

Expert Advice: Industry Expertise of Financial Advisors in Mergers and Acquisitions

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Abstract

We examine whether the industry expertise of financial advisors matters to the value creation of mergers and acquisitions. Using a large sample of U.S. domestic acquisitions, we find that acquirers with advisors that have more expertise in the target's industry experience significantly higher announcement-period abnormal stock returns. This finding is more pronounced in diversifying acquisitions, in acquisitions where the acquirer has no recent acquisition experience in the target's industry, and in acquisitions of targets operating in more opaque industries. It is also stronger when the target's industry is more homogenous, when the deal is economically more important to the acquirer, and when the acquirer advisor's former clients performed better in previous takeovers of firms from the target's industry. A further investigation regarding the source of the value added by industry expert advisors shows that even though acquirers with industry expert advisors do not make acquisitions that generate significantly higher synergy, they pay significantly lower premiums and capture a significantly larger proportion of the synergistic gains. Finally, we find that industry expert financial advisors command higher advisory fees. Overall, our evidence suggests that financial advisors with more experience in the target industry provide higher quality advisory service that helps acquirers create more shareholder value.

I. Introduction

The incentives and role of financial advisors in mergers and acquisitions (M&A) and their impact on deal outcomes have been the subject of a continuing stream of literature (see, e.g., Bowers and Miller (1990), McLaughlin (1990, 1992), Servaes and Zenner (1996), Rau (2000), Kale, Kini, and Ryan (2003), Bao and Edmans (2011), and Golubov, Petmezas, and Travlos (2012)). Yet, we still do not fully understand whether financial advisors can help acquirers realize higher shareholder returns, and if so, which ones do. Much of the extant research focuses on a financial advisor's ranking or reputation as a measure of its ability to advise client firms. Although it is theoretically reasonable to expect that deals advised by investment banks who have built up their reputation in these capital market transactions should have better outcomes, evidence so far has been mixed. While some studies find that more reputable advisors are not associated with higher acquirer shareholder returns from acquisitions (Bowers and Miller (1990), Servaes and Zenner (1996), and Rau (2000)), others report results that suggest otherwise, albeit in only subsets of acquisitions (Kale, Kini, and Ryan (2003) and Golubov, Petmezas and Travlos (2012)). Utilizing a novel approach based on investment bank fixed effects, Bao and Edmans (2011) document a strong persistence in an investment bank's ability to generate higher shareholder returns for acquirer.¹ However, the question still remains what characteristics or qualifications enable investment banks to help acquirers make better acquisitions.

In this paper, we contribute to a more complete understanding of this issue by examining whether investment banks can better advise the acquirer in a transaction if they have built up more expertise in the target's industry through prior advisory services. Industry expertise is widely touted by investment banks as a major strength of their M&A advisory service. For example, the investment banking division of Credit Suisse claims on its website that "*Our industry expertise encompasses: Chemicals, Financial Institutions, ... , Transportation, Utilities, Waste Management.*" Brown Brothers Harriman, a boutique investment bank, states on its

¹ Chemmanur, Ertugrul, and Krishnan (2013) examine the effects of investment bankers on acquirer performance and deal outcomes. Even when they control for investment banker fixed effects, investment bank fixed effects remain significant, indicating that both the organizational capital at the bank level and the human capital at the banker level are important determinants of the value added by M&A advisors. As with most of the studies in the literature, we do not distinguish between bank and banker level expertise.

website that *“We focus on industries where we are able to differentiate ourselves through domain expertise in select industries. Our banking professionals have refined expertise in industries including Communications, Healthcare, Commodity Trade Finance, and Not-for-Profit.”* Firms involved in M&A activities also recognize the importance of the financial advisor’s industry expertise. In an interview with the CFO Journal of the Wall Street Journal Online, Karan Rai, CFO and Executive Vice President of ADS Inc., and a former investment banker himself, said that to find the right investment bank, *“It’s important to know who is leading the recent deals in your sector, because markets are fluid and whoever is actively working most deals will have the most feedback and a better understanding of the market.”*

For each acquisition, we measure the acquirer’s financial advisor’s expertise in the target’s industry by the proportion of all acquisitions of firms from the target’s industry in which the bank served as the acquirer advisor in the past three years. Acquirers can benefit from such industry expertise of their advisors in at least two ways. First, advisors with more expertise in the target’s industry may be able to steer acquirers toward deals that generate higher synergies. Specifically, prior advisory experiences provide opportunities for these banks to build up knowledge and understanding about the target’s industry as well as develop a large network of connections within that industry. These resources can help the banks identify targets that are more suitable for the acquirers. All else being equal, the higher the synergy of an acquisition, the more the acquiring firm (as well as the target) stands to gain. We label this argument as the “synergy creation” hypothesis.

Second, the target industry expertise of financial advisors can also help acquirers in the negotiation process of M&A transactions. The bilateral bargaining between the acquirer and the target has been shown to have a crucial impact on deal outcomes, such as takeover premiums and the division of the total synergy gains (Boone and Mulherin (2007a), Povel and Singh (2006), and Aktas, Bodt, and Roll (2010)). Among other factors, the acquirer’s ability to understand and evaluate the target and the proposed transaction can affect the outcomes of the negotiation process. Due to the often significant information asymmetry surrounding targets, especially when targets are from an unrelated industry or a more uncertain or opaque industry, acquirers risk overestimating the value of the targets and the merits of

the proposed transactions, resulting in overpayment. Financial advisors with more expertise in the target industry are better able to help acquirers meet these challenges, because their experiences from assisting acquirers in previous industry transactions give them a competitive advantage in conducting a thorough due diligence on the target, assessing the target's outside options, and estimating the true value of the target as well as the combined firm created by the proposed transaction.² As a result, the acquirers can approach the targets with better-devised bidding and negotiating strategies that enable them to capture more of the synergy created by the acquisitions and deliver higher returns to their shareholders. We term this conjecture as the “synergy capturing” hypothesis.

While both conjectures above suggest that the target industry expertise of financial advisors can have a positive impact on acquirer returns from M&A transactions, there are also reasons to expect otherwise. For example, an alternative “deal execution” hypothesis posits that financial advisors are hired to simply follow the client's instructions and execute the deals without any meaningful inputs into the decision making. Under this hypothesis, we should observe no link between the industry expertise of acquirer advisors and deal outcomes. Even more pessimistically, the acquirer advisor's experience in the target industry can be negatively related to acquirer returns if its experience consists mostly of pushing through deals even when the acquirers overpay and destroy shareholder value and it intends to continue such practice. We term this possibility the “deal completion” hypothesis.

We empirically examine these hypotheses using a comprehensive sample of 5,359 completed U.S. domestic acquisitions between 1985 and 2012. Consistent with both the “synergy creation” and “synergy capturing” hypotheses, we find that the industry expertise of acquirer advisors in the target industry is

² In particular, target industry expertise can enhance the financial advisor's capabilities to evaluate the risk of contingent liabilities in the due diligence process. The acquirers bear significant risk in change-of-control transactions if the due diligence process is conducted improperly. On November 20, 2012, Hewlett-Packard Co. announced an \$8.8 billion write-down of assets and huge quarterly losses, blaming more than \$5 billion of that on the improper accounting methods at Autonomy, which HP acquired in the summer of 2011. The HP-Autonomy episode highlights the potential risk stemming from acquiring a target firm and the importance of due diligence in controlling that risk. Because it is usually difficult for industry outsiders to assess the disclosure quality and detect accounting irregularities at the target company (Dichev, Graham, Harvey, and Rajgopal (2013)), the industry expertise of financial advisors can be quite valuable in helping the acquirers conduct a more thorough and effective due-diligence process and produce a more informed assessment of any potential liabilities associated with a transaction.

significantly and positively related to the acquirer's abnormal stock returns around the acquisition announcement. The positive relation is robust to controlling for a wide array of acquirer- and deal-level characteristics that have been shown to affect acquirer announcement returns in the literature. It continues to hold when we control for the acquirer advisor's prior investment banking relationship with either the target or the acquirer and the target financial advisor's overall reputation and industry expertise. Our findings are also economically meaningful. Specifically, *ceteris paribus*, acquirer returns increase by 0.406% (0.234%) per one-standard deviation increase in the number-based (value-based) industry expertise of acquirer advisors. Considering the average acquirer in our sample, this translates into a gain of \$24.0 (\$13.9) million for the acquirer shareholders.

We next examine whether the positive relation between advisor industry expertise and acquirer announcement returns varies with several target, acquirer, or advisor characteristics as the synergy creation and synergy capturing hypotheses would predict. Specifically, if the advisory service provided by industry expert advisors can indeed lead to higher acquirer returns, we would expect the advisor's industry expertise to be more useful to acquirers in transactions in which they face greater challenges in understanding and evaluating the targets. Consistent with our expectation, we find that the positive effect of advisor industry expertise on acquirer returns is concentrated (i) in diversifying acquisitions, (ii) in acquisitions where the acquirer has no recent M&A experience in the target's industry, and (iii) in deals in which the targets come from more opaque industries. Exploring potential heterogeneities in the nature of the industry expertise of financial advisors, we find that the positive effect of advisor industry expertise on acquirer returns is more pronounced (iv) when the targets operate in more homogenous industries, where the industry knowledge and expertise developed by the acquirer advisor from prior advisory experience can be more easily transferred and applied to the current transaction; and (v) when the advisor's prior acquirer-clients performed better in target industry transactions, suggesting that it is the advisor's "winning" experience from its previously advised deals that helps the acquirer in the current transaction create higher shareholder value. Overall, these cross-sectional variation results lend further

support to the conjecture that acquirer advisors with more expertise in the target industries can provide higher quality advisory services that help acquirers create more shareholder value.

In further analysis, we investigate the channels through which financial advisor industry expertise contributes to higher acquiring shareholder returns. Based on the “synergy creation” hypothesis, industry-expert advisors help create value for the acquirer shareholders by identifying target firms that create more synergistic gains when combined with the acquirers. The “synergy capturing” hypothesis, on the other hand, posits that industry expert advisors can help acquirers design more effective bidding strategies, negotiate better deal terms, and avoid overpayment, thus enabling acquirers to capture a larger proportion of the total synergistic gains (Golubov, Petmezas, and Travlos (2012) and Custodio and Metzger (2013)). Inconsistent with the “synergy creation” hypothesis, we do not find that the industry expertise of acquirer advisors is associated with higher deal synergy. However, our analysis shows that takeover premiums and target abnormal returns are significantly lower when acquirers are assisted by financial advisors with more expertise in the target industry, and such acquirers capture a significantly higher percentage of a deal’s total synergistic gains. These results are consistent with the “synergy capturing” hypothesis.

Even though we are careful in our empirical analysis by including as exhaustive a list of control variables as possible in our regressions, two potential issues could still cloud our inference. One is related to sample selection and the other driven by endogeneity. The sample selection related concern is that not all acquirers in the universe of M&A transactions retain investment banks as advisors and the decision to hire a financial advisor or not is most likely non-random. As a consequence, our analysis could be subject to a sample selection bias since our sample includes only deals in which the acquirers retain financial advisors. To address this concern, we employ Heckman’s (1979) two-stage framework to correct for any potential bias due to the selection issue. In the spirit of Golubov, Petmezas, and Travlos (2012), we first use the number of in-house acquisitions made by the acquirer in the past to predict its propensity to hire a financial advisor in the current deal. Then in the second stage, we augment our main regressions of acquirer returns by including the inverse Mills ratio constructed from the first-stage equation as an additional control. The results suggest that the positive relationship between the industry expertise of

financial advisors and acquirer abnormal announcement returns remain highly significant after correction for the sample selection bias.

The endogeneity concern in our setting can take the form of both reverse causality and omitted variables, which can generate several alternative explanations for the positive relation between acquirer advisor industry expertise and acquirer returns. One possibility is that investment banks with more expertise in a particular industry are able to differentiate *ex ante* between deals that are likely to generate value and those that are likely to destroy value, and they only accept advising mandates in the first category of deals. While this explanation is clearly plausible, it is inconsistent with the results from the deal synergy analysis, where we do not find a significant relation between acquirer advisor industry expertise and the total value creation of a transaction. It is also possible that investment banks with substantial industry expertise are in a stronger position in the market of M&A advisory services and can cherry pick the acquirers they prefer to work with. As such, they may choose to advise only acquirers which they believe are more likely to make shareholder value increasing acquisitions. To address this concern, we draw upon the prior literature and augment the acquirer returns regression by controlling for acquirer CEO quality, acquirer CEO industry expertise, and several acquirer corporate governance measures, which have been found to be positively related to acquirer returns (Morck, Shleifer, and Vishny (1990), Masulis, Wang, and Xie (2007), and Custodio and Metzger (2013)). Our results continue to hold with these additional controls in place.

To further alleviate endogeneity related concerns, we implement a two-stage least squares (2SLS) regression approach. We construct a geography-based instrument variable (IV) that is equal to one for acquiring firms headquartered in states or regions with major financial centers and zero otherwise. Our expectation is that acquirers located near major financial centers potentially face a larger supply of investment banking services and thus are more likely to be able to hire an M&A advisor with more expertise in the target industry. This intuition is confirmed in the first regression. In the second stage, we reestimate the acquirer return regression with the instrumented acquirer advisor industry expertise

measure. We find that it continues to have a significant and positive coefficient. Therefore, it appears that our results are unlikely to be driven by endogeneity.

As our final inquiry, we examine whether acquirer advisors with more experience in the target industry are compensated for the superior advisory service they provide and the shareholder wealth they help create in the M&A process. In specific, we find that the industry expertise of acquirer advisors is associated with significantly higher advisory fees charged by the banks. The result is consistent with the notion that the superior skill and capability of acquirer advisors with extensive experience in the target industry is recognized by the contracting parties in the market for M&A advisory service.

Overall, our results point to a significantly positive and economically meaningful effect of acquirer advisor expertise in the target industry on shareholder value creation in mergers and acquisitions. As such, we make two distinct contributions to the literature. First, we provide new insights into the debate over whether investment banks are capable of creating value for acquirers in the M&A process, and if so, which characteristic can enhance their abilities to do so. Our focus on one specific and salient dimension of advisor attributes, i.e., industry expertise, differs from much of the extant research that hypothesizes an empirical proxy for the advisor's overall reputation. We present the first evidence in the literature that an investment bank's experience from its involvement in takeovers of firms in the target's industry gives it a competitive advantage in assisting acquirers and its expertise is rewarded by premium advisory fees. This provides a justification for investment banks to develop specialization in certain industries.

A contemporaneous study by Chang, Shekhar, Tam, and Yao (2013) also examines the industry expertise of acquirer advisors. However, they focus on the financial advisor's expertise in the acquirer's industry. They find that advisors with such expertise are associated with a higher deal completion probability but not with the valuation effects of acquisitions. By focusing on the acquirer advisor's

expertise in the target's industry, we provide clear evidence that the industry expertise of financial advisors matters to the acquirer shareholder gains from acquisitions.³

Second, we add to an emerging literature that highlights the importance of industry expertise for a variety of parties in corporate and financial market settings, e.g., CEOs (Custodio and Metzger (2013) and Custodio, Ferreira, and Matos (2013)), boards of directors (Dass et al. (2013), Fernandes and Fich (2013), Minton, Taillard, and Williamson (2011), and Wang, Xie, and Zhu (2013)), and financial analysts (Bradley, Gokkaya, and Liu (2014)). Our paper is the first to uncover significant valuation effects of industry expertise of financial advisors in the context of mergers and acquisitions, and our results suggest that acquirer advisors with relevant expertise in the target industry are better able to assist their clients in creating more shareholder value in the M&A process.

The remainder of the paper is organized as follows. Section II describes the sample construction procedure and presents summary statistics for variables used in the paper. The empirical results are reported in Section III. Section IV concludes the paper.

II. Sample

A. Sample construction

We extract our acquisition sample from the Securities Data Corporation's (SDC) Domestic Mergers and Acquisitions database. We identify 5,359 acquisitions made by 2,744 firms between January 1, 1985 and December 31, 2012 that meet the following criteria:

- i. The transaction is completed.
- ii. The acquirer retains at least one investment bank as financial advisor. Following Bao and Edmans (2011), we focus on active banks that advised on at least ten deals or were acquired by a bank that advised on at least ten deals over the sample period.

³ In untabulated results, we control for the acquirer advisor's expertise in the acquirer's industry and do not find that it is significantly related to acquirer returns.

- iii. The acquirer owns less than 50% of the target's shares prior to the deal and controls more than 50% of the target's shares afterwards.
- iv. The deal value is greater than \$1 million and is at least 1% of the acquirer's market capitalization on the 11th trading day prior to the deal announcement date.
- v. The financial statement information of the acquirer is available from COMPUSTAT and stock return data from Center for Research in Securities Prices (CRSP).

B. Measuring financial advisor industry expertise

Acquirer advisors are presumed to perform two distinct functions in the M&A process (McLaughlin (1990, 1992), Kale, Kini, and Ryan (2003), Golubov, Petmezas, and Travlos (2012)). First, they can assist the acquirers in identifying targets that create higher synergistic gains with the acquirers. Second, acquirer advisors are able to provide valuable advice on acquisition strategies by designing the optimal bidding technique, bargaining for better deal terms with the targets, and facilitating the takeover process at the lowest possible costs. Both skills require in-depth knowledge and expertise in the target industry. One way for investment banks to accumulate such expertise is through prior advisory services in deals involving firms operating in similar environments. Therefore, for each transaction, we measure the acquirer financial advisor's expertise in the target industry as the number of acquisitions involving the same target industry in which it served as the acquirer advisor over the past three years, scaled by the number of all acquisitions involving the same target industry over the same period.^{4,5} For instance, consider a hypothetical acquisition of a target firm from the software industry. For this deal, the industry expertise of the acquirer's advisor, Bank XYZ, would be equal to 0.1 if there have been 20 acquisitions in which the targets are from the software industry over the past three years and Bank XYZ served as an advisor on the acquiring side in two of them. Alternatively, we also construct an industry expertise

⁴ We aggregate the industry expertise of each bank if the deal involves more than one financial advisor. Our results are robust to either excluding deals where acquirers have multiple financial advisors or alternatively controlling for the number of financial advisors retained by the acquirers in the regressions.

⁵ In untabulated analysis, we show that our results are robust to measuring an investment bank's industry expertise based on deals over the past 5 or 10 years.

measure based on the total dollar value of deals advised by the investment bank. Following Giroud and Mueller (2010), we define industries based on the 3-digit standard industry classification (SIC) codes.⁶

To account for the extensive mergers and acquisitions activities in the investment banking sector over the sample period, we utilize the data provided by Corwin and Schultz (2005), Ljungqvist, Marston, and Wilhelm (2006), and Bao and Edmans (2011) and complement them by manually checking the information from the National Information Center, SDC, and Factiva. The surviving bank from a merger or acquisition is credited with both predecessor banks' industry expertise within an industry. For example, following the acquisition of Merrill Lynch by Bank of America in 2009, the combined firm Bank of America Merrill Lynch inherited the industry expertise of both Merrill Lynch and Bank of America in the past.

It is plausible that investment banks can also develop industry expertise by repeatedly serving as advisors for target firms from a particular industry. But the tasks investment banks are expected to perform and thus the required knowledge and skill sets are likely to be very different between acquirer advisors and target advisors. As a result, the expertise developed by serving as target advisors in an industry may not be quite useful for better serving future acquirers of firms in that industry. For example, a major part of an acquirer advisor's job is to help the acquirer conduct a thorough due diligence on the target company, arrive at a fair valuation of the target both as a standalone company and as part of a combined entity after the consummation of the proposed transaction, and devise an optimal bidding strategy. The acquirer advisor's ability to do so is critical, especially when targets come from industries that are inherently associated with greater uncertainties due to the nature of their underlying business or from industries that the acquirers do not fully understand due to a lack of either operational or transactional experience in those sectors. In contrast, the aforementioned due diligence process and fair value estimation are not as essential for target advisors, because the target company presumably knows its

⁶ Giroud and Mueller (2010, pp. 316) argue that compared to the 2-digit and 4-digit SIC partitions, the 3-digit SIC classification represents "a compromise between too coarse a partition, in which unrelated industries may be pooled together, and too narrow a partition, which may be subject to misclassification." They also provide some examples to illustrate their point. We obtain very similar results using the 4-digit SIC classification and slightly weaker but still significant results using the 2-digit SIC classification.

true value better than any outside party. In addition, since the target company is typically at the receiving end of an offer, target advisors are not required to come up with a bidding strategy. Therefore, we expect a financial advisor's industry expertise to be more valuable to acquirers if it developed such expertise by serving as an advisor on the acquiring side in deals involving targets from a particular industry.⁷

C. Summary statistics

We present the distribution of our sample acquisitions by announcement year in Table 1. The statistics closely mimic the overall trend reported in earlier studies (Moeller, Schlingemann, and Stulz (2004), Masulis, Wang, and Xie (2007), and Golubov, Petmezas, and Travlos (2012)). Specifically, the number of deals peaked during the "internet bubble" period around 1999 and an obviously declining trend was observed following the recent financial crisis. We also report the average acquirer market capitalization and deal value over the sample period and produce consistent descriptive statistics with the literature.

Table 2 presents the summary statistics for variables used in the paper. Our main dependent variable, acquirer returns, is measured by the market model-adjusted cumulative abnormal returns (CAR) experienced by the acquirer's stock over a three-day event window (-1, 1) centered around the initial announcement date provided by the SDC.⁸ The market model parameters are estimated over the (-210, -11) period, with the CRSP value-weighted index return serving as the market return (Masulis, Wang, and Xie (2007)). The target abnormal returns are calculated in a similar manner. The statistics in Panel A, Table 1 suggest that an average (median) acquirer experiences slightly positive CAR of 0.9% (0.3%) while the target firm fares much better with average (median) CAR of 20.6% (17%), all of which are

⁷ In untabulated results, we find that the acquirer advisor's industry expertise developed from previously serving as an advisor for targets from an industry does not significantly affect acquirer returns in the current transaction. This is not surprising given the different tasks and skill sets expected of target advisors and acquirer advisors discussed above.

⁸ In unreported tables, we obtain qualitatively and quantitatively similar results if we measure the acquirer announcement return using five-day market model adjusted CARs or simple three-day CARs over the CRSP value-weighted index (Bao and Edmans (2011)).

significant at the conventional level. We obtain from SDC information on takeover premiums based on the target's stock price 1 day, 1 week, and 4 weeks prior to the announcement date.

Based on the number of deals advised by an investment bank, the acquirer advisor industry expertise measure has a mean of 0.02 and a median of 0.002. The advisor industry expertise measure based on the dollar value of advised deals has a mean of 0.049 and a median that is slightly positive. Following prior studies in the literature (e.g., Rau (2000) and Bao and Edmans (2011)), we use the acquirer advisor's market share in the entire M&A advisory business as a measure of its overall reputation. It is computed as the ratio of the total dollar value of deals an investment bank is involved with (on either the acquirer or the target side) in a given year to the total dollar value of all deals in that year.⁹ In our sample, the acquirer advisor's market share in the year prior to deal announcement has a mean of 0.042 and a median of 0.03.

Building on the extant literature on acquirer returns, we control for a comprehensive list of acquirer, deal, and target characteristics. The firm-level variables we consider include firm size, Tobin's Q, free cash flows, and leverage, all of which are measured at the most recent fiscal year end prior to the deal. For the acquirers, we also compute the stock price runup, measured as the buy-and-hold abnormal return during the (-210, -11) period prior to the deal, because it has been shown that acquirer returns are negatively related to its pre-announcement stock price runup (Rosen (2006)).

In addition to firm-level attributes, we account for an array of deal-specific factors that may affect M&A performance. Specifically, we include the relative size of the deal to the acquirer, the industry relatedness between the acquirer and the target, the deal form, the competitive environment of the deal, the method of payment, and the target listing status. To be consistent with our measure of advisor industry expertise, we define diversifying acquisitions as those where the acquirer and target do not share a three-digit SIC industry. Other deal characteristics are constructed strictly following the literature. Detailed definitions for variables used in the paper can be found in Appendix A.

⁹ The value of a deal is equally attributed to each bank if the acquirer in the deal involves multiple advisors. Using the number rather than total dollar value of deals to construct the market share measure does not impact our results in any meaningful way.

The summary statistics for the acquirer, deal, and target characteristics are displayed in Panel B, C, and D of Table 2 respectively. The target firms are much smaller than the acquirers and more financially constrained in terms of free cash flows (-0.02 (0.021) versus 0.009 (0.033) for the mean (median) value). Acquirer stocks exhibit an average (median) run-up of 13% (3%) prior to the announcement date. Approximately one half of the sample deals involve a target firm from a different three-digit SIC industry, 9.6% are in the form of tender offers, 1.2% are hostile, 3.1% involve competing bids, 28.3% are paid in cash only, and 38.9% represent acquisitions of public firms.

III. Empirical results

A. Baseline analysis

To empirically test our hypothesis, we examine the relation between the industry expertise of acquirer advisors and acquirer returns in a multivariate OLS regression framework. Specifically, we regress acquirer returns on the key independent variable, the advisor industry expertise, while controlling for various advisor, acquirer, and deal characteristics. We adjust the standard errors for heteroskedasticity (White (1980)) and acquirer clustering (Petersen (2009)). All regressions control for industry and announcement year fixed effects, whose coefficients are suppressed for brevity. The results are reported in Table 3.

We find that both measure of acquirer advisor industry expertise are positively related to acquirer returns. The positive relation is significant not only statistically but also economically. *Ceteris paribus*, acquirer CARs increase by 0.406% (0.234%) per one standard deviation increase in the number-based (value-based) industry expertise measure of acquirer advisors. For an average-sized acquirer in our sample, the improvement in acquirer returns is equivalent to an absolute gain of \$24.0 (\$13.9) million for the acquirer shareholders. To our best knowledge, these results represent the first evidence that hiring a financial advisor with more expertise in the target firm's industry significantly improves acquirer shareholder returns from the acquisition, and they lend support to the synergy creation and synergy capturing hypotheses, both of which suggest that financial advisors with relevant industry expertise are

more capable of helping acquirers create more shareholder value. Given that all our findings discussed in the paper are robust to using either of the two industry expertise measures, from this point forward we only report the results based on the number-based measure for the sake of brevity. Results based on the value-based measure are available upon request.

The coefficient estimates for the control variables are generally consistent with prior literature. Specifically, we find no significant association between the market share of acquirer advisors and abnormal announcement return, which is consistent with much of the earlier work that generally fails to find support for the reputational capital mechanism in the market for M&A advisory businesses (Bowers and Miller (1990), Michel, Shaked, and Lee (1991), Servaes and Zenner (1996), Hunter and Jagtiani (2003), and Ismail (2010)). Regarding acquirer-level characteristics, acquirer CARs significantly decrease with firm size (Moeller, Schlingemann, and Stulz (2004)), free cash flows, which may facilitate empire building behaviors (Harford (1999)), and stock price runup (Rosen (2006)). The coefficient of acquirer leverage ratio is positive and significant, suggesting that high leverage ratio reduces financial slack and prevents managers from making value-destroying acquisitions to some extent (Jensen (1986)). The deal-level control variables also produce coefficient estimates with expected directions. For instance, acquirer CARs are significantly lower in diversifying acquisitions, deals with competing offers, and acquisitions involving public targets, and significantly higher in tender offers and all-cash deals.

B. Cross-sectional variations in the effect of advisor industry expertise

So far, the results suggest that acquirer shareholders can benefit from enlisting the advisory service of investment banks that have extensive expertise in the target industries. In this section, we explore whether the positive effect of advisor industry expertise on acquirer returns varies with acquirer, target, and advisor characteristics as our hypotheses would imply. Such an analysis can provide a higher level of granularity to our main findings and highlight the settings in which the industry expertise of financial advisors is more important to acquirers as well as the types of industry expertise that are more

helpful to acquirers in creating higher shareholder returns. In doing so, we are also able to speak to the causal nature of the relation between advisor industry expertise and acquirer returns.

In our first set of analysis, we examine whether the acquirer advisor's target industry expertise is more valuable when acquirers face greater information asymmetry and have more difficulties in understanding and evaluating the targets. To test this conjecture, we select three settings, diversifying acquisitions, acquisitions in which acquirers have no recent acquisition experience in the target's industry, and acquisitions in which the targets are from more opaque industries, and we expect the positive effect of advisor industry expertise on acquirer returns to be more pronounced in these transactions. We report the results from this analysis in Subsections B.1 to B.3 below.

In the second set of analysis, we explore the heterogeneity in the industry expertise of financial advisors and focus on two specific dimensions. One is related to the industry expertise's transferability between firms within an industry. We postulate that the acquirer advisor's previous advisory experience in the target's industry is more helpful to the acquirer in the current transaction if the target's industry is more homogenous. The reasoning behind this conjecture is that in homogenous industries, the knowledge and expertise developed by the acquirer advisor from its prior dealings with other firms in the target's industry can be more transferrable and applicable to the target in the current deal. We also investigate whether the advisor's industry expertise is more conducive to higher acquirer returns in the current deal if it was accumulated through previous advisory services that helped acquirers generate higher shareholder value. This exploration is motivated by the question whether it is the advisor's "winning" experience or all experience in the target industry that matters to acquiring shareholder value creation in the current transaction. We present the results from these two tests in Subsections B.4 and B.5 below.

Finally, we examine whether the effect of advisor industry expertise is related to the relative size of M&A transactions. If industry expert advisors contribute to higher acquirer shareholder value through providing better advice on the deals under consideration rather than through some non-M&A related services they offer, we would expect the valuation effects experienced by the acquirers to increase with

the magnitude of the deals relative to the acquirers. Results from this analysis are presented in Subsection B.6.

B.1. Diversifying versus related deals

To examine whether the industry expertise of acquirer advisors is more valuable in diversifying deals, we classify an acquisition as diversifying if the acquirer and the target do not share a 3-digit SIC code, so as to be consistent with our industry expertise measure.¹⁰ We then reestimate the acquirer returns regression separately for diversifying and related acquisitions. For brevity, we only report the coefficient estimates on the industry expertise measure in Panel A of Table 4. We find that the coefficient on the acquirer advisor industry expertise is positive and highly significant in the diversifying deal subsample. In contrast, we find no significant effect of advisor industry expertise on acquirer CARs in related acquisitions. These results are consistent with the interpretation that the value of advisory service provided by industry-expert advisors manifests itself more pronouncedly in diversifying acquisitions where the acquirers are unfamiliar with the target's industry and face greater difficulties in understanding and evaluating the targets.

B.2. Acquirer's M&A experience in the target industry

To assess whether the importance of advisor expertise in the target industry varies with the acquirer's prior M&A experience (or the lack thereof) in the target industry, we search for acquisitions made by the acquirer over the past three years and determine if the target in any of those deals is from the same 3-digit SIC industry as the target in the current transaction. We find that acquirers in 1,587 of our sample acquisitions have made at least another acquisition in the target's industry over the past three years. We partition our sample into two subsamples based on whether the acquirer has any recent acquisition experience in the target industry. We estimate the acquirer returns regressions separately for the two subsamples and report an excerpt of the results in Panel A of Table 4.

¹⁰ Our results are robust to defining diversifying acquisitions based on 2-digit SIC codes.

We find that the acquirer advisor's industry expertise has a significantly positive effect on acquirer returns in the subsample of deals where the acquirers lack recent acquisition experience in the target industries. On the other hand, we find no significant relationship between advisor industry expertise and acquirer returns for "experienced" acquirers who have recently made acquisitions in the target industry. The results are consistent with our conjecture that acquirers without recent acquisition experience in the target industry benefit more from the industry expertise of financial advisors.

B.3. Target industry opacity

We next examine whether the value of advisor industry expertise varies with the information environment of the target industry. Target firms operating in a more opaque information environment are more difficult for acquirers to evaluate both as a standalone entity and as part of a proposed M&A transaction. Financial advisors with more expertise in the target industry can leverage their knowledge and insights gained through previous advisory services in the target industry to help the acquirers more effectively assess deal merits, conduct the due diligence process, and determine the price to pay for the targets. Therefore, we expect the positive relation between advisor industry expertise and acquirer announcement returns to be more pronounced when the target firm comes from a more opaque industry. To test this prediction, we measure an industry's opacity by the industry median asset intangibility ratio, with higher ratios indicating more opaque industries (Barth and Kasznik (1999)). We then divide the whole sample into two subsamples based on whether the target industry's asset intangibility ratio is above or below the sample median and estimate subsample regressions of acquirer returns. The coefficient estimates presented in Panel A of Table 4 show that consistent with our conjecture, the positive impact of advisor industry expertise on acquirer CARs is only significant when the target comes from a more opaque industry.

B.4. Target industry homogeneity

In this section, we examine whether the positive relation between advisor industry expertise and acquirer returns depends on the target industry's homogeneity. Firms in homogenous industries utilize similar production technologies, compete in the same product market, and are subject to the influence of a similar set of economic factors. Therefore, we expect the advisor's prior advisory experience in the target industry to be more valuable when the target's industry is more homogenous, because the advisor's knowledge and expertise in the industry can be more easily transferred between deals.

Following Parrino (1997), we measure industry homogeneity by the partial correlation between common stock returns of firms within each three-digit SIC industry from 1970 to 2012. Specifically, we create an equal weighted industry index for each month within the sample period using the entire CRSP universe. Following Parrino (1997), we exclude industries with fewer than 35 firms from the estimation and randomly select 50 firms if an industry has more than 50 companies. Then we regress the monthly returns of each firm against the equal weighted industry index returns and the equal weighted CRSP market returns. The average of the partial correlation coefficient of the industry index returns is our measure of industry homogeneity with higher correlation coefficients indicating more homogenous industries. We partition our sample into two subsamples based on whether the target industry's homogeneity measure is above or below the sample median. We estimate the acquirer returns regression separately for the two subsamples and report the results in Panel B of Table 4. Consistent with our prediction, we find that the advisor industry expertise measures have a significant and positive coefficient in the subsample of deals involving targets from more homogenous industries. In contrast, the coefficient of advisor industry expertise is insignificant in the subsample of acquisitions in which the targets operate in less heterogeneous industries.

B.5. Prior acquirer-client performance in target industry transactions

Our evidence so far suggests that by serving as financial advisors on the acquirer side in deals involving targets from a particular industry, investment banks can build up valuable expertise in the industry and use it to better serve acquirers in future transactions involving the same target industry. A

natural question about this finding is that if the prior advisory services rendered by an investment bank have mostly led to mediocre or poor acquirer performance, whether the advisor's industry expertise developed from these "losing" experiences can still help acquirers in future transactions generate higher shareholder returns. At least from a theoretical standpoint, even "losing" experience can enhance an investment bank's capability to provide quality advisory service in the future if it learns from its past mistakes. Alternatively, it could be the case that only the "winning" experiences matter, i.e., the industry expertise of financial advisors will benefit acquirers only when such expertise comes from prior advisory services that led to superior acquirer performance. As Bao and Edmans (2011) demonstrate, there is strong persistence in investment banks' ability to improve acquirers' returns from acquisitions.

To investigate these possibilities, we use two different proxies to measure an investment bank's prior client performance. Following Bao and Edmans (2011), the first measure is the equally weighted average of acquirer CARs in acquisitions involving the same target industry as the current deal in which the bank served as the acquirer financial advisor over the past three years. Similarly, the second proxy, in the spirit of Rau (2000), is the value-weighted average of acquirer CARs in prior deals where the market value of acquirer equity in each deal is used as the weight. Then we split our sample of acquisitions at the sample median point of each of our prior client performance measures and reestimate the acquirer returns regression on each subsample. The regression results are presented in Panel B of Table 4.

We find that regardless of which prior client performance measure we use, the advisor industry expertise always has a positive effect on acquirer returns. However, the effect is only statistically significant in the subsample of deals in which the average performance of the acquirer advisor's prior clients is above the sample median. These results lend strong support to the notion that the expertise of financial advisors in the target industry is more valuable to the acquirers in current deals when the advisors have succeeded in the past in helping their clients create more shareholder wealth in acquisitions involving the same industry.

B.6. Relative deal size

Finally, we investigate whether the impact of advisor industry expertise on acquirer announcement returns varies with a transaction's economic significance to the acquirer. To the extent that industry expert advisors add value to acquirers by providing higher quality advisory service on the current deals, the impact of the industry expertise on acquirer returns is more likely to manifest in acquisitions that represent a significant addition to the acquirer. To examine this conjecture, we partition our sample deals into two subsamples based on whether the relative deal size is above or below the sample median. We then repeat our baseline regression of acquirer CARs on each subsample respectively. The results are presented in Panel C of Table 4. Consistent with our prediction, the positive coefficient on the acquirer advisor industry expertise measure is only significant when the transaction's relative size is larger, suggesting that the industry expertise of financial advisors is more valuable to acquirers in relatively larger deals. In addition to the economic significance discussion in Section A, this finding further accentuates the economic importance of advisor industry expertise to acquirers.

C. Correction for sample selection bias

Because of our focus on industry expertise of financial advisors, all the acquirers in our sample retain at least one investment bank as a financial advisor. A potential concern with this sampling method is that not all acquirers in the universe of M&A transaction hire financial advisors and the acquirer's decision to hire one or not is most likely non-random. As a result, our analysis could be subject to a sample selection bias. To address this issue, we follow Heckman (1979) and repeat our main analysis in a two-stage procedure to correct for any selection bias due to the non-randomness of our sample. In the spirits of Golubov, Petmezas, and Travlos (2012), we use the acquirer's in-house acquisition expertise, which is defined as the number of "in-house" acquisitions made by the acquirer in the past three years, to predict the propensity of the acquirer to hire an investment bank for the current deal in the first-stage regression. Then in the second stage, we reestimate the acquirer returns regression while including an additional control variable, the inverse Mills ratio constructed from the first-stage regression. Table 5 presents the results from the Heckman (1979)'s two-stage procedure.

To conduct the first stage regression, we supplement our original sample of acquisitions with 435 “in-house” deals from SDC announced between 1985 and 2012 that meet our sample selection criteria but in which the acquirers do not have a financial advisor.¹¹ We estimate a probit model using the expanded sample, where the dependent variable is equal to one for deals in which the acquirers enlist the advisory service of investment banks and zero otherwise. The independent variables include the acquirer’s in-house acquisition expertise as well as all the control variables included in the acquirer return regressions in earlier tables. Column (1) reports the coefficient estimate of the probit model. We find a negative and highly significant coefficient for the acquirer’s in-house M&A expertise, suggesting that acquirers that have made more acquisitions in the past without the assistance of financial advisors are less likely to hire one in the current deal. We also find that the larger acquirers and acquirers in relatively larger deals and hostile deals are more likely to hire a financial advisor, and compared to deals involving public and private targets, acquirers taking over subsidiary targets are more likely hire a financial advisor. Columns (2) presents the second-stage results of acquirer returns regressions controlling for the inverse Mills ratio computed from the first-stage equation. We find a positive and insignificant coefficient for the inverse Mills ratio in both specifications, indicating that any sample selection bias is unlikely to be serious. More importantly, the effect of advisor industry expertise on acquirer returns remains positive and significant, suggesting that our results are robust to correcting for any sample selection bias due to our sampling process.

D. Sources of higher acquirer returns

The body of evidence we have presented suggests that financial advisors with expertise in the target’s industry can help acquirers generate higher shareholder returns. In this section, we explore the sources of the value creation by industry expert advisors. As we contend in the introduction, there are two non-mutually exclusive channels through which advisor industry expertise can benefit acquirers. Specifically, the “synergy creation” hypothesis argues that industry-expert advisors can help identify and

¹¹ Golubov, Petmezas, and Travlos (2012) report 352 in-house acquisitions over the period of 1996 to 2009.

structure deals that are likely to generate higher expected synergy, while the “synergy capturing” hypothesis posits that advisor industry expertise can help acquirers better understand and evaluate the targets, thereby improving their bidding and negotiation strategies and enabling them to capture a larger share of the expected synergy. We aim to distinguish between the two channels by examining deal synergy, takeover premiums, and the division of acquisition synergy between the acquirer and the target.

D.1. Analysis of deal synergy

To test the “synergy creation” hypothesis, we relate acquirer advisor industry expertise to the synergy gains of acquisitions. Following Bradley, Desai, and Kim (1988) and Wang and Xie (2009), we measure an acquisition’s synergy as the 3-day abnormal stock returns around (-1, 1) of a weighted average portfolio of the acquirer and the target, with the weights determined by the acquirer’s and the target’s respective market value of equity on the 6th trading day prior to the acquisition announcement and adjusted to reflect any toehold of the acquirer in the target. We also follow Kale, Kini, and Ryan (2003) in estimating an acquisition’s synergy in dollar terms by adding the acquirer’s and the target’s respective dollar gains or losses. The acquirer’s (target’s) gains or losses from the acquisition are estimated as its 3-day abnormal stock returns multiplied by its market value of equity on the 6th day prior to the acquisition announcement. Since we need stock return data for both the acquirer and the target to compute either measure of synergy, our analysis in this section is limited to 1,899 acquisitions of public targets only.

We regress deal synergy against acquirer advisor industry expertise while controlling for the same set of acquirer and deal characteristics as in earlier tables. Table 6 presents the estimation results, with column (1) based on the percentage return measure of synergy and column (2) based on the dollar measure of synergy. We find that acquirer advisor industry expertise has a negative but insignificant effect on acquisition synergy, inconsistent with the “synergy creation” hypothesis that acquirer advisors

with expertise in the target’s industry contribute to higher acquirer CARs by identifying targets and structuring deals to generate greater synergy.¹²

D.2. Analysis of takeover premiums and target abnormal returns

In order to shed light on the “synergy capturing” hypothesis, we first examine whether acquirer advisor industry expertise affects takeover premiums offered by the acquirers and the abnormal returns experienced by the targets around the acquisition announcement. The takeover premium information provided by SDC is based on the offer price in an acquisition and the target firm’s stock price at several points (one day, one week, and four weeks) prior to the acquisition announcement. Such information is available for 1,835 acquisitions in our sample that involve public targets. We regress the takeover premium offered by the acquirer in an acquisition against the acquirer advisor’s industry expertise measure and report the results in columns (1) to (3) of Table 7. We find that regardless of which takeover premium measure is being used, the acquirer advisor industry expertise has a significantly negative effect on the takeover premiums offered by acquirers. This evidence provides at least indirect support for the “synergy capturing” hypothesis, which argues that financial advisors with expertise in the target industry can help acquirers better understand and more accurately value targets so that they can avoid overpaying for the targets. As for the control variables, we find that acquisition premiums are significantly higher for tender offer deals and deals involving competing offers.

As an alternative to the takeover premiums reported in the SDC, we measure the 3-day abnormal stock returns experienced by target firms around the acquisition announcements. We regress target abnormal returns on the acquirer advisor industry expertise and present the results in column (4) of Table 7. Consistent with the evidence from the takeover premium analysis, we find that acquirer advisor industry expertise has a significantly negative effect on target abnormal returns. The coefficient estimates

¹² This evidence, however, does not necessarily imply that financial advisors with industry expertise are incapable of identifying transactions with greater potential for synergistic gains. It could be that the acquirers have already set their sights on specific target firms before they engage financial advisors, or that the acquirers only solicit financial advisors’ inputs on other aspect of the deals.

for the control variables are generally consistent with the literature (Officer (2003), Dong et al. (2006), and Wang and Xie (2009)). In particular, target CARs are lower for larger targets and targets with higher Tobin's Q and higher in hostile deals, deals in the form of tender offers, and deals paid exclusively with cash.

D.3. Analysis of the acquirer-target division of deal synergy

The results presented in the previous two subsections indicate that acquirers advised by financial advisors with industry expertise do not make acquisitions that generate significantly higher synergy but they pay significantly lower premiums for targets in their acquisitions. A direct implication from these findings, which is also a direct prediction of the "synergy capturing" hypothesis, is that acquirers advised by industry-expert advisors are able to capture a larger proportion of deal synergy. To examine this conjecture, we compute the acquirer's share of deal synergy (ASOS) as the proportion of deal synergy that accrues to the acquirer.¹³ Following Kale, Kini, and Ryan (2003), ASOS is equal to the ratio of the acquirer's dollar gains or losses to the dollar value of deal synergy if the synergy is positive, and $(1 - \text{the acquirer's dollar gains or losses} / \text{the dollar value of deal synergy})$ if the synergy is negative. To avoid potential concerns with interpreting negative synergy gains, we also follow Ahern (2012) and calculate the acquirer's relative gains to the target. Specifically, we compute the difference in dollar gains between the acquirer and the target and scale the difference by the sum of the acquirer's and target's market value of equity 50 trading days prior to the acquisition announcement date.

We estimate regressions of both the acquirer's share of deal synergy and the acquirer's gains relative to the target against acquirer advisor industry expertise and present the results in Table 8. Consistent with the "synergy capturing" hypothesis, we find that the acquirer advisor's industry expertise has a significantly positive effect on both the acquirer's share of deal synergy and the acquirer's gains relative to the target.

¹³ When SG is positive, we compute ASOS as the ratio of acquirer dollar-denominated gains to total gains. When SG is negative, we define ASOS as $[1 - \text{acquirer dollar-denominated gains} / \text{total gains}]$ following Kale et al. (2003).

E. Endogeneity concerns and alternative explanations

Even though our evidence is consistent with a causal interpretation that the target industry expertise of financial advisors leads to higher returns for acquiring shareholders, the endogenous nature of the acquirer-advisor pairing generates several alternative explanations that can potentially account for our findings as well. The endogeneity problem manifests itself in two forms in our setting. One is reverse causality and the other is omitted variables.

E.1. Reverse causality

The reverse causality argument posits that rather than financial advisors with target industry expertise improving acquirer returns, it could be that industry-expert advisors are able to identify *ex ante* which acquirers are more likely to make shareholder value increasing acquisitions and choose to accept the advising mandates from these acquirers only. To deal with this concern, we augment our acquirer returns regression by controlling for acquirer CEO quality and industry expertise and acquirer corporate governance. Prior research finds that acquirers with higher-quality CEOs, CEOs with industry expertise, and better governance tend to generate higher returns for their shareholders (Morck, Shleifer, and Vishny (1990), Masulis, Wang, and Xie (2007), and Custodio and Metzger (2013)). Therefore, investment banks may very well pick their clients based on these characteristics. Table 9 present the estimation results of the augmented acquirer return regressions. Specifically, in column (1), we control for acquirer CEO quality, which is measured by the industry-adjusted growth rate of the acquiring firm's net income over the three years prior to the acquisition (Morck, Shleifer, and Vishny (1990)). In columns (2) to (4), we control for the acquirer's anti-takeover provision index as constructed by Gompers, Ishii, and Metrick (2003) and the product market competition faced by the acquirer, which we measure by the acquirer industry's Herfindahl index based on sales. These two variables capture the disciplinary power of the market for corporate control and the product market competition, respectively (Masulis, Wang, and Xie (2007)). In columns (5) and (6), we control for whether the acquirer CEO has prior work experience in the

target's industry based on her employment history obtained from BoardEx,¹⁴ with column (5) based on both diversifying and related acquisitions and column (6) based on diversifying acquisitions only. It is worth noting that data availability for the anti-takeover provisions and CEO industry expertise significantly reduces our sample size.

We find that our earlier findings are robust to the inclusion of these additional controls in the acquirer return regressions, as the acquirer advisor industry expertise measures continue to have significant and positive coefficients. The coefficient estimates of the new control variables are also largely in line with extant evidence in the literature. For example, consistent with Morck, Shleifer, and Vishny (1990) and Masulis, Wang, and Xie (2007), we find that the CEO quality measure has a significantly positive effect on acquirer returns (see column (1)), suggesting that firms run by better CEOs make better acquisition decisions. Also consistent with the evidence of Masulis, Wang, and Xie (2007), the anti-takeover provision index has a significant and negative coefficient (see columns (2) and (4)), indicating that firms with a lower anti-takeover provision index, i.e., with fewer takeover defenses, make better acquisition decisions. Finally, similar to Custodio and Metzger (2013), we find that acquirers tend to make better diversifying acquisitions when the acquirer CEO has prior work experience in the target's industry. Overall, the results reported in Table 9 suggest that the positive effect of acquirer advisor industry expertise on acquirer returns is incremental to the effects of these acquirer firm and CEO characteristics.

E.2. Omitted variables

Also complicating the interpretation of our findings is the omitted variable problem, which encompasses the reverse causality possibility we try to dispel above. The broader concern here is that there may be some deal, acquirer, and/or even target characteristics that drive both acquirer returns and

¹⁴ Specifically, we follow the methodology in Custodio and Metzger (2013) and construct a CEO industry expertise dummy variable that equals to one if the acquirer CEO has worked in the target industry and zero otherwise. Information on the employment history of corporate executives is from the BoardEx database. Since BoardEx mainly covers large firms and its coverage starts around year 2000, requiring BoardEx data availability significantly reduces our sample size.

the acquirer's hiring of industry-expert financial advisors. If such characteristics, which can be unobservable to financial economists, are uncontrolled for in our acquirer return regression, the coefficient estimates we obtain could be biased and any relation we identify between acquirer return and advisor industry expertise could be spurious. While it is impossible to completely rule out this possibility, we aim to alleviate the concern by implementing a two-stage least squares (2SLS) regression approach. The success of this approach in addressing the omitted variable problem hinges on whether we can find a good instrumental variable (IV) that can predict the industry expertise of acquirer financial advisors (the relevance condition) but is unrelated to acquirer returns, except through acquirer advisor industry expertise (the exclusion restriction). To satisfy these criteria, we construct an instrument that is equal to one for acquiring firms headquartered in states or regions with major financial centers and zero otherwise.¹⁵ The idea behind this instrument is that acquirers located near major financial centers potentially face a larger supply of investment banking services, which increases their chance of hiring financial advisors with more expertise in the target's industry. There does not appear to be a direct economic link between this instrument and acquirer returns. We present the 2SLS regression results in Table 10. In the first stage, we find that our instrument has a significant and positive effect on acquirer advisor industry expertise, indicating that it satisfies the relevance condition. In the second stage, we find that the instrumented version of acquirer advisor industry expertise continues to have a significant and positive effect on acquire returns, suggesting that our findings are robust to correcting for endogeneity bias due to omitted variables.

F. Further robustness tests

To further buttress the robustness of our findings, we re-estimate the acquirer return regression while controlling for (1) any prior investment banking relationship between the acquirer advisor and the target, (2) any prior investment banking relationship between the acquirer advisor and the acquirer, (3)

¹⁵ These states include California, Illinois, New York, New Jersey, Connecticut, Massachusetts, Rhode Island, Maine, Vermont, and New Hampshire. The financial centers present in these states are Chicago, New York City, Boston, San Francisco, and Los Angeles.

acquirer advisor fixed effects, (4) acquirer firm fixed effects (in a subsample of firms making multiple acquisitions), and (5) the target advisor's overall reputation and (both target and acquirer) industry expertise. The acquirer advisor's target industry expertise continues to have a significant and positive effect on acquirer returns. We have experimented with alternative measures of acquirer advisor industry expertise. Namely, we use the absolute number or total deal value of the target industry transactions in which the acquirer advisor served as a buyer advisor. Our results continue to hold.

G. Advisory fees

So far, we have established that acquirer advisors with more experience in the target industry can provide superior advisory service and help the acquirer create more shareholder wealth during the M&A process. It is therefore quite natural and important to examine whether the superior services provided by industry-expert financial advisors are associated with premium advisory fees, since M&A advisory fees constitute a major source of revenue for investment banks (Golubov, Petmezas, and Travlos (2012)). Evidence in this regard can also shed light on whether investment banks have the incentives to develop industry-specific specialization and expertise. In specific, we regress advisory fees, measured as the total advisory fees paid by the acquirer as a percentage of deal value, on advisor industry expertise while controlling for a comprehensive array of deal and acquirer characteristics that may have an effect on the advisory fees. Table 11 presents the results based on various model specifications using different sets of control variables. In all specifications, we include the natural logarithm of deal value as a control variable since McLaughlin (1990) finds a significantly negative relation between advisory fees as a percentage of deal value and transaction size due to economy of scale. We confirm this finding in our sample. The coefficient of $\log(\text{deal value})$ is negative and significant at the 1% level in all specifications. More important for our purpose, the coefficient on the advisor industry expertise measure is significant and positive. This evidence suggest that the superior advisory services provided by industry-expert advisors are recognized and compensated during the contracting process in the market for M&A advisory service. It is worth noting that our finding is obtained while controlling for the acquirer advisor's market share in

the previous year as a reputation measure that is widely used in the extant literature. Consistent with prior studies, investment banks with a larger market share command significantly higher advisory fees.

IV. Conclusion

In this paper, we investigate whether acquirer advisors with more relevant expertise in the target industries can do a better job in helping the acquirers create more shareholder value during the M&A process. Our findings indicate that financial advisors with in-depth knowledge in the target industries can significantly increase acquirer announcement returns. The positive effect of advisor industry expertise on acquirer shareholder returns is more pronounced in diversifying acquisitions, in acquisitions where the acquirer has no prior acquisition experience in the target industry, and in acquisitions of targets operating in more opaque industries. The effect is also stronger when the target's industry is more homogenous, allowing an easier transfer of relevant expertise within industry, and when the advisor's former clients performed better in their acquisitions of firms in the target's industry, suggesting that there is a persistence in the effect of industry expertise. We also find that the impact of acquirer advisory industry expertise is accentuated in deals that are economically more significant to the acquirers.

We further investigate the sources of the higher returns experienced by acquirers with industry expert advisors. We find that even though these acquirers do not make acquisitions that generate significantly higher synergy, they pay significantly lower premiums and capture a significantly larger proportion of the synergistic gains. Finally, we find that industry expert financial advisors command higher advisory fees. Overall, our evidence suggests that financial advisors that have accumulated relevant skills and expertise through prior advisory experiences in an industry can better assist acquirers create more shareholder value in future transactions involving targets from that industry.

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Table 1. Sample distribution by announcement year

The sample consists of 5,359 completed U.S. mergers and acquisitions between 1985 and 2012. Variable definitions can be found in Appendix A.

Year	Number of Acquisitions	Percentage of Sample	Mean Acquirer Market Value of Equity (\$mil)	Mean Deal Value (\$mil)
1985	123	2.3	2,103	638
1986	140	2.6	1,553	339
1987	93	1.7	1,843	301
1988	105	2.0	3,089	525
1989	91	1.7	2,655	742
1990	67	1.3	2,661	458
1991	68	1.3	2,198	271
1992	99	1.8	1,024	249
1993	128	2.4	2,558	636
1994	204	3.8	2,035	429
1995	275	5.1	2,098	473
1996	318	5.9	3,001	755
1997	371	6.9	3,259	730
1998	408	7.6	6,387	1,727
1999	352	6.6	8,667	1,812
2000	324	6.0	8,332	2,095
2001	212	4.0	6,367	1,329
2002	210	3.9	6,423	701
2003	197	3.7	5,111	709
2004	217	4.0	3,897	679
2005	234	4.4	10,181	1,689
2006	205	3.8	9,962	1,675
2007	205	3.8	9,488	1,003
2008	132	2.5	6,086	1,072
2009	136	2.5	16,831	2,428
2010	150	2.8	13,969	1,342
2011	121	2.3	7,413	1,812
2012	174	3.2	7,183	1,024
Total	5359	100.0	5,922	1,103

Table 2. Summary statistics

The sample consists of 5,359 completed U.S. mergers and acquisitions between 1985 and 2012. Panel A, B, C, D, and E present the summary statistics for the dependent variables, advisor-, acquirer-, deal-, and target-specific characteristics, respectively. Variable definitions can be found in Appendix A.

Panel A: Dependent variables

	N	Mean	Std	Q1	Median	Q3
Acquirer CARs	5359	0.908	8.829	-3.391	0.270	4.383
Target CARs	1899	20.627	20.852	6.191	17.006	31.663
Premium 1 day	1812	33.826	41.231	13.400	27.230	45.700
Premium 1 week	1810	38.614	47.864	16.860	31.650	50.720
Premium 4 weeks	1801	44.810	63.814	18.970	36.220	59.055

Panel B: Advisor characteristics

	N	Mean	Std	Q1	Median	Q3
Industry expertise (number)	5359	0.020	0.049	0.000	0.002	0.023
Industry expertise (value)	5359	0.049	0.110	0.000	0.000	0.042
Market share	5359	0.042	0.044	0.003	0.030	0.065

Panel C: Acquirer characteristics

	N	Mean	Std	Q1	Median	Q3
Log(Acquirer size)	5359	6.787	1.969	5.375	6.725	8.075
Acquirer Q	5359	2.319	2.713	1.225	1.625	2.389
Acquirer free cash flow	5359	0.009	0.157	-0.007	0.033	0.073
Acquirer leverage	5359	0.162	0.159	0.027	0.120	0.250
Acquirer stock price runup	5359	0.130	0.625	-0.169	0.030	0.267

Panel D: Deal characteristics

	N	Mean	Std	Q1	Median	Q3
Relative deal size	5359	0.519	1.304	0.082	0.220	0.577
Diversifying acquisition	5359	0.501	0.500	0.000	1.000	1.000
Tender offer	5359	0.096	0.295	0.000	0.000	0.000
Hostile deal	5359	0.012	0.108	0.000	0.000	0.000
Competed deal	5359	0.031	0.174	0.000	0.000	0.000
All-cash deal	5359	0.283	0.450	0.000	0.000	1.000
Public target	5359	0.389	0.488	0.000	0.000	1.000
Private target	5359	0.302	0.459	0.000	0.000	1.000

Panel E: Target characteristics

	N	Mean	Std	Q1	Median	Q3
Log(Target size)	1912	5.826	1.753	4.559	5.701	6.950
Target Q	1888	2.009	1.736	1.133	1.470	2.162
Target free cash flow	1694	-0.020	0.192	-0.037	0.021	0.062
Target leverage	1879	0.178	0.180	0.016	0.138	0.284

Table 3. Acquirer CARs and advisor industry expertise

The sample consists of 5,359 completed U.S. mergers and acquisitions between 1985 and 2012. The dependent variable is the acquirer's three-day cumulative abnormal returns (CARs) around the announcement date. Other variable definitions can be found in Appendix A. In parentheses are t-statistics based on standard errors adjusted for heteroskedasticity (White (1980)) and acquirer clustering (Petersen (2009)). ***, **, and * stand for statistical significant based on two-sided tests at the 1%, 5%, and 10% level, respectively. We control for year and industry fixed effects in all regressions, whose coefficient estimates are suppressed.

Dependent variable	(1) Acquirer CARs	(2) Acquirer CARs
Industry expertise (number)	8.291*** (3.192)	
Industry expertise (value)		2.131** (2.045)
Acquirer advisor market share	2.627 (0.889)	2.696 (0.896)
Log(Acquirer size)	-0.438*** (-4.836)	-0.440*** (-4.849)
Acquirer Q	-0.075 (-0.890)	-0.075 (-0.886)
Acquirer free cash flow	-3.389** (-2.453)	-3.388** (-2.454)
Acquirer leverage	2.801** (2.406)	2.891** (2.479)
Acquirer stock price runup	-0.566** (-2.338)	-0.566** (-2.335)
Relative deal size	0.791*** (5.216)	0.791*** (5.188)
Diversifying acquisition	-0.549** (-2.062)	-0.586** (-2.206)
Tender offer	1.747*** (4.005)	1.734*** (3.975)
Hostile deal	0.550 (0.646)	0.603 (0.709)
Competed deal	-1.370** (-1.964)	-1.337* (-1.907)
All-cash deal	0.840*** (3.043)	0.830*** (3.009)
Public target	-4.023*** (-13.148)	-4.019*** (-13.116)
Private target	-0.287 (-0.838)	-0.294 (-0.855)
Intercept	8.081*** (7.534)	8.070*** (7.521)
Industry fixed effect	YES	YES
Year fixed effect	YES	YES
Observations	5,359	5,359
Adjusted R-squared	0.104	0.103

Table 4. Cross-sectional variations in the effect of advisor industry expertise on acquirer returns

This table presents the results of the cross-sectional variations in the effect of advisor industry expertise on acquirer returns. The dependent variable is the acquirer's three-day cumulative abnormal returns (CARs) around the announcement date. Diversifying deals are defined as deals where the acquirer and target do not share a three-digit SIC industry. Acquirer industry M&A experience is defined as whether the acquirer has engaged in acquisition of target from the same three-digit SIC industry as the current transaction in the past three years. Target industry opacity is defined as the target industry's median intangible asset ratio where industry is defined using the three-digit SIC industry classification scheme. Target industry homogeneity is defined as the partial correlation of stock returns in the three-digit SIC industry the target belongs to. Prior client performance (EW/VW) is the equally weighted/value-weighted average of three-day acquirer CARs of the advisor's prior clients in acquisitions of targets from the same industry as the current transaction. Relative deal size is the ratio of total deal value over the acquirer market value of equity. Control variables in all the subsample regressions are the same as in Table 3. In parentheses are t-statistics based on standard errors adjusted for heteroskedasticity (White (1980)) and acquirer clustering (Petersen (2009)). ***, **, and * stand for statistical significant based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Subsample	N	Industry expertise (number)	
		coefficient	t-statistics
<i>Panel A: Information asymmetry</i>			
Diversifying deals	2,685	14.433***	(4.102)
Related deals	2,674	-1.110	(-0.397)
Acquirers do not have industry M&A experience	3,772	8.023***	(2.599)
Acquirers have industry M&A experience	1,587	2.400	(0.599)
Target industry opacity above sample median	2,595	9.300***	(2.791)
Target industry opacity below sample median	2,602	3.277	(0.911)
<i>Panel B: Heterogeneity of the industry expertise</i>			
Target industry homogeneity above sample median	2,360	11.139***	(2.704)
Target industry homogeneity below sample median	2,337	-1.627	(-0.275)
Prior client performance (EW) above median	1,221	14.773**	(2.537)
Prior client performance (EW) below median	1,221	5.900	(0.765)
Prior client performance (VW) above median	1,221	14.292***	(2.601)
Prior client performance (VW) below median	1,221	7.520	(0.951)
<i>Panel C: Economic significance of the deal</i>			
Relative deal size above median	2,679	9.770***	(3.255)
Relative deal size below median	2,680	1.644	(0.462)

Table 5. Acquirer CARs and advisor industry expertise: Heckman Two-Stage Procedure

This table presents the Heckman (1979) two-stage regression results of acquirer CARs on the industry expertise of acquirer financial advisors. Column (1) presents the result of a probit regression of acquirer's decision to employ a financial advisor. The dependent variable is a dummy variable that takes the value of one if the acquirer retains at least one investment bank as financial advisor and zero otherwise. Column (2) presents the regression results of acquirer CARs on the industry expertise of acquirer financial advisors after controlling for the inverse Mills ratio constructed from the first-stage equation in Column (1). The dependent variable is the acquirer's three-day cumulative abnormal returns (CARs) around the announcement date. Other variable definitions can be found in Appendix A. In parentheses are t-statistics based on standard errors adjusted for heteroskedasticity (White (1980)) and acquirer clustering (Petersen (2009)). ***, **, and * stand for statistical significant based on two-sided tests at the 1%, 5%, and 10% level, respectively. We control for year and industry fixed effects in all regressions, whose coefficient estimates are suppressed.

Dependent variables	(1) Acquirer hires advisor (1/0)	(2) Acquirer CARs
In-house expertise	-0.482*** (-3.589)	
Industry expertise (number)		8.294*** (3.194)
Acquirer advisor market share		2.661 (0.899)
Log(Acquirer size)	0.166*** (3.630)	-0.439*** (-4.838)
Acquirer Q	0.027 (0.991)	-0.075 (-0.887)
Acquirer free cash flow	0.218 (0.739)	-3.387** (-2.451)
Acquirer leverage	-0.213 (-0.426)	2.808** (2.411)
Acquirer stock price runup	0.062 (0.864)	-0.569** (-2.350)
Relative deal size	1.830*** (4.126)	0.793*** (5.199)
Diversifying acquisition	0.053 (0.445)	-0.550** (-2.064)
Tender offer	0.018 (0.087)	1.748*** (4.008)
Hostile deal	5.125*** (3.452)	0.563 (0.659)
Competed deal	0.634 (1.276)	-1.359* (-1.946)
All-cash deal	-0.014 (-0.091)	0.841*** (3.043)
Public target	-1.578*** (-7.135)	-4.039*** (-13.067)
Private target	-0.584*** (-2.622)	-0.291 (-0.849)
Inverse Mills ratio		0.392 (0.307)
Intercept	10.851*** (12.617)	8.088*** (7.540)
Industry fixed effect	YES	YES
Year fixed effect	YES	YES
Observations	5,794	5,359
Pseudo R-squared /Adjusted R-squared	0.790	0.104

Table 6. Deal synergy and advisor industry expertise

This table presents the regression results of deal synergy on the industry expertise of acquirer financial advisors. The dependent variable in Column (1) is the three-day cumulative abnormal return for a value-weighted portfolio of the bidder and the target with their market capitalization at the sixth trading day prior to the announcement as the weight. The dependent variable in Column (2) is synergy gains (SG), defined as the sum of acquirer and target dollar-denominated gains. Detailed variable definitions can be found in Appendix A. In parentheses are t-statistics based on standard errors adjusted for heteroskedasticity (White (1980)) and firm clustering (Petersen (2009)). ***, **, and * stand for statistical significant based on two-sided tests at the 1%, 5%, and 10% level, respectively. We control for year and industry fixed effects in all regressions, whose coefficient estimates are suppressed.

Dependent variable	(1) PCAR(-1,1)	(2) SG
Industry expertise (number)	-2.531 (-0.936)	-30.276 (-0.104)
Acquirer advisor market share	9.957** (2.411)	474.157 (0.757)
Log(Acquirer size)	-0.536*** (-4.353)	-52.609*** (-2.997)
Acquirer Q	-0.262** (-1.992)	-36.429 (-1.625)
Acquirer free cash flow	-0.161 (-0.090)	-38.334 (-0.432)
Acquirer leverage	3.552** (2.157)	152.793 (0.922)
Acquirer stock price runup	-1.110*** (-3.099)	-51.863 (-1.025)
Relative deal size	1.502*** (4.609)	-6.647 (-0.315)
Diversifying acquisition	-0.642* (-1.763)	-55.845 (-1.355)
Tender offer	1.726*** (3.693)	130.181** (2.340)
Hostile deal	3.777*** (3.872)	117.421 (0.981)
Competed deal	-1.229* (-1.874)	-204.636** (-2.316)
All-cash deal	1.193*** (2.887)	26.950 (0.608)
Intercept	-2.626 (-0.848)	-377.826 (-0.546)
Industry fixed effect	YES	YES
Year fixed effect	YES	YES
Observations	1,899	1,899
Adjusted R-squared	0.144	0.044

Table 7. Takeover premiums and advisor industry expertise

This table presents the regression results of acquisition premiums on the industry expertise of acquirer financial advisors. The dependent variables in Columns (1)-(3) are the takeover premiums from SDC based on the target stock price of 1 day, 1 week, and 4 weeks prior to the transaction, respectively. The dependent variable in Column (4) is target's three-day cumulative abnormal returns (CARs) around the announcement date. Other variable definitions can be found in Appendix A. In parentheses are t-statistics based on standard errors adjusted for heteroskedasticity (White (1980)) and firm clustering (Petersen (2009)). ***, **, and * stand for statistical significant based on two-sided tests at the 1%, 5%, and 10% level, respectively. We control for year and industry fixed effects in all regressions, whose coefficient estimates are suppressed.

Dependent variable	(1) P1day	(2) P1wk	(3) P4wk	(4) Target CARs
Industry expertise (number)	-56.924*** (-2.900)	-57.451** (-2.365)	-77.176** (-2.240)	-25.049*** (-3.682)
Acquirer advisor market share	-21.034 (-0.997)	-16.417 (-0.673)	-7.339 (-0.231)	-3.137 (-0.279)
Log(Acquirer size)	-0.006 (-0.010)	-0.140 (-0.195)	-0.313 (-0.366)	0.469 (1.301)
Acquirer Q	0.245 (0.339)	0.297 (0.401)	0.990 (1.310)	-0.182 (-0.825)
Acquirer free cash flow	-24.521 (-1.106)	-21.870 (-0.988)	-11.537 (-0.521)	-1.193 (-0.218)
Acquirer leverage	-4.190 (-0.439)	1.738 (0.158)	8.366 (0.612)	-3.496 (-0.758)
Acquirer stock price runup	2.168 (0.842)	2.583 (0.915)	3.963 (1.549)	-0.993 (-1.192)
Relative deal size	-0.115 (-0.300)	-0.738* (-1.734)	-1.146* (-1.933)	-2.594*** (-2.879)
Diversifying acquisition	-0.280 (-0.134)	0.842 (0.361)	2.241 (0.751)	-0.393 (-0.379)
Tender offer	9.079*** (2.737)	12.724*** (2.803)	16.771** (2.454)	8.821*** (5.918)
Hostile deal	11.893** (2.007)	7.488 (0.963)	1.784 (0.145)	8.564*** (3.003)
Competed deal	20.016*** (3.190)	27.783*** (2.772)	37.751** (2.197)	-7.222*** (-4.482)
All-cash deal	-1.064 (-0.340)	-1.749 (-0.429)	-2.477 (-0.416)	2.776* (1.883)
Intercept	27.493 (1.208)	53.025* (1.849)	109.653*** (4.690)	36.537*** (6.260)
Industry fixed effect	YES	YES	YES	YES
Year fixed effect	YES	YES	YES	YES
Observations	1,812	1,810	1,801	1,899
Adjusted R-squared	0.080	0.106	0.131	0.154

Table 8. Division of synergy gains and advisor industry expertise

This table presents the regression results of acquirer's share of synergies (ASOS) and acquirer's relative gains on the industry expertise of acquirer financial advisors. The dependent variable in Column (1) and (2) is the acquirer's share of synergies (ASOS), defined as the ratio of acquirer dollar-denominated gains to total synergy gains (SG) when SG is positive and (1-acquirer dollar-denominated gains/SG) when SG is negative. The dependent variable in Column (3) and (4) is acquirer's relative gains to the target, defined as the difference in dollar gains between the acquirer and the target, normalized by the sum of the acquirer's and target's market value of equity 50 trading days prior to the deal. Detailed variable definitions can be found in Appendix A. In parentheses are t-statistics based on standard errors adjusted for heteroskedasticity (White (1980)) and firm clustering (Petersen (2009)). ***, **, and * stand for statistical significant based on two-sided tests at the 1%, 5%, and 10% level, respectively. We control for year and industry fixed effects in all regressions, whose coefficient estimates are suppressed.

Dependent variable	(1) ASOS	(2) ASOS	(3) Acquirer relative gains	(4) Acquirer relative gains
Industry expertise (number)	3.505* (1.931)	3.703** (1.991)	0.084** (2.447)	0.097*** (2.736)
Acquirer advisor market share	1.622 (0.432)	-1.088 (-0.375)	-0.001 (-0.025)	0.042 (0.981)
Log(Acquirer size)	-0.029 (-0.349)	0.258* (1.652)	0.003** (2.091)	0.011*** (5.922)
Acquirer Q	0.062* (1.698)	0.112 (1.596)	-0.000 (-0.248)	0.001 (0.777)
Acquirer free cash flow	0.420 (0.331)	0.402 (0.342)	-0.008 (-0.311)	-0.010 (-0.424)
Acquirer leverage	0.858 (0.640)	-0.900 (-1.151)	0.005 (0.298)	-0.012 (-0.605)
Acquirer stock price runup	0.173 (0.540)	0.015 (0.071)	-0.012*** (-3.404)	-0.009** (-2.057)
Log(Target size)		-0.356** (-2.130)		-0.014*** (-6.761)
Target Q		-0.208 (-1.428)		-0.003** (-2.294)
Target free cash flow		-1.427** (-2.424)		-0.003 (-0.228)
Target leverage		0.402 (0.460)		0.035** (2.428)
Relative deal size	-0.578 (-1.357)	0.090 (0.390)	-0.024*** (-7.361)	-0.013*** (-4.209)
Diversifying acquisition	0.287 (0.776)	0.230 (0.656)	-0.002 (-0.529)	-0.004 (-0.934)
Tender offer	0.032 (0.082)	-0.299 (-0.724)	-0.003 (-0.662)	-0.003 (-0.644)
Hostile deal	0.803* (1.691)	1.213** (2.294)	-0.029*** (-3.390)	-0.020** (-2.128)
Competed deal	0.558 (1.174)	0.444 (0.880)	-0.004 (-0.666)	-0.001 (-0.196)
All-cash deal	0.135 (0.501)	-0.111 (-0.299)	0.014*** (3.252)	0.005 (1.069)
Intercept	-0.379 (-0.368)	-0.191 (-0.172)	-0.089*** (-3.917)	-0.152*** (-6.076)
Industry fixed effect	YES	YES	YES	YES
Year fixed effect	YES	YES	YES	YES
Observations	1,899	1,625	1,899	1,625
Adjusted R-squared	0.009	0.010	0.112	0.141

Table 9. Controlling for acquirer CEO quality, corporate governance, and CEO industry expertise

This table presents the regression results of acquirer CARs on the industry expertise of acquirer financial advisors after controlling for acquirer CEO quality, corporate governance, and CEO industry expertise. The dependent variable is the acquirer's three-day cumulative abnormal returns (CARs) around the announcement date. Acquirer CEO quality is measured by the acquirer's three-year industry-adjusted growth rate of operating income (data 13) following Morck et al. (1990). Acquirer G-index is the governance index defined in Gompers, Ishii, and Metrick (2003). Acquirer industry's Herfindahl index (HHI) is the sum of squared market shares of all COMPUSTAT firms in the acquirer's industry. Acquirer CEO industry expertise is a dummy variable that is equal to 1 if the acquirer CEO has working experience in the target industry following Custodio and Metzger (2013). Other variable definitions can be found in Appendix A. In parentheses are t-statistics based on standard errors adjusted for heteroskedasticity (White (1980)) and acquirer clustering (Petersen (2009)). ***, **, and * stand for statistical significant based on two-sided tests at the 1%, 5%, and 10% level, respectively. We control for year and industry fixed effects in all regressions, whose coefficient estimates are suppressed.

Sample	(1)	(3)	(3)	(4)	(5)	(6)
Dependent variable	Full	Full	Full	Full	Full	Diversifying deals
	Acquirer CARs	Acquirer CARs	Acquirer CARs	Acquirer CARs	Acquirer CARs	Acquirer CARs
Industry expertise (number)	6.401*** (2.953)	12.393** (2.150)	8.280*** (3.482)	12.358** (2.142)	9.773** (2.032)	25.370*** (2.726)
Acquirer CEO quality	0.004* (1.715)					
Acquirer G-index		-0.117* (-1.872)		-0.118* (-1.880)		
Acquirer industry HHI			2.956 (1.139)	1.275 (0.271)		
Acquirer CEO industry expertise					0.561 (0.965)	0.927* (1.778)
Acquirer advisor market share	3.346 (1.114)	0.943 (0.226)	2.633 (0.906)	0.900 (0.216)	4.774 (0.863)	12.895** (2.108)
Log(Acquirer size)	-0.557*** (-5.883)	-0.449*** (-3.243)	-0.436*** (-5.107)	-0.447*** (-3.231)	-0.095 (-0.452)	-0.189 (-1.025)
Acquirer Q	-0.084 (-0.540)	-0.004 (-0.042)	-0.075 (-0.964)	-0.004 (-0.042)	-0.332 (-1.507)	-0.172 (-1.360)
Acquirer free cash flow	0.516 (0.325)	-4.740* (-1.918)	-3.403** (-2.480)	-4.738* (-1.917)	2.950 (0.330)	-4.088* (-1.710)
Acquirer leverage	3.125** (2.497)	4.245** (2.511)	2.793** (2.505)	4.244** (2.510)	4.386 (1.413)	5.531** (2.265)
Acquirer stock price runup	-0.436 (-1.511)	-0.492 (-1.554)	-0.569** (-2.351)	-0.493 (-1.556)	0.067 (0.117)	0.127 (0.258)
Relative deal size	0.858*** (3.673)	0.582 (1.566)	0.786*** (5.244)	0.580 (1.561)	2.100** (2.192)	-0.792 (-1.310)
Diversifying acquisition	-0.458* (-1.680)	-0.554 (-1.574)	-0.549** (-2.085)	-0.559 (-1.592)	0.900 (1.385)	
Tender offer	1.323*** (2.966)	1.307** (2.244)	1.737*** (4.064)	1.303** (2.239)	1.900* (1.956)	0.126 (0.131)
Hostile deal	0.547 (0.685)	0.004 (0.004)	0.530 (0.616)	0.005 (0.005)	0.603 (0.252)	-0.268 (-0.071)
Competed deal	-1.394** (-2.017)	-0.774 (-0.836)	-1.360** (-2.017)	-0.768 (-0.830)	-0.061 (-0.041)	-0.522 (-0.339)
All-cash deal	0.913*** (3.163)	1.287*** (3.581)	0.847*** (3.124)	1.287*** (3.580)	0.634 (1.179)	0.416 (0.796)
Public target	-3.479*** (-11.194)	-3.760*** (-8.604)	-4.015*** (-12.769)	-3.757*** (-8.587)	-3.377*** (-5.182)	-1.604** (-2.537)
Private target	-0.654* (-1.863)	-0.643 (-1.398)	-0.284 (-0.835)	-0.646 (-1.403)	1.469* (1.771)	0.886 (1.330)
Intercept	8.884*** (7.675)	9.732*** (5.643)	7.689*** (7.143)	9.575*** (5.270)	2.400 (0.829)	-2.538 (-0.490)
Industry fixed effect	YES	YES	YES	YES	YES	YES
Year fixed effect	YES	YES	YES	YES	YES	YES
Observations	4,202	2,400	5,359	2,400	1,189	730
Adjusted R-squared	0.115	0.114	0.104	0.114	0.177	0.186

Table 10. Two-stage least square (2SLS) regression of bidder CARs

This table presents the results of the two-stage least square regression (2SLS) of bidder CARs, where the industry expertise of acquirer financial advisors is instrumented by the geographical location of acquirer headquarters. Location is a dummy variable, which equals to 1 if the firm is located in NY, NJ, CA, IL, MA, VT, CT, ME, RI, or NH and 0 otherwise. Column (1) presents the first stage regression results with industry expertise of acquirer advisors as the dependent variables. Column (2) presents the second stage regression results of acquirer CARs. Other variable definitions can be found in Appendix A. In parentheses are t-statistics based on standard errors adjusted for heteroskedasticity (White (1980)) and acquirer clustering (Petersen (2009)). ***, **, and * stand for statistical significant based on two-sided tests at the 1%, 5%, and 10% level, respectively. We control for year and industry fixed effects in all regressions, whose coefficient estimates are suppressed.

	(1)	(2)
Dependent variable	1st stage Industry expertise	2nd stage Acquirer CARs
Location	0.005*** (2.634)	
Industry expertise (number)		33.712*** (2.754)
Acquirer advisor market share	0.173*** (9.354)	-0.798 (-0.221)
Log(Acquirer size)	0.000 (0.938)	-0.442*** (-5.530)
Acquirer Q	0.000*** (2.590)	-0.113 (-1.384)
Acquirer free cash flow	0.004 (1.365)	-2.692** (-2.070)
Acquirer leverage	0.014** (2.169)	2.274** (2.332)
Acquirer stock price runup	-0.001 (-1.126)	-0.684*** (-2.859)
Relative deal size	-0.000 (-0.110)	0.829*** (5.015)
Diversifying acquisition	-0.007*** (-4.784)	0.011 (0.042)
Tender offer	-0.002 (-0.602)	2.041*** (4.716)
Hostile deal	0.001 (0.063)	0.091 (0.116)
Competed deal	0.006 (0.846)	-1.565** (-2.295)
All-cash deal	-0.004** (-2.572)	0.938*** (3.450)
Public target	0.002 (0.956)	-4.204*** (-13.991)
Private target	0.001 (0.596)	-0.400 (-1.238)
Intercept	-0.006 (-0.733)	2.503*** (3.232)
Industry fixed effect	YES	YES
Year fixed effect	YES	YES
Observations	5,359	5,359
Adjusted R-squared	0.083	0.089

Table 11. Advisory fees and advisor industry expertise

This table presents the regression results of advisory fees on the industry expertise of acquirer financial advisors. The dependent variable is the total advisory fees paid by the acquirer as a percentage of deal value. Other variable definitions can be found in Appendix A. In parentheses are t-statistics based on standard errors adjusted for heteroskedasticity (White (1980)) and firm clustering (Petersen (2009)). ***, **, and * stand for statistical significant based on two-sided tests at the 1%, 5%, and 10% level, respectively. We control for year and industry fixed effects in all regressions, whose coefficient estimates are suppressed.

Dependent variable	(1) Advisory fees	(2) Advisory fees	(3) Advisory fees
Industry expertise (number)	1.624** (2.533)	1.682*** (2.608)	1.680*** (2.667)
Acquirer advisor market share	1.842*** (4.231)	1.867*** (4.302)	1.587*** (3.682)
Log(Deal value)	-0.263*** (-14.996)	-0.270*** (-14.695)	-0.329*** (-11.291)
Relative deal size		0.000 (0.028)	0.014** (2.105)
Diversifying acquisition		-0.012 (-0.284)	-0.027 (-0.632)
Tender offer		0.022 (0.356)	-0.036 (-0.529)
Hostile deal		0.176** (2.107)	0.213** (2.465)
Competed deal		0.143* (1.825)	0.157** (1.972)
All-cash deal		0.056 (0.750)	0.017 (0.215)
Public target		-0.031 (-0.273)	-0.039 (-0.356)
Private target		-0.071 (-0.513)	-0.068 (-0.516)
Log(Acquirer size)			0.087*** (3.774)
Acquirer Q			-0.004 (-0.448)
Acquirer free cash flow			-0.230 (-1.234)
Acquirer leverage			-0.251 (-1.104)
Acquirer stock price runup			0.001 (0.031)
Intercept	0.117 (0.182)	0.108 (0.164)	-0.056 (-0.086)
Industry fixed effect	YES	YES	YES
Year fixed effect	YES	YES	YES
Observations	1,059	1,059	1,059
Adjusted R-squared	0.420	0.422	0.434

Appendix A. Variable definitions

Variable	Definitions
<i>Dependent variables</i>	
Acquirer CARs	Acquirer three-day (-1, 1) cumulative abnormal returns (CARs) calculated using the market model. The market model parameters are estimated over the period (-210, -11) with the CRSP value-weighted return as the market return.
Target CARs	Target three-day (-1, 1) cumulative abnormal returns (CARs) calculated using the market model. The market model parameters are estimated over the period (-210, -11) with the CRSP value-weighted return as the market return.
Premium 1 day	Premium of the offer price to target stock price based on the stock price information of 1 day prior to the announcement date. The variable is obtained from SDC.
Premium 1 week	Premium of the offer price to target stock price based on the stock price information of 1 week prior to the announcement date. The variable is obtained from SDC.
Premium 4 weeks	Premium of the offer price to target stock price based on the stock price information of 4 weeks prior to the announcement date. The variable is obtained from SDC.
<i>Advisor characteristics</i>	
Industry expertise (number)	The number-based proportion of acquisitions involving the same three-digit SIC target industry as the current deal in which the bank served as the acquirer advisor in the past three years.
Industry expertise (value)	The value-based proportion of acquisitions involving the same three-digit SIC target industry as the current deal in which the bank served as the acquirer advisor in the past three years.
Market share	The value-based proportion of acquisitions in which the bank served as the acquirer advisor in the past one year.
<i>Acquirer characteristics</i>	
Log(Acquirer size)	Log of acquirer book value of total assets.
Acquirer Q	Market value of assets over book value of assets.
Acquirer free cash flow	Operating income before depreciation – interest expenses – income taxes – capital expenditures, scaled by acquirer book value of total assets.
Acquirer leverage	Book value of debts over market value of total assets.
Acquirer stock price runup	Acquirer's buy-and-hold abnormal return over the period (-210, -11) with the CRSP value-weighted return as the market return.
<i>Deal characteristics</i>	
Relative deal size	Deal value (from SDC) divided by the acquirer market value of equity.
Diversifying acquisition	Dummy variable: 1 if the acquirer and target do not share a three-digit SIC industry, 0 otherwise.
Tender offer	Dummy variable: 1 for tender offers, 0 otherwise.
Hostile deal	Dummy variable: 1 for hostile bids, 0 otherwise.
Competed deal	Dummy variable: 1 if the bids have competing offers, 0 otherwise.

All-cash deal	Dummy variable: 1 if the deals are financed exclusively with cash, 0 otherwise.
Public target	Dummy variable: 1 for public targets, 0 otherwise.
Private target	Dummy variable: 1 for private targets, 0 otherwise.
<i>Target characteristics</i>	
Log(Target size)	Log of target book value of total assets.
Target Q	Market value of assets over book value of assets.
Target free cash flow	Operating income before depreciation – interest expenses – income taxes – capital expenditures, scaled by target book value of total assets.
Target leverage	Book value of debts over market value of total assets.
