Brokered Careers: The Role of Search Firms
in Managerial Career Mobility

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Abstract

We explore how career paths are shaped by the involvement of search firms in hiring. Drawing on theories of market intermediation, we argue that search firms constrain horizontal moves across functions and industries by favoring workers from within the same function and industry as the role being filled. Using survey data on 1,342 job moves undertaken by 816 MBA alumni, we find that individuals who move jobs through a search firm experience lower horizontal mobility than those who move through other means. Our findings also suggest that these results are not driven by firms' decisions to use a search firm to fill the job. In supplementary analyses, we find no evidence that the job matches that are formed using search firms result in a better fit between workers and employers. Overall, the findings point to the significant institutional role that search firms play in managerial careers.

Changing organizations is an important means by which people advance their careers (Fuller, 2008; Quintana-García & Elvira, 2016). A key dimension along which those cross-organization moves vary is whether they involve "horizontal" mobility into different kinds of work, perhaps in a different function or a different industry (DiPrete, 1987; Bidwell & Mollick, 2015). Prior studies have shown that horizontal mobility can have significant career consequences, allowing people to acquire broader skills and more diverse relationships (O'Mahony & Bechky, 2006; Custódio, Ferreira, & Matos, 2013; Crossland, Zyung, Hiller, & Hambrick, 2013), but also limiting the depth of those skills and the coherence of their identity (Zuckerman, Kim, Ukanwa, & Rittmann, 2003; Ferguson & Hasan, 2013). We know less, however, about the antecedents of horizontal mobility – i.e. when cross-organization moves take people into different functions and industries versus when they do not.

One factor that could plausibly shape the extent of horizontal mobility in cross-organization moves is the way that people and employers find one another through the hiring process and, in particular, whether they use a third-party intermediary such as an executive search firm or "headhunter." It has been estimated that nearly half of the jobs in professional and managerial labor markets are now filled using executive search firms (Association of Executive Consultants, 2011), yet we still know relatively little about how their use might shape career paths. In particular, are certain kinds of career moves more common when search firms are involved in the hiring process? In this paper we draw on theories of market brokerage (Spulber, 2003; Burt, 2005) to explore one particular aspect of how intermediaries affect career paths, by examining how search firms affect individuals' likelihood of changing functions and industries when they move across organizations –i.e. their horizontal mobility.

Some elements of brokerage theory might suggest that search firms should contribute to

increased mobility across functions and industries. Brokers have a much more diverse set of connections than other market participants (Burt, 2005), potentially helping them link people to jobs that are different from the ones that they could find on their own. We might therefore expect search firms to help job seekers to make moves across functions and industries, as those connections help people to find roles that they would struggle to find themselves. Job seekers may therefore hope that search firms will be particularly helpful if they are trying to switch functions or industries. We argue, though, that the incentives that search firms face will lead them to emphasize more conventional-seeming matches, hence reducing horizontal mobility. We outline how search firms' role as "gatekeepers" for employers (Gould & Fernandez, 1989) makes them particularly sensitive to these employers' preferences. We suggest that search firms' incentives to complete searches quickly, as well as their comparatively greater ability to source candidates with a specific profile, will lead them to disproportionately propose candidates whose functional and industry background closely fits the jobs being filled. As a consequence, people will be less likely to move horizontally across functions or industries when their moves are mediated by a search firm.

We test this argument using data from a career survey of MBA alumni, which records all their employment spells since graduating from the program. These data provide us with a fairly homogeneous sample of people entering similar jobs during their prime working years, and one where executive search firms often play a key role in matching individuals with job opportunities. The little prior work that exists on the role of search firms in career transitions has relied on archival data from a single search firm, which did not include comprehensive information on how each job move was mediated (Hamori, 2014). To the best of our knowledge, ours is the first dataset to include information on how people moved between organizations,

allowing us to compare levels of horizontal mobility across functions and industries for those who moved with the involvement of a search firm versus those who used other methods. In doing so, we provide new empirical evidence on the role that intermediaries can play in structuring career paths and shaping mobility within managerial labor markets. We also contribute to the literature on careers and category spanning. Where existing work mostly examines the penalties or rewards associated with accumulating experiences across disparate areas (Leung, 2014; Zuckerman et al., 2003), we focus on the antecedents of category spanning, identifying some of the conditions that enable or constrain career mobility across industry and function boundaries.

Search Firms and Horizontal Mobility

Bidwell and Mollick (2015) define "horizontal mobility" as transitions that take people into a different kind of work, regardless of whether the new role is at the same hierarchical level as the previous one. Differences in the nature of the work are often characterized by two dimensions. First, jobs differ in their function within the organizational division of labor, with the tasks involved in jobs within the sales function, for example, being very different to those found within the finance function. Second, jobs in different industries are also likely to involve very different tasks and skills, so that sales jobs in a manufacturing company are different from sales jobs in a professional services firm (Neal, 1995). Although moving function can sometimes present different challenges to moving industry, both types of moves involve transitioning to a different type of work that likely requires different skills. Because our theory focuses on whether moves across firms also involve moving into jobs that require different kinds of skills, we develop a single set of arguments about how intermediaries shape mobility across functions and industries.

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Job seekers may engage in such horizontal mobility across functions or industries in order to enter jobs that are a better fit for their values or abilities (Jovanovic, 1979), or to develop broader knowledge and skills that could increase their market value – particularly in managerial occupations (Custódio et al., 2013; Crossland et al., 2013). Such horizontal moves also bring costs, though. Much research suggests that employees acquire human capital that is specific to the industry that they work in and the nature of the tasks that they perform (Neal, 1995; Quinones, Ford, & Teachout, 1995; Sullivan, 2010). As a consequence, people who are trying to move into a new function or industry will find that much of their human capital is no longer valuable in the new roles that they are seeking, and are likely to lack some of the skills necessary for those new roles (Hamori, 2007).

This lack of function- and industry-specific skills among horizontal movers will tend to make those movers less attractive to employers, as compared to candidates seeking to move within the same function and industry (O'Mahony & Bechky, 2006). Although employers may sometimes value the fresh perspectives brought by somebody with a different background, those advantages are often outweighed by the much steeper learning curve that will be faced by new hires without relevant functional or industry experience. The importance of possessing such relevant experience may be accentuated in the most visible roles (e.g., CEOs and senior management), where the employer is also concerned about a hire's perceived legitimacy (Khurana, 2002). Reflecting these dynamics, Kwon and Milgrom (2014) find that firms are less likely to fill roles with people from a different occupation when staffing more senior jobs.

Although the hiring processes that shape this horizontal mobility are often managed directly by employers, in many cases they also involve the use of a third party search firm (Finlay & Coverdill, 2002; Bonet et al., 2013; Coverdill & Finlay, 2017). These search firms are

usually hired by the employer to fill a specific job in return for a fee (often 30% of first-year salary). The search firm may play a variety of roles in the hiring process (Finlay & Coverdill, 2002; Coverdill & Finlay, 2017). Sometimes they may help the employer to develop a list of requirements for the role, while in other cases the search firm may be engaged once the requirements have already been defined. Search firms can also manage communications between the employer and the candidate, buffering each side from the risk of explicit rejection (Khurana, 2002). The most important role that search firms usually play, however, is to generate a shortlist of candidates for the employer to consider. This process generally begins with the search firm developing a long list of potential candidates, based on their own proprietary databases, as well as conversations with contacts who might help them to identify suitable candidates (Cappelli & Hamori, 2013). In some cases, the employer itself may also suggest people to include on the long list. The search firm will then interview candidates on the long list to assess their suitability for the position and their interest in the job. Based on those interviews, they assemble a shortlist of candidates that is presented to the client. It is in developing this shortlist that search firms exert the most influence over hiring, since it is almost always the employer who will make the final decision about which candidate to hire.

While firms' use of intermediaries to fill jobs should not affect individuals' preferences to move horizontally, search firms can affect their opportunities for horizontal mobility by determining the kinds of jobs for which they will be considered by employers. In this way, search firms can help to shape the extent to which people change functions and industries when moving organizations. In particular, theories of intermediation emphasize two ways in which intermediaries may affect matching in markets: by introducing different incentives regarding which matches to enable (Levitt & Syverson, 2008; Fernandez-Mateo & King, 2011); and by

bringing different resources to the search process than do other market actors (Spulber, 1996; Burt, 2005). We suggest that these differences will increase opportunities for people seeking to enter the job from the same function or industry when search firms fill jobs, while reducing opportunities for those seeking horizontal mobility.

First, intermediaries tend to have different incentives than other market participants, which may lead them to emphasize different criteria in the hiring process. Compared to buyers and sellers, intermediaries bear a higher proportion of the search costs and benefit less from the surplus created from a good match (Levitt & Syverson, 2008). Although search firms usually seek to maintain a good relationship with their clients and therefore aim to find candidates who will perform well in the role, their incentive structure also means that they are particularly motivated to complete searches quickly in order to limit their costs. Coverdill and Finlay (2017), for example, describe how headhunters routinely attempt to convince clients that delays are costly, and to inject a sense of urgency into the process while also coaching candidates on how to sell themselves to clients in an interview.

Given the nature of the hiring process described above, completing searches quickly means finding a candidate that is easy to sell to the client: it is ultimately the client that makes the hiring decision (it is unusual for final round candidates to reject offers (Fernandez-Mateo & Coh, 2015)), and it is only when a hiring decision is made that the search firm is paid. We propose that search firms will try to find such easier-to-sell matches by disproportionately presenting candidates from within the same function and industry as the role being filled. As already mentioned, candidates coming from the same function and industry are likely to be perceived as having more relevant skills, and should therefore be more superficially attractive to the client. It is likely harder to persuade the client to hire a candidate from outside the industry

and function, even where that candidate's overall skill set would make them a good fit on closer inspection. Although there may be cases where a candidate with a different functional or industry background is particularly compelling, perhaps because of their unique achievements or because they come from a high status employer (Hamori, 2010), on average the search firm will prefer to propose candidates coming from the same function and industry as that of the vacancy.

Indeed, where the search firm is focused on completing the search rapidly, they may place more emphasis on superficial similarities to the role being filled, such as function and industry, than would the employer themselves. Consistent with this argument, Fernandez-Mateo and King (2011) found that temporary help agencies were more likely than their clients to sort applicants into gender-typical projects, as they attempted to anticipate their clients' preferences. Cowgill & Perkowski (2020) report a similar phenomenon using a two-sided audit study, finding that intermediaries' career concerns lead them to put more weight on managers' preferences than on candidates' preferences in the screening process. In the context of career moves, intermediaries' incentives to serve their clients thus mean that search firms will exhibit even stronger preferences than the employer does for candidates whose current role seems more similar to the job being filled.

Search firms' tendency to propose candidates who are a better fit with the salient dimensions of the role may be accentuated by the different resources that they bring to the search process – particularly their deeper labor market networks. Brokerage theory argues that intermediaries tend to have stronger networks and market knowledge than other market participants (Burt, 2005; Rider, 2009). Consistent with this perspective, search firms market themselves on the strength of their relationships, claiming that these allow them to make better matches than employers could alone (Coverdill & Finlay, 2017). Were search firms neutral

brokers between candidates and employers, it is possible that their superior knowledge and relationships could increase candidates' opportunities for horizontal mobility, by helping them to identify novel roles that would fit the candidates' skills and preferences. Indeed, candidates may often hope that search firms' greater knowledge of the market will help them to find very different opportunities that might facilitate a career switch (Ibarra, 2002). Yet because search firms' matchmaking tends to serve the perceived interest of employers, they are likely instead to use their deeper knowledge of the labor market to identify candidates who most closely fit the details of each given client's specifications – notably, those whose functional and industry affiliation matches the vacancy. An employer acting alone often has little knowledge of the labor market and may therefore struggle to identify potential candidates whose background closely fits the role being filled. Because search firms have deep labor market networks, though, they are usually aware of a much larger pool of potential candidates. Within that pool, they are thus more likely to identify a number of people whose background closely fits the requirements of the role. Search firms are therefore likely to be able to use their deeper labor market knowledge to identify and solicit candidates with that relevant experience, raising the likelihood of the job being filled by someone who is not moving function or industry.

Taken together, these arguments about search firms' incentives and resources have important implications for the opportunities that potential movers will face when search firms mediate the hiring process. In particular, they suggest that hiring processes are more likely to favor candidates from the same function and industry as the job being filled when search firms are involved. *We thus expect that people are less likely to change functions or industries when moving jobs through a search firm versus other means*.

We examine this argument in our empirical analysis below, by exploring how job moves

that are mediated by search firms differ from those that are not.

Data and Methods

We examined the role of search firms in careers using a survey of MBA graduates. Our survey sample is not representative of the general workforce in that these graduates are better educated, more highly paid, and take jobs in a smaller set of occupations. However, this approach allows us to gather longitudinal data on the careers of a fairly homogeneous sample of people entering similar jobs during their prime working years. Reflecting these advantages, alumni surveys have frequently been used to study careers (Merluzzi & Phillips, 2016; Dobrev & Merluzzi, 2018). We sent our survey to alumni from a European business school in the summer of 2016. All alumni were invited to participate in the study, and were offered a report on the results as an incentive to complete the survey. Among the 10,854 alumni who received the email, 2,158 completed at least 90% of the survey – a response rate of nearly 20%, which is comparable to previous studies of similar populations (e.g., Bertrand, Goldin, & Katz, 2010; Bidwell & Mollick, 2015). The respondents include both full-time and part-time (executive) MBAs who graduated since the 1960s. The majority of responses correspond to later cohorts, however, because the earlier cohorts are smaller (there was no significant difference in response rate across cohorts). To assess non-response bias, we compared the LinkedIn profiles of 1,000 randomly selected respondents with 1,000 randomly selected non-respondents. We found no significant differences between these two groups in terms of gender, industry, or the job title of their latest position.

We asked participants to provide details about all of their employment spells since graduating from the program. We define an employment spell as the period of time during which an individual is employed by a single organization, works as a contractor or a company founder,

or is unemployed for more than six consecutive months (a given employment spell may therefore encompass several roles within the same firm). For each spell, we asked questions about the company, industry, location, job title, function, number of promotions obtained, and compensation. The resulting data have an unbalanced panel structure, as the number of employment spells varies by individual. Our survey allowed each respondent to report on no more than ten spells, but few described that many.

Given our focus on moves between organizations, we do not examine entry into the first post-MBA employment spell (i.e., we omit individuals' first spells from our data set). We also dropped a number of transitions that were substantially different from traditional career moves between employers and might not therefore be comparable to other moves. These were: 727 transitions into self-employment and entrepreneurship and 253 transitions out of self-employment or entrepreneurship;[1] 50 spells that involved part-time jobs after retirement; 48 spells that were not entered through the external labor market (e.g., moves due to corporate spin-offs, acquisitions, or transfers within the same parent company); and 63 spells which began more than three years after the prior spell ended, since these cases were not clearly instances of moving from one employer to the next. We further dropped an additional 430 observations with missing data.[2] In each case, these exclusions reflected particular challenges in comparing those specific transitions to others, and we retained any other spells by the same individual that did not

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[1] In separate analyses, we confirmed that our results are substantively similar when including individuals' transitions from self-employment or entrepreneurship into regular jobs. We also conducted robustness checks in which we added a control for whether the respondent had ever been self-employed. Our results were unchanged.

[2] The fields most commonly missing were compensation (because respondents chose not to report it), industry (presumably because of difficulties classifying their employer), and organization size (most likely because participants did not know how large their employers were). Our analysis suggests that there are no major differences between observations with and without missing data. As compared with observations that had missing data, our final sample contains 4.5 percentage points fewer women, and individuals with 1.6 years more experience after graduate school on average.

meet these exclusions. Our final sample includes 1,342 transitions between employers experienced by 816 people.[3]

Key variables

Heard about the job through a search firm. Our independent variable is whether a job move across employers takes place through a search firm. We followed the job search literature in asking respondents to report on how they heard about each job (Granovetter, 1973; Corcoran, Datcher, & Duncan, 1980; Holzer, 1987; Pellizzari, 2010). Specifically, for each employment spell, we asked: "How did you learn about this job opportunity with this employer?" Our independent variable takes the value 1 for the 34% of responses that listed a search firm, and is otherwise set to 0. Given how search firms are paid for directing candidates to jobs, any role that people heard about through a search firm should have had the hiring process mediated by that firm. The other means of job search were network connection (47%), job posting (16%), recruitment event (1%), and "other" (11%) – for example, previous employment with the firm. The choices were not mutually exclusive, and the sample includes 118 observations for which the individual heard about the job through more than one method (our main analyses include a control for "multiple job search methods"; dropping these observations does not affect the results).[4] In some analyses, we also examine the effect of each job search method separately.

Change in function. We use a dummy variable that is set to 1 when the job function reported for the beginning of the new employment spell is different from the job function

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[3] This represents 7.8% of our original sampling frame. Note, though, that, most of the decline from the 2,158 respondents who filled out the survey is due to 941 respondents not having had a job transition that met our criteria for inclusion. In particular, many of our respondents only reported working with a single employer, preventing us from assessing how they changed employers. A number of others reported transitions in and out of self-employment. Although we lose another 401 individuals due to missing data, the majority of our sample shrinkage therefore reflects that not every respondent had engaged in the kinds of employer to employer transitions that we are studying.
[4] Of the 50 observations listing a search firm plus another method, 24 listed a job posting, 22 listed network connections, 1 listed a recruitment event, and 7 listed "other."

reported for the end of the old spell, and is set to 0 otherwise. Following prior studies of MBA alumni (e.g., Bidwell & Mollick, 2015) and the classification used by this school's career services, we used 27 functional categories that are representative of the jobs taken by its graduates. The most common functions were general management (18.9% of jobs),[5] followed by consulting (16.5%), business development (10.4%), and marketing (6.2%).

We also use a more nuanced measure of change in function: The Jaccard index of similarity. This variable is calculated as the number of times that one function follows another function, as a proportion of the total number of times that the function of the destination job appears in the sample (see Leung, 2014). At the extremes, a value of 0 indicates that the observed type of move is not present in the sample, while a value of 1 indicates that a given job function always follows the same function. Certain moves (e.g., between education/training and consulting roles) are common in our data and thus have high index values; conversely, moves that are rare (e.g., between general management and human resources) have low values. The Jaccard index therefore yields a more nuanced assessment of the extent to which moves take individuals into more-related versus less-related roles than they currently occupy.

Change in industry. This variable takes the value 1 when the new employment spell's industry differs from the old spell. We use ten industry categories: consulting & professional services (17.4%); technology/media/telecom (17.4%); other finance (14.7%); heavy industry (11.4%); investment management (10.1%); investment banking (7.9%); government & non-profit (6.3%); biotech/health (5.6%); consumer (5.1%); and other services (4.1%). We also use the Jaccard index of similarity for change in industry, calculated in the same way as the Jaccard

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[5] It is possible that moves into general management may be different from other kinds of horizontal mobility, given the broader nature of this function. We therefore reran our analyses omitting observations in general management. We found very similar results for the effects of search firm on change in function. Our results were slightly weaker for change in industry, most likely reflecting the reduced sample size.

index for change in function described above.

Other variables

Job characteristics.

We assessed the new role's responsibilities using the *Number of subordinates*. Although numbers of subordinates vary substantially across functions and industries, within a given function or industry this number is a good indicator of responsibility – especially in the kinds of managerial jobs studied here (Bidwell & Mollick, 2015). Respondents reported the total number of people who worked in the units that they managed in their first year of each employment spell. The distribution of this variable is highly skewed, with a few people managing very large units and many managing much smaller groups. We do not expect the effects of search firms to be linear across this range and so we took the log of this value, after first adding 1 to account for observations with zero subordinates.

We control for job rewards using the log of *Predicted compensation.* Respondents reported total compensation in the first year of each employment spell. This includes base salary and any extras such as bonuses, options, and stock grants. Almost half of the employment spells were based in the United Kingdom, and the rest were distributed worldwide; hence we converted all figures to pounds sterling (GBP) using the exchange rate for the corresponding year.[6] A concern with using the actual compensation to assess the rewards of the job being filled is that this compensation may be endogenous to the use of search firms if search firms are able to help candidates bid up their pay. Although search firms represent the employer, it is possible that they

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[6] We relied on exchange rates provided by XE (https://www.xe.com/) and MeasuringWorth (https://www.measuringworth.com/). We could not retrieve information on 42 yearly exchange rates. When information on exchange rates was available for years that are fewer than four years removed from the focal year, we replaced the missing value with the exchange rate of the closest year; if there was no information on exchange rates within a four-year window, we treated the value as missing. This was the case for six observations.

help to persuade employers to offer higher compensation in order to attract a particular

candidate, increase their commission, or help close the vacancy more rapidly, just as realtors

persuade clients to accept lower prices to sell their homes more quickly (Levitt & Syverson,

2008); certainly a number of studies have associated the use of search firms with higher pay

(Bidwell, 2011; Seidel, Polzer, & Stewart, 2000). We therefore created a variable, *Predicted*

compensation, to provide a measure of how much a given job was expected to pay. To calculate

this variable, we estimated the predicted log compensation of each position as a function of job

characteristics (specifically the log of organization size, and interactions between the number of

people managed and dummies for each function and industry, so as to allow the number of

people managed to have differing effects on pay across different kinds of jobs). We did not

control for whether the individual heard about the job through a search firm. We then used the

predicted pay calculated from this regression as our measure of *Predicted compensation*. We

logged this variable to accommodate its highly skewed distribution.

Our analyses also include dummy variables for the new employment spell's *Function* and

Industry (as described previously). In some models, we also control for other characteristics of

both the old and new employment spells that might affect horizontal mobility, including (logged)

Number of subordinates of the old and new employment spells, *Tenure* in the old and new

employment spells (measured as the number of weeks between the beginning and end date of

each spell), and the *Weekly working hours* of the old and new employment spells.

Individual characteristics.

We controlled for gender (*Female* = 1) and whether the respondent graduated from the

executive MBA program (*EMBA*), which caters to more experienced students and is taught part-

time (31% of employment spells). We control for *Years of post-MBA experience* at the start of

each employment spell, as horizontal mobility becomes less likely with experience while the use of search firms is more likely. We also include the squared term of this variable, as well as *Number of employment spells after graduation*.

Move characteristics.

An important concern is that search firms may be more likely to target passive candidates, who are not looking to move. If passive candidates were more satisfied with their job and willing to move only for higher paid roles that are similar to their current ones, we might see a spurious correlation between the use of search firms and horizontal mobility. We therefore measured whether movers were engaged in *Active search*, by asking: "Were you actively searching for a job (e.g., looking at job postings; telling friends that you were thinking of changing jobs; contacting headhunters; applying to other jobs) when you heard about this opportunity?" Respondents answered Yes for 73% of employment spells. We also include a control for whether the individual *Left the old employment spell involuntarily* (32% of the spells).

Employer characteristics.

We controlled for the log of *Organization size* (number of individuals working for the company) of the old and new employment spells. Respondents were asked to estimate the approximate size of their employer by identifying which of a number of ranges it fell within; we then proxied for *Organization size* using the midpoint of the range indicated by the respondent. We also include indicators for industry.

Geography.

Cross-national differences may affect both the use of search firms and people's

propensity for horizontal mobility. Because we lack country-level data on these factors, we instead include dummies for the country/region where the job is. Countries with fewer than 20 observations were aggregated with other countries on the same continent. The United Kingdom accounts for 49% of the observations, followed by the United States (11.6%), and other European countries (11.6%);[7] see Table 1b for the full list of categories.

Year.

We include controls for the starting year of each employment spell, which enables us to account for exogenous factors that may affect employment conditions over time. Because the number of observations was smaller for earlier years – fewer than 8% of the observations are from years before 1990 – we include only decade dummies through 1989 (i.e., for the 1970s and 1980s) and use year dummies for later periods.[8] Table 1 reports descriptive statistics and correlations for the main variables used in our analysis.

Estimation strategy

We argue that individuals are less likely to change function or industry when moving jobs through a search firm versus other means. The unit of analysis is therefore an individual's job move between employers. An important concern with our analysis is that search firms may be used to fill different kinds of jobs from those that are filled by other means. We attempt to account for such heterogeneity in jobs in three ways. In our first set of analyses, we include detailed job-level controls. We then perform a second set of analyses using coarsened-exact matching (Blackwell, Iacus, King, & Porro, 2009), to more explicitly compare observably

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[7] Our results are largely robust to using an indicator for each country (91 dummies), although the significance level for our search firm dummy in Models 4 and 6 of Table 2a declines to p<0.1.

[8] Our results are robust to using an indicator for each year (52 dummies), although the significance level for our search firm dummy in Model 4 and 6 of Table 2a declines to p<0.1.

equivalent jobs that are filled using search firms versus other means. Specifically, we match jobs on 27 functions, 10 industries, 12 different values of logged number of subordinates and 12 values of logged organization size (the cut points for logged number of subordinates and organization size were chosen by the matching algorithm). The matching procedure causes our sample for analyzing *Change in function* to drop from 1,342 to 399 observations (of which 172 are search firm-mediated), and for *Change in industry* from 1,320 to 392 observations (of which 169 are search-firm mediated).[9] We then ran analyses on the matched sample, weighting each observation to balance the weight of moves that are versus are not mediated by a search firm within a given stratum (i.e., the set of observations with the same value of matched variables). Errors are clustered by respondent in all models, to account for the non-independence of jobs taken by the same respondent. Finally, we also conduct a robustness check using a two-stage model (bivariate probit) to account for selection effects.

Analysis and Results

Search firms and horizontal mobility

In our data, 46% of search firm–mediated moves involved a change in function, as compared with 58% for moves that were not mediated. Similarly, 50% of mediated moves involved a change in industry, as compared with 57% of moves that took place through other means. These differences are statistically significant and consistent with our argument that people are less likely to experience horizontal mobility when moving jobs through a search firm. At the same time, these figures also reveal that even search firms will often place candidates

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[9] We performed several checks to ensure that the CEM procedure is successfully implemented. First, we confirmed that the matching reduces covariate imbalance by 55%. Second, we compared the treatment probability distribution overlap between the treatment and control groups, as well as the distribution of each of the variables that we match on, pre and post-CEM. We confirmed that (1) the matched sample exhibits no obvious selection differences into treatment versus control, and (2) for all the matching covariates, the matched sample shows greater overlap between the treatment and control groups than does the original sample. Further detail can be found in the Online Appendix.

from a different function or industry, perhaps because those candidates have accomplishments or skills that make them particularly eligible for the role, or because even the search firm is unable to find an ideal candidate for the role who also comes from the same industry or function.

Table 2a presents the results of the multivariate analysis that we use to test our argument. We estimate linear probability models predicting whether the focal individual changes function or industry when moving jobs.[10] Models 1 and 4 reveal that those who heard about the job through a search firm are approximately 11% less likely to change function and 7% less likely to change industry as compared with those who heard about the job through other means.

In Models 2 and 5 we break out the alternative means by which respondents might have found their jobs into detailed categories. Our base category is having found a job through a network connection, reflecting the well-documented role of social capital in finding jobs. We find that people are significantly less likely to change function and industry when moving jobs through a search firm as compared to moving jobs through networks. A test of equality of coefficients shows that having heard about the job through a search firm is indeed significantly different from the coefficients of the other search options.

Models 3 and 6 report analyses based on the alternative measure of horizontal mobility (i.e., Jaccard index of similarity). When workers move jobs through a search firm, the Jaccard Index is 4.8% higher for change in function and 2.6% higher for change in industry (for comparison, the standard deviation of the Jaccard Index is 21% for function and 19% for industry). This means that individuals who move using a search firm take positions more similar to their previous ones than do individuals who heard about the job through other means. Table 2b

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[10] In separate analyses, available from the authors, we estimated the models using random-effects specifications and obtained substantively similar results. We also considered the use of individual fixed effects, but a Hausman test was unable to reject the hypothesis that this would yield systematically different results from those of the random-effects models. We also confirmed that the results are substantively the same when using logit models.

confirms that these results largely hold when using the CEM estimator in the smaller, matched sample. In fact, across all models, the magnitude of the search firm coefficient in the matched sample is larger than the one in the full sample. For change in industry, however, the results lose some statistical significance due to the large reduction in sample size.

In separate analyses, we estimated models including controls for each individual's prior number of functional moves, in case search firms favor workers who have not moved functions in the past. Although we found a positive relationship between prior number of functional moves and the likelihood of changing functions (i.e., the sample includes serial movers), the search firm's negative effect remains significant. There is similarly a positive correlation between an individual's prior number of industry moves and her likelihood of changing industries, but accounting for this tendency does not affect the main coefficient of interest.

We also explored whether the reason why the respondent moved jobs might affect our results. For example, would those who are moving for more money or more responsibility be more likely to respond to calls from search firms and less likely to move horizontally? We asked respondents who said that they left their prior job to take one that had already been offered: "What attracted you about the new job relative to your previous job?"[11] When we include in our analysis dummy variables for each possible answer to this question, the sample size drops to 776, yet we continue to find a significant negative relationship between moving through a search firm and the likelihood of changing function. We do not find significant results for industry, though, reflecting the change in sample size.

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[11] The options were: compensation; level of responsibility; intellectual challenge; opportunity to make a difference; culture/people/values; job security or stability; work-life balance /flexibility; opportunities for training/skill development/ long-term opportunities at the firm; long-term access to better opportunities at other firms; geographic location of position; opportunities for more travel within the country where you were based; opportunities for more international travel; opportunities for international experience/exposure; opportunity to travel less; opportunity to work for a different manager. Respondents could choose more than one option.

Finally, we performed several additional analyses (available from the authors) to explore potential heterogeneous effects of search firms on horizontal mobility. Regarding the variation across time periods, for example, there is some evidence that individuals moving in the early 1990s and 2000s were more likely to change functions than those moving in the 2010s. However, there are no significant interaction effects between time periods and the use of search firms. The same is true for geography and respondents' gender: there is no evidence that women or individuals based in different regions are differentially impacted when moving jobs through a search firm versus other means.

Accounting for Selection.

In an additional robustness check, we used a bivariate probit model to simultaneously estimate the determinants of an individual hearing about the job through a search firm, as well as the probability that the associated job move will result in this individual changing function or industry. The advantage of estimating both stages simultaneously in a bivariate probit model is that it allows us to correct for the endogeneity of the first stage selection of the use of search firms in our second stage estimate of the determinants of horizontal mobility (Wooldridge, 2010). This two-stage approach to endogeneity is preferred when – as in our case – both the dependent variable and the endogenous variable are binary (See Greene (1993) or Wooldridge (2010) for further discussion).

Although the bivariate model is identified by its bivariate normality assumption, robust identification benefits greatly from covariates that satisfy an exclusion restriction (Wooldridge, 2010). In order to fully identify the model, we thus introduce a variable that predicts the use of a search firm but is uncorrelated with individuals' horizontal mobility. Specifically, we exploit the fact that the search firm industry is developed to a different extent across different countries.

Within our data, we calculate the *Search firm ratio* for each country, which is the proportion of all moves in that country that are mediated by a search firm. The average is 20%, with a standard deviation of 7%. This national propensity to use search firms should satisfy the necessary properties of a valid instrumental variable, as it affects whether a move involves a search firm without otherwise affecting the propensity to move horizontally. A drawback of using this variable as our instrument is that we can no longer include country/region dummies when we estimate changes in function and industry. That said, separate robustness checks show that the results of Table 2a are substantially unchanged when country/region dummies are not included in the estimation – suggesting that these dummies had little effect in the main analysis to begin with.

The results of our bivariate probit analysis are presented in Table 3. Because the model was not stable with large numbers of variables, we greatly simplified the structure of controls relative to Table 2a, using a two-step process. First, where possible, we replaced dummy variables with smaller numbers of continuous variables. Hence, instead of including a dummy for each function in our analyses of function changes, we calculated the proportion of moves into jobs within each function that came from a different function. We similarly calculated the number of moves into jobs within each industry that came from a different function. In our analyses of industry changes, we included similar variables calculating the proportion of moves into each industry that involved changes in function or industry. Rather than using year dummies, we create a linear time variable which represents time since 1960 (our first observation) and include time, $time^2$, $time^3$, and $time^4$ to allow for non-linear effects of time. Second, we excluded variables that were not significant, in order to further pare down the list of controls (this included dropping the time variables created above, as they turned out not to be

significant predictors of horizontal mobility).

We present two sets of models: In Models 1 and 2 of Table 3, we include the same variables in both stages, with the exception of *Search firm ratio*. In Models 3 and 4 we only include variables that are significant within that stage. These final models include only a small number of controls. However, we confirmed in supplementary analyses that using this much simplified structure of controls had almost no effect on our main results from the single stage models (Table 2a). This reassured us that omitting these controls did not materially affect our findings despite improving the stability of the models. We first discuss the implications of the results in Table 3 for the potential endogeneity in the use of search firms, before moving on to discuss other insights from the first stage selection model.

Accounting for endogeneity in the bivariate probit model.

The results for the first stage confirm that *Search firm ratio* is a relevant instrument, since it is significantly and positively related to the use of a search firm to move jobs. In the second stage, and consistent with our theoretical arguments, the coefficient for having heard about the job through a search firm is negative and statistically significant in all models except Model 4.. The coefficients indicate a much larger effect of search firms on the probability of changing function or industry than that found in Table 2a. For example, the use of search firms reduces the probability of change in function by 44% (Model 1) and change in industry by 46% (Model 2) – both models are evaluated at the mean values of all other variables. We confirmed that these substantial increases in effect sizes reflect the use of a two-stage model rather than using a probit instead of a linear probability model or including a different set of controls.

Of particular interest in the models is the correlation in the error term between the two equations (ρ), as it is this correlation that gives rise to endogeneity problems. Across all four

models, we find that the correlation is positive (albeit only significantly so for Model 3), indicating that search firms are *more* likely to be used for the kinds of job searches that usually result in changes in function or industry. This is the opposite of what we would expect if our main results were being driven by the selection of search firms for roles where clients preferred candidates from the same industry or function. We thus conclude that our results are unlikely to reflect firms using search firms to fill jobs for which they prefer candidates from the same function or industry.

Understanding the use of search firms – which gates are kept?

In addition to helping us to account for endogeneity in the use of search firms, our first stage selection model also provides insight into the kinds of roles whose entry is likely to be shaped by those search firms. Besides our instrument (*Search firm ratio)*, we find that three job-level variables significantly predict the use of a search firm in filling jobs: organizational size, number of subordinates, and predicted compensation. The magnitudes of these effects are substantial.

It is possible that all of these variables reflect the capacity and willingness of employers to pay search firms substantial fees. Larger organizations generally have more resources. Employers may also be more willing to pay search firms' fees to get the best candidates when they are filling roles that have the greatest impact on organizational success. High impact roles are also likely to be those that involve the greatest responsibilities (as measured by the number of subordinates) and have the greatest rewards.

Beyond helping us to understand organizational decisions to use search firms, these analyses also indicate where the use of search firms is most likely to shape career paths within the labor market. We have shown that jobs that are filled using search firms are less likely to be

entered through horizontal mobility. To the extent that search firms tend to fill more senior roles, the implication is that movers are less likely to enter these senior jobs through horizontal mobility, and that this relationship is, at least in part, *because* of the presence of search firms.

Supplementary analysis: Do search firm mediated moves yield a better job fit?

We have found that people are less likely to change function or industry when moving jobs through a search firm. What is not clear, though, is whether the people placed by search firms actually turn out to be a better fit for the job, or indeed whether those who enter the job from the same function or industry do better. In supplementary analyses, we examined what happened after job candidates enter the job, using five proxy measures of their *ex post* fit with the job. First, we examine rates of both *Voluntary turnover* and *Involuntary turnover* from the firm, since turnover theories argue that workers are more likely to leave jobs for which they are a poor fit, either because they are unable to perform the job effectively, or because they find that the job does not match their personal preferences (Jovanovic, 1979; Weller, Hymer, Nyberg, & Ebert, 2019). Since replacing employees is costly, rapid exit also suggests that the hire was unsuccessful from the employer's perspective. Second, we examine individuals' career growth within the firm, notably their *Growth in compensation*, *Growth in number of subordinates*, and *Number of promotions* received after entering the employment spell. Since both raises and promotions are usually rewards for good performance, these measures should correlate with performance and fit with job.

We present these analyses in Table 4.[12] All models include controls for individual and job

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[12] The median tenure within an employment spell is 2.9 years (mean = 4.1 years). *Growth in compensation* was calculated as the difference between the final compensation and the initial compensation of the focal employment spell (both logged). The median compensation growth is £15,000. *Growth in number of subordinates* was calculated as the difference between the final number of subordinates and the initial number of subordinates of the focal employment spell (both logged). The median increase is 0 subordinates, and the mean increase is 79. Finally, we asked respondents about the number of times they were promoted during a given employment spell (mean = 1;

characteristics (including the individual's compensation at the beginning of the new employment spell), as well as for whether the individual left their old employment spell voluntarily, and their tenure in the old employment spell. We also control for the *Number of employment spells after graduation*, thereby ensuring that our results are not driven by serial movers being more likely to change jobs via search firms. For each outcome, we present models with and without controlling for horizontal mobility (i.e., *Change in function* and *Change in industry*).

Model 1 shows the results from a Cox proportional hazard model that estimates the hazard rate of voluntary turnover from a given position. We do not find evidence that those who moved jobs through search firms are a better fit with their jobs. They are not less likely to voluntarily leave those jobs. Nor do we find that entering a job from a different function or industry is associated with higher voluntary turnover (as shown in Model 2). In fact, those entering from a different industry are *less* likely to leave the firm. Our analysis of involuntary turnover similarly fails to find that search firms improve worker-job fit; Models 3 and 4 provide suggestive evidence that individuals who heard about their job through a search firm are in fact *more* likely to leave their position involuntarily.

Models 5 through 8 use ordinary least-squares models to analyze growth in compensation and number of subordinates in a given employment spell; these models also control for tenure in that spell. We find no relationship between moving through a search firm an either *Growth in compensation* or *Growth in number of subordinates*. Here we do find some disadvantage to changing industry, as it is associated with lower growth in compensation (Model 6). Finally, Models 9 and 10 analyze the *Number of promotions* within each employment spell. Respondents were asked only about their promotions during completed employment spells, so we lose

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median = 0).

observations for the spells not yet completed by the time of the survey. Because this is a count variable, we use a Poisson regression (we did not use negative binomial regression because the data do not show evidence of overdispersion). In separate analyses, we confirmed that the results are the same when using a zero-inflated Poisson model. Again, there is no significant relationship between *Heard about the job through a search firm* and the subsequent *Number of promotions*.

Overall, we find little evidence that search firm-mediated moves result in improved matches. Moving through a search firm is associated with marginally higher compensation growth, but also with marginally higher turnover; it has no effect on the growth in the number of subordinates or the number of promotions. Although caution is especially appropriate when interpreting a lack of evidence, our findings cast some doubt on the notion that search firms' deeper networks and market knowledge are providing candidates who are a better fit.

Discussion and Conclusion

Search firms play a prominent role in many hiring processes within the modern labor market. How might their presence change who enters what job, and hence the kinds of career paths that people pursue? Drawing on theories of careers and market intermediation, we suggest that people are less likely to move horizontally into different functions and industries when moving through search firms, both because search firms are motivated to propose candidates whose relevant experience makes them easier to sell to the client, and because those search firms' superior knowledge and relationships make it easier to find such candidates. Using data from a career survey of MBA graduates, we confirm that career mobility is indeed different when it takes place through search firms, with people being less likely to change function or industry compared to other means of finding jobs. These findings are robust to a wide variety of

individual controls, including whether the candidate was actively searching for a job before their move. Even though search firms often have deep networks within labor markets, our results suggest that these networks are not leveraged to help people make bigger changes in their careers, but instead serve to provide employers with candidates coming from similar roles to the one being filled.

Analyses using a two-stage bivariate probit help to address endogeneity concerns, suggesting that our results are not driven by the selection of search firms to fill jobs that require more similar experience to the job being filled. The two-stage models also show that search firms are more likely to be used to enter jobs with higher pay and more responsibility in larger organizations. Our analyses therefore give us particular insight into how people enter the most rewarding roles: as jobs become more senior, they become less likely to be entered from a different function and industry, due in part to the use of search firms to fill those roles. Overall, these findings point to the institutional role that search firms play in managerial careers, constraining many of the paths into the highest-paying jobs to follow routes that are more linear and less varied. We also explore whether search firms' improved resources allow them to create a better fit with the roles that they fill. We find no evidence that individuals placed through search firms are a better fit for their roles than those who find their jobs by other means; this result suggests that the reduced horizontal mobility associated with employers' use of search firms need not result in better matches.

Our study makes several contributions to the careers literature. First, we believe that this is the first longitudinal analysis linking complete data on how individuals move jobs across organizations to measures of horizontal career mobility. Our analysis yields different results from the one prior study closest to ours (Hamori, 2014); unlike that paper, we find that people

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are less likely to change functions and industries when moving through search firms. It is possible that these different results stem from our data's including information on how people move jobs. The differences may also reflect the presence in our data of moves mediated by a variety of search firms, while Hamori (2014) studied a single intermediary.

This paper also complements our understanding of labor market specialization. A great deal of work has studied the advantages and disadvantages that workers may derive from building specialized labor market profiles (Ferguson & Hasan, 2013; Leung, 2014; Merluzzi & Phillips, 2016). Less is known about the antecedents of these career profiles, although some work suggests that individuals may vary in their internal motivations and preferences for specialization (Neal, 1995; Roberts, Cha, Hewlin, & Settles, 2009). Our study suggests that, beyond workers' motives, the way that they move across organizations may also play a role in their career outcomes. We show that the use of search firms leads people to move to new jobs that are more similar to their old ones. By constraining horizontal mobility, third-party intermediaries may therefore end up increasing the extent of specialization in career paths. Relatedly, in exploring when people move across functions and industries, our paper also makes a contribution to the broader literature on categories (Vergne & Wry, 2014; Zuckerman, 1999). A large body of research has examined the consequences for actors of spanning categorical boundaries in a variety of contexts (Kacperczyk & Younkin, 2017; Leung & Sharkey, 2013; Zuckerman et al., 2003). In contrast, there is little systematic evidence on the conditions that enable or constraint category spanning, particularly in the labor market. Our research highlights how labor market intermediaries help shape actors' opportunities for category spanning. It is possible that other forms of gatekeepers might contribute to shaping the extent of category spanning in other fields.

In addition, our findings illuminate some of the career trade-offs faced by individuals when changing jobs via an intermediary instead of relying on their own social connections or other job search methods. In particular, although search firms are gatekeepers to the highest-paid positions, they seldom help executives move across functions or across industries. Another finding of particular interest is that neither the use of search firms nor the hiring of employees from the same function or industry seems to result in a better job fit. Hence, although search firms seem to make *different* matches, by providing candidates whose background is a better observable fit for the role, these are not necessarily *better* matches. Such a pattern is consistent with search firms finding people who are easier to sell to the client rather than being better suited to the position.

Our theory and results also extend previous work on brokerage and market intermediation, shedding light on some of the consequences of brokerage for those who are connected to intermediaries (Fernandez-Mateo, 2007; Rider, 2009; Galunic, Ertug, & Gargiulo, 2012). We illustrate how the constraints and benefits of intermediation can make some types of market transactions more likely even as they limit other types of transactions. Whereas established theories of brokerage could imply that market intermediaries increase the range and diversity of their clients' potential partners, our theory and findings suggest that intermediaries may sometimes do just the opposite (see also Fernandez-Mateo & King, 2011). Although this analysis is consistent with theories proposing that brokered transactions differ from unmediated ones (e.g., Burt, 2005; Rider, 2009), it also indicates that mediated transactions are not always better – at least in terms of maximizing the fit between individuals and firms.

Our paper has several limitations and boundary conditions that open up opportunities for future research. First, we only have data on realized job moves, rather than the processes that

placed people into particular jobs. Our theory emphasizes the way that search firms influence job moves, but it is important to note that the hiring decisions reflect the actions of both the search firms and their clients. Clients usually make the final decision about which candidate will be hired, and sometimes even shape the shortlist by proposing particular candidates. To the extent that these client decisions blur the distinction between search firm-mediated searches and client-led searches, they should make it more difficult to find the effects that we demonstrate. Nonetheless, data on shortlists for moves that took place with and without search firms would allow future research to more fully explore how search firms' and clients' actions shape horizontal mobility. Similarly, we assume that reduced horizontal mobility when using intermediaries reflects a reduced tendency for search firms to include people in different functions and industries in the final shortlist of candidates, rather than an unwillingness by candidates looking to move horizontally to be considered for the job. Our analyses account for the factors that are most likely to shape whether people are willing to respond to a search firm's overtures – notably whether they were actively searching for a job, and why they were moving – but, again, it would be valuable to have process data to fully unpack the actions of search firms and movers.

Second, we do not have random assignment of people to search firm-mediated versus non-mediated moves. As a consequence, our analyses are correlational, rather than demonstrating causality. Given the process by which search firms fill jobs, we do not believe that movers actively choose to move through search firms or not – rather, sometimes the moves that they try to make require them to go through search firms and at other times they do not. It is possible that people with weaker social networks may be more likely to use search firms to move jobs, but the strong correlation between the job's compensation and the use of search firms

suggests that most candidates would move jobs through search firms where feasible. As much as possible, we have sought to address mover heterogeneity by controlling for multiple aspects of movers' roles and human capital. Nonetheless, future research which directly measured movers' social networks would further increase confidence in our findings.

Third, we only use data on external moves, sidestepping the role of internal moves in advancing careers. Our theory and results therefore only speak to horizontal mobility conditional on people moving firms. Also, while our career survey offers detailed information on patterns of external mobility, it focuses on a particular subset of workers: those who earned an MBA from a prestigious business school. In light of our arguments about when employers use search firms, we expect that these highly paid respondents would be more likely to make mediated moves than would the broader population of workers. That said, we have no reason to believe that the association between mediated search and horizontal mobility would be much different in other groups. Outside the population of highly paid executives, workers may move with the help of labor market intermediaries other than search firms – for instance, contingent recruiters and online platforms. Studies using data from these intermediaries have illuminated employers' decision making about quality and fit in this context (Leung, 2014; Stanton & Thomas, 2016). Yet we know less about the mechanisms by which the platforms themselves may enable or constrain individuals' career mobility. Our work suggests that exploring this question would be a fruitful area for further research.

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Table 1a. Descriptive Statistics

Variable	N	Mean	D	Min.	Max.
1. Female	1,342	0.20	0.40	0	1
2. EMBA	1,342	0.31	0.46	0	1
3. Years of post-MBA experience	1,342	6.23	5.34	0	34
4. Years of post-MBA experience squared	1,342	67.32	114.11	0	1,156
5. Number of employment spells after graduation	1,342	2.15	1.15	1	6
New employment spell					
6. Heard about the job through a search firm	1,342	0.34	0.47	0	1
7. Heard about the job through network	1,342	0.47	0.50	0	1
8. Heard about the job through a job posting	1,342	0.16	0.37	0	1
9. Heard about the job through a recruitment event	1,342	0.01	0.12	0	1
10. Heard about the job through other methods	1,342	0.11	0.32	0	1
11. Number of subordinates (logged)	1,342	2.19	2.07	0	11.88
12. Compensation (logged)	1,342	11.41	0.97	0	15.13
13. Predicted Compensation (logged)	1,342	11.40	0.63	7.74	13.84
14. Organization size (logged)	1,342	7.86	3.08	1.61	11.92
15. Tenure within spell (weeks)	1,335	49.53	46.36	0	444
16. Weekly working hours	1,342	53.44	11.43	6	100
17. Growth in compensation	1,327	0.34	0.70	-6.70	12.10
18. Growth in the number of subordinates	1,305	0.62	1.37	-4.62	8.01
19. Number of promotions	880	0.72	1.06	0	7
Old employment spell					
20. Active search	1,342	0.73	0.44	0	1
21. Number of subordinates (logged)	1,313	1.80	1.86	0	9.39
22. Compensation (logged)	1,316	11.35	0.92	4.51	14.98
23. Organization size (logged)	1,342	8.23	2.95	1.61	11.92
24. Weekly working hours	1,342	54.39	12.39	10	120
25. Multiple search methods	1,342	0.09	0.28	0	1
26. Left the old employment spell involuntarily	1,342	0.32	0.47	0	1
Change from the old to new employment spell					
27. Change in function	1,342	0.54	0.50	0	1
28. Change in industry	1,308	0.55	0.50	0	1
29. Jaccard index for function	1,342	0.26	0.21	0.00	0.72
30. Jaccard index for industry	1,308	0.27	0.19	0.01	0.55

Note: Reported values were calculated at the individual-employment spell level. The sample includes 816 individuals with a varying number of employment spells.

Table 1b. Descriptive Statistics (continued)

Job industry (%)		Job function (%)			
Consulting and professional services	17.44	General management	18.85	Other finance	1.49
Technology/Media/Telecoms	17.36	Consulting	16.47	Trading	1.49
Other finance	14.68	Business development	10.36	Product development	1.49
Heavy industry	11.40	Marketing	6.18	Information technology	1.49
Investment management	10.13	Corporate finance	5.81	Corporate finance (Analysis/Treasury)	1.19
Investment banking	7.90	Sales	5.74	Human resource management	1.19
Government/Non-profit	6.33	Other	5.66	Other business services	1.04
Biotech/Health	5.59	Private equity/Venture capital	3.73	Research and development	0.89
Consumer	5.07	Investment banking	3.73	Financial advisor	0.67
Other services	4.10	Investment management	3.28	Risk Management/Compliance	0.67
		Financial research	2.46	Civil servant	0.67
		Accounting/Actuary/Auditor	2.16	Education/Training	0.52
		Operations/Logistics	2.01	Engineering	0.52
				Entrepreneur	0.22

Decade (%)		Country/region (%)			
2010s	43.37	United Kingdom	48.96	Middle East	2.91
2000s	37.56	United States	11.55	Canada	2.76
1990s	11.77	Europe (ex.UK)	11.55	Switzerland	1.94
1980s	5.37	Asia	7.97	France	1.86
1970s	1.94	America (ex.USA)	4.10	Germany	1.71
		Oceania	3.35	Africa	1.34

Note: The sample size for these variables is the same as for the variables in Table 1a (N = 1,342).

Table 1c. Correlations Table

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Female	1														
2. EMBA	-0.03	1													
3. Years of post-MBA experience	-0.02	-0.20***	1												
4. Years of post-MBA experience squared	-0.02	-0.14***	0.93***	1											
5. Number of employment spells after graduation	0.01	0.04	0.56***	0.48***	1										
6. Heard about the job through a search firm	-0.02	0.05*	0.02	0.02	0.03	1									
7. Heard about the job through network	-0.05*	-0.08***	0.08***	0.05*	0.03	-0.60***	1								
8. Heard about the job through a job posting	0.09***	0.08***	-0.05*	-0.04	0.01	-0.21***	-0.28***	1							
9. Heard about the job through a recruitment event	-0.01	0.09***	-0.09***	-0.05*	-0.08***	-0.07**	-0.07***	-0.05	1						
10. Heard about the job through other methods	0.06**	-0.06**	-0.08***	-0.06**	-0.05*	-0.22***	-0.16***	-0.10***	-0.02	1					
11. Number of subordinates (logged)	-0.14***	0.04	0.21***	0.20***	0.06**	0.12***	-0.01	-0.11***	-0.04	-0.05*	1				
12. Compensation (logged)	-0.05*	0.07**	0.23***	0.20***	0.11***	0.20***	0	-0.14***	-0.02	-0.15***	0.15***	1			
13. Predicted compensation (logged)	0.01	0.13***	0.17***	0.16***	0.13***	0.15***	0.03	-0.10***	-0.03	-0.14***	0.24***	0.65***	1		
14. Organization size (logged)	0.01	0.04	-0.12***	-0.11***	-0.09***	0.12***	-0.12***	0.03	0.04	0.01	0.12***	0.11***	0.17***	1	
15. Tenure within spell (weeks)	-0.11***	-0.05*	-0.03	-0.02	-0.11***	-0.01	-0.02	0.03	-0.02	0	0.29***	-0.17***	-0.19***	0.08***	1
16. Weekly working hours	-0.09***	-0.11***	-0.01	-0.03	0	0.08***	0.02	-0.17***	0.03	0.02	0.15***	0.24***	0.21***	0.04	-0.04
17. Growth in compensation	-0.08***	-0.04	-0.04	-0.01	-0.08***	-0.01	0.02	-0.06**	0	0.08***	0.22***	-0.34***	-0.11***	-0.01	0.52***
18. Growth in the number of subordinates	-0.06**	-0.03	-0.09***	-0.08***	-0.08***	0.03	-0.04	0.01	-0.01	0.03	0.51***	-0.12***	0.01	0.09***	0.33***
19. Number of promotions	-0.06*	-0.07*	-0.15***	-0.12***	-0.16***	0.03	-0.09***	0.05	0.01	0.05	0.27***	-0.20***	-0.17***	0.20***	0.65***
20. Active search	0.04	0.03	-0.06**	-0.05*	-0.02	-0.03	-0.07***	0.18***	0.01	0.01	-0.17***	-0.10***	-0.06**	0	-0.02
21. Number of subordinates of the old spell (logged)	-0.13***	0.13***	0.37***	0.36***	0.12***	0.06*	0.05*	-0.10***	-0.02	-0.10***	0.50***	0.16***	0.16***	-0.04	0.07**
22. Compensation of the old spell (logged)	-0.02	0.06**	0.32***	0.29***	0.16***	0.14***	0.06**	-0.16***	-0.04	-0.14***	0.09***	0.70***	0.65***	-0.01	-0.17***
23. Organization size of the old spell (logged)	-0.01	0.03	-0.08***	-0.08***	-0.19***	0.08***	-0.04	-0.02	0	-0.03	0.04	0.06**	0.09***	0.30***	0
24. Weekly working hours of the old spell	-0.08***	-0.24***	0.04	0.02	-0.04	0.08***	0.07**	-0.17***	-0.07***	-0.01	0.06**	0.22***	0.22***	0.02	-0.09***
25. Multiple search methods	0.06**	0	-0.02	-0.02	0.02	0.06**	0.16***	0.26***	0.08***	0.29***	-0.04	-0.01	0.01	0.04	-0.02
26. Left the old employment spell involuntarily	-0.06**	-0.03	0.10***	0.08***	0.04	-0.07**	0.06**	0.03	-0.07**	0.03	-0.05*	-0.03	-0.02	-0.06**	-0.03
27. Change in function	0.03	0.03	-0.11***	-0.09***	-0.08***	-0.11***	0.04	0.08***	0.07**	0.02	-0.07**	-0.14***	-0.09***	0.02	0.03
28. Change in industry	0.05*	-0.04	-0.08***	-0.05	-0.07***	-0.06**	0.03	0	0.07**	0.01	-0.01	-0.10***	-0.07**	-0.01	0.04
29. Jaccard index for function	-0.03	-0.07**	0.11***	0.09***	0.08***	0.14***	-0.04	-0.10***	-0.08***	-0.02	0.10***	0.17***	0.14***	0	-0.03
30. Jaccard index for industry	-0.06**	0.02	0.06**	0.03	0.05*	0.08***	-0.02	-0.02	-0.08***	-0.03	0.02	0.13***	0.11***	0.05	-0.03

Table 1c. Correlations Table (continued)

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
16. Weekly working hours	1														
17. Growth in compensation	0.04	1													
18. Growth in the number of subordinates	0.04	0.31***	1												
19. Number of promotions	0.03	0.43***	0.48***	1											
20. Active search	-0.07***	-0.08***	0	-0.03	1										
21. Number of subordinates of the old spell (logged)	0.04	0.06**	0.01	0	-0.10***	1									
22. Compensation of the old spell (logged)	0.16***	-0.12***	-0.14***	-0.22***	-0.09***	0.22***	1								
23. Organization size of the old spell (logged)	0.04	0.01	0.06**	0.08**	-0.03	0.03	0.07**	1							
24. Weekly working hours of the old spell	0.51***	-0.03	-0.01	-0.04	-0.08***	0.02	0.29***	0.03	1						
25. Multiple search methods	-0.02	0.02	0.02	0.02	0.06**	-0.06**	-0.02	-0.01	0	1					
26. Left the old employment spell involuntarily	-0.03	-0.04	-0.02	-0.06*	0.24***	0.04	0.06**	-0.09***	0.01	0.04	1				
27. Change in function	-0.05	0.04	0.04	0.07**	0.04	-0.06**	-0.11***	0.05*	0.01	0.02	0	1			
28. Change in industry	-0.04	-0.01	0.06**	0.05	0.08***	-0.04	-0.10***	-0.01	0.04	-0.02	-0.01	0.37***	1		
29. Jaccard index for function	0.07**	-0.04	-0.03	-0.06*	-0.07***	0.08***	0.16***	-0.04	0.09***	-0.02	-0.01	-0.92***	-0.32***	1	
30. Jaccard index for industry	0.05*	0.01	-0.04	-0.05	-0.08***	0.02	0.13***	0.04	0.03	0.02	0.01	-0.34***	-0.94***	0.34***	1

*p < 0.10, **p < .05, ***p < 0.01

Table 2a. Search firm mediated moves and horizontal mobility

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Change in function		**Jaccard index - Function**	**Change in industry**		**Jaccard index - Industry**
Heard about the job through a search firm	-0.1061***	-0.0983***	0.0475***	-0.0664**	-0.0828**	0.0261**
	(0.0304)	(0.0325)	(0.0121)	(0.0315)	(0.0342)	(0.0119)
Heard about the job through a job posting		0.0589			-0.0624	
		(0.0444)			(0.0443)	
Heard about the job through a recruitment event		0.2821***			0.2584***	
		(0.0992)			(0.0897)	
Heard about the job through other methods		-0.0403			-0.0723	
		(0.0515)			(0.0500)	
EMBA	0.0242	0.0188	-0.0248	-0.0619	-0.0650	0.0130
	(0.0402)	(0.0403)	(0.0157)	(0.0401)	(0.0402)	(0.0150)
Female	0.0337	0.0355	-0.0168	0.0582	0.0643*	-0.0242*
	(0.0391)	(0.0390)	(0.0157)	(0.0380)	(0.0379)	(0.0142)
Active search	0.0438	0.0362	-0.0215	0.0954***	0.1013***	-0.0268**
	(0.0332)	(0.0333)	(0.0132)	(0.0331)	(0.0331)	(0.0123)
Predicted compensation (logged)	-0.0751	-0.0744	0.0492	-0.0843	-0.1014	0.0548
	(0.0994)	(0.1001)	(0.0383)	(0.1010)	(0.1010)	(0.0389)
Years of post-MBA experience	-0.0107	-0.0091	0.0017	-0.0162*	-0.0152	0.0070**
	(0.0082)	(0.0081)	(0.0033)	(0.0095)	(0.0094)	(0.0033)
Years of post-MBA experience squared	0.0003	0.0003	-0.0000	0.0006	0.0005	-0.0003**
	(0.0003)	(0.0003)	(0.0001)	(0.0004)	(0.0004)	(0.0001)
Number of employment spells after graduation	-0.0112	-0.0121	0.0047	-0.0165	-0.0172	0.0054
	(0.0169)	(0.0167)	(0.0071)	(0.0180)	(0.0180)	(0.0072)
Weekly working hours	-0.0009	-0.0009	-0.0006	-0.0022	-0.0023	0.0001
	(0.0015)	(0.0015)	(0.0006)	(0.0015)	(0.0015)	(0.0006)
Weekly working hours of old employment spell	0.0028**	0.0032**	0.0005	0.0031**	0.0031**	0.0001
	(0.0013)	(0.0013)	(0.0005)	(0.0013)	(0.0013)	(0.0005)
Tenure of old employment spell	-0.0002	-0.0002	0.0001	-0.0003	-0.0004	0.0001
	(0.0004)	(0.0004)	(0.0002)	(0.0004)	(0.0004)	(0.0002)
Left the old employment spell involuntarily	0.0087	0.0137	-0.0079	-0.0395	-0.0350	0.0090
	(0.0318)	(0.0317)	(0.0129)	(0.0315)	(0.0316)	(0.0119)
Multiple search methods	0.0486	0.0341	-0.0218	-0.0373	-0.0003	0.0103
	(0.0523)	(0.0592)	(0.0210)	(0.0481)	(0.0554)	(0.0184)
Number of subordinates of new employment spell (logged)	-0.0048	-0.0042	0.0035	0.0190	0.0211	-0.0080
	(0.0138)	(0.0138)	(0.0050)	(0.0146)	(0.0146)	(0.0056)
Organization size of new employment spell (logged)	0.0089	0.0081	-0.0030	0.0034	0.0040	-0.0007
	(0.0060)	(0.0061)	(0.0024)	(0.0059)	(0.0060)	(0.0022)
Organization size of old employment spell (logged)	0.0105**	0.0109**	-0.0048**	-0.0004	-0.0000	0.0010
	(0.0050)	(0.0050)	(0.0020)	(0.0051)	(0.0051)	(0.0019)
Function dummies	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.8302	0.7934	-0.0685	1.2765	1.4838	-0.3451
	(1.0800)	(1.0896)	(0.4187)	(1.1147)	(1.1145)	(0.4260)
Observations	1,342	1,342	1,342	1,320	1,320	1,320
R-squared	0.1169	0.1228	0.1941	0.1283	0.1347	0.1594

Notes: All models are linear probability models and include controls for year/decade and country/region. The lower number of observations in Models 4–6 is due to missing information on industry. Standard errors (in parentheses) are clustered by individual. *$p < 0.10$, **$p < .05$, ***$p < 0.01$

Table 2b. Search firm mediated moves and horizontal mobility using CEM

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Change in function		**Jaccard index - Function**	**Change in industry**		**Jaccard index - Industry**
Heard about the job through a search firm	-0.1606***	-0.1926***	0.0737***	-0.0969*	-0.1079	0.0383*
	(0.0570)	(0.0661)	(0.0232)	(0.0584)	(0.0658)	(0.0217)
Heard about the job through a job posting		0.0574			0.1018	
		(0.1092)			(0.1115)	
Heard about the job through a recruitment event		0.0920			0.4135***	
		(0.2600)			(0.1447)	
Heard about the job through other methods		-0.2061**			-0.1577	
		(0.1045)			(0.1057)	
EMBA	0.0446	0.0402	-0.0406	0.0149	-0.0008	-0.0117
	(0.0780)	(0.0776)	(0.0320)	(0.0771)	(0.0781)	(0.0292)
Female	-0.0446	-0.0343	0.0017	0.0254	0.0387	-0.0167
	(0.0803)	(0.0814)	(0.0327)	(0.0758)	(0.0765)	(0.0279)
Active search	0.1128	0.1069	-0.0481*	0.0386	0.0363	-0.0131
	(0.0720)	(0.0713)	(0.0285)	(0.0789)	(0.0783)	(0.0297)
Predicted compensation (logged)	0.5394	0.4742	-0.1860	0.3669	0.3194	-0.0656
	(0.4148)	(0.4075)	(0.1648)	(0.4866)	(0.4692)	(0.1767)
Years of post-MBA experience	-0.0258	-0.0287*	0.0090	-0.0159	-0.0133	0.0069
	(0.0167)	(0.0169)	(0.0069)	(0.0174)	(0.0176)	(0.0062)
Years of post-MBA experience squared	0.0005	0.0007	-0.0002	0.0002	0.0001	-0.0002
	(0.0007)	(0.0007)	(0.0003)	(0.0008)	(0.0008)	(0.0003)
Number of employment spells after graduation	0.0083	0.0095	0.0027	-0.0369	-0.0368	0.0159
	(0.0329)	(0.0326)	(0.0142)	(0.0334)	(0.0339)	(0.0131)
Weekly working hours	0.0001	0.0004	-0.0006	0.0013	0.0013	-0.0013
	(0.0035)	(0.0035)	(0.0014)	(0.0035)	(0.0035)	(0.0013)
Weekly working hours of old employment spell	0.0010	0.0006	0.0011	-0.0024	-0.0024	0.0018
	(0.0035)	(0.0035)	(0.0014)	(0.0033)	(0.0034)	(0.0012)
Tenure of old employment spell	0.0001	-0.0000	0.0000	-0.0006	-0.0008	0.0001
	(0.0008)	(0.0009)	(0.0003)	(0.0009)	(0.0009)	(0.0003)
Left the old employment spell involuntarily	0.0849	0.0929	-0.0407	0.0061	0.0152	-0.0003
	(0.0626)	(0.0624)	(0.0259)	(0.0659)	(0.0658)	(0.0248)
Multiple search methods	0.0009	0.0633	-0.0039	-0.0394	-0.0044	0.0066
	(0.0966)	(0.1166)	(0.0392)	(0.0909)	(0.1097)	(0.0343)
Number of subordinates of new employment spell (logged)	-0.1007*	-0.0949	0.0428*	-0.0693	-0.0617	0.0174
	(0.0599)	(0.0583)	(0.0240)	(0.0680)	(0.0650)	(0.0249)
Organization size of new employment spell (logged)	0.0174	0.0188	-0.0051	0.0115	0.0114	-0.0046
	(0.0164)	(0.0164)	(0.0066)	(0.0185)	(0.0183)	(0.0067)
Organization size of old employment spell (logged)	0.0278***	0.0282***	-0.0109**	0.0136	0.0147	-0.0011
	(0.0101)	(0.0100)	(0.0043)	(0.0101)	(0.0100)	(0.0038)
Function dummies	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes
Constant	-6.9216	-6.1102	3.0211	-3.7796	-3.2141	0.9654
	(4.9078)	(4.8357)	(1.9510)	(5.7133)	(5.5296)	(2.0752)
Observations	399	399	399	392	392	392
R-squared	0.2625	0.2767	0.3269	0.2269	0.2472	0.2694

Notes: All models are linear probability models and include controls for year/decade and country/region. The lower number of observations in Models 4–6 is due to missing information on industry. Standard errors (in parentheses) are clustered by individual. *$p < 0.10$, **$p < .05$, ***$p < 0.01$

Table 3. Search firm mediated moves and horizontal mobility using a bivariate probit model

	Model 1		Model 2		Model 3		Model 4	
	Use of search firm	Change in function	Use of search firm	Change in industry	Use of search firm	Change in function	Use of search firm	Change in industry
Heard about the job through a search firm		-1.3846***		-1.4686***		-1.2714***		-0.4650
		(0.5071)		(0.3334)		(0.2960)		(1.8506)
Search firm ratio	0.9536*		1.0991*		1.0319**		1.2601*	
	(0.5225)		(0.5945)		(0.4603)		(0.7586)	
Organization size of new employment spell (logged)	0.0284**	0.0247**	0.0271*	0.0205	0.0359**	0.0271**	0.0355	
	(0.0126)	(0.0121)	(0.0140)	(0.0125)	(0.0117)	(0.0124)	(0.0220)	
Number of subordinates of new employment spell (logged)	0.0521***	0.0083	0.0543***	0.0297*	0.0520**		0.0535***	0.0042
	(0.0179)	(0.0239)	(0.0178)	(0.0178)	(0.0166)		(0.0182)	(0.0429)
Predicted compensation	0.2440***	0.0100	0.2336***	0.1173*	0.2502***		0.2476***	0.0290
	(0.0625)	(0.0910)	(0.0652)	(0.0712)	(0.0582)		(0.0623)	(0.1842)
Organization size of old employment spell (logged)	0.0202	0.0310***	0.0139	0.0153		0.0230**		
	(0.0125)	(0.0115)	(0.0136)	(0.0116)		(0.0111)		
Active search		0.0855		0.1390				
		(0.0658)		(0.0898)				
Proportion of moves into function coming from different function	-0.9022**	1.3364*			-0.3432	1.6428***		
	(0.4218)	(0.7051)			(0.3483)	(0.4307)		
Proportion of moves into industry coming from different function	-0.2217	1.5971***				1.7827***		
	(0.3505)	(0.5571)				(0.4074)		
Proportion of moves into function coming from different industry			-0.2585	1.7860***				2.5010***
			(0.3570)	(0.6402)				(0.5581)
Proportion of moves into industry coming from different industry			0.2060	2.0264***				2.5379***
			(0.3657)	(0.5649)				(0.5353)
Constant	-3.3026***	-1.6991**	-3.7380***	-3.2900***	-3.7058***	-1.7580***	-3.9094***	-2.7958**
	(0.7915)	(0.7470)	(0.9248)	(0.6971)	(0.7252)	(0.4212)	(0.6994)	(1.2902)
ρ	0.7363		0.8696		0.6539**		0.2018	
	(0.3820)		(0.2845)		(0.2113)		(1.1483)	
Wald Test of $\rho=0$	1.2759		1.3017		4.4874		0.0292	
p-value for $\rho=0$	0.2587		0.2539		0.0341		0.8643	
χ^2	385.24***		591.27***		288.08***		172.61***	
Log likelihood	-1690.7022		-1635.5611		-1695.0244		-1641.5489	
Observations	1,337		1,303		1,337		1,303	

Notes: Models 1 and 2 include the same variables in both stages, with the exception of *Search firm ratio*. Models 3 and 4 include variables that are significant within each stage. Standard errors (in parentheses) are clustered by individual. *$p < 0.10$, **$p < .05$, ***$p < 0.01$

Table 4. Search firm mediated moves and outcomes in the new employment spell

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
	Voluntary turnover (Cox)		Involuntary turnover (Cox)		Growth in compensation (OLS)		Growth in number of subordinates (OLS)		Number of promotions (Poisson)	
Heard about the job through a search firm	0.1113	0.0996	0.2745**	0.2519**	0.0566	0.0522	-0.0252	-0.0357	-0.0737	-0.0832
	(0.1173)	(0.1187)	(0.1251)	(0.1272)	(0.0353)	(0.0370)	(0.0683)	(0.0698)	(0.0856)	(0.0888)
Change in function		0.0017		-0.1257		0.0315		0.0282		0.0803
		(0.1106)		(0.1260)		(0.0317)		(0.0699)		(0.0884)
Change in industry		-0.2932**		0.0610		-0.0975**		0.0653		0.0712
		(0.1208)		(0.1288)		(0.0410)		(0.0722)		(0.0923)
EMBA	0.0101	-0.0790	0.1380	0.1240	-0.0243	-0.0251	-0.1541*	-0.1312	-0.0469	-0.0559
	(0.1361)	(0.1387)	(0.1490)	(0.1567)	(0.0398)	(0.0390)	(0.0837)	(0.0855)	(0.1187)	(0.1222)
Female	0.2163*	0.2933**	-0.0169	-0.0335	-0.0534	-0.0446	-0.0767	-0.0751	-0.0199	-0.0635
	(0.1187)	(0.1230)	(0.1564)	(0.1598)	(0.0371)	(0.0379)	(0.0693)	(0.0716)	(0.1056)	(0.1092)
Active search	0.0967	0.1114	0.0960	0.1074	-0.1338***	-0.1246**	0.2328***	0.2229***	0.0377	0.0336
	(0.1109)	(0.1124)	(0.1311)	(0.1348)	(0.0515)	(0.0502)	(0.0740)	(0.0761)	(0.0929)	(0.0938)
Years of post-MBA experience	-0.1015***	-0.1175***	0.0168	0.0063	-0.0246	-0.0274	-0.0386**	-0.0312	-0.0358	-0.0378
	(0.0276)	(0.0279)	(0.0383)	(0.0402)	(0.0172)	(0.0183)	(0.0192)	(0.0197)	(0.0297)	(0.0303)
Years of post-MBA experience squared	0.0023**	0.0028**	-0.0008	-0.0004	0.0012	0.0014	0.0007	0.0005	0.0008	0.0008
	(0.0011)	(0.0012)	(0.0015)	(0.0017)	(0.0008)	(0.0009)	(0.0007)	(0.0008)	(0.0012)	(0.0012)
Number of employment spells after graduation	0.0992	0.1326*	0.1230	0.1239	0.0162	0.0120	-0.0390	-0.0676	-0.0526	-0.0365
	(0.0639)	(0.0719)	(0.0748)	(0.0855)	(0.0205)	(0.0230)	(0.0453)	(0.0506)	(0.0588)	(0.0676)
Weekly working hours	0.0098**	0.0102**	0.0150***	0.0158***	0.0059***	0.0063***	-0.0023	-0.0024	0.0037	0.0042
	(0.0049)	(0.0050)	(0.0054)	(0.0056)	(0.0021)	(0.0021)	(0.0028)	(0.0028)	(0.0034)	(0.0035)
Tenure of new employment spell					0.0074***	0.0075***	0.0044***	0.0041***	0.0100***	0.0099***
					(0.0005)	(0.0006)	(0.0010)	(0.0010)	(0.0009)	(0.0009)
Tenure of old employment spell	0.0009	0.0013	0.0005	0.0004	0.0011	0.0010	-0.0021**	-0.0024**	-0.0020	-0.0016
	(0.0014)	(0.0014)	(0.0017)	(0.0017)	(0.0009)	(0.0009)	(0.0010)	(0.0011)	(0.0014)	(0.0014)
Left the old employment spell involuntarily	-0.0238	0.0179	0.2581**	0.2839**	0.0007	-0.0020	0.0485	0.0327	-0.1281	-0.1413
	(0.1096)	(0.1124)	(0.1280)	(0.1316)	(0.0319)	(0.0330)	(0.0706)	(0.0717)	(0.0936)	(0.0968)
Multiple search methods	-0.3130*	-0.3235*	-0.0228	0.0083	0.0343	0.0332	0.1336	0.1320	0.1002	0.1088
	(0.1834)	(0.1849)	(0.1849)	(0.1898)	(0.0594)	(0.0596)	(0.0900)	(0.0912)	(0.1280)	(0.1243)
Compensation of new employment spell (logged)	0.0684	0.0656	0.0991	0.1056	-0.3683***	-0.3724***	-0.2497***	-0.2404***	-0.0787	-0.0734
	(0.0638)	(0.0654)	(0.0700)	(0.0718)	(0.1386)	(0.1405)	(0.0577)	(0.0556)	(0.0656)	(0.0661)
Number of subordinates of new employment spell (logged)	-0.1504***	-0.1397***	-0.1887***	-0.1874***	0.0615***	0.0634***	0.4529***	0.4493***	0.1242***	0.1225***
	(0.0319)	(0.0321)	(0.0346)	(0.0361)	(0.0111)	(0.0112)	(0.0276)	(0.0275)	(0.0215)	(0.0218)
Organization size of new employment spell (logged)	-0.0292	-0.0269	-0.0972***	-0.0954***	-0.0038	-0.0038	-0.0134	-0.0084	0.0599***	0.0577***
	(0.0189)	(0.0199)	(0.0230)	(0.0235)	(0.0048)	(0.0050)	(0.0110)	(0.0111)	(0.0154)	(0.0160)
Function dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant					3.8844***	3.9448***	2.8440***	2.7577***	-0.4103	-0.5391
					(1.4682)	(1.4938)	(0.7173)	(0.7099)	(0.7598)	(0.7640)
Observations	1,374	1,325	1,374	1,325	1,367	1,319	1,345	1,298	914	883
Number of individuals	830	820	830	820	825	815	821	812	569	558
R-squared	N/A	N/A	N/A	N/A	0.4616	0.4650	0.4549	0.4581	N/A	N/A
Wald chi-squared	169.18***	180.98***	833.66***	825.73***	N/A	N/A	N/A	N/A	1776.37***	1578.37***

Notes: All models include controls for year/decade and country/region. All models are run on all available observations in our data (instead of on the sample we use for the main analyses). The numbers of observations vary across models due to missing information on the dependent variables. Standard errors (in parentheses) are clustered by individual. *$p < 0.10$, **$p < .05$, ***$p < 0.01$