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Big Fish in Small Ponds: Human Capital Migration and the Rise of Boutique Banks

Janet Gao,[a] Wenyu Wang,[b] Xiaoyun Yu[c,*]

[a] McDonough School of Business, Georgetown University, Washington, District of Columbia 20057; [b] Kelley School of Business, Indiana University, Bloomington, Indiana 47401; [c] Shanghai Advanced Institute of Finance, Shanghai Jiao Tong University, Shanghai 200052, China
*Corresponding author

Contact: janet.gao@georgetown.edu, https://orcid.org/0000-0001-9960-7053 (JG); wenywang@indiana.edu, https://orcid.org/0000-0003-0587-3655 (WW); xyyu@saif.sjtu.edu.cn, https://orcid.org/0000-0002-8601-4651 (XY)

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Abstract. We study the comparative advantage of firms with focused and multidivisional organizational forms at attracting valuable human capital. Using the merger and acquisition (M&A) advisory industry as a laboratory, we show that high-performing individuals are more likely to migrate to boutique (focused) banks, especially those who are still on the upward trajectory of their career. Such migration is amplified by the cross-subsidization inside bulge bracket (multidivisional) firms, proxied by poor performance of their non-M&A departments. The transition of skilled labor improves the performance of the boutique sector, potentially contributing to the rise of boutiques over the past two decades. Moreover, M&A deal outcomes differ when having boutique advisors. Our findings suggest that corporate organizational structure and labor migration can jointly shape industry dynamics.

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1. Introduction

The coexistence of large, multidivisional firms with small, focused ones and the competition for talent and resources between the two sectors are widespread across industries. Nevertheless, we still have a limited understanding as to what extent one organizational form offers advantages over the other in attracting and retaining skilled human capital. On the one hand, by allocating workers more efficiently across divisions, multidivisional firms improve labor productivity and help workers build their human capital (Tate and Yang 2015). They also offer higher job security (Faccio and O'Brien 2021). These seem to suggest that multidivisional firms may have a competitive edge over their focused counterparts in the labor market. On the other hand, the multidivisional structure generates interdepartmental compensation spillover that disincentivizes skilled labor (Duchin et al. 2017, Silva 2021). This effect could render multidivisional firms less attractive for valuable human capital, propelling their migration to more focused rivals and ultimately shifting the competitive landscape of the industry. While previous studies have examined human capital deployment by large, multidivisional firms, less is known regarding the role of organizational structure in shaping human capital migration and industry dynamics.

In this paper, we ask which corporate organizational form—multidivisional or focused—appeals most to valuable human capital, and to what extent this labor market effect shapes the structure of the industry. Examining the relationship between corporate organizational structure and labor market dynamics is empirically challenging because it is difficult to separate physical capital from human capital in industrial firms, and economic inferences can be confounded by factors such as heterogeneity in worker tasks and technology across firms. We surmount these challenges by employing the merger and acquisition (M&A) advisory industry as a laboratory and exploiting a novel, granular data set that traces the migration path of high-quality human capital.

Our research setting offers several unique and important advantages. First, the M&A advisory industry primarily relies on human capital as production input and requires little physical capital. Importantly, the tasks they perform—deal advising—are relatively homogeneous, easily comparable and directly measurable across workers. Second, the M&A industry has

long embraced both organizational forms—large, diversified firms providing a full spectrum of services (i.e., bulge bracket banks) and small firms focusing mostly on advising M&A deals (i.e., boutique banks), allowing us to witness how they wax and wane over time. Last, we compile a large-scale data set linking the career paths of individual investment bankers to the value of their human capital and the market share of their employers.

We first document a prominent expansion of the boutique sector in both the labor and product markets over the past two decades. The percentage of skilled investment bankers employed in the boutique sector has increased from about 20% in the early 2000s to 40% by 2018. Concurrently, boutique banks advise a growing share of M&A deals, from 20% in the early 2000s to over 50% by 2018, equating to $1.37 trillion in deal value.[1] Such changes in the product market share also manifest in the number of industries covered by each sector. By the end of 2018, many industries that were previously exclusively covered by the bulge bracket sector are dominated by boutique advisors.

While many factors may have contributed to this changing industry dynamic, such as increasing regulatory oversight and awareness of conflicts of interest inherent in the full-service banks' business model, in this study we focus on the role of cross-sector migration of valuable human capital. We postulate that the simple organizational structure of boutique banks allows them to attract high-performing bankers and the resulting relocation of skilled labor helps boost the boutique sector's market share. By contrast, the multidivisional structure of bulge bracket banks facilitates the spillover of poor performance in non-M&A divisions to the M&A division, influencing the compensation and incentives of its M&A bankers (Morrison and Wilhelm 2007). The weakened link between compensation and banker performance in bulge bracket firms is frequently discussed by practitioners.[2] While this spillover effect may even out for the average employee, it can be discouraging for top performers, whose compensation is more sensitive to the upside potential but has a limited exposure to the downside risk. We thus expect high-performing individuals to be more likely to migrate to boutique banks than low-performing ones. The exodus of skilled bankers can engender not only a loss of clients and business opportunities, but also a "brain drain" of other valuable employees, both of which could erode the market share of the bulge bracket sector.

We explore this rationale with several analyses. To start, we compare the job transition patterns between high- and low-performing M&A bankers to examine which industry sector appeals more to skilled bankers. We find that, compared with others working in the same firm at the same time, high-performing bankers are more likely to leave their current employers and join or form a boutique bank. A one-standard-deviation increase in a banker's performance, captured by his past M&A deal volume, is associated with a 10% higher likelihood that he joins a boutique bank. By contrast, these skilled individuals are less likely to move to a bulge bracket bank. Importantly, such patterns are concentrated among productive junior bankers, as past high achievers with high seniority rarely make such job transitions. Arguably, unlike their more senior counterparts, less senior bankers are more mobile and constantly seek employers to derive the highest benefits of their human capital.[3] Interestingly, boutique advisors not only attract top performers from bulge bracket banks, but also appeal more to skilled individuals from outside the industry than their bulge bracket rivals. While a significant fraction of bankers leaving their bulge bracket employers choose to migrate to the boutique sector, bankers in the boutique sector, on the other hand, are more likely to stay within the sector.

We next investigate to what extent the migration of valuable human capital to the boutique sector, aggravated by the cross-subsidization inside multidivisional banks, contributes to the changing competitive structure of the industry. We first verify that high-performing M&A bankers are more likely to switch to a boutique bank when the non-M&A divisions of their bulge bracket employers perform poorly, as compared with periods of good non-M&A performance. We then evaluate how the market share of boutique banks changes when the need for cross-subsidization in bulge bracket banks is elevated, which exogenously affects the supply of skilled M&A bankers to the boutique sector. In doing so, we construct a "shift-share" instrument that calculates the weighted average of non-M&A performance in the bulge bracket sector, with the weights being the percentage of high-performing bankers employed by each bulge bracket bank. We compute this instrument separately for each industry of M&A clients, leveraging on the fact that the *same* bulge bracket bank employs different fractions of skilled bankers specializing in different industries. The intuition is the follows: When a bulge bracket bank that employs a large fraction of M&A bankers specializing in an industry experiences poor performance in its non-M&A divisions ("treated industry"), it affects the skilled labor supply to boutique banks in this industry more than in other industries ("control industries"). Our empirical approach then compares performance across industries covered by the *same* boutique bank in the same year that differ only in their exposure to banker exodus from bulge brackets.

We find that when bulge bracket banks with larger industry-specific labor shares experience poor non-M&A performance, boutique banks advise more M&A deals and seize larger market shares in subsequent

years in that treated industry than in control industries. Boutique advisors are also more likely to expand their coverage to the treated industry if they have never advised any deals in that industry previously.

To further sharpen the identification, we exploit the passage of the 2012 Jumpstart Our Business Startups (JOBS) Act as an exogenous shock to the non-M&A performance of certain bulge bracket banks. Because the JOBS Act disproportionally increased initial public offering (IPO) activities in biotech and pharmaceutical industries relative to other industries (Dambra et al. 2015), bulge bracket banks that underwrite IPOs in these two industries ("exposed banks") should benefit more. Put differently, the rising IPO underwriting revenue induced by this regulatory change should help the exposed banks retain human capital in their M&A advisory departments to a greater extent in comparison with those having no prior exposure in underwriting IPOs in these two industries. Accordingly, we find that following the JOBS Act, boutique advisors experience slower growth and market share expansion in industries dominated by exposed bulge bracket banks. They are also less likely to enter those industries. Finally, we consider the "bundled-client" argument that the M&A division of bulge bracket banks may benefit from the service synergies or client resources of other divisions. This argument predicts a significant correlation between the M&A and non-M&A deal volume of a bank for the same client industry. We find no evidence for such a correlation inside bulge bracket banks.

When exploring potential channels through which skilled labor reallocation shapes the structure of the M&A advisory industry, we find evidence that both former M&A clients and colleagues "follow" the migration of high-performing bankers to boutique firms. The brain drain of fellow colleagues and the loss of client revenues are likely to amplify the changes in bank performance and, ultimately, aggregate to a shift in the competitive landscape of the industry. Overall, our results are consistent with the notion that the multidivisional structure of bulge bracket banks presents a friction that hinders their ability to attract and retain valuable human capital. The increasing migration of skilled bankers to firms with a focused and simple organizational form may thus serve as one of the important factors contributing to the rise of the boutiques in the M&A advisory industry.

In the last step of our analysis, we investigate how the M&A market characteristics change along with the rise of boutique advisors. While boutique advisors on average do not outperform their bulge bracket counterparts, they shorten deal duration, increase deal success rate, and create more value for their acquirer clients in large M&A deals that demand more sophisticated expertise. There is also evidence that bankers' human capital development and career progression vary between the two sectors. When working for boutique advisors, high-performing individuals not only are more productive but also broaden their skill set. Bankers are more likely to be promoted once they join boutique advisors, especially if they migrate from the bulge bracket sector.

We acknowledge that many factors can explain the rise of boutique banks, including the increasing awareness of conflicts of interest inside bulge bracket banks brought about by the Global Settlement, firms' demand for more objective advice, and regulatory constraints imposed by the Dodd–Frank Act on large banks' operations and compensation. As such, the role of corporate organizational structure on human capital migration that we highlight offers a partial explanation for the competitive dynamics in the M&A advisory industry.

Our study contributes to several strands of literature. First, it is related to the literature documenting the cross-subsidization in internal capital and labor markets within diversified firms (e.g., Lamont 1997, Shin and Stulz 1998, Rajan et al. 2000, Maksimovic and Phillips 2007, Xuan 2009, Ozbas and Scharfstein 2010, Silva 2021). We provide novel evidence that the cross-subsidization inside multidivisional firms can be unappealing to high-skill workers, leading to cross-sector reallocation of human capital. Our study thus complements this line of literature by identifying a new channel through which corporate organizational structure and labor migration jointly shape industry dynamics.[4]

Our findings also add to prior studies on the value creation by M&A advisory firms (e.g., Rau 2000, Kale et al. 2003, Bao and Edmans 2011, Golubov et al. 2012, Song et al. 2013) and by individual M&A bankers with greater deal experience (Bradley et al. 2011, Chemmanur et al. 2019). We contribute to this literature by showing that, as high-skill bankers gradually migrate to boutique firms, they can potentially change the types and outcomes of deals being made in the M&A market.

Last, our paper is related to a burgeoning literature examining the real effects of human capital reallocation. Prior studies establish that skilled individuals bring significant changes in corporate policies, firm performance, innovation, and entrepreneurship when transitioning across firms and geographical regions (e.g., Giannetti et al. 2015, Babina 2020, Baghai et al. 2021, Chen et al. 2021, Jeffers 2024). Others highlight the role of human capital allocation in shaping financial sector development (e.g., Aggarwal et al. 2011, Levine et al. 2020). For instance, migrant remittances boost banking sector growth in developing economies. Cross-country forced labor departure breeds local distrust of formal financial institutions, hindering the adoption of modern household finance. Different from these studies, we focus on to what extent corporate organizational

structure triggers human capital migration, which in turn helps shape industry dynamics. In this respect, we are the first to document a declining industry concentration, which stands in contrast with the global rise of industry concentration among nonfinancial firms (Decker et al. 2016, Grullon et al. 2019, De Loecker et al. 2020). We provide novel evidence that cross-sector talent reallocation potentially contributes to this changing trend, and that the two industry sectors differ in M&A deal outcomes and in fostering human capital development.

The rest of this paper is organized as follows. Section 2 introduces institutional background and describes the data. Section 3 presents patterns in banker career transition. Section 4 explores the institutional friction pertinent to multidivisional firms that drives cross-sector migration of skilled bankers and reports the resulting changes in bank performance and industry dynamics. Section 5 compares the real effects between the two types of advisors. Section 6 concludes. Variable definitions are in the internet appendix, Section IA.1. Internet Appendix Sections IA.2 through IA.12 present additional discussions and test results.

2. Institutional Background, Data, and Stylized Fact

2.1. Bulge Bracket vs. Boutique Investment Banks

Since Hayes (1971), both academic literature and financial press have documented a two-tiered power structure in the investment banking industry (e.g., Tinic 1988, Carter and Manaster 1990, Carter et al. 1998, Fang 2005). This rigid hierarchy is often reflected in "tombstone announcements." On one end are the large, bulge bracket banks serving a global base of premier clients such as governments, large corporations, and prominent institutions. They offer a broad array of financial products and provide a full range of services, including advisory and underwriting services, financial research, market making, sales and trading services, and asset management. They are often primary dealers of U.S. treasuries. On the other end are boutique advisors, which are much smaller in size, often focusing on a specific aspect of investment banking services—such as advising M&A deals—and operating in a specific region or country.

To define bulge bracket and boutique banks for our analysis, we follow the institutional knowledge and consensus of the professionals in the investment banking industry and rely on the classification offered by Wall Street Oasis (WSO). Wall Street Oasis is a leading job search forum for positions in many fields of the financial services industry, including investment banking, private equity, and hedge funds, as its classifications aggregate the professional views from bankers in the industry. It identifies 10 investment banks (including Goldman Sachs, Bank of America Merill Lynch, Citi, and Morgan Stanley) as bulge bracket, and classifies 154 banks (including Centerview, Evercore, Greenhill, Moelis & Co., and Perella Weinberg) as boutique. If an affiliated investment bank does not fit as a boutique or a bulge bracket bank, we classify it as "other." The internet appendix, Section IA.2, provides a full list of bulge brackets banks and a list of top 20 boutique banks by deal volume in our sample. These boutiques are generally much larger and more notable than a typical sample boutique firm, which tends to be small and focused.

While people mostly agree upon which banks belong to bulge brackets, there is far less clear consensus as what constitutes as a boutique.[5] In the context of our analysis, a key distinction between the two is that boutiques focus on advising M&A deals, whereas bulge brackets also engage heavily in many other types of investment banking business, a feature that is pertinent to the institutional friction that we explore in the paper. In the internet appendix, Section IA.3, we consider an alternative classification of boutique banks as those that do not have substantial non-M&A activities such as IPOs, Seasoned Equity Offerings (SEOs), bonds, and loan underwriting. We find that the WSO and revenue-concentration classification schemes are highly correlated, and our main findings are robust to this alternative way of defining boutique banks.

2.2. M&A Advisors

We collect information on individual investment bankers' deal advising history from Mergermarket Ltd. (formerly a subsidiary of Financial Times), which tracks M&A deals conducted from 2000 to 2018 in both the United States and abroad. The database includes all deals with a transaction value larger than $5 million and involving at least 30% of the target firm being acquired. For each deal, it provides the names of the lead bankers of the advisory team and their employment affiliations. This feature differentiates Mergermarket from other M&A databases such as SDC Platinum, which do not disclose the identities of bankers.[6]

Mergermarket uses a coarse industry classification for acquirers and targets. We match deals in Mergermarket to SDC Platinum to extract other deal-specific information, such as deal status, advisory duration, and whether the deal was successful. We also obtain two-digit Standard Industrial Classification (SIC) industry codes from SDC, which helps us gauge individual bankers' industry expertise and advisory firms' industry-specific market share.[7]

2.3. Investment Banker Career Path

While Mergermarket documents the names and affiliations of individual bankers leading the deal advisory at

the time of deal announcement, it does not reveal the accurate timing of bankers' job transitions. We gather this information from the BrokerCheck Report provided by the Financial Industry Regulatory Authority (FINRA), a regulatory agency that monitors all individuals engaging in security transactions, collecting their names, their affiliations, and the precise timing of job transitions.

For each banker that appeared in the Mergermarket database, we search for his or her career path as reported by FINRA by name and affiliated banks. This step allows us to construct a banker-bank-year panel from 2000 to 2018 that contains 2,756 unique bankers, 384 unique investment banks, and 4,182 job transitions. This panel captures the career paths of bankers in our study. Other data sources are described as we introduce them in the analysis.

We consider two types of exit outcomes for a transitioning banker. First, we define *Exit to Boutique* as a dummy variable that equals one if the year of observation is the last year that a banker works for a given bank and that the banker's next employer is a boutique bank. Second, *Exit to Bulge Bracket* is an indicator for whether a banker leaves his current employer to join a bulge bracket bank. In the case of a bank merger, employees in the target bank may appear to have a changed job affiliation even if they are retained in the combined entity. We do not count such cases as career transitions.[8]

Following Chemmanur et al. (2019), we measure a banker's human capital by his past performance. Specifically, *Past Deals* is calculated as the logarithm of one plus the number of M&A deals he advised in the past over a three- or five-year rolling window, respectively. Past deal-making activity is a main indicator for a banker's performance.[9] Subsequently, we use "past deal volume," "past performance," and "past productivity" interchangeably. In the internet appendix, Section IA.4, we provide direct evidence that high-performing bankers—those who have advised a large number of M&A deals in the past—tend to generate more deals in the future. This persistence of banker's human capital corroborates the argument that banks benefit from hiring high-performing bankers.

In addition to the number of M&A deals, we consider the deal's dollar volume as an alternative proxy for a banker's past accomplishment. Anecdotal evidence suggests that advising large deals, especially mega deals, helps banks earn considerable fees and boost their reputation and industry status. Bankers capable of executing large deals thus can be highly valuable in the labor market for M&A advisors. In the internet appendix, Section IA.5, we introduce two alternative metrics of banker performance, *Past Deal Value*, which is the natural logarithm of the sum of total deal value advised by a banker over the past three or five years, and *Past Mega Deal Value*, which is the natural logarithm of total dollar amount of advised deals whose value exceeds $5 billion over the same set of rolling horizons. We show our findings are robust to these alternative ways to identify high-performing bankers.

2.4. Summary Statistics

Panel A of Table 1 summarizes banker characteristics for the 2000–2018 period. About 8% of our sample bankers leave their current employers in a given year to join a boutique bank. The average banker performance

Table 1. Descriptive Statistics

Panel A. Banker-bank-year sample characteristics

Variable	*N*	Mean	Std. dev.
Exit to Boutique	22,345	0.0776	0.2675
Exit to Bulge Bracket	22,345	0.0557	0.2293
Past Deals (3 years)	22,345	0.2230	0.4704
Past Deals (5 years)	22,345	0.2705	0.5365

Panel B. Bank-industry-year sample characteristics

Bulge Bracket Banks			
Log(*Deals*) (3 years)	16,590	0.2348	0.5056
Log(*Deals*) (5 years)	16,590	0.3191	0.6153
Market Share (3 years) (%)	16,590	1.9574	6.8049
Market Share (5 years) (%)	16,590	2.0642	6.1913
Boutique Banks			
Log(*Deals*) (3 years)	113,680	0.0379	0.2078
Log(*Deals*) (5 years)	113,680	0.0515	0.2510
Market Share (3 years) (%)	113,680	0.2897	2.9766
Market Share (5 years) (%)	113,680	0.2867	2.6848

Panel C. Univariate comparison

	Bulge bracket (1)	Boutique (2)	Difference in mean (1) − (2)
# *Deals/Year*	25.0295	6.2525	18.7771***
# *Industries Covered/Year*	8.4895	1.4735	7.0159***
Diversifying Mergers (%)	0.1815	0.1218	0.0597***
# *Employees/Year*	49.2611	6.6380	42.6230***
Banker Experience	8.1607	7.4897	0.6710**
# *Deals Per Banker/Year*	0.1584	0.3004	−0.1420**

Notes. This table provides summary statistics for the variables of interest in our sample. Panel A shows the summary statistics for the banker-bank-year panel. Panel B shows the summary statistics for the bank-industry-year sample. In this panel, industries not covered by a bank will have a deal volume of zero. Panel C compares deal characteristics and employee characteristics between bulge bracket banks (column 1) and boutique banks (column 2), including total number of M&A deals advised per year, number of industries covered per year, fraction of diversifying mergers, number of M&A bankers employed per year, average banker experience, and average number of deals per banker per year. All variables are measured at the bank-year level except for *Banker Experience*, which is measured at the bank-banker-year level. We only count employees who work for the M&A advisory department in these banks. Variable definitions are in the internet appendix, Section IA.1. Std. dev., Standard deviation.

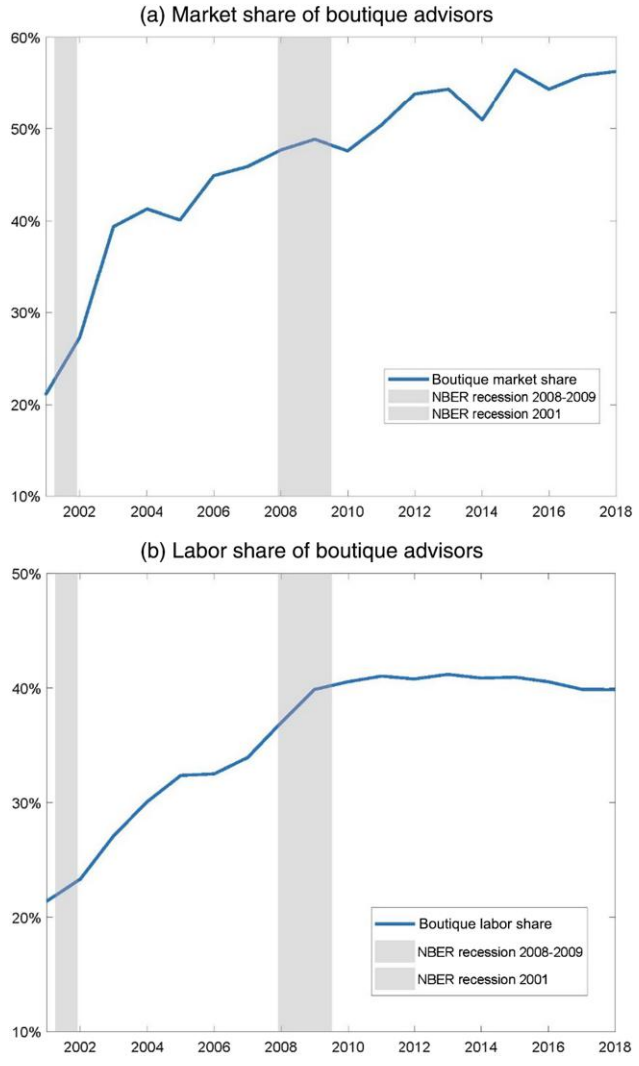
** and *** indicate significance at the 5% and 1% levels, respectively.

measure is 0.22 for the three-year horizon and is 0.27 for the five-year horizon, implying that an average banker has advised 0.46 M&A deals in the past three years, and 0.61 deals in the past five years.

Panel B of Table 1 reports the performance statistics for investment banks at industry level. On average, bulge bracket banks advise more deals and have a larger market share than boutiques. An average bulge bracket bank advises 0.53 (0.83) deals per industry during the past three (five) years, while an average boutique bank conducts 0.08 (0.12) deals. These deal numbers appear small because they are averaged across all industries in our sample, and banks, even bulge bracket ones, do not cover all industries.

Panel C compares the deal and employee characteristics between boutique and bulge bracket firms. An average bulge bracket firm advises 25.03 deals per year across all industries it covers, about four times as many deals as those advised by an average boutique. Bulge bracket banks also employ far more M&A bankers, cover more industries, and conduct more diversifying deals than boutique banks.

Figure 1. (Color online) Market Share and Labor Share of Boutique Advisors



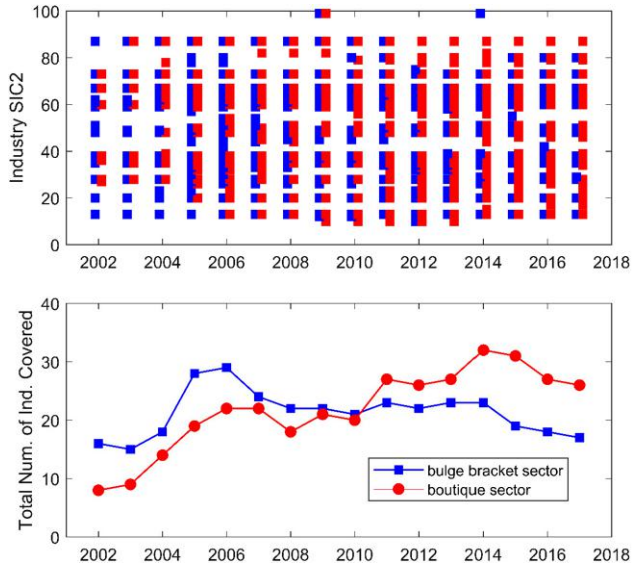
Notes. Panels (a) and (b) plot, respectively, the market and labor share dynamics of the boutique M&A advisors during the 2000–2018 period. Market share is defined as the fraction of deals advised by boutique banks relative to the total deals recorded in the Mergermarket database in a year. Labor share is defined as the fraction of M&A bankers who work in the boutique sector.

2.5. The Rise of Boutique Banks

Panel (a) of Figure 1 tracks the market share of boutique banks over time. Market share is defined as the fraction of deals advised by boutique banks relative to the total deals recorded in the Mergermarket database. The solid line represents the market share of the boutique sector, and the shaded areas represent the National Bureau of Economic Research (NBER) recession periods. The market share of boutique banks experienced a dramatic increase over our sample period. At the beginning of 2000s, boutique banks advised only around 20% of the deals, while by 2018, more than 50% of the deals were advised by boutique banks.

The expansion of boutique banks appears to occur not only at the intensive margin, but also at the extensive margin. The top panel of Figure 2 reveals an increasing

Figure 2. (Color online) Industry Coverage by the Bulge Bracket and Boutique Bank Sectors



Notes. This figure presents the industry coverage by the bulge bracket sector and the boutique sector. The sample period is 2000–2018. The upper panel shows the two-digit SIC industries covered by the bulge bracket bank sector and by the boutique bank sector. We use the WSO's definition to classify boutique banks. The lower panel shows the total number of two-digit SIC industries covered by the bulge bracket sector and by the boutique sector over time.

industry coverage of boutique banks relative to the bulge bracket sector. Interestingly, some industries (e.g., two-digit SIC industries 22, 24, and 47) were previously covered mostly by bulge bracket banks; toward the end of the sample period, these banks appear to have abandoned their presence, and boutique banks take over. The bottom panel of Figure 2 shows that the total number of industries covered by the boutique sector grows over time, exceeding that of the bulge bracket sector in 2011.[10]

Coinciding with the rising product market share of boutique advisors, panel (b) of Figure 1 shows a growing percentage of bankers working in the boutique sector over our sample period. In the early 2000s, only about 20% of M&A bankers in our sample work for boutique firms. By 2018, the boutique sector employs 40% of bankers. Taken together, boutique banks have become more prominent in the labor market for M&A bankers, and this could contribute to their increasing presence in the M&A advisory market.

3. Cross-Sector Migration of High-Performing Bankers

3.1. Banker Transition to the Boutique Sector

3.1.1. Is the Boutique Sector More Attractive to Productive Bankers? We first examine whether high-performing M&A bankers are more likely to transition to boutique advisors compared with low-performing ones by estimating the following regression model:

$$y_{i,b,b',t} = \beta \times Past\ Deals_{i,b,t} + \boldsymbol{\gamma X_{i,b,b',t}} + \alpha_i + \theta_{b,t} + \phi_{b'} + \tau_t + \epsilon_{i,b,t}, \quad (1)$$

where $y_{i,b,b',t}$ is a dummy variable indicating whether banker i transitions from his current employer b (i.e., the *losing bank*) during year t to a subsequent employer b' (i.e., the *gaining bank*). The dependent variables are *Exit to Boutique* and *Exit to Bulge Bracket*, respectively. If a high-performing individual is more likely to migrate to a boutique bank than a low-performing one, then we expect $\beta > 0$ for *Exit to Boutique*. The term $\boldsymbol{X_{i,b,b',t}}$ includes controls for time-varying characteristics of bankers and their employers, such as a banker's total years of work experience and the past performance of his current and next employers. Banker experience, defined as the number of years since he enters his first M&A advisory firm, captures a banker's seniority and potentially job mobility. The past performance of a losing (gaining) bank, defined as the log number of M&A deals that it advised in the past three- or five-year window, respectively, captures the investment bank's prominence in the M&A market and its profitability in recent years. We also control for a host of fixed effects, including banker fixed effects (α_i), losing bank × year fixed effects ($\theta_{b,t}$), year fixed effects (τ_t), and gaining bank fixed effects ($\phi_{b'}$). Standard errors are clustered by banker.

Panel A of Table 2 presents the regression estimates examining the relative attractiveness of the boutique sector to valuable human capital. Banker performance is measured by the number of M&A deals they advised in the past three years (columns (1)–(5)) and past five years (columns (6)–(10)). We start with a naïve correlation between banker past productivity and the likelihood of transitioning to a boutique in columns (1) and (6), controlling only for banker fixed effects. One prominent phenomenon in the investment banking industry is bankers' frequent job transitions. During our sample period, a median banker changed jobs twice. Banker fixed effects thus capture the innate characteristics such as personality or personal preferences that may drive both a banker's job transition rate and productivity. For instance, individuals who are ambitious are more likely to seek outside job opportunities and, at the same

Table 2. Is the Boutique Sector More Attractive to High-Performing Bankers?

Panel A. Exit to boutique bank

Dependent variable:	*Exit to Boutique*									
Time horizon:	3 years (1)	3 years (2)	3 years (3)	3 years (4)	3 years (5)	5 years (6)	5 years (7)	5 years (8)	5 years (9)	5 years (10)
Past Deals	0.0426***	0.0141***	0.0098*	0.0109**	0.0100*	0.0515***	0.0172***	0.0128**	0.0143***	0.0139**
	(0.005)	(0.004)	(0.005)	(0.005)	(0.006)	(0.005)	(0.004)	(0.005)	(0.005)	(0.006)
Banker Experience				0.0324	0.0298				0.0321	0.0297
				(0.024)	(0.028)				(0.024)	(0.028)
Losing Bank Past Performance				0.0010					0.0005	
				(0.003)					(0.003)	
Gaining Bank Past Performance				0.0128***	0.0115***				0.0126***	0.0113***
				(0.002)	(0.002)				(0.002)	(0.002)
Banker FEs	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Year FEs	No	No	Yes	Yes	No	No	No	Yes	Yes	No
Losing Bank FEs	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No

Table 2. (Continued)

Panel A. Exit to boutique bank

Dependent variable:	*Exit to Boutique*									
Time horizon:	3 years (1)	3 years (2)	3 years (3)	3 years (4)	3 years (5)	5 years (6)	5 years (7)	5 years (8)	5 years (9)	5 years (10)
Losing bank × year FEs	No	No	No	No	Yes	No	No	No	No	Yes
Gaining bank FEs	No	No	No	Yes	Yes	No	No	No	Yes	Yes
Observations	22,171	22,310	22,138	22,110	20,979	22,171	22,310	22,138	22,110	20,979
R^2	0.142	0.043	0.224	0.279	0.412	0.145	0.044	0.224	0.279	0.412

Panel B. Exit to bulge bracket banks

Dependent variable:	*Exit to Bulge Bracket*			
Time horizon:	3 Years (1)	3 Years (2)	5 Years (3)	5 Years (4)
Past Deals	−0.0053	−0.0064	−0.0030	−0.0051
	(0.004)	(0.005)	(0.004)	(0.005)
Banker Experience	0.0028	0.0061	0.0019	0.0058
	(0.012)	(0.012)	(0.012)	(0.011)
Losing Bank Past Performance	0.0002		0.0008	
	(0.002)		(0.002)	
Gaining Bank Past Performance	0.0205***	0.0204***	0.0212***	0.0211***
	(0.002)	(0.003)	(0.002)	(0.002)
Banker FEs	Yes	Yes	Yes	Yes
Year FEs	Yes	No	Yes	No
Losing bank FEs	Yes	No	Yes	No
Losing bank × year FEs	No	Yes	No	Yes
Gaining bank FEs	Yes	Yes	Yes	Yes
Observations	22,110	20,979	22,110	20,979
R^2	0.270	0.339	0.271	0.339

Panel C. Industry entry and exit

Dependent variable:	*Industry Exit Rate*				*Industry Entry Rate*			
	All bankers		High-performing bankers		All bankers		Skilled bankers	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Boutique	−0.0036	−0.0048*	−0.0012	0.0007	0.0261*	0.0393***	0.0084**	0.0062***
	(0.003)	(0.002)	(0.001)	(0.002)	(0.015)	(0.014)	(0.003)	(0.002)
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Weighted regression	No	Yes	No	Yes	No	Yes	No	Yes
Observations	1,853	1,853	1,853	1,853	1,853	1,853	1,853	1,853
R^2	0.067	0.269	0.046	0.134	0.088	0.133	0.039	0.075

Panel D. Sector entry and exit

	Gaining bank		
	Bulge Bracket	Boutique	Total
Losing bank			
Bulge bracket	861	743	1,604
Boutique	233	578	811
Total	1,094	1,321	

Notes. This table presents results comparing the relative attractiveness of the boutique sector to the bulge bracket sector in attracting high-performing human capital. The dependent variable is *Exit to Boutique* in panel A and *Exit to Bulge Bracket* in panel B. The unit of observation is a banker-bank-year. In each column, the time horizon indicates both the horizon during which we measure a banker's performance using his past deal volume and the horizon during which we measure a losing/gaining bank's past performance in terms of its deal volume. Robust standard errors clustered by banker are in parentheses. In panel C, the dependent variables are the number of bankers (high-performing bankers) exiting the M&A advisory industry as a fraction of total bankers in columns (1) and (2) (columns (3) and (4)), and the number of bankers (skilled bankers) entering the M&A advisory industry as a fraction of total bankers in columns (5) and (6) (columns (7) and (8)). In columns (2), (4), (6), and (8), we conduct employee-count-weighted regressions. Standard error clustered by banker. In panel D, we report a transition matrix, breaking down the number of job-switching bankers based on the types of their origin and destination banks. Variable definitions are in the internet appendix, Section IA.1. FEs, Fixed effects.

*, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

time, may be more productive. Bankers endowed with a large social network (such as alumni connections) may have more outside job options and are also more capable of drawing in clients. Banker fixed effects allow us to examine whether a banker is more likely to move to boutique firms as he or she becomes more productive.

Next, we consider the persistent institutional characteristics of the losing bank that lead to the departure of its valuable employees. For instance, an investment bank may be subject to more stringent regulations, have a distinct capital adequacy, or have a more hostile work environment, which may drive productive workers to the boutique sector. In columns (2) and (7), we control for losing bank fixed effects. This allows us to compare bankers with heterogeneous performance from the same losing bank. In columns (3) and (8), we add year fixed effects to control for macroeconomic conditions such as business cycles and financial crises.

In columns (4) and (9), we control, additionally, the time-varying past performance of losing bank and gaining bank, as well as gaining bank fixed effects. A losing bank may be shrinking and losing market share—for reasons such as a decline in overall profitability or tightened regulations—and have to downsize. As a result, its past poor performance can be detrimental to human capital retention. A banker's career transition may also be driven by characteristics of the future employer (gaining bank). For instance, a bank in an expansionary phrase may be able to offer more generous compensation packages and more attractive positions. Inclusion of gaining bank past performance and gaining bank fixed effects helps mitigate the concern that an individual's career transition decision is explained by certain boutique banks having booming business and aggressively "scooping" talents from competitors. For this set of analyses, we also control for bankers' years of work experience. Doing so helps alleviate the concern that banker seniority in the financial service industry may influence both job switch rates and deal volume.

Last, in columns (5) and (10), we replace losing bank fixed effects with losing bank × year fixed effects to further purge confounding effects arising from time-varying dynamics of the losing bank. This helps narrow down our comparison with all peer bankers working at the same bank at the same time. Taken together, these controls and fixed effects help us rule out confounding effects related to bankers' time-invariant preferences, bank characteristics, and/or macroeconomic conditions. They allow us to examine whether boutique bankers appear more attractive to bankers with more valuable human capital.

Across all specifications, we consistently observe a significant and positive coefficient associated with a banker's past deal volume, suggesting that high-performing bankers are indeed more likely to join boutique banks. Column (10) indicates that a one-standard-deviation increase in banker past deal volume is associated with a 0.8-percentage-point (= 0.0139×0.54) increase in the likelihood that the banker moves to a boutique bank. This translates into a 10% (= 0.8/7.8) increase relative to the unconditional probability of a banker moving to a boutique bank in a given year, which is 7.8%.

In the internet appendix, Section IA.6, we also consider an extended set of specifications, highlighting separately the demand-side and supply-side effects. To do so, we first reestimate our main regressions with only losing bank controls and fixed effects, but no gaining bank controls or fixed effects. We then switch to specifications with only gaining bank controls and fixed effects, but no losing bank controls or fixed effects. Also in these less saturated specifications, our results remain robust. This suggests that our base findings are not sensitive to the set of controls we include.

In the internet appendix, Section IA.7, we reestimate the main specifications in panel A, as well as subsequent tests, replacing the dependent variable with *Exit to Prestigious Boutique*, an indicator for whether the boutique bank that a banker transitions to is a "prestigious" one. A bank is a prestigious boutique if it is one of the industry leaders, whose deal volume in the past five years ranks above the median of all investment banks covering a given industry. We find similar results. This suggests that a banker's exit to a boutique bank is not driven by an inevitable downward career spiral due to his poor performance in the current employer, or by his transitioning to a poor-quality firm. As such, the rise of the boutique sector that we document in Figure 1 is unlikely to be explained by an increasing number of low-quality boutique advisors.

Panel B of Table 2 evaluates the propensity of high-performing bankers to transition to bulge bracket firms. Contrary to the findings on boutiques in panel A, high-performing bankers do not exhibit a differential likelihood of joining bulge brackets compared with other bankers. The coefficients of interest are negative but insignificant for all columns, suggesting that, if anything, bulge bracket banks face difficulty in attracting high-performing individuals.

3.1.2. Industry Exit and Entry. One potential concern is that our findings are limited to individual bankers transitioning within the M&A advisory industry; it is possible that the boutique sector also experiences a higher exit rate of valuable human capital from the M&A industry or gains fewer talents from outside the industry compared with bulge bracket banks. Subsequently, the rise of the boutiques we document in Section 2.5 may not be explained by the within-industry migration of high-performing bankers.

To evaluate this possibility, we compare the industry exit and entry rates of skilled bankers between the boutique and bulge bracket sectors. An industry exit is defined as the incidence where a banker is no

longeremployed by any M&A advisory firm in the following year and does not return to the industry in the future. An industry entrant is defined as the case where a banker starts his first year of work in the M&A advisory industry. To calculate the industry exit (entry) rate in a bank-year, we scale the number of bankers exiting (entering) the M&A advisory industry from (to) the bank by the total number of bankers working in that bank in a year. We also compute industry exit and entry rates for high-performing bankers only. For industry exit, high-performing bankers are those whose deal volume in the past five years ranks in the top tercile of the sample. For entry, we identify skilled entrants who have previously worked in other financial institutions and were involved in security-dealing or brokerage businesses. This is because, by definition, new entrants have no prior experience in M&A deal advising before joining this industry, but their related working experience can be relevant and helpful. The industry exit (entry) rate of skilled bankers is defined as the ratio of the number of skilled bankers exiting (entering) the industry over total bankers per bank-year.

In a bank-year panel, we regress a bank's industry exit and entry rates on an indicator for whether the bank is a boutique, controlling for year fixed effects. Panel C reveals that boutique banks do not lose more talents than bulge brackets (columns (1)–(4)). Moreover, they attract significantly more human capital from outside the industry (columns (5)–(8)). The results prevail when we weight the observations by the number of employees (columns (2), (4), (6), and (8)) to account for the fact that employee turnover in bigger banks generates a larger influence on the sectoral aggregate. Finally, we note that the differences in exit and entry rates between the two sectors are generally small, suggesting that industry exit and entry are unlikely to be the main determinants of banker turnover patterns in the M&A advisory industry.

Overall, our results indicate that boutique banks appear to be better at attracting new entrants from outside the industry, especially the ones with prior experience in the financial sector. They also do not lose more talent than bulge bracket firms. This suggestive evidence adds support to our argument that boutique firms have advantages in attracting and retaining valuable human capital compared with bulge bracket firms.

3.1.3. Sector Entry and Exit. Our findings so far indicate that boutique banks are more appealing to high-performing bankers than bulge bracket firms. In Sections 3.2 and 4, we explore explicitly whether bankers transition across sectors, or whether the results simply reflect the overall attractiveness of the boutique sector regardless of whether bankers come from bulge bracket banks or other boutique banks.

In this subsection, we provide initial evidence on cross-sector transition. Panel D of Table 2 presents a transition matrix, where we break down the sample of migrating bankers based on the types of their origin and destination banks: transition from the bulge bracket sector to the boutique sector, transition from the boutique sector to the bulge bracket sector, transition within the bulge bracket sector, and transition within the boutique sector. Doing so sheds light on the frequency of banker movement within and across the two sectors, conditional on their decision to leave their current employers.

Panel D reveals that over the sample period, 861 bankers depart from current bulge bracket banks for other bulge bracket banks, accounting for 54.95% of total number of bankers in the bulge bracket sector.[11] In comparison, the bulge bracket sector loses 743 of bankers, or 47.42% of its labor force, to the boutique sector. These relocating bankers account for 61.97% of the labor force in the boutique sector. While a significant fraction of bankers leaving the bulge bracket sector choose to switch to the boutique sector, the latter does not experience a similar pattern of cross-sector migration. During the sample period, the boutique sector loses 233 bankers, or 19.43% of its labor force, to bulge bracket banks, while 578 bankers relocate to other boutique banks, representing 48.21% of the labor force in the boutique sector. Furthermore, job switches from bulge bracket to boutique banks account for 30.7% of all job transitions in these two sectors, a much higher fraction than switches from boutique to bulge bracket banks (9.6% of the total job transitions).

The results in panel D thus indicate that cross-sector transition is likely driven by bankers moving from the bulge bracket sector to the boutique sector. Bankers in the boutique sector, on the other hand, are more likely to stay within the sector.

3.2. Which High-Performing Bankers Join Boutiques?

The results so far suggest that high-performing bankers are more likely to relocate to the boutique sector. One concern is that our results could be driven by senior bankers, who are highly experienced in brokering deals and also seeking high positions in smaller firms. While this is plausible, an alternative explanation is that less senior bankers who are on an upward career trajectory search for employers to maximize the value of their human capital. Consequently, these productive individuals are more likely to choose boutique firms, which have a simple organizational structure and little overhead costs.

In this subsection, we explore the heterogeneity within transitioning bankers, augmenting model (1) by interacting *Past Deals* with indicator variables for bankers of high and low seniority. Our primary measure for

seniority is a banker's years of work experience. The cutoff for a more or less experienced banker is eight years, which is around the sample median of departing bankers' years of work experience.[12]

Notably, our main analyses consider how a banker's past performance relates to the likelihood of him switching to an investment bank sector. This likelihood, however, is a joint product of the probability of a job change and the probability of joining a sector conditional on the job change. For this reason, we restrict the analysis to transitioning bankers and construct several exit-only samples, focusing on a banker's choice of potential employers, conditional on him leaving the current one.[13]

We first reestimate our main tests using the transition sample of banker-year observations where the banker is leaving a bulge bracket bank. Columns (1) and (2) of Table 3, panel A, reveal that high-performing individuals migrating from the bulge bracket sector into the boutique sector are bankers of low seniority, as the coefficient estimate for *Past Deals* × *Less Experienced* is highly significant across all regression specifications. Past high achievers with high seniority, on the other hand, do not often make such job transitions. Arguably, unlike their more senior counterparts, less senior bankers are more mobile, constantly seeking employers to derive the highest benefits of their human capital. By contrast, there is no evidence that they often transition to a bulge bracket bank after generating a large past deal volume (columns (1) and (2) of panel B).[14]

Because we aim to understand how organizational structure facilitates the flow of human capital across different industry sectors, in columns (3) and (4) of both

Table 3. Which High-Performing Bankers Exit?—Transition Matrix Analysis

Panel A. Banker seniority and transition to boutique

Dependent variable:	*Exit to Boutique*					
Sample:	Exit from bulge brackets		Exit from multidivisional banks		Exit from boutique	
Time horizon:	3 years	5 years	3 years	5 years	3 years	5 years
	(1)	(2)	(3)	(4)	(5)	(6)
Past Deals × *Less Experienced*	0.1267*	0.1162*	0.1400***	0.1382***	0.1303*	0.1072
	(0.076)	(0.069)	(0.049)	(0.046)	(0.070)	(0.070)
Past Deals × *More Experienced*	−0.0359	−0.0268	−0.0721*	−0.0343	−0.0823	−0.0485
	(0.049)	(0.041)	(0.043)	(0.036)	(0.073)	(0.064)
Banker FEs	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Losing bank FEs	Yes	Yes	Yes	Yes	Yes	Yes
Observations	901	901	1,359	1,359	333	333
R^2	0.617	0.617	0.597	0.596	0.779	0.777

Panel B. Banker seniority and transition to bulge bracket

Dependent variable:	*Exit to Bulge Bracket*					
Sample:	Exit from bulge brackets		Exit from multidivisional banks		Exit from boutique	
Time horizon:	3 years	5 years	3 years	5 years	3 years	5 years
	(1)	(2)	(3)	(4)	(5)	(6)
Past Deals × *Less Experienced*	−0.1074	−0.1023	−0.0736	−0.0742*	0.0597	0.0460
	(0.081)	(0.072)	(0.047)	(0.044)	(0.046)	(0.048)
Past Deals × *More Experienced*	0.0739	0.0710	0.0653	0.0377	0.0958	0.0880*
	(0.054)	(0.046)	(0.043)	(0.035)	(0.060)	(0.053)
Banker FEs	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Losing bank FEs	Yes	Yes	Yes	Yes	Yes	Yes
Observations	901	901	1,359	1,359	333	333
R^2	0.642	0.642	0.647	0.646	0.713	0.713

Notes. This table presents results for the job transitions of bankers at different career stages. The dependent variable is *Exit to Boutique* in panel A and *Exit to Bulge Bracket* in panel B. The unit of observation is a banker-bank-year. In each column, the time horizon indicates both the horizon during which we measure a banker's performance in terms of his past deal volume and the horizon during which we measure a losing/gaining bank's past performance in terms of its deal volume. The samples in columns (1) and (2), columns (3) and (4), and columns (5) and (6) include, respectively, only observations where a banker is transitioning from a bulge bracket, a multidivisional bank, and a boutique bank to another bank. A banker's seniority is based on his or her experience. Variable definitions are in the internet appendix, Section IA.1. Robust standard errors clustered by banker are in parentheses. FEs, Fixed effects.

* and *** indicate significance at the 10% and 1% levels, respectively.

Table 4. Cross-Subsidization in Multidivisional Banks and Banker Departure

Dependent variable:	*Exit to Boutique*					
Time horizon:	3 years (1)	3 years (2)	3 years (3)	5 years (4)	5 years (5)	5 years (6)
Past Deals × Non-M&A Volume	−0.0044**	−0.0039*	−0.0030	−0.0054***	−0.0049**	−0.0051**
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Past Deals	0.0461**	0.0424**	0.0343*	0.0616***	0.0577***	0.0599***
	(0.020)	(0.019)	(0.020)	(0.020)	(0.019)	(0.021)
Non-M&A Volume	0.0036	−0.0032		0.0056*	−0.0025	
	(0.003)	(0.003)		(0.003)	(0.004)	
Banker Experience		−0.3618	−0.4735		−0.3543	−0.4679
		(0.403)	(0.365)		(0.389)	(0.357)
Losing Bank Past Performance		0.0088*			0.0088*	
		(0.005)			(0.005)	
Gaining Bank Past Performance		0.0121***	0.0118***		0.0112***	0.0107***
		(0.003)	(0.003)		(0.003)	(0.003)
Banker FEs	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	No	Yes	Yes	No
Losing bank FEs	Yes	Yes	No	Yes	Yes	No
Losing bank × year FEs	No	No	Yes	No	No	Yes
Gaining bank FEs	No	Yes	Yes	No	Yes	Yes
Observations	14,049	14,039	13,926	14,049	14,039	13,926
R^2	0.214	0.263	0.348	0.215	0.263	0.348

Notes. This table presents results for the career transitions of bankers. We examine whether a high-performing banker's tendency to join boutique firms is modulated by his current multidivisional employer's cross-department subsidization activity. The unit of observation is a banker-bank-year. The dependent variable is *Exit to Boutique*. *Non-M&A Volume* is the log of one plus the total number of non-M&A deals—including bonds, loans, SEOs, and IPOs—underwritten by the current employer in the past three or five years. In each column, the time horizon indicates the horizon during which we measure a banker's past deal volume, the losing bank's non-M&A volume, and the losing bank's/gaining bank's past performance. Variable definitions are in the internet appendix, Section IA.1. Robust standard errors clustered by banker are in parentheses.

*, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

panels, we also consider bankers who depart from multidivisional banks. Multidivisional banks are defined as banks that have multiple business lines, including M&A advisory, equity issuance, and debt underwriting. While our bulge bracket firms certainly fall into the sample of multidivisional banks, estimating our tests using the multidivisional bank sample ensures that the exodus of productive bankers is more likely exacerbated by banks' organizational structure, rather than bulge bracket classification schemes. We explicitly explore this rationale in Section 3.3 and Table 4.

We confirm that, conditional on bankers changing their jobs, those from multidivisional banks with low seniority are more likely to transition to a boutique bank after being involved in many past deals than when the transition occurs following fewer deals.

Last, in columns (5) and (6) of both panels, we limit the sample to observations where the banker switches jobs from one boutique to another boutique. There is some evidence that past high achievers with low seniority departing from a boutique employer are more likely to move to another boutique, rather than transitioning to a bulge bracket bank.

Overall, when considering only transitioning bankers, we observe that high-performing bankers at a junior or middle stage of their career are more likely to relocate to the boutique sector compared with low-performing ones. Such a pattern does not exist among relatively more senior bankers. There is also no evidence that productive bankers prefer transitioning to bulge bracket banks. If anything, once these high performers of low seniority decide to leave their current boutique employers, they are more likely to stay within the boutique sector, rather than migrating to the bulge bracket sector.

3.3. Cross-Subsidization in Bulge Bracket Banks and Cross-Sector Banker Migration

We now formally explore how corporate organizational structure influences cross-sector migration of high-performing bankers. As discussed before, one prevalent feature of multidivisional firms is cross-division subsidization: when one division suffers from poor performance, its losses can be smoothed over by the profit made by other divisions. As a result, an employee's compensation hinges upon not only the profitability of his own division, but also that of other divisions. Indeed, Duchin et al. (2017) provide microlevel evidence regarding the cross-subsidization of management pay in nonfinancial conglomerates.

In the context of bulge bracket banks that offer a full menu of services and carry a multidivisional form of organizational structure, revenues from the M&A division can be used to offset losses from non-M&A divisions. Consequently, compensation for M&A bankers may not be closely tied to their own performance but can be affected by the performance of non-M&A divisions in the same bank (Morrison and Wilhelm 2007). By detaching compensation from performance, cross-division spillover weakens the incentives of M&A bankers, especially the most productive ones, whose payoff structure has a greater upward potential.[15] On the other hand, boutiques are less subject to this friction because they focus on only one or two lines of investment banking business. This allows the compensation of their employees to be closely tied to performance. Ultimately, the organizational friction pertinent to multidivisional firms relative to focused ones may aggravate the exodus of high-performing bankers toward boutique (focused) firms.

We first validate the importance of cross-subsidization in hindering multidivisional firms' ability to retain valuable human capital, taking into account the current and previous employers of relocating bankers. To do so, we restrict the sample to multidivisional banks and examine whether high-performing bankers are incrementally more likely to move to the boutique sector when the non-M&A departments of their employers, such as equity and debt underwriting, suffer poor performance.

We obtain data on IPO, SEO, corporate loan, and bond underwriting from SDC Platinum and on syndicated loans origination from LPC Dealscan. A bank's performance in its non-M&A departments, *Non-M&A Volume*$_{b,[t-k,t]}$, is defined as the total number of IPO, SEO, bond, and syndicated loan deals underwritten by bank b during the past k years. We then augment model (1), including an interaction of *Non-M&A Volume* and *Past Deals* of the corresponding horizon. When such a bank experiences low volume in non-M&A departments, it should be more likely to cross-subsidize those divisions using revenues from the M&A division, which may trigger more exits of high-performing M&A bankers. We thus expect the interaction term *Past Deals* × *Non-M&A Volume* to carry a negative coefficient.

Table 4 reveals that while a banker's past performance continues to be positively and significantly related to the likelihood of transitioning to a boutique bank, the interaction term between his performance and his employer's non-M&A performance generates a negative coefficient. Note that the specification in columns (3) and (7) includes losing bank × year fixed effects, which absorb the main effect of *Non-M&A Volume* and other time-varying bank-specific shocks. These fixed effects also allow us to compare the differential effects of poor non-M&A performance on more productive versus less productive employees within the *same* bank during the same period. The estimate from column (6) suggests that a one-standard-deviation (4.23) reduction in the non-M&A deal volume increases the tendency of a high-performing banker to join a boutique firm by one-third (e.g., $-4.23 \times -0.0051 = 0.02157$, which is around a third of 0.0599).

4. Changes in Industry Structure

In this section, we move to the main research question and examine how human capital migration, triggered by the cross-subsidization in full-service banks, contributes to the expansion of the boutique sector. Our empirical approach analyzes whether the same boutique bank expands its market share more in industries that experience a greater supply of skilled bankers (to boutiques) relative to other industries over the same period. This within-bank, cross-industry comparison helps purge out confounding effects from concurrent changes in technology, resources, and other conditions at the bank level.

4.1. Methodology

In the context of our analysis, the variation of skilled labor supply to the boutique sector originates from the exodus of industry experts from bulge bracket banks due to poor performance in their non-M&A departments. To gauge the shocks to skilled banker supply to boutiques in an industry, we construct an industry-level, shift-share instrument, *Non-M&A Spillover*. This Bartik-type instrument is computed as the weighted average of the poor non-M&A performance across all bulge bracket banks that employ skilled bankers specializing in a given industry. The weights equal the percentage of skilled bankers employed by each bank in the previous year. Formally, *Non-M&A Spillover* is defined as

$$\textit{Non-M\&A Spillover}_{n,t} = \sum_{b} \textit{Skilled Banker Share}_{b,n,t-1} \times \textit{Low Non-M\&A Volume}_{b,t},$$

where b indexes bulge bracket banks, n is an industry in the M&A market, t is the year of observation, and *Low Non-M&A Volume*$_{b,t}$ is an indicator set to one if the non-M&A deal volume of bulge bracket bank b ranks at the bottom tercile in its own history in year t. Skilled bankers are defined as individuals whose past five years of deal volume ranks at the top tercile among all bankers covering the same two-digit SIC industry. The variable *Skilled Banker Share*$_{b,n,t-1}$ is the share of skilled bankers specializing in industry n that are employed by bulge bracket bank b in the previous year $(t-1)$. This variable is defined as follows:

$$\textit{Skilled Banker Share}_{b,n,t} = \frac{\#\textit{Skilled Bankers}_{b,n,t}}{\sum_{j=1}^{J} \#\textit{Skilled Bankers}_{j,n,t}},$$

where $\#\textit{Skilled Bankers}_{b,n,t}$ is the number of skilled bankers specializing in industry n employed by bank b

during year t, and $\sum_{j=1}^{J} \#Skilled\ Bankers_{j,n,t}$ is the total number of skilled bankers specializing in industry n employed by all banks in year t. A banker's (time-varying) specialized industry is defined as the two-digit SIC industry in which he advised the most deals during the past five years.

A higher value of *Non-M&A Spillover* indicates that more bulge bracket banks employing greater shares of skilled bankers in industry n experience poor non-M&A performance in year t. Because poor non-M&A performance of bulge bracket banks triggers the exit of high-performing bankers (Table 4), a higher *Non-M&A Spillover* should indicate a larger supply of skilled labor for all boutique banks that cover industry n. By construction, this variable does not impose any assumption on the matching between skilled bankers and any specific boutique bank.[16]

We postulate that the arrival of high-performing individuals specializing in industry n, brought about by higher *Non-M&A Spillover*, will boost a boutique bank's performance in that industry relative to other industries covered by the *same* bank. We measure a boutique's performance in industry n using the log of total deal volume and the average market share in an industry during the three-year and five-year rolling windows, respectively. To infer performance changes following a shock in labor supply, we take the difference in those performance measures between $[t, t+k]$ and $[t-k, t]$, where $k = 3$ or 5. Finally, in light of evidence in Figure 2, we create an indicator for whether in the next five years the boutique expands to industry n in which it had no prior coverage. We then link the *Non-M&A Spillover* of bulge bracket banks in an industry to the performance change of boutique banks in that industry. Formally, we estimate the following model:

$$Performance\ Growth_{b',n,t} = \beta \times Non\text{-}M\&A\ Spillover_{n,t} + \theta_{b',t} + \psi_n + \vartheta_{b',n,t}, \quad (2)$$

where $Performance\ Growth_{b',n,t}$ is the change in performance of the (gaining) boutique bank b' in industry n over the $[t-k, t+k]$ window centered around year t. Crucially, the regression controls for gaining bank × year fixed effects ($\theta_{b't}$), and thus compares the growth of the *same* boutique over the *same* period between deals involving industries that face a greater *Non-M&A Spillover* and deals involving other industries that face a weaker spillover from bulge bracket banks. The within-bank comparison also helps rule out alternative explanations related to client-side demand or preferences for boutique banks. We also impose industry fixed effects (ψ_n) to remove differential growth rates across industries. In this analysis, we restrict the sample to boutique advisors and cluster standard errors by bank.

4.2. Performance of Boutiques

4.2.1. Cross-Subsidization in Bulge Bracket Banks and Boutique Performance. Table 5 reports the regression estimates from model (2). In columns (1)–(5) of panels A and B, we use all high-performing bankers to calculate *Skilled Banker Share* when constructing *Non-M&A Spillover*. In columns (6)–(10), *Skilled Banker Share* is based on less experienced high-performing bankers, who have been shown to drive human capital migration to the boutique sector.

Panel A reveals that, regardless of whether all or only low seniority bankers are used, *Non-M&A Spillover* always bears a positive, significant coefficient for deal growth (columns (1) and (2) and columns (6) and (7)) and market share growth (columns (3) and (4) and columns (8) and (9)). A boutique advisor is also more likely to enter an industry within five years after experiencing a positive supply shock of high-performing bankers in that industry (columns (5) and (10)), corroborating the graphical evidence presented in Figure 2. A one-standard-deviation increase in *Non-M&A Spillover* (0.24) is associated with a 0.005 (= 0.24 × 0.021) increase in the growth rate of a boutique bank's log deal number, or a 9.79% (= 0.005/0.0515) increase relative to its average deal volume in a given industry in the next five years relative to other industries (column (2)). The same change in *Non-M&A Spillover* is also associated with a 2.9% greater growth in a boutique bank's market share (= 0.24 × 0.035/0.2867) in an industry (column (4)). Meanwhile, if the boutique bank has not advised any M&A deals in the given industry before, our estimate suggests that a similar increase in *Non-M&A Spillover* would increase the likelihood of the boutique bank initiating its coverage of this industry by 13%.

4.2.2. Performance Comparison Between M&A and Non-M&A Divisions. In panel B of Table 5, we adopt an alternative approach to construct *Non-M&A Spillover*, considering the relative performance between the bank's M&A division vis-à-vis its other divisions. Cross-subsidization may be more concerning for M&A bankers when their division performs much better than other non-M&A divisions, but can be less of a concern when their division has similar or even worse performance compared with other divisions. Following this intuition, we calculate the ratio between non-M&A and M&A deal volumes for each bulge bracket bank. A low ratio suggests that non-M&A departments perform relatively poorly compared with the bank's M&A department. When constructing *Non-M&A Spillover*, we redefine the indicator variable $Low\ Non\text{-}M\&A\ Volume_{b,t}$ to be one if the ratio falls into the bottom tercile in the bank's own history in year t.[17]

In columns (1)–(5), the ratio-based *Non-M&A Spillover* is computed using a bulge bracket bank's share of all high-performing bankers in a given industry as

Table 5. Cross-Subsidization in Bulge Bracket Banks and Boutique Bank Performance

Panel A. Cross-subsidization in bulge bracket banks and boutique performance										
Weights of *Non-M&A Spillover*	Shares of all high-performing bankers					Shares of less experienced high-performing bankers				
Dependent variable:	*Deal Growth*		*Market Share Growth*		*New Industry*	*Deal Growth*		*Market Share Growth*		*New Industry*
Time horizon:	3 years	5 years	3 years	5 years		3 years	5 years	3 years	5 years	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Non-M&A Spillover	0.0186***	0.0214***	0.0245***	0.0352***	0.0189***	0.0124***	0.0207***	0.0184***	0.0326***	0.0138***
	(0.003)	(0.003)	(0.005)	(0.008)	(0.003)	(0.003)	(0.005)	(0.006)	(0.010)	(0.003)
Gaining bank × year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	90,160	78,750	90,160	78,750	90,160	90,160	78,750	90,160	78,750	90,160
Adjusted R^2	0.067	0.113	0.057	0.109	0.132	0.066	0.113	0.057	0.109	0.132
Panel B. Ratio-based *Non-M&A Spillover*										
Non-M&A Spillover	0.0121***	0.0144***	0.0175***	0.0289***	0.0164***	0.0075***	0.0237***	0.0149***	0.0405***	0.0111***
	(0.003)	(0.004)	(0.005)	(0.010)	(0.004)	(0.003)	(0.004)	(0.005)	(0.009)	(0.002)
Gaining bank × year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	90,160	78,750	90,160	78,750	90,160	90,160	78,750	90,160	78,750	90,160
Adjusted R^2	0.066	0.113	0.057	0.109	0.132	0.066	0.114	0.057	0.110	0.132
Panel C. Are the effects driven by weights?										
Test:	Equal-weighted Non-M&A Spillover					Placebo analysis				
Dependent variable:	*Deal Growth*		*Market Share Growth*		*New Industry*	*Deal Growth*		*Market Share Growth*		*New Industry*
Time horizon:	3 years	5 years	3 years	5 years		3 years	5 years	3 years	5 years	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Non-M&A Spillover	0.0170***	0.0129***	0.0207***	0.0228**	0.0191***	0.0027	0.0017	0.0034	−0.0010	0.0030
	(0.004)	(0.004)	(0.006)	(0.010)	(0.004)	(0.002)	(0.002)	(0.003)	(0.005)	(0.002)
Gaining bank × year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	90,160	78,750	90,160	78,750	90,160	90,160	78,750	90,160	78,750	90,160
R^2	0.066	0.112	0.057	0.109	0.132	0.066	0.112	0.057	0.109	0.131

Notes. This table examines how bankers' job transitions affect the performance of gaining banks. The dependent variable is *Deal Growth* in columns (1), (2), (6), and (7); *Market Share Growth* in columns (3), (4), (8), and (9); and *New Industry* in columns (5) and (10). The unit of analysis is at the bank-industry-year level. In panel A, *Low M&A Volume* used to compute *Non-M&A Spillover* is set to one if the non-M&A deal volume of bank *b* ranks at the bottom tercile in its own history in year *t*. In panel B, *Low M&A Volume* is set to one if the ratio of non-M&A volume relative to M&A volume of bank *b* ranks at the bottom tercile in its own history in year *t*. In columns (1)–(5) of panels A and B, the weight to construct *Non-M&A Spillover*—a bulge bracket bank's share of high-performing bankers in a given industry—uses all high-performing bankers. In columns (6)–(10), the weight uses only high-performing bankers of low seniority with experience less than eight years. In columns (1)–(5) of panel C, *Non-M&A Spillover* is constructed with equal weight. In columns (6)–(10) of panel C, we run a placebo test in which we randomly reshuffle the indicator of poor non-M&A performance across banks to create a "pseudo" *Non-M&A Spillover*. In each column, *Time Horizon* indicates the horizon during which we measure an M&A advisory bank's performance changes and *Non-M&A Spillover*. Variable definitions are in the internet appendix, Section IA.1. Robust standard errors clustered by bank are in parentheses. FEs, Fixed effects.

** and *** indicate significance at the 5% and 1% levels, respectively.

weights. In columns (6)–(10), the weight uses only less experienced high-performing bankers. We observe similar results: By escalating skilled banker migration toward boutique banks, cross-subsidization within multidivisional banks continues to be positively and significantly linked to better performance of the boutique bank. This superior performance is observed in industries that are departing bankers' specialties, compared with other industries covered by the same boutique in the same year.

4.2.3. Decomposing Non-M&A Spillover. Our Bartik-type instrument, *Non-M&A Spillover*, is constructed as the weighted average of indicators for low non-M&A-division performance of bulge bracket banks, with the weights being each bank's skilled banker share. A potential concern is that the variation of this measure is purely driven by the variation in skilled banker share and is unrelated to poor non-M&A performance in bulge bracket banks.

To evaluate this possibility, we conduct two sets of tests. First, instead of using these labor shares as the weights, we take a simple average of the indicators for poor non-M&A performance across all bulge bracket banks covering an industry. The resulting equal-weighted *Non-M&A Spillover* teases out the variation of skilled labor share from our instrument, retaining only the extent of cross-subsidization as captured by poor non-M&A performance in these banks. If the time-varying labor share component of *Non-M&A Spillover* explains the performance change of the boutique sector, we should expect the results in panels A and B to disappear once we apply the equal-weighted version of the instrument.

Columns (1)–(5) of Table 5, panel C, find otherwise. The equal-weighted *Non-M&A Spillover* continues to explain the discrepancy in performance of a boutique between industries that experience labor supply shocks from bulge bracket banks and industries that do not. This suggests that cross-subsidization—rather than labor share—most likely affects the deal volume growth and market expansion of the boutique sector.

Second, we run a placebo test by randomly reshuffling the indicators of poor non-M&A performance across banks. We then compute a "pseudo" instrument by taking the weighted average of the scrambled non-M&A performance indicators, with the weights being each bank's skilled labor share. This reshuffled version of *Non-M&A Spillover* is built upon "correct" labor shares but "incorrect" indicators for poor non-M&A performance. If it is the variation in labor share that explains our findings, the reshuffled version of the instrument should still explain growth of the boutique sector. In columns (6)–(10) of panel C, we find no evidence that the pseudo non-M&A spillover instrument significantly affects a boutique bank's deal growth and market expansion.

Overall, the results from panel C suggest that the effect of *Non-M&A Spillover* on boutique banks' performance arises from the variation in cross-subsidization, as captured by poor non-M&A performance of bulge bracket banks. These banks' skilled labor share, on the other hand, does not fully explain our findings. Together with panels A and B, these results support the view that organizational friction inside multidivisional firms triggers cross-sector migration of valuable human capital, and that the relocation of human capital alters bank performance. The changes in market share can ultimately aggregate to a change in the industry structure, contributing to the rise of boutique banks in the M&A advisory industry.

4.3. The JOBS Act

To further strengthen our identification, we exploit the 2012 enactment of the JOBS Act, which disproportionally increased the IPO activities in the biotech and pharmaceutical industries relative to other industries (Dambra et al. 2015). Given that the IPO underwriting services are specialized and segmented (Benveniste et al. 2002, Benveniste et al. 2003), the JOBS Act differentially increased the IPO underwriting revenue for bulge bracket banks specializing in those two industries relative to other bulge bracket banks. This should allow them to better retain skilled M&A bankers following the JOBS Act, which consequently, could inhibit the expansion of their boutique counterparts. Rather than relying on the variation in realized deal volume in the non-M&A departments, the extent of cross-subsidization within multidivisional banks in this set of tests rises from regulatory-induced shocks to the non-M&A department performance.

We modify the definition of *Non-M&A Spillover* by focusing on banks' (preexisting) exposure to IPO deals in biotech and pharmaceutical industries. Specifically, *JOBS Spillover* is defined as follows:

$$JOBS\ Spillover_n = \sum_b Skilled\ Banker\ Share_{b,n} \times Exposed\ to\ JOBS_b,$$

where $Exposed\ to\ JOBS_b$ is a dummy variable indicating whether a bulge bracket bank b has underwritten any IPO deal in the biotech and pharmaceutical industries during the five-year period before the JOBS Act (2007–2011). The weights—*Skilled Banker Share*—are calculated as of 2011.

In a difference-in-differences framework, we compare a boutique bank's performance growth from pre-JOBS (2010–2011) to post-JOBS (2012–2014) periods, in an industry with higher *JOBS Spillover* relative to an industry with lower spillover. To mitigate the concern

Table 6. Boutique Bank Performance and the JOBS Act

Dependent variable:	*Deal Growth*		*Market Share Growth*		*New Industry*
Time horizon:	3 Years	5 Years	3 Years	5 Years	
	(1)	(2)	(3)	(4)	(5)
JOBS Spillover × *Post*	−0.0074	−0.0343***	−0.0187**	−0.0705***	−0.0187***
	(0.005)	(0.007)	(0.009)	(0.015)	(0.004)
Gaining bank × year FEs	Yes	Yes	Yes	Yes	Yes
Industry FEs	Yes	Yes	Yes	Yes	Yes
Observations	32,637	32,637	32,637	32,637	32,637
R^2	0.040	0.117	0.035	0.103	0.134

Notes. This table examines how bankers' job transitions affect the performance of gaining banks. The sample period is 2010–2014, two years before and two years after the enactment of the JOBS Act of 2012. The dependent variable is *Deal Growth* in columns (1) and (2), *Market Share Growth* in columns (3) and (4), and *New Industry* in column (5). The unit of analysis is at the bank-industry-year level. In each column, the time horizon indicates the horizon during which we measure an M&A advisory bank's performance change. To establish causality, we instrument the labor supply to the gaining banks' M&A division using multidivisional banks' ex ante exposure to the JOBS Act. The variable *JOBS Spillover* is constructed using information from year 2011, the year prior to the shock. Variable definitions are in the internet appendix, Section IA.1. Robust standard errors clustered by bank are in parentheses. FEs, Fixed effects.
** and *** indicate significance at the 5% and 1% levels, respectively.

that the JOBS Act may also directly affect the M&A market for the pharmaceutical and biotech industries, we exclude these two industries from our sample of M&A deals. We estimate the following model:

$$\begin{aligned} &\textit{Performance Growth}_{b',n,t} \\ &= \beta \times \textit{JOBS Spillover}_n \times \textit{Post}_t + \theta_{b',t} + \psi_n + \vartheta_{b',n,t}, \end{aligned} \tag{3}$$

where *Post* is a dummy variable that equals one for the post-JOBS period and zero otherwise. Our regressions control for gaining bank × year fixed effects and industry fixed effects.

Table 6 reports the results. Following the enactment of the JOBS Act, boutique banks experience a significant slowdown in M&A deal volume growth and market share growth in the same M&A industries covered by the exposed bulge bracket banks (excluding pharmaceutical and biotech).[18] This suggests that positive shocks to the non-M&A departments at bulge bracket banks negatively affect the growth of the boutique sector.[19] To summarize, rather than relying on the variation in realized non-M&A deal volume, we use regulatory-induced shocks as an instrument for the extent of cross-subsidization within multidivisional banks. Also in this context, our findings provide causal evidence that the transitions of skilled bankers, triggered by the institutional frictions inside bulge bracket banks, can help reshape the competitive structure of the M&A advisory industry.

4.4. Validating Identifying Assumptions

We now validate an implicit assumption of our empirical approach, that is, the future industry-specific growth of a boutique bank is uncorrelated to idiosyncratic shocks to non-M&A performance of bulge bracket banks outside the channel of human capital migration. One concern is that by offering a full menu of services, a bulge bracket bank helps its M&A clients finance their acquisitions from its corporate lending division. Its M&A division may also approach firms who have developed relationships with its IPO/SEO divisions. Under this bundled-client explanation, the non-M&A performance in bulge bracket banks may be correlated with the M&A performance of boutiques outside of the human capital channel.

The key distinction between the predictions from bundled clients and those from cross-subsidization is whether the performance correlation between departments arises from the same client (or same industry). The former implies that the rise and fall of volumes in equity or debt divisions should only predict fluctuations of the M&A volume in the same client industry. The correlation caused by cross-subsidization, in contrast, is not restricted to the same client industry. Thus, we might observe limited correlation between M&A and non-M&A volumes within the same industry.

We test the differential predictions from the above mechanisms by examining the intertemporal relations between a bulge bracket bank's non-M&A department performance and M&A department performance in the same client industry. We focus on the *specialized* industries of an M&A department (i.e., industries with the highest labor share) because our non-M&A spillover measure places the highest weights on those industries. We regress the M&A department performance in a bulge bracket bank's specialized industry on its non-M&A department performance in the same industry,

measured in years $t-3$, $t-2$, $t-1$, t, $t+1$, $t+2$, and $t+3$. Panel A of Table 7 reports the results. We find no evidence that performance in banks' specialized industry for non-M&A departments is significantly correlated with that of the M&A department at any of these horizons. These results lend further support to our identifying assumption.

The cross-subsidization mechanism suggests that severe negative shocks in the non-M&A business lines of bulge bracket firms should escalate the exit of valuable M&A human capital to the boutique sector. In panel B, we estimate the extent to which poor non-M&A performance in bulge bracket banks affects the speed of banker arrival to the boutique sector. Analogous to the way we measure bank performance growth, we construct *d*(*Skilled Banker Arrival*), defined as the changes in the number of skilled bankers specializing in industry n that arrive at a boutique bank from $[t-k, t]$ to $[t, t+k]$, where $k = 3, 5$. Panel B of Table 7 shows that *Non-M&A Spillover* significantly predicts skilled banker arrival. The coefficient estimated in column (1) (column (2)) suggests that a one-standard-deviation increase in

Table 7. Validation of Identifying Assumptions

Panel A. Performance synchronicity between M&A and non-M&A departments

Dependent variable:	Log(*M&A Volume*)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Log(*Non-M&A Volume*)	−0.0363						
	(0.026)						
Log(*Non-M&A Volume*)$_{t-3}$		0.0484					
		(0.036)					
Log(*Non-M&A Volume*)$_{t-2}$			0.0392				
			(0.035)				
Log(*Non-M&A Volume*)$_{t-1}$				0.0233			
				(0.037)			
Log(*Non-M&A Volume*)$_{t+1}$					0.0114		
					(0.023)		
Log(*Non-M&A Volume*)$_{t+2}$						0.0272	
						(0.049)	
Log(*Non-M&A Volume*)$_{t+3}$							−0.0007
							(0.036)
Bank FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	177	177	177	177	177	177	177
R^2	0.575	0.576	0.576	0.573	0.572	0.574	0.572

Panel B. The speed of banker arrival at boutiques

	d(*Skilled Banker Arrival*)	
	3-year time horizon	5-year time horizon
	(1)	(2)
Non-M&A Spillover	0.0185***	0.0377***
	(0.005)	(0.009)
Industry FEs	Yes	Yes
Gaining bank FEs	Yes	Yes
Year FEs	Yes	Yes
Observations	90,160	78,750
R^2	0.008	0.020

Notes. Panel A examines performance correlation between a bulge bracket bank's non-M&A departments and M&A department in its specialized industry. The unit of observations is a bank-year. The dependent variable is Log(*M&A Volume*), defined as the natural logarithm of one plus the number of M&A deals in an industry that the bank has the largest labor share (i.e., its specialized industry). Log(*Non-M&A Volume*) is the natural logarithm of one plus the number of IPOs, SEOs, bonds, and loans underwritten by the bank in its specialized industry. Panel B examines how cross-subsidization affects the arrival of skilled bankers specializing in an industry at boutiques, instrumenting the labor supply to a boutique using the non-M&A department performance of bulge bracket banks. The unit of observation is a bank-industry-year. Variable definitions are in the internet appendix, Section IA.1. Robust standard errors clustered by bank are in parentheses. FEs, Fixed effects.

*** indicates significance at the 1% level.

Non-M&A Spillover (0.24) is associated with a 0.4 (0.9) percentage point increase in the likelihood that a skilled banker joins a boutique firm in the next three (five) years. This magnitude is sizeable compared with the average likelihood of a skilled banker joining a boutique firm over a three-year (five-year) window, 2.1 (3.0) percentage points. Together with Table 4, these results suggest that organizational frictions inherent in multidivisional firms facilitate the flow of valuable human capital from the bulge bracket sector to the boutique sector.

Importantly, to gauge the extent to which a high-performing individual matters for the growth of the receiving boutique, we perform a back-of-the-envelope calculation. The coefficient in column (2) of panel A of Table 5 suggests that a one-standard-deviation increase in *Non-M&A Spillover* (0.24) is associated with a 0.005 increase in log deal number of boutique banks ($= 0.0214 \times 0.24$). This estimated performance change is the joint product of two factors: (i) the likelihood that a boutique hires a banker from a bulge bracket bank and (ii) the effect of each arriving banker (skilled banker) on boutique bank performance. Note that the results from panel B of Table 7 provide an estimate for the first factor: a one-standard-deviation increase in non-M&A spillover increases the likelihood for a skilled banker to migrate to a given boutique bank by 0.9 percentage points. This implies that the arrival of a banker (skilled banker) specialized in a given industry from a bulge bracket firm would increase the logarithm of deal number in this industry by 0.55 ($= 0.005/0.009$), compared with other industries covered by the same boutique bank but receiving no exodus bankers. To illustrate, assuming that a boutique bank has not advised any deals in an industry, a skilled banker would add 0.73 ($= e^{(0.55+ln(1+0))} - 1$) more M&A deals in that industry for the boutique over the five years following his arrival.

4.5. Economic Channels

The results so far identify human capital migration as one of the factors that help shape the structure of the M&A advisory industry. We next explore potential economic mechanisms underlying our findings. In the internet appendix, Section IA.10, we find that clients are more likely to follow high-performing bankers to the new M&A advisory firm, suggesting that a boutique bank can "steal" clients from bulge bracket banks as it attracts top talents from those banks. A high-performing banker's transition also induces more former colleagues to join the gaining bank, which may result in a brain drain for the losing bank. The portability of client relationships and the cascading effect of human capital movement thus serve as potential mechanisms through which banker migration affects the performance of losing and gaining banks.

5. Deal Outcomes and Human Capital Development of Boutique Advisors

In the last part of this paper, we investigate how the outcomes of M&A deals differ when they are advised by boutique and bulge bracket banks. We look at several dimensions of M&A deal outcome: *Deal Duration* is the number of days between the deal announcement date and deal completion date. A shorter deal duration implies a smoother negotiation and a faster decision-making process, arguably as a result of a well-identified bidder–target match as well as the effort and ability of the M&A advisors (Bhagwat et al. 2016). *Success Rate* is an indicator for whether the deal is eventually completed, and *CAR* is the client's cumulative abnormal return from three days before to three days after the announcement. Abnormal returns are benchmarked on the Fama–French three-factor model. To ensure that the results are not driven by varying sample sizes, for this set of analyses, we restrict the sample to all deals with available bidder information.

We first compare deal performance between boutique advisors and bulge bracket banks. The internet appendix, Section IA.11, reveals that, on average, boutique banks do not outperform their bulge bracket counterparts. This average effect, however, masks important heterogeneity across deals. Large deals are generally more complicated and require more bankers' expertise to broker, advise, and negotiate on behalf of their clients. These deals are also more profitable and often attract fierce competition among M&A advisors. For this reason, we include an interaction between *Deal Size* and the *Boutique* dummy. We also control for bank fixed effects, which narrows down the comparison with deals with different sizes advised by the same bank.

Table 8 shows that while larger deals take longer to settle and have a lower success rate, boutique advisors appear to close them faster (columns (1) and (2)) and attain a higher success rate for those deals (columns (3) and (4)) compared with bulge bracket banks. Boutique advisors also help generate higher abnormal announcement period returns for their bidder clients in larger acquisitions (columns (5) and (6)).[20] This suggests that boutique advisors have advantages over bulge bracket banks in larger, more complex deals than smaller ones.[21]

A follow-up implication regarding the deal performance of the two types of investment banks is that as more high-performing bankers migrate from the bulge bracket sector to the boutique sector during our sample period, the deal performance gap between the two sectors should become wider over time. In the internet appendix, Section IA.11, we provide evidence largely consistent with this conjecture.

The above evidence also corroborates the patterns revealed in Figure 1 that the structural change in the

Table 8. Clients' Deal Performance

Dependent variable	*Deal Duration*		*Success Rate*		*Bidder's CAR*		*Target's CAR*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Deal Size × Boutique	−9.0399***	−6.8437***	0.0205***	0.0191***	0.0122***	0.0061*	0.0084	0.0035
	(2.929)	(2.325)	(0.005)	(0.005)	(0.003)	(0.003)	(0.012)	(0.012)
Deal Size	30.0259***	31.9232***	−0.0329***	−0.0386***	−0.0115***	0.0079	−0.0329***	−0.0444***
	(1.451)	(1.384)	(0.003)	(0.003)	(0.002)	(0.006)	(0.008)	(0.011)
Bidder Firm Size		−7.8786***		0.0123***		−0.0266***		0.0231**
		(0.624)		(0.002)		(0.008)		(0.009)
Bidder Leverage		0.0791		0.0383**		0.2291***		−0.0142
		(6.404)		(0.016)		(0.085)		(0.052)
Bidder Market to Book		−0.8432		−0.0010		0.0142**		0.0035
		(0.920)		(0.003)		(0.006)		(0.007)
Bidder Cash Holding		26.7163***		−0.0834***		−0.0284		−0.0452
		(8.835)		(0.028)		(0.019)		(0.086)
Bidder ROA		−11.3843		0.0778		−0.0970		0.2385*
		(8.511)		(0.052)		(0.081)		(0.119)
Bank FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bidder industry FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5,777	5,773	5,862	5,858	1,872	1,864	757	742
R^2	0.282	0.372	0.067	0.115	0.044	0.244	0.155	0.265

Notes. This table compares the outcomes of deals advised by boutique and bulge bracket banks. The unit of analysis is at the M&A deal-advisor level. The dependent variables are the duration of a deal in columns (1) and (2), the success rate in columns (3) and (4), the CAR of bidders in columns (5) and (6), and the CAR of targets in columns (7) and (8). *Boutique* is a dummy variable set to one if the investment bank is a boutique bank, and zero if a bulge bracket bank. Industry classification is based on the two-digit SIC code. Variable definitions are in the internet appendix, Section IA.1. Robust standard errors clustered by bank are in parentheses. ROA, Return on assets; FEs, fixed effects.

*, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

M&A advisory industry appears to be fueled by a gradual, rather than an abrupt, flow of valuable human capital across the two sectors over time. In the internet appendix, Section IA.12, we explain this gradual shift using a simple theoretical framework. We show that, with labor market frictions, workers' preference for one organizational structure over the other can lead to a steady cross-sector labor flow rather than an abrupt shift. A gradual rise of boutiques is therefore plausible even without any time-varying sectoral differences such as economic shocks and technology adoption.

Last, we explore how bulge bracket and boutique advisors differ in affecting the productivity, job scope, and career development of their skilled employees. In the internet appendix, Section IA.13, we provide evidence that high-performing bankers become more productive and broaden their skill set once they work for boutique banks. Using the manually collected job title data from LinkedIn., we also find that bankers are more likely to be promoted once they join boutique advisors, especially if they transition from the bulge bracket sector. Collectively, the results suggest that bankers perform better, accumulate more human capital, and speed up their career progression when relocating to the boutique sector.

6. Conclusions

This paper investigates the comparative advantage of focused and multidivisional organizational forms at attracting valuable human capital. While prior literature highlights various benefits and costs of firm diversification in utilizing and redeploying human capital, less is known regarding whether firms' organizational form plays a role at attracting and retaining human capital, and what implication it generates for product market competition.

We exploit the M&A advisory industry as a laboratory and leverage on a novel data set that tracks the career paths and performance of individual M&A bankers. In this setting, we document a surprising rise of focused firms (i.e., boutique banks) and the fall of multidivisional ones (i.e., bulge bracket banks) in both the product market and in the labor market for skilled bankers. High-performing bankers are more likely to switch to boutique advisors, especially those that are at relatively junior stage and thus are still on the upward trajectory of their career. Such migration is amplified by the cross-subsidization inside bulge bracket firms. This transition of human capital has important implications for product market competition, contributing to the expansion of the boutique sector over the past two

decades. It also affects the types and outcomes of deals being made in the M&A market. Our findings highlight the role of corporate organizational structure in affecting worker migration and identify the effect of human capital relocation as one of the factors that help shape the competitive landscape of an industry.

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Endnotes

[1] See also the anecdotal evidence by Schäfer (2012) and Gelles (2015).

[2] See, for example, Paulden (2006) and Butcher (2017). In particular, "boutiques can be much more remunerative for top bankers than big banks. For a start, bankers have a more direct claim on the profits they earn for the firm." "Without the overhead associated with distribution, sales, trading and capital markets (at bulge brackets), the margins (at boutiques) are very, very high." While the compensation structure at bulge brackets is not observable, anecdotes suggest that their employees' bonuses are not entirely tied to their performance: "[Bulge brackets'] bonus pool sharing has really affected a lot of people in a negative way, especially at banks that had to pay a lot of fines and it affected everyone's bonuses—it's not in your control. … At a boutique, the money you bring into your firm will be reflected in your bonus, so there's more upside."

[3] This finding is consistent with the life cycle pattern of banker job transition theorized by Gao et al. (2023).

[4] We note that our study focuses on a financial service industry that requires little financial or physical capital inputs, in which skilled workers perform relatively homogeneous tasks across firms. This unique setting makes it easier to evaluate the role of firm organizational structure in shaping human capital migration. The implications from our findings can be generalized readily to other human-capital-intensive industries.

[5] Besides the WSO, multiple sources, such as Thomas Reuters league tables and Bloomberg 20, offer their own lists and rankings of bulge bracket banks. Nevertheless, there are significant overlaps among these rankings.

[6] See Chemmanur et al. (2019) for a detailed discussion on M&A deal coverage between the Mergermarket and SDC.

[7] We match the two databases based on the names and addresses of the acquirers and targets, as well as the deal announcement dates. We then manually check the consistency of each match through internet and news sources to determine the correct date. For the remaining deals in Mergermarket that cannot be accurately matched to the SDC, we search for their industry classification from Compustat in case that either the acquirer or the target is a public firm. These steps allow us to identify the two-digit SIC code for 52% of acquirers and 40% of targets in our sample.

[8] For example, following the merger between Bank of America and Merrill Lynch, bankers that previously worked for Merrill Lynch will be assigned to Bank of America without actually separating from their employer. In such cases, we assign indicators for banker exit to be zero. Excluding these cases also helps remove a mechanical relation between banker transition and bank performance that we examine in Section 3.

[9] Our measure aims to capture bankers' value to their M&A advisory employers, which is primarily reflected in their ability to attract clients, procure businesses, and execute deals. Such ability is closely linked to bankers' deal volume. For instance, the annual league tables rank M&A advisory firms based on their deal volume rather than based on clients' postmerger performance. The total advisory fees that advisory firms receive are tied to the number of deals as well as the size of the deals but are not directly related to client performance. This compensation structure also applies to bankers: investment banks often reward their bankers for generating and executing more deals. We rely on the number of deals as a measure of bankers' past deal-making activity also because Mergermarket does not disclose the value of over 30% of deals in our sample. Different from Chemmanur et al. (2019), we do not restrict our sample bankers to advise at least two acquirers. This is because we focus on how a banker's performance relates to job transitions over his or her career path.

[10] Even though the boutique sector as a whole covers a large number of industries, individual boutiques stay quite focused. An average boutique bank covers 4 industries, compared with 17 industries covered by an average bulge bracket.

[11] During our sample period, 1,567 sample bankers work in the bulge bracket sector, and 1,199 work in the boutique sector.

[12] In the internet appendix, Section IA.8, we show the results are robust when we consider changes in a banker's job titles over time for hierarchical seniority instead of years of work experience. We manually collect information on various positions held by our sample bankers during the course of their career from their resumes posted at LinkedIn.com. A lower-ranked banker has a job title such as analyst, associate, or vice president, whereas a higher-ranked banker holds a job title such as managing director, division head, chairmen of the board, executive, partner, or founder. Notably, a banker's work experience monotonically increases with the rank of his job title. The cutoff for seniority based on years of experience corroborates the one separating low- and high-ranked job titles used in panel B of Table IA.8.

[13] In the internet appendix, Section IA.8, we find similar results when we use the entire set of banker-year observations rather than the exit-only sample.

[14] Note that the number of observations reduces from 4,182 to 2,475 because singletons related to fixed effects are dropped from the regressions.

[15] In an untabulated analysis, we verify that the deal volume from non-M&A businesses is comparable to the total volume of M&A deals for an average multidivisional bank. The time-series variations of M&A and non-M&A deal volumes are also similar in magnitude. These facts help corroborate our strategy that the deal volume in non-M&A departments can generate meaningful effects on M&A bankers.

[16] Our instrument of non-M&A spillover does not directly identify the arrival of skilled labor to a specific boutique bank; rather, it only suggests an increase in labor supply to the entire boutique sector. The advantage of this approach is that it circumvents potential endogeneity concerns related to labor market matching.

[17] The correlation between the two versions of *Non-M&A Spillover*, one based on the ratio of relative performance between non-M&A

and M&A divisions and the other based on the level of non-M&A deal volume, is 59% ($p < 0.001$).

[18] Note that the effect of *JOBS Spillover* is absorbed by industry fixed effects and that of *Post* is absorbed by year fixed effects.

[19] In the internet appendix, Section IA.9, we perform a placebo test to verify that the results are indeed induced by the (exogenous) regulatory event. Specifically, we counterfactually assign year 2008 as an artificial enactment time for the JOBS Act, and we observe no significant loading in this placebo test, suggesting that the results we obtain from the JOBS Act are unlikely to be driven by other confounding factors.

[20] Interestingly, the coefficients for *Deal Size* × *Boutique* are insignificant for target firms (columns (7) and (8)). This may not be surprising: unlike bidders that may return to the same investment bank for future advisory business and present a potential repeated revenue source, most target firms are one-time visitors to the market for corporate control.

[21] A potential concern is that boutique (bulge bracket) banks disproportionately advise small (large) deals, making the above comparison less informative. In the internet appendix, Section IA.11, we construct a matched sample in which we match deals advised by both types of banks by size. Our findings remain robust in the matched sample setting.

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