	7.29	7.39	7.62	19.23	19.23	19.40	19.66	20.13

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. of experience since entry in the industry. Standard errors are in brackets and clustered by firms. include the set of major licenses (Series 63, 6, 7, 65/66, 24) but not other exams. "Experience FEs" take into account the number of years investment adviser within 2 years since entry in the industry. "Firm FEs" are fixed effects for original firm j at time t. "License FEs" gender dummy, experience and its squared term (without experience FEs), tenure, dummies for major licenses (Series 63, 6, 7, 65/66, 24) an adviser has received a disclosure event in  $A_1 \cup B \cup C$  at least once at time t. "Adviser Controls" include the following variables: a adviser i works for firm j at time t and switches to new firm  $j' \neq j$  at time t+1 (new employment) with/out a disclosure event in set firm size as measured by the total number of advisers or total assets (in millions of \$US) at new firm j' in year t+1, conditional on that Note: Observations are based on adviser-year panel data over the period 2000-2018. The dependent variable is the natural logarithm of (without license FEs), the number of other licenses excluding the major ones, and a dummy for whether the adviser has started career as (termination), and C the set of regulatory actions (see Section 2.6 for these definitions). The variable "Disclosure" is a dummy for whether  $A_1 \cup B \cup C$  that occurs at time t, where  $A_1$  is the set of customer disputes with settlement, B the set of employer disciplinary actions

Table 11: Summary Statistics for the Protocol for Broker Recruting

	Average Adviser	Top A	dviser
		Before	After
Original Firm:			
(1) In the Protocol (%):	21.1	32.6	80.4
New Firm:			
(1)-1. In the Protocol (%):	62.9	90.3	88.9
Pre-Protocol:			
$-3 \le t \le -1$	5.8	2.8	0.7
Post-Protocol:			
$0 \le t \le 2$	36.3	58.7	46.2
$3\stackrel{=}{\leq} t\stackrel{=}{\leq} 5$	27.4	30.6	14.5
$6\stackrel{-}{\leq}t\stackrel{-}{\leq}8$	18.1	6.1	20.7
9 < t	10.7	0.9	17.8
Difference in Firm Size (New-Original):			
Number of Advisers	-728.3	570.7	-1,600.5
Total Assets (in millions of dollars)	-29,124.0	-29,029.9	-75,463.0
AUM (in millions of dollars)	35,901.3	94,995.7	86,184.4
Revenue (in millions of dollars)	-1,539.4	-5,959.3	-3,098.6
Total Number of Accounts (in thousands)	243.6	606.2	488.8
(1)-2. Not In the Protocol (%):	37.1	9.7	11.1
Difference in Firm Size (New-Original):			
Number of Advisers	-11,134.5	-11,852.3	-11,321.0
Total Assets (in millions of dollars)	-74,748.9	-78,309.3	-68,296.2
AUM (in millions of dollars)	-79,283.7	-72,789.6	-44,217.6
Revenue (in millions of dollars)	-3,036.1	-27.7	-3,413.2
Total Number of Accounts (in thousands)	-432.6	-369.7	-308.6
Original Firm:			
(2) Not In the Protocol (%):	78.9	67.4	19.6
New Firm:			
(2)-1. In the Protocol (%):	32.7	68.8	86.6
Pre-Protocol:			
$-3 \le t \le -1$	32.8	38.8	5.7
Post-Protocol:			
$0 \le t \le 2$	23.4	30.6	28.6
$3 \leq t \leq 5$	17.0	14.0	18.9
$6 \leq t \leq 8$	11.2	6.4	18.3
$9 \leq t$	4.1	0.6	21.1
Difference in Firm Size (New-Original):			
Number of Advisers	$6,\!856.8$	8,161.7	8,465.1
Total Assets (in millions of dollars)	33,592.7	25,747.5	-40,793.5
AUM (in millions of dollars)	49,248.0	50,751.5	80,339.0
Revenue (in millions of dollars)	1,308.0	-248.3	-940.5
Total Number of Accounts (in thousands)	249.7	275.9	376.0
(1)-2. Not In the Protocol (%):	67.3	31.2	13.4
Difference in Firm Size (New-Original):			
Number of Advisers	-589.4	-314.2	199.2
Total Assets (in millions of dollars)	-6,671.3	-8,672.3	-4,319.5
AUM (in millions of dollars)	-4,273.1	-12,856.8	-9,820.3
Revenue (in millions of dollars)	-81.3	-55.1	-5.2
Total Number of Accounts (in thousands)	-22.4	-32.5	-51.0
Observations	999,292	1,833	1,032

Note: Observations are based on adviser-year panel data over the period 2001-2016. We limit the sample to observations where advisers worked for a firm ("Original Firm") in a given year and switched to a different firm ("New Firm") in the subsequent year. We consider two cases (1) and (2) whether an original firm is in the protocol, and also the respective two subcases for whether a new firm is in the protocol. We measure the firm size by "Number of Advisers" at the firm and by its financial information on "AUM", "Revenue", and "Total Number of (clients') Accounts" (see Section 2.4 for these data sources).

Table 12: Sorting Dynamics After Firms Join the Protocol for Broker Recruting

	Pre-Pro	tocol:-3	$\leq x \leq 1$		otocol: 0	$\leq x \leq 2$	Post-Pro	otocol: $3 \le x \le$	Ü	Post-Protocol: $6 \le x \le 8$	stocol: 6	$\overset{ \wedge}{x} \overset{ \wedge}{x}$
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Top Adviser	0.08**	$\begin{array}{cccc} 0.08** & 0.04* & 0.02 \\ (0.04) & (0.02) & (0.01) \end{array}$		0.14*** 0.07** $(0.04) (0.01)$	0.14*** 0.07*** 0.05*** 0.04* (0.04) (0.01) (0.01) (0.02)	** 0.05*** 0.04* (0.01) (0.02)	* 0.04* (0.02)	0.03***	0.01 $(0.01)$	-0.03** (0.01)	* 0.01 (0.01)	0.00 $(0.00)$
Protocol	-0.08*** -0.04* (0.02) (0.01)	-0.08*** -0.04*** (0.02) (0.01)	*	0.12** 0.03° (0.06) (0.01)	0.03** $(0.01)$		0.10***	* 0.05*** (0.01)	*	0.06*** $(0.02)$	(0.01)	
Adviser Controls Firm × County FE Year × County × Experience FE	•	<b>&lt; &lt; &lt;</b>	•	•	<b>.</b>	<	<	<b>.</b>	<	<	< < <	<
Year $\times$ County $\times$ Experience FE Firm $\times$ Year $\times$ County $\times$ License $\times$ Experience FE		<	<		<	<		<	<		<	<
Observations $R^2$	999,292 $0.019$		394,428 $0.670$	999,292 $0.061$	887,431 $0.452$	394,428 999,292 $0.640 0.041$	999,292 $0.041$	887,431 $0.425$	394,428 $0.668$	999,292 $0.029$	887,431 $0.403$	394,428 $0.681$
Mean of Dependent Variable	0.09	0.09	0.13			0.10		0.07	0.06	0.05	0.05	0.04

experience since entry in the industry. Standard errors are in brackets and clustered by firms. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.to a firm in the protocol at t+1, conditional on that the adviser worked for a firm in the previous year t and switched to a new firm by the end of the next year t+1. Note that the sample does not include observations that advisers exit from the industry over the period. The variable "Protocol" is a dummy for whether the t. "License FEs" include the set of major licenses (Series 63, 6, 7, 65/66, 24) but not other exams. "Experience FEs" take into account the number of years of for whether the adviser has started career as investment adviser within 2 years since entry in the industry. "Firm FEs" are fixed effects for original firm j at time FEs), tenure, dummies for major licenses (Series 63, 6, 7, 65/66, 24) (without license FEs), the number of other licenses excluding the major ones, and a dummy former firm at time t was in the protocol. "Adviser Controls" include the following variables: a gender dummy, experience and its squared term (without experience Note: Observations are based on adviser-year panel data over the period 2001-2016. The dependent variable is a dummy that indicates whether an adviser move

### Appendix

### A Definition of the Major Qualification Exams (Licenses)

The definitions of qualification exams (licenses) are described in the FINRA website.<sup>39</sup> Below we consider the major qualification exams (Series 6, 7, 24, 63, 65, 66) as in the main text and give their definitions used in the website. Series 6 and 7 are categorized as "FINRA Representative-level Exams", Series 24 as "FINRA Principal-level Exams", Series 63, 65, and 66 as "North American Securities Administrators Association (NASAA) Exams". Note that the definitions of NASAA Exams are given by the NASAA website.<sup>40</sup>

Series 6: The Series 6 exam – the Investment Company and Variable Contracts Products Representative Qualification Examination (IR) – assesses the competency of an entry-level representative to perform their job as an investment company and variable contracts products representative. The exam measures the degree to which each candidate possesses the knowledge needed to perform the critical functions of an investment company and variable contract products representative, including sales of mutual funds and variable annuities.

Series 7: The Series 7 exam – the General Securities Representative Qualification Examination (GS) – assesses the competency of an entry-level registered representative to perform their job as a general securities representative. The exam measures the degree to which each candidate possesses the knowledge needed to perform the critical functions of a general securities representative, including sales of corporate securities, municipal securities, investment company securities, variable annuities, direct participation programs, options and government securities.

Series 24: The Series 24 exam – the General Securities Principal Qualification Exam (GP) – assesses the competency of an entry-level principal to perform their job as a principal dependent on their corequisite registrations. The exam measures the degree to which each candidate possesses the knowledge needed to perform the critical functions of a principal, including the rules and statutory provisions applicable to the supervisory management of a general securities broker-dealer.<sup>41</sup>

<sup>&</sup>lt;sup>39</sup>See the website: https://www.finra.org/registration-exams-ce/qualification-exams.

<sup>&</sup>lt;sup>40</sup>See the website: https://www.nasaa.org/exams/study-guides.

<sup>&</sup>lt;sup>41</sup>In addition to the Series 24 exam, candidates must pass the Securities Industry Essentials (SIE) Exam (since October 1, 2018 with a complete overhaul) and a representative-level qualification exam, or the Supervisory Analysts Exam (Series 16) exam, to hold an appropriate principal registration. See the FINRA website for the definitions of related exams.

**Series 63:** The Series 63 exam – the Uniform Securities State Law Examination – is a North American Securities Administrators Association (NASAA) exam administered by FINRA.

(Definition given by NASAA:) The Uniform Securities Agent State Law Examination was developed by NASAA in cooperation with representatives of the securities industry and industry associations. The examination, called the Series 63 exam, is designed to qualify candidates as securities agents. The examination covers the principles of state securities regulation reflected in the Uniform Securities Act (with the amendments adopted by NASAA and rules prohibiting dishonest and unethical business practices). The examination is intended to provide a basis for state securities administrators to determine an applicant?s knowledge and understanding of state law and regulations.

**Series 65:** The Series 65 exam – the NASAA Investment Advisers Law Examination – is a North American Securities Administrators Association (NASAA) exam administered by FINRA.

(Definition given by NASAA:) The Uniform Investment Adviser Law Examination and the available study outline were developed by NASAA. The examination, called the Series 65 exam, is designed to qualify candidates as investment adviser representatives. The exam covers topics that have been determined to be necessary to understand in order to provide investment advice to clients.

**Series 66:** The Series 66 exam – the NASAA Uniform Combined State Law Examination – is a North American Securities Administrators Association (NASAA) exam administered by FINRA.

(Definition given by NASAA:) The Uniform Combined State Law Examination was developed by NASAA based on industry requests. The examination (also called the "Series 66") is designed to qualify candidates as both securities agents and investment adviser representatives. The exam covers topics that have been determined to be necessary to provide investment advice and effect securities transactions for clients.<sup>42</sup>

<sup>&</sup>lt;sup>42</sup>The FINRA Series 7 is a corequisite exam that needs to be successfully completed in addition to the Series 66 exam before a candidate can apply to register with a state.

### B Definition of the Main Disclosure Events

Disclosure events details are described in Form U4.<sup>43</sup> Below we consider the main disclosure events defined in Section 2.6 and give their definitions used in the FINRA's BrokerCheck database.<sup>44</sup>

Customer Dispute - Settled: This type of disclosure event involves a consumer-initiated, investment-related complaint, arbitration proceeding or civil suit containing allegations of sale practice violations against the broker that resulted in a monetary settlement to the customer.

Customer Dispute - Award / Judgment: This type of disclosure event involves a final, consumer-initiated, investment-related arbitration or civil suit containing allegations of sales practice violations against the broker that resulted in an arbitration award or civil judgment for the customer.

Customer Dispute - Closed-No Action / Withdrawn / Dismissed / Denied: This type of disclosure event involves (1) a consumer-initiated, investment-related arbitration or civil suit containing allegations of sales practice violations against the individual broker that was dismissed, withdrawn, or denied; or (2) a consumer-initiated, investment-related written complaint containing allegations that the broker engaged in sales practice violations resulting in compensatory damages of at least \$5,000, forgery, theft, or misappropriation, or conversion of funds or securities, which was closed without action, withdrawn, or denied.

Employment Separation After Allegations: This type of disclosure event involves a situation where the broker voluntarily resigned, was discharged, or was permitted to resign after being accused of (1) violating investment-related statutes, regulations, rules or industry standards of conduct; (2) fraud or the wrongful taking of property; or (3) failure to supervise in connection with investment-related statutes, regulations, rules, or industry standards of conduct.

**Regulatory Final:** This type of disclosure event may involve (1) a final, formal proceeding initiated by a regulatory authority (e.g., a state securities agency, self-regulatory organization, federal regulatory such as the Securities and Exchange Commission, foreign financial regulatory body) for a violation of investment-related rules or regulations; or (2) a revocation or suspension of a broker's authority to act as an attorney, accountant, or federal contractor.

<sup>&</sup>lt;sup>43</sup>The Form U4 is available via https://www.finra.org/sites/default/files/form-u4.pdf.

<sup>&</sup>lt;sup>44</sup>Note that the definition of each event is given in the FINRA's BrokerCheck report for financial advisers (registered representatives) who have indeed received that disclosure in the past. See <a href="https://brokercheck.finra.org/">https://brokercheck.finra.org/</a>.

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Career Concerns, Risk-Taking, and Upward Mobility in the Financial Services Industry: Evidence from Top Ranked Financial Advisers

### Abstract

We investigate career concerns of financial advisers with a focus on their risktaking and upward mobility. We use matched employer-employee data for the universe of financial advisers with one well-known national ranking for top financial advisers. We find that at early career stages before being ranked, top advisers (i) are twice as likely to acquire a certain license to serve as investment adviser, (ii) encounter customer disputes way more frequently (up to seven times), and (iii) switch to a firm of 80 % larger size as measured by total assets, than average advisers. We also find that top advisers manage high risks through labour-market penalty reduction associated with disciplinary actions. Lastly, using variations in firm policy for recruitment across firms, we provide evidence that reducing frictions in job mobility yields sorting dynamics that employers recruit high productive workers intensively within a short time window.

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