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Do Investment Banks Matter for M&A Returns?

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Abstract

We document a significant investment bank fixed effect in the announcement returns of an M&A deal. The inter-quartile range of bank fixed effects is 1.26%, compared to a full-sample average return of 0.72%. The results remain significant after controlling for the component of returns attributable to the acquirer. Our findings suggest that investment banks matter for M&A outcomes, and contrast earlier studies which show no positive link between various measures of advisor quality and M&A returns. Differences in average returns across banks are also persistent over time and predictable from prior performance. Clients do not chase past returns, which may explain why persistence exists in M&A performance while it is absent in mutual funds.

JEL Classification Codes: G24, G34

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Mergers and acquisitions (M&A) are among the most critical decisions a CEO can make. Successful mergers can create substantial synergies, while misguided acquisitions can lead to misallocation of companies to parents unable to reap their full potential. In addition to these large effects on shareholder value, a bad acquisition also increases the CEO's risk of being fired (Lehn and Zhao (2006)). A prominent example is the departure of Carly Fiorina from Hewlett Packard, which was widely attributed to her acquisition of Compaq. The quality of M&A transactions is also of great importance to the economy as a whole. The total value of M&A announced by a U.S. acquirer in 2007 was \$2.1tr, around 15% of GDP.

Since CEOs make M&A decisions rarely, they typically lack experience and seek counsel from investment banks. The *skilled advice* hypothesis is that banks help clients to identify synergistic targets and negotiate favorable terms. If banks indeed provide valuable advice, it is reasonable to expect that the highest-quality advisors lead to the best outcomes. However, existing research generally fails to find such a relationship. Bowers and Miller (1990) and Michel, Shaked and Lee (1991) measure an advisor's quality by the prestige of its name and find no link with acquirer returns; Rau (2000) uses market share to measure quality and documents a negative relationship. Servaes and Zenner (1996) find no benefit of hiring any advisor at all, compared to executing the deal in-house.¹ These findings instead appear to support the *passive execution* hypothesis, that banks do not provide true advice but are simply "execution houses" who undertake deals as instructed by the client. If true, such a conclusion has troubling implications. The investment banking industry, which consumes a significant proportion of an economy's talented human capital, is mainly a deadweight loss to society. CEOs' inexperience in M&A is not mitigated by hiring an advisor, which may explain why so many acquisitions destroy value.

This paper reaches a different conclusion. Prior studies investigate the importance of investment banks for M&A outcomes by hypothesizing a measure of advisor quality, such as market share or name prestige, and correlating it with this measure of quality. Such studies will only find significant results if their chosen

¹ To our knowledge, only Kale, Kini and Ryan (2003) find gains to employing market-leading advisors. They study 324 contested takeovers of public targets, and find that large banks are more likely to withdraw when the price becomes too high. By contrast, both we and Rau (2000) find a negative link between market share and performance across all M&A transactions (over 15,000 in our sample), of which approximately 1/3 are public. One reason may be that the incentives to act in the client's interest are far stronger in public situations, where "honest" advice to withdraw from a deal is widely observed.

measures are truly accurate proxies of ability. We instead employ a fixed effects analysis. This is a broader approach which examines whether banks exhibit differential deal returns in the first place, without having to specify a measure of advisor quality with which any differential will be correlated. Indeed, we find significant bank fixed effects to a deal's 3-day cumulative abnormal return (CAR). Studying all banks that advised on at least 10 deals over 1980-2007 and controlling for time effects, the difference between the 25th and 75th percentile bank is 1.26%. This difference is economically meaningful applied to the mean bidder size of \$10 billion and compared to the mean CAR of 0.72%. An F-test that bank fixed effects are equal is rejected at the 1% significance level. Our results support the skilled advice hypothesis and contrast prior findings that banks have little effect on M&A outcomes, as predicted by the passive execution hypothesis.

Returns analyses have also been used to evaluate skill in mutual funds, hedge funds and security analysts. Our setting shares two challenges also faced by studies of stock-picking ability. The first is performance attribution: returns are not purely the responsibility of the financial intermediary. In an investment setting, returns also depend on the portfolio's factor loadings and realized factor outcomes. Since investment skill depends on how a portfolio performs over the long run, investment studies typically investigate long-horizon returns. Therefore, the results are highly contingent on the benchmark asset pricing model used (Fama (1998)). Benchmark adjustment is less of an issue here, since performance can be measured by short-horizon announcement returns: in an efficient market, they capture the full value impact of an acquisition. Our setting faces a different performance attribution challenge – CAR may be the responsibility of either the bank or the client. A bank may be associated with positive (negative) CARs if it is systematically mandated by high-quality (empire-building) clients. Many prior studies (e.g. Bowers and Miller (1990), Michel, Shaked and Lee (1991), Rau (2000), Hunter and Jagtiani (2003)) do not tackle performance attribution and assume CAR results entirely from the bank. Others control for deal characteristics (e.g. Servaes and Zenner (1996), Kale, Kini and Ryan (2003)), but acknowledge that this solution may go too far the other way, since deal characteristics are often the advisor's responsibility.² We control for the component of CAR that can be explained by *acquirer* characteristics

² For example, Servaes and Zenner (1996) caveat their conclusion by acknowledging “it is not certain that the [deal characteristics] affecting investment banking choice are exogenous. For example, it is possible that investment banks influence the form of payment or the decision to pursue the acquisition.”

that proxy for the likelihood that the client is empire-building (such as free cash flow and various governance measures, as used by Masulis, Wang and Xie (2007)) and high-quality (such as stock and operating performance, and Tobin's Q). We also add acquirer fixed effects to proxy for time-invariant unobservable measures of quality. Even after these controls, the bank fixed effects remain statistically and economically significant, with an inter-quartile range of 1.23%.

A second shared challenge is that average returns depend not only on ability, but also scale. Maksimovic and Phillips (2002) argue that conglomerate firms' lower productivity arises since they are able to accept all projects with positive NPV (including those with modestly-positive NPV), whereas single-segment firms with financing constraints can only pursue those with high NPV. Applied to our setting, this *limited capacity* hypothesis posits that banks differ not in ability, but capacity to accept mandates. Small banks can work only on the highest-return deals; large banks also accept mandates with small (but positive) value and thus exhibit lower average returns. We refute this hypothesis by showing that the banks with the lowest average returns are not the most frequent advisors – the correlation between bank fixed effects and market share is an insignificant 0.03 (p-value of 0.72). Indeed, the most frequent advisors occupy the middle of the fixed effects distribution.

While addressing the limited capacity hypothesis, that the most positive and most negative fixed effects are associated with infrequent advisors may give rise to two quite different concerns. First, these extreme fixed effects may result from measurement error arising from few observations, rather than a “true” dispersion of advisor quality. Second, it may be that there is little dispersion among the major banks who matter more for the M&A market – i.e. the result is not generalizable to the most important advisors. Note that infrequent advisors will not drive the statistical significance of our results: if many banks have imprecisely measured fixed-effects, the F-test will have little power. To address concerns that they drive our economic magnitudes, the inter-quartile range reported earlier is based on fixed effects weighted by the inverse of their standard errors. Moreover, to further investigate whether our results hold among frequent advisors alone, we then test the equality of bank fixed effects on a sub-sample of the largest banks who advise on at least 84 deals over the 28-year sample period (i.e. 3 per year). Even though the number of banks falls markedly from 143 to 42, the results stay significant with an inter-quartile range of 0.74% (controlling for acquirer characteristics and acquirer fixed

effects) and the F-test of equality is rejected at the 1% level. Thus, there are meaningful differences even among the most active advisors.

Having documented that banks are associated with different CARs over the entire period, we then ask whether these differences are predictable based on historic data, and thus can be used by clients to guide their selection of advisors. The fixed effect implies a persistent component to a bank's CAR and thus provides us with *a priori* motivation to predict future returns using past returns, rather than the market share and prestige measures previously studied. Indeed, we find that performance is persistent: the top quintile of banks based on CAR over the past 2 years outperforms the bottom quintile by 0.94% over the next 2 years (significant at 1%). Persistence remains after removing the component of CAR that can be attributed to client characteristics. Inconsistent with the limited capacity hypothesis, the low CARs of the bottom-quintile banks do not arise from executing mildly positive transactions, but from executing double the proportion of value-destructive deals as the top quintile. Regression analyses yield similar results: a bank's average returns are significantly linked to its past average returns, even when controlling for market share. When interacting past returns with market share, the interaction term is insignificant but past returns alone remain significant, suggesting that effect of past returns is similar for both frequent and infrequent advisors.

The existence of persistence in M&A advice contrasts the lack of persistence in mutual funds. Berk and Green (2004) show that, even if mutual funds possess skill, this does not translate into persistence if investor flows respond to past performance and there are diminishing returns to scale. We find that a bank's market share is independent of its past CAR (also found by Rau (2000)). This lack of performance-chasing can potentially reconcile why persistence exists in M&A advice but not mutual funds (e.g. Carhart (1997)). Instead, we find that mandate awards are highly correlated with past market share, even though market share negatively predicts future performance.

The selection of high-market share rather than high-CAR advisors has two quite different interpretations. First, it may be efficient, if clients build up relationship-specific capital with particular banks and thus rationally retain the same advisor irrespective of past performance; market share has predictive power as it measures a bank's existing relationships. We show that retaining a past advisor is associated with worse future performance, particularly if the bank advised on negative-CAR transactions in the past, which does not support the view that relationship-specific capital improves future M&A

performance. However, clients may derive other services from banking relationships, such as lending and underwriting, which rationally induces them to retain their existing bank (see Yasuda (2005), Ljungqvist, Marston and Wilhelm (2006, 2009)). Alternatively, it may be inefficient if clients are not locked into relationships but voluntarily choose advisors based on market share, under the misperception that it predicts superior returns. Such behavior is consistent with real-life practices: market share league tables are widely publicized by both the media and the banks themselves, and so both academics and practitioners have come to use them as a measure of expertise.

Ertugurul and Krishnan (2010) also study the existence of ability in investment banking. They focus on individual bankers who switch advisors, rather than banks themselves.³ Another difference is that, in addition to identifying a fixed effect in the full sample, we also investigate persistence and thus the predictability of future outcomes using past performance. Jaffe, Pedersen and Voetmann (2009) demonstrate persistence in M&A performance at the client level. Mikhail, Walther and Willis (2004) and Hoberg (2007) document persistence in two other banking services, security analysis and equity underwriting.

This paper proceeds as follows. Section 1 discusses the potential sources of differential M&A returns across banks and Section 2 describes the data. Section 3 documents significant advisor fixed effects to M&A returns and shows that average returns are predictable using past performance. Section 4 shows that mandate awards are correlated not with past performance but with market share, and Section 5 concludes.

1. Motivation: Why Might Banks Be Associated With Differential M&A Returns?

This section discusses a theoretical framework for why there may be a bank fixed effect to M&A returns, i.e. why certain banks may be systematically associated with high or low return deals. To understand the possible sources of correlation, we first outline the role that advisors play in M&A deals. Their actual level of involvement can vary significantly across transactions, and falls under three broad categories.

³ We study banks rather than individual bankers for two reasons. First, a transaction typically leverages resources across the entire bank (e.g. a debt-financed acquisition of a German chemicals target by a UK pharmaceuticals firm may involve the M&A and debt product groups and the pharmaceuticals, chemicals, UK and Germany coverage teams). Second, it is difficult to know which particular banker worked on a certain deal. A bank's chemicals team consists of several bankers, many of whom will not be involved in the deal. If a bank's skill hinges on particular star bankers (who often move between firms) rather than the whole organization, we should find weak bank fixed effects and bank-level persistence.

In a “bank-initiated deal,” the advisor is involved in both selecting the deal and negotiating terms, and thus is responsible for the entire CAR. In a “standard client-initiated deal,” the client proposes the transaction, but lacks the ability to identify good deals and so relies on the bank to advise whether to pursue it. Since the bank can reject a bad deal, it is again responsible for deal selection in addition to negotiation, and thus the entire CAR. Not all banks will reject the deal, but for reasons which are their responsibility. Some lack the ability to identify bad deals; others know that a deal will destroy value but undertake it to maximize their own fee income rather than pursuing the client’s interests. A bank cannot blame low CARs on having to work on bad deals, since it controls its deal flow – just as a lender cannot blame losses on poor credit quality, since it controls the loans it chooses to write.

In a “fixated client deal,” the acquirer has already decided on the target and does not seek advice on its appropriateness; it uses the bank simply to execute the transaction on the best terms possible. This may occur in two cases. First, the client may be skilled in identifying targets and does not need the bank’s input. At the other extreme, the client is empire-building or hubristic and wishes to pursue a bad deal even if the bank cautions otherwise. By accepting the mandate, the bank may be adding value compared to the counterfactual of the client pursuing the acquisition with a rival advisor. The bank is not responsible for the component of CAR that can be attributed to the acquirer’s skill or hubris, only the orthogonal component.

Given banks’ varying levels of involvement, systematic differences in average returns may stem from three sources. The *skilled advice* hypothesis is that certain advisors possess ability, either in proposing targets (for bank-initiated deals) or in negotiating terms (for all deals). Alternatively, variation may stem from systematically turning away bad deals. This requires ability to identify such deals, plus trustworthiness to turn them down. We use the term “skilled advice” to include these three qualities of deal identification, transaction negotiation and trustworthiness. Thus, even a bank with high-quality employees may be classified as low-ability if its business model is to accept every mandate, regardless of whether it will create client value.

The *passive execution* hypothesis is that banks lack ability in target selection or deal negotiation. Instead, variation in returns arises because the bank is systematically

mandated by skilled (empire-building) clients.⁴ In reality, banks exert substantial effort in pitching deals to clients: they allocate the majority of bankers to client coverage (rather than deal execution) groups which are primarily responsible for pitching. Therefore, it seems unlikely that fixated client deals are sufficiently prevalent to explain differences in average returns. However, since it is impossible to observe which party initiates a transaction and provide direct statistics on this prevalence, to be conservative we also report results controlling for the component of returns attributable to acquirer characteristics. The passive execution hypothesis would also be supported if bank fixed effects are not significant in the first place.

The *limited capacity* hypothesis posits that banks differ not in ability, but their capacity to accept mandates. A bank may exhibit a high average CAR because it can work on only the highest value-creating deals, whereas low CAR may arise if a bank has the capacity to execute also mildly good deals. We evaluate this hypothesis by investigating whether a bank's low average CAR stems from advising on deals with modest value, or value-destructive deals.⁵

2. Performance Metrics, Data and Descriptive Statistics

We use *Thomson Financial's* Securities Data Company (SDC) data for mergers announced between January 1980 and December 2007. Since deals that involve a change of control are most likely to affect acquirer returns, we retain only transactions categorized as "Merger", "Acquisition", "Acquisition of Assets" or "Acquisition of Majority Interest" and drop all deals for which the acquirer's initial stake exceeded 50%, or its final stake was below 50%. We also drop transactions for which the acquirer had no stock returns on CRSP or the deal value was below \$1m (as in Rau (2000)). Our final sample contains 15,344 deals.

Our value-creation measure is the acquirer's (-1, +1) CAR over the CRSP value-weighted index, which we winsorize at 1% and 99%.⁶ Stock returns are the relevant

⁴ Fernando, Gatchev and Spindt (2005) construct an assignment model where high-quality banks are systematically mandated by high-quality clients.

⁵ The limited capacity hypothesis is less likely for investment banks than corporations or mutual funds. Even small banks are able to work on very large transactions - for example, the boutique Gleacher employs 50 staff and advised on Bank of Scotland's \$40b merger with Halifax, AT&T's \$22b sale to SBC Communications and MFS Communications' \$14b merger with WorldCom.

⁶ We also obtain beta model returns from Eventus and find similar results. The correlation between beta model returns and returns above the CRSP value-weighted (VW) index is 98.5%. Since the beta model

performance measure as they represent the change in shareholder wealth, capitalizing all of the future effects of an acquisition; they are thus used in the vast majority of investment banking studies (see, e.g., Bowers and Miller (1990), Servaes and Zenner (1996), Rau (2000)). While CAR refers to one specific deal, *RET* is the average CAR to all deals advised by a bank in a j -year period. To be included in the analysis, a bank must have announced at least $2j$ deals within the period.⁷

Some papers attribute the entire CAR to the bank, which constitutes an over-attribution in fixated client deals. Others remove the component explained by deal characteristics but this leads to an under-attribution, since deal characteristics may be chosen by the advisor, either directly by initiating the deal or indirectly by accepting a client-proposed mandate. We control for acquirer characteristics that proxy for client quality or empire-building since they are outside a bank's control, taking its client base as given. Note that banks may have some control over their client base: if a bank advises a standard client to abandon a bad deal, it does not enter its client base. Therefore, controlling for acquirer characteristics is conservative.

A number of our characteristics are related to governance. Masulis, Wang and Xie (2007) find that governance mechanisms are significantly related to acquirer returns. Their primary measure is the Gompers, Ishii, and Metrick (2003) index. Unfortunately, it is not suitable here since it is only available from 1990 and we require a long time series to test for persistence; moreover, it is only available for a subset of firms in a given year. We therefore include other governance mechanisms studied by Masulis et al.: institutional ownership, leverage, and product market competition (measured by the Herfindahl index and the industry's median ratio of selling expense to sales). The second group of characteristics are proxies for acquirer quality, also from Masulis et al.: Tobin's Q , stock price run-up, and operating performance. We also use the other bidder characteristics studied by Masulis et al.: free cash flow (which may facilitate empire-building) and size (which Moeller, Schlingemann and Stulz (2004) show is negatively correlated with returns). Since omitted acquirer characteristics may over-attribute CAR to the bank, we add additional controls over and above those featured in prior literature.

cannot be calculated for several acquirers, we use returns above the CRSP VW index. In addition, Hackbarth and Morellec (2007) show that betas change substantially upon a merger, and so a beta calculated based on historical data is likely to be misleading. We use the CRSP VW index as a benchmark as Rau and Vermaelen (1998) document biases when using size and book-to-market adjusted CARs.

⁷ Where a deal has multiple advisors, the deal is credited to each advisor separately. This is consistent with how SDC constructs market share league tables.

We include inside ownership from Compact Disclosure, to measure management's alignment with shareholders. Where missing, we impute it using firm sales and age.⁸ To proxy for empire-building intent, we include the number of acquirer SIC codes and a dummy for whether it made an acquisition in the previous five years. Finally, we include dummies for the bidder's Fama-French industry.⁹ Full variable definitions are given in Table 1. All variables are calculated for the fiscal year ending the year before deal announcement.¹⁰

We use *CARRES* to denote the residual CAR after controlling for acquirer characteristics, and define *RETRES* as the average *CARRES* over a *j*-year period. The regression results are shown in Table 2. Most coefficients are of the expected sign: returns are increasing in leverage, operating performance and inside ownership, and decreasing in free cash flow and the number of SIC codes. The R^2 of 4% is commensurate with Masulis et al.'s R^2 of 5%. Their R^2 is marginally higher as they include deal characteristics, which are not appropriate here since they are under the bank's control.

Since the bank is responsible for raw CAR in all but fixated client deals, it constitutes our core measure. As with any investment decision, an M&A transaction should be undertaken if the NPV, irrespective of project characteristics, exceeds zero. A bank cannot justify a negative-NPV transaction by arguing that other clients with (say) the same number of SIC codes undertook even worse deals, if it had the option to turn away the deal in the first place.

3. Return Differences Across Investment Banks

3.1. Full-Sample Fixed Effects

⁸ Specifically, we winsorize sales at 1% and 99% and regress inside ownership on sales and age. We then use the coefficients to predict inside ownership for the firms where it is missing. The R^2 of the first-stage regression is 13%.

⁹ We use acquirer industry fixed effects rather than running the analysis for each industry separately (i.e. studying the fixed effect of a particular bank-industry group) because very few banks undertake at least 2j transactions within a given industry in *j* years, the minimum required to calculate an accurate *RET* measure.

¹⁰ Our regression of CAR on characteristics is run on the entire sample with year-fixed effects. Using a rolling window would cause data from the early period of the sample to be dropped and would also produce less precise estimates. Full-sample regressions are thus often used in asset pricing. We are not assuming that clients use past data to estimate the characteristics parameters for themselves when choosing banks. Instead, we posit that clients already have in mind a model of the effect of acquirer characteristics on returns, which they use to isolate the portion of CAR that is outside the bank's control. As econometricians, we are attempting to estimate this model, for which we require the full sample.

Most prior research on advisor ability attributes a deal's CAR entirely to the bank and studies the association between average CAR and a variable hypothesized to proxy for bank quality, such as market share or reputation (measured by the prestige of the bank's name). Such analyses will only find significant results if ability is correlated with their chosen measures of advisor quality. Thus, the absence of a link with market share or reputation need not imply that banks do not matter for M&A outcomes.

We therefore take a broader approach. Rather than hypothesizing a measure of bank ability, we investigate whether banks exhibit differential CARs in the first place by estimating the bank fixed effect component of a deal's returns. We regress CAR on bank fixed effects while controlling for time fixed effects, since market enthusiasm for M&A may have varied over time. We then add acquirer characteristics to proxy for observable measures of quality or empire-building. Finally, we add acquirer fixed effects, to proxy for time-invariant unobservable measures of advisor quality. If two banks merge (e.g. Deutsche Bank buys Bankers Trust), we construct one fixed effect for the target (Bankers Trust) and a separate fixed effect for the acquirer (Deutsche Bank) both before and after the merger.

The results are shown in Table 3, for the 143 banks that advised on at least 10 deals over 1980-2007 or were acquired by a bank that advised on at least 10 deals. Panel A finds that, in all specifications, the fixed effects are highly significantly different from each other (p -values < 0.01). Panel B demonstrates economic significance of these differences. The difference between the 25th and 75th percentile banks is 0.9-1.3%¹¹, compared with the average CAR of 0.72% and the mean bidder size of \$10 billion. To our knowledge, these results constitute the first large-scale evidence that certain banks are systematically associated with superior M&A returns, and contradict prior findings that advisor quality has no positive effect on M&A outcomes.

While supportive of the skilled advice hypothesis, differential returns could also be consistent with the limited capacity hypothesis, if the banks with the highest fixed effects advise on the fewest transactions. To investigate this, Figure 1 presents a scatter plot of a bank's fixed effect against its market share (by number of deals). Inconsistent with the limited capacity hypothesis, the most frequent advisors occupy the middle, rather than the lower end of the distribution. There is a hump-shaped relationship between

¹¹ Following Bertrand and Schoar (2003) we weight each fixed effect by the inverse of its standard error to account for estimation error. Without this weighting, the inter-quartile range of fixed effects is 1.7-2.2%.

market share and fixed effects, and the correlation between the two variables is an insignificant -0.05 to 0.05.

While Figure 1 provides evidence against the limited capacity hypothesis, it may raise a different concern – perhaps the significant results of Table 3 are driven by infrequent advisors whose fixed effects are noisily measured, or who are relatively unimportant for the M&A market as a whole. To address this concern, the inter-quartile ranges of fixed effects that we reported above are after weighting each fixed effect by the inverse of its standard error. Moreover, we further investigate this hypothesis by testing for equality of fixed effects focusing only on the largest banks who advised on at least 84 transactions over the sample period, i.e. 3 per year. 42 banks meet this criterion. Panel C shows that the fixed effects remain jointly statistically significant at the 1% level, and the inter-quartile range is an economically meaningful 0.74%, even when continuing to control for acquirer characteristics and acquirer fixed effects.

Another measurement concern is that, while CAR measures the full value impact of a deal in an efficient market, it may understate it if part is incorporated into prices before or after announcement. The former will occur if the deal leaks out early, bringing the measured returns of both good and bad deals towards zero. The latter will occur if investors do not notice certain effects of the transaction until later and this failure is not unbiased (i.e. they fail to notice more good than bad effects, or vice-versa). While long-run returns would capture a greater proportion of the transaction's impact, they would also incorporate many other corporate events (e.g. dividend and earnings changes not due to the acquisition) and hence suffer from a high noise-to-signal ratio. Moreover, errors resulting from failure to use the “true” benchmark model of stock returns are compounded over long horizons (Fama (1998)).

In the classical “errors-in-variables” problem, where measurement error is symmetric (i.e. the average error is zero) and similar across observations, mismeasurement simply attenuates the results. Our setting differs from the standard problem in two ways. First, mismeasurement arising from leakage or delayed reaction is asymmetric: positive (negative) true returns are associated with negative (positive) errors. If the mean return were zero, positive and negative true returns would be equally likely and so the average error would also be zero – thus, the results would again be attenuated. By contrast, our mean CAR is positive and so the average error is negative, biasing reported returns towards zero and thus below the mean. This would not be a problem if

mismeasurement was similar across banks, since it would reduce measured *RET* evenly across the sample. However, our second difference is that mismeasurement may be more serious for certain banks. For example, small banks may advise small clients, whose deals are less closely followed by M&A arbitrageurs or the media, leading to less leakage and thus higher measured CAR. Thus, a low *RET* fixed effect may result from measurement error rather than underperformance.¹² We address the mismeasurement explanation in a number of ways. First, it is reasonable to assume that transactions with measured CARs exceeding 10% in absolute value did not suffer from attenuation. The remaining 87% of deals is the subset for which attenuation may be present. The mean CAR for this subset is -0.016%, very close to zero. Hence, any attenuation is indeed towards the mean as in the classic errors-in-variables setting, and leads to our results being understated.¹³ Second, in Panels D and E we filter out low-price and low-volume acquirers, and show that the results are barely affected.¹⁴ For example, the inter-quartile range is 0.8%, even when focusing on the 42 largest banks and adding all controls. Third, we later show (in Panel D of Table 5) that the low average returns of low-*RET* banks stem from them undertaking a high proportion of value-destructive deals, rather than deals with small but positive measured value.¹⁵

To demonstrate the results on an individual bank level, Table 4 provides summary statistics on the 15 largest banks by number of deals. There is significant variation in the average returns to each bank, which range from -0.12% (UBS) to 1.47% (Bank of America). Controlling for acquirer characteristics sometimes has a marked impact on

¹² For example, assume banks A and B both execute deals with true value creation of 1.5%, 1.0% and -1.0% (i.e. a positive mean). Bank A's CARs fully capture the value, and so its *RET* is 0.5%. Bank B's CARs capture only half of the value due to leakage or underreaction, and so its CARs will be 0.75%, 0.5% and -0.5%, yielding a *RET* of 0.25%.

¹³ Continuing the earlier example, assume banks A and B both execute deals with true value creation of 12%, 1% and -1%. Bank A's CARs fully capture the value and Bank B's CARs for the final two deals are halved. Since the deals that exhibit attenuation have a zero average return, both banks will have the same *RET*.

¹⁴ Specifically, we keep only cases where the acquirer's price is at least \$1 before the acquisition and where there is trading volume either 2 or 3 days before the announcement and trading volume on the day after the announcement. These filters are similar in spirit to Diether, Lee, and Werner (2009) who use an initial \$1 and zero volume screen. Our setting differs from the anomalies literature (e.g. Diether et al.) in that we only require that CAR be a signal of value creation and do not require that it be tradable; thus, the M&A literature does not typically employ such filters. Further, CRSP reports the midpoint of bid and ask if a closing price is not available.

¹⁵ A further hypothesis is that banks differ not in skill, but the fees that they charge: low *RET* banks may be adding the same value as their rivals, but charging higher fees. We are unable to calculate "pre-fee" CARs as fees are only available for 2,046 deals within our sample. However, among the deals that do have fee data, we find that the correlation between acquirer returns and fees (scaled by market cap) is a slightly *positive* 0.013, inconsistent with the hypothesis that low *RET* results from high fees.

banks' performance measures: for example, Goldman Sachs has the second lowest fixed effect (-0.93%) when only controlling for year dummies, but it rises to an above-average 0.17% when adding acquirer characteristics and acquirer fixed effects.

3.2. Persistence in Announcement Returns

While significant bank fixed effects suggest that advisors matter for M&A returns, the results of Table 3 are not actionable by clients in their selection decisions, since they are based on the full 28-year sample. We therefore analyze whether clients can predict positive future returns based on historic data. The existence of a bank fixed effect implies a persistent component to a bank's average CAR and thus provides *a priori* motivation for predicting future returns using an advisor's past returns, rather than the market share and reputation measures previously studied. This *a priori* motivation mitigates potential concerns of data-mining for advisor characteristics with predictive power. We calculate persistence in advisor performance in a similar manner to Jegadeesh and Titman (1993) for stocks and Carhart (1997) for mutual funds. At the start of each year, we sort banks into quintiles based on *RET* for the past j calendar years, where $j = \{1,2,3\}$. Next, for each quintile, we calculate *RET* for all banks within the quintile over the next k calendar years, where $k = \{1,2,3\}$. We report the difference in *RET* between the top (Q5) and bottom (Q1) quintiles.^{16,17}

Table 5 illustrates the results. Panel A documents significant persistence in raw CAR in 8 out of the 9 time horizons. For example, when $j=k=2$, the difference between Q1 and Q5 is 0.94%, significant at the 1% level. This result need not imply differential ability, if fixated client deals comprise a substantial proportion of all transactions, and so we next control for acquirer characteristics.¹⁸ Panel B illustrates persistence in the component attributable to advisors (*RETRES*). Thus, the persistence in *RET* does not

¹⁶As future returns are overlapping, we correct for mechanical autocovariance by using Newey-West standard errors for panel data.

¹⁷To illustrate our treatment of bank mergers, we continue with the example of the Deutsche Bank (DB) and Bankers Trust (BT) merger in June 1999. Consider a regression of 2-year *RET* on past 2-year *RET*. For any observations where *RET* ends in 1998 or earlier, DB and BT enter separately and both *RET* and *RET* are calculated on a standalone basis. For any observations where *RET* ends in 1999 or later, we drop the two standalone observations and create one combined observation. Specifically, *RET* for 1998-1999 includes all deals advised by either DB, BT or the merged entity during this period. To be consistent, the past *RET* measure will also include all deals advised by either bank or the merged entity in 1996-1997.

¹⁸Since the persistence analysis uses short windows of 1-3 years, we do not include acquirer fixed effects, because identifying purely on repeat acquirers who switch advisors would mean that very few deals are used to calculate *RETRES* and lead to substantial noise.

arise because banks are systematically mandated by fixated acquirers, consistent with the skilled advice hypothesis.

The above panels calculate *RET* and *RETRES* using an equally-weighted average of a bank's CARs. Equal-weighting is appropriate if one believes that each transaction is a separate measure of the bank's ability and thus should be considered equally; it is also consistent with the main analysis on bank fixed effects which treats each deal equally. Indeed, Mikhail, Walther and Willis (2004) and Hoberg (2007), who study performance persistence in two other investment banking services (analyst recommendations and equity underwriting) also use equal-weighting. However, weighting CARs by the size of the transaction may be appropriate if one believes that banks put greater effort into larger deals and so they are a more accurate measure of ability, or larger deals are more complex and thus a truer test of advisor quality. Panel C repeats the analysis under size-weighting. The results for our core performance measure, *RET*, are now stronger in terms of economic significance in 8 of the 9 cells, and are at least 10% significant in six. The results for *RETRES* remain positive in all cells but are significant in only two.

While suggestive of persistence, the above results admit other interpretations. A notable feature of Panel A is that the average returns are positive even for Q1. Thus, it is consistent with both the limited capacity and mismeasurement hypotheses: Q1's low *RET* arises not due to bad deals, but deals with modest measured returns – either because they actually generate small value, or they actually generate large value which is under-measured. We address both interpretations by calculating the “success ratio” of each bank: the percentage of deals which have a positive CAR. The correlation between one-year *RET* and bank success ratio is 0.68. Panel D illustrates that Q5 has approximately double the success ratio of Q1, 65-72% compared to 27-38%. Therefore, inconsistent with these hypotheses, Q1's low *RET* stems from a high proportion of value-destructive deals, rather than deals with small but positive measured returns. Additional suggestive evidence against the limited capacity hypothesis is in Figure 1, which shows no correlation between a bank's *RET* and its market share.

While Table 5 is a bank-level analysis, which considers each bank equally, another approach is a deal-level analysis. The Online Appendix shows that the results remain robust – deals where the advisor was in the top quintile based on 2-year prior performance outperform the bottom quintile by 0.91%, significant at the 1% level. This persistence continues to hold after controlling for acquirer characteristics. The Online

Appendix also considers other performance measures than CAR. It documents persistence in a bank's completion ratio and speed of completion, and show that these are weakly positively correlated with *RET*.

As in Section 3.1, we also subdivide the analysis into the largest and smallest banks. Note that such a division significantly reduces power by lowering our sample size. Other persistence analyses in corporate finance typically study accounting variables (e.g. Bertrand and Schoar (2003), Lemmon, Roberts and Zender (2008)) which are directly under the manager's control. Moreover, many accounting variables are naturally persistent: for example, Lemmon et al. study the level of leverage, which is naturally persistent as any changes to leverage are with respect to last period's leverage as a starting point. Thus, far fewer observations are needed to achieve power. By contrast, M&A returns start from a "clean slate" each time – the starting point is zero, rather than the return of the last M&A deal. Moreover, M&A returns are notoriously noisy because they reflect the market's reaction rather than a variable controlled by management; indeed, previous studies of M&A returns (e.g. Masulis, Wang and Xie (2007)) find low R-squareds, implying they are difficult to explain. Thus, stratifying the sample will markedly reduce the statistical power of our tests, as well as lowering the cross-sectional variation within each subsample. Nevertheless, we perform such a stratification to investigate the source of the significant results in Table 5. We define "large banks" as those in the top 2/3 by number of deals in the period over which past performance is measured, and "small banks" as those in the lowest third. We divide banks into terciles of past performance in the large bank subsample and halves within the small bank subsample, rather than quintiles, to obtain approximately the same number of banks in each quantile as before (since $2/3 * 5$ is close to 3 and $1/3 * 5$ is close to 2). While the number of banks remains similar within each quantile, moving from quintiles to terciles or halves reduces the variation between the top and bottom quantile.

The left side of Panel E of Table 5 gives the *RET* results for large banks. 7 of the 9 cells are significant which suggests that persistence does exist among the large bank subsample alone. The results are slightly weaker than in Table 5, consistent with reduced power. The right side of Panel E demonstrates the findings for small banks. The results remain significant in 7 of the 9 cells even though the sample size has fallen by 2/3. One of the motivations for removing small banks is that their *RET* may be measured with significant error given the small number of deals. Thus, the variations in bank fixed

effects in Table 3 may reflect noise rather than true differences in performance. However, while noise may explain cross-sectional variation at a given point in time, it is unlikely to account for time series persistence – noise implies that returns might be measured to be very high in one period, and then very low in an adjacent period. By contrast, we find evidence of persistence for even infrequent advisors, suggesting their return differences reflect true variation in performance rather than noise.

3.3. Regression Analysis

The analysis of Section 3.2 studies differences in average performance between the top and bottom quantiles. To ensure that the results are not purely driven by banks at the extremes (i.e. the best and worst banks alone), we conduct a similar analysis using regressions. In addition to using all banks in the sample, regressions also allow us to control for other potential predictors of past returns. In particular, Rau (2000) finds that *RET* is negatively related to a bank’s past market share; he does not examine the effect of past returns. We wish to examine whether the explanatory power of past *RET* remains when controlling for market share. We run the following pooled regression:

$$RET_{t,t} = \alpha_t + \beta_R RET_{t-j,t-1} + \beta_S SHARE_{t-j,t-1}. \quad (1)$$

$SHARE_{t-j,t-1}$ is the market share over the past j calendar years, by dollar value of deals (using number of deals leads to similar results). Since we have shown that bank fixed effects are significant, and our regressors may not capture the full fixed effects, the residuals for deals advised by the same bank might be correlated. We therefore cluster standard errors by bank. The results are illustrated in Panel A of Table 6. The regressions replicate the positive association between future *RET* and past *RET* documented in the quintile analysis, for all values of j . Market share is significantly negatively related to future returns in all three specifications in which it is included. The Online Appendix shows similar results in a deal-level analysis.

We are again interested whether our results apply to the M&A advisory market in general, or instead are driven by small acquirers. Panel B adds an interaction term between *RET* and *SHARE*. The interaction term is insignificant (t-statistics all below 0.5), suggesting that persistence is not weaker for larger banks. Moreover, the

coefficients on *RET* and *SHARE* alone retain their significant coefficients in all specifications. While stratifying the quintile analysis of Section 3.2 significantly reduces sample size, a regression analysis allows us to use an interaction term to study how the results vary across banks of different sizes without such a reduction. In addition, while the coefficient on *RET* gives the significance of the marginal effect if *SHARE* = 0, we also include the coefficient if *SHARE* = 5%, i.e. for a frequent advisor with a 5% market share. From Table 4, a bank with a 5% market share would be in the top 10 advisors. The table demonstrates that the marginal effect of past *RET* remains significant even for frequent advisors.

Another interesting question is whether ability differences have decreased over time. Morrison and Wilhelm (2007, 2008) show that investment banking skills have become commoditized over time, in part due to rapid increases in computer power and the rise in general skills resulting from MBA degrees. If true, and if our results are primarily driven by the early part of our sample, our findings become less interesting because we are documenting a phenomenon that is no longer in existence. We investigate this hypothesis in Panel C of Table 6 by adding an additional regressor, *RET*FIRSTHALF*, where *FIRSTHALF* is a dummy variable that equals 1 if the dependent variable is in the first half of our performance sample, 1981-1994. This is an appropriate cut-off as Morrison and Wilhelm (2008, Figure 3) document a marked increase in computer power around 1993-4. The interaction term is positive but insignificant in all six specifications. In the presence of the interaction term, the coefficient on *RET* now measures persistence using the second half of the dataset only. Importantly, even though we have less power, past *RET* remains significant in all specifications for $j \geq 2$, suggesting that the ability differences we document remain significant today.

4. Do Clients Chase Performance?

Even if a financial intermediary possesses superior ability (our fixed effects results of Table 3), Berk and Green (2004) show that this need not translate into performance persistence (our quintile and regression results of Tables 5-6) if two necessary conditions hold: clients chase past returns and there are diminishing returns to scale. Indeed, our persistence results for M&A advice contrast the lack of persistence in

mutual funds (see, e.g., Carhart (1997).) Since past *RET* positively predicts future *RET*, it would seem logical for clients to select banks based on past performance, in which case persistence will disappear if there are diminishing returns to scale. For ability to translate into persistence, it is sufficient for one of the necessary conditions in Berk and Green to be violated. We investigate whether clients respond to past performance (the first condition) as it is much cleaner to measure than returns to scale.

Table 7 studies the effect of past performance on a bank's future market share. Since bank-client relationships take time to develop, large banks are likely to have persistently high market shares irrespective of past performance. We therefore either include a bank fixed effect or the bank's past market share as regressors. Standard errors are clustered at the bank level.

Strikingly, even though *RET* is a positive predictor of future performance, the first six columns of Table 7 show that it is an insignificant determinant of market share (consistent with Rau (2000)). By contrast, even though market share negatively predicts performance, it is strongly significantly related to future share. The last three columns of Table 7 repeat the analysis adding an interaction between *RET* and *SHARE* which is generally insignificant, suggesting that the results are similar across all sizes of banks.¹⁹ This lack of performance chasing is a sufficient condition for ability to translate into persistence and thus underpins the results of Section 3. The strong performance-chasing by mutual fund investors, and the absence of such behavior by acquirers, may thus reconcile the performance persistence in M&A with its absence in mutual funds. Our results echo Kaplan and Schoar (2005), who document persistence in private equity performance (also found by Axelson et al. (2010)), and that top performing funds grow proportionally more slowly than poorly performing funds, which explains why persistence can arise.

The significance of past market share, even though it negatively predicts future performance, and irrelevance of past returns, even though it is a positive predictor, may appear at first glance to be inefficient. However, applying the Berk and Green (2004) framework to our setting, responsiveness to performance requires not only learning about ability from past returns but also competitive provision of M&A mandates by clients. Thus, lack of performance-chasing can occur if either assumption is violated, and

¹⁹ The coefficient on the interaction term in the 1-year analysis is significant at the 10% level, but the marginal effect of *RET* at a 5% market share is not significant.

therefore has different interpretations. Mandate awards may be non-competitive if clients build up relationship-specific capital with a particular bank, which can be leveraged by continuing to use it for future deals. Thus, while past market share is a *predictor* of future mandates, it may not be a *determinant* (i.e. actively be used by acquirers in their selection decisions) – instead, its significance arises as it proxies for the extent of existing relationships. Table 8 investigates the relationship-specific capital hypothesis by studying repeat acquirers, who have conducted at least one acquisition in the prior five years while being public. Using a previously-mandated advisor is associated with a lower CAR of 0.24 percentage points (t-statistic of 1.74). If the advisor had generated a negative average CAR for that particular client in question, the CAR is 0.79 percentage points lower than using past advisors that generated positive CARs (t-statistic of 4.09). These findings are consistent with the *RET* persistence results of Section 3. However, even if using a past advisor is correlated with poor future M&A performance, it is not inefficient if the bank provides many other non-M&A services. For example, Yasuda (2005) and Ljungqvist, Marston and Wilhelm (2006, 2009) find that clients select underwriters based on lending relationships or analyst coverage. Even if banks are providing no other services, clients may be “locked in” to a past advisor since working on a previous deal gives the advisor an information monopoly: Ljungqvist et al. (2006, 2009) find that past co- or lead underwriters are typically appointed as future lead underwriters. Asker and Ljungqvist (2010) highlight another source of lock-in: clients’ wish to avoid sharing banks with product market rivals.

Learning about ability from past returns will not occur if clients are unaware of the persistence of *RET* and mistakenly believe that market share is a good measure of quality. Under this interpretation, market share is significant not because clients are locked in and it proxies for existing relationships, but because they actively select on it. Indeed, both the insignificance of *RET* and the significance of *SHARE* are fully consistent with real-life practices in the investment banking industry, where league tables on market share are widely publicized and used as a proxy for expertise. Therefore, industry participants have grown to take it for granted that market share equates with quality; similarly, many academic studies such as Rau (2000), Kale, Kini and Ryan (2003) and Hunter and Jagtiani (2003) use market share as their measure of quality. However, we show that it is actually negatively correlated with performance. By contrast, measures of

returns are less publicized, which hinders clients' ability to use returns as an additional metric to learn about quality even if they are not locked-in.

Given the lack of performance-chasing and importance of prior relationships, it is logical for banks to accept even bad deals. Not only will the mandate boost fee income today, but it will also create new relationships and thus the ability to win future mandates. Even though accepting bad deals will depress *RET*, this does not reduce future mandates, either due to lock-in or failure to learn. Indeed, if certain banks are systematically non-selective and accept bad deals, this would lead to the negative correlation between market share and *RET* that we document.

As a preliminary investigation into the importance of lock-in for M&A, we study the extent to which clients switch M&A advisors. During 1985-2007, we find that on 21.4% of M&A deals where the acquirer had made at least one acquisition in the past five years, the advisors also covered all of the acquirer's M&A deals over the past five years. On 50.1% of deals, the advisors covered at least one deal over the past five years. Ljungqvist and Wilhelm (2005) find that 64.1% of equity issuers used the same underwriter for their IPO and first SEO. Our figures are somewhat lower, tentatively suggesting that lock-in may be slightly weaker in M&A. One potential explanation is that a significant amount of M&A advice is target-specific, and thus knowledge built up during one transaction may be less applicable for future deals. Our findings are consistent with Francis, Hasan and Sun (2009), who find that fewer than 20% of deals are conducted by exclusive advisors, which they interpret as evidence that existing relationships are less influential for advisor choice in M&A than other banking services.

Given the importance of other banking services, we also gather SDC issuance data to measure debt and equity underwriting relationships, and Dealscan data to measure lending relationships.²⁰ Since Dealscan data is sparse until 1988, the lending numbers are calculated from 1993; for consistency, we use the same timeframe for the issuance data. We find that, on 9.5% of M&A deals over 1993-2007, the advisors also covered all of the acquirer's issuance over the past five years; on 45.4% of deals, banks covered at least one issue. For lending, the numbers drop to 6.7% and 15.8% respectively. While we do not have a benchmark for a formal test, these relatively low numbers suggest that clients use different advisors for their M&A business than for their underwriting and borrowing

²⁰ We thank Michael Roberts for providing us with the table to link Dealscan to Compustat, used in Chava and Roberts (2008).

decisions. Indeed, while there are plausibly strong synergies between lending and bond underwriting (Yasuda (2005)), the connection between lending and M&A advice appears to be weaker. We also attempt to study the selection decisions of clients who are not locked in and thus have freedom on advisor choice. We take a subsample of clients that engaged in no M&A deals, issuance or borrowing with our 143 advisors in the past five years, and thus have no existing relationships. We note that this is not a perfect measure of freedom. First, it may include “un-free” clients: if some of these acquirers intend to engage in issuance or borrowing in the future, they may select an M&A advisor who provides these services. Second, it may exclude “free” clients: some clients may have engaged in issuance or borrowing with an M&A advisor in the past, but have no intention of doing so in the foreseeable future. If lock-in, rather than failure to learn, is the reason for the aggregate insignificance of *RET* for market share in Table 7, then *RET* should be positively correlated with future mandates for “free” acquirers. By contrast, Table 9 shows that *RET* is negatively correlated with future mandates in most specifications (though statistically insignificant) for this subsample. This suggests that failure to learn is a cause of the insignificance of past performance. However, we note that these results are only suggestive, due to the difficulty of identifying “free” clients mentioned earlier, and our small sample size: we can only identify “free” clients from 1993 onwards, and only 1,224 deals were conducted by such acquirers.

If clients are indeed not fully locked-in, our results suggest that they may be able to improve their advisor selection decisions by using information on past returns to supplement market share information.²¹ An increased focus on returns may in turn dissuade banks from accepting value-destructive transactions. The findings also have implications for the nature of contracts between acquirers and advisors. McLaughlin (1990) finds that banks are paid for deal completion but not value creation. He suggests that reputational concerns may be sufficient to align banks with clients, since a bank that performs poorly will not win future mandates. However, the insignificance of *RET* implies that banks’ implicit incentives are also low – if clients are locked in or do not learn from *RET*, banks can be less concerned with returns – and so explicit incentives

²¹ Since shareholders are diversified, they are not concerned with idiosyncratic risk. Thus, a value-maximizing manager should maximize expected CAR rather than a measure adjusted for the variance. However, managers may care about the variance of CAR if they are concerned with their own undiversified human capital. We find that a bank’s *RET* is highly correlated with its “Sharpe ratio” of *RET* divided by the standard deviation of CAR. Over three-year non-overlapping windows beginning in 1981, we find the average Spearman rank correlation of *RET* and the “Sharpe ratio” to be 0.965.

would be valuable. In a similar vein, clients frequently solicit fairness opinions to verify that the terms are “fair” (Kisgen, Qian and Song (2009)). As part of its mandate, an advisor should ensure that the client is undertaking only favorable deals in the first place, and there should be no need for a separate fairness opinion. The prevalence of such opinions is consistent with the view that incentives to act in clients’ interests are insufficient, either due to lock-in or failure to learn.

5. Conclusion

This paper finds a significant investment bank fixed effect in the announcement returns to an acquisition. The positive association between certain banks and high returns can be predicted by clients using past performance – a bank’s returns are persistent. While most prior research attributes the entire CAR to the advisor, we remove the component that can be explained by acquirer characteristics; the orthogonal component remains persistent. These results suggest that certain banks have ability in identifying acquisitions or negotiating terms, or trustworthiness in turning down bad deals. They contrast prior findings that bank quality, as measured by market share or reputation, has no positive effect on M&A outcomes, thus suggesting that banks do not matter. The lack of performance-chasing by clients potentially explains why persistence exists in M&A advice even though it is absent in mutual fund performance.

This paper suggests a number of questions for future research. First, it may be interesting to study *why* clients do not chase performance and whether such behavior is efficient – i.e. disentangle whether it results from rational lock-in or inefficient failure to learn (e.g. due to an acquirer’s private benefits from working with a prestigious bank.) Agency variables such as governance may explain advisor choice, just as they do for acquirer returns (Masulis et al. (2007)). Second, the low returns to ability appear puzzling. While superior performance in equity underwriting is rewarded with higher future market share (Dunbar (2000), Hoberg (2007)), and superior returns to private equity investing increases future fund flows (Chung et al. (2010)), there seems to be little reward for good M&A advice. Third, we have focused on acquirer returns since these are frequently negative, and so advisor selection is particularly important for bidders to ensure value creation; in addition, far more bidders are public than targets. It would be

fruitful to investigate whether target returns also exhibit a bank fixed effect, and whether the banks that consistently create value for bidders are also skilled at defense mandates.

References

- Asker, John and Alexander Ljungqvist (2010): "Competition and the Structure of Vertical Relationships in Capital Markets," *Journal of Political Economy*, forthcoming.
- Axelson, Ulf, Tim Jenkinson, Per Strömberg and Michael S. Weisbach (2010): "Borrow Cheap, Buy High? The Determinants of Leverage and Pricing in Buyouts," Working paper, London School of Economics.
- Berk, Jonathan B. and Richard C. Green (2004): "Mutual Fund Flows and Performance in Rational Markets," *Journal of Political Economy* 112, 1269-1295.
- Bertrand, Marianne and Antoinette Schoar (2003): "Managing With Style: The Effect of Managers of Firm Policies," *Quarterly Journal of Economics* 118, 1169-1208.
- Bowers, Helen and Robert Miller (1990): "Choice of Investment Banker and Shareholders' Wealth of Firms Involved in Acquisitions," *Financial Management* 19, 34-44.
- Carhart, Mark (1997): "On Persistence in Mutual Fund Performance," *Journal of Finance* 52, 57-82.
- Chava, Sudheer and Michael R. Roberts (2008): "How Does Financing Impact Investment? The Role of Debt Covenants," *Journal of Finance* 63, 2085-2121.
- Chung, Ji-woong, Berk Sensoy, Lea H. Stern and Michael S. Weisbach (2010): "Pay for Performance from Future Fund Flows: The Case of Private Equity," Working Paper, Ohio State University.
- Diether, Karl B., Kuan-Hui Lee, and Ingrid M. Werner (2009): "Short-Sale Strategies and Return Predictability," *Review of Financial Studies* 22, 575-607.
- Dunbar, Craig (2000): "Factors Affecting Investment Bank Initial Public Offering Market Share," *Journal of Financial Economics* 55, 3-41.
- Ertugurul, Mine and Karthik Krishnan (2010): "Advisor Skill and Acquisition Performance: Do Investment Bankers Make a Difference?" Working paper, University of Massachusetts.
- Fama, Eugene (1998): "Market Efficiency, Long-Term Returns, and Behavioral Finance," *Journal of Financial Economics* 49, 283-306.
- Fernando, Chitru S., Vladimir A. Gatchev and Paul A. Spindt (2005): "Wanna Dance? How Firms and Underwriters Choose Each Other," *Journal of Finance* 60, 2437-2469.
- Francis, Bill B., Iftekhar Hasan and Xian Sun (2009): "Choice of Financial Advisors and Reasons to Switch: Evidence From M&As," Working paper, Rensselaer Polytechnic Institute.
- Gompers, Paul, Joy Ishii and Andrew Metrick (2003): "Corporate Governance and Equity Prices," *Quarterly Journal of Economics* 118, 107-155.
- Hackbarth, Dirk and Erwan Morellec (2007): "Stock Returns in Mergers and Acquisitions," *Journal of Finance* 63, 1213-1252.

- Hoberg, Gerard (2007): "The Underwriter Persistence Phenomenon," *Journal of Finance* 62, 1169-1206.
- Hunter, William and Julapa Jagtiani (2003): "An Analysis of Advisor Choice, Fees and Effort in Mergers and Acquisitions," *Review of Financial Economics* 12, 65-81.
- Jaffe, Jeffrey, David Pedersen and Torben Voetmann (2009): "Mergers and Persistence: A Test of Differential Skill in Corporate Finance," Working paper, University of Pennsylvania.
- Jegadeesh, Narasimhan and Sheridan Titman (1993): "Returns to Buying Winners and Selling Losers: Implications for Stock Market Efficiency," *Journal of Finance* 48, 65-91.
- Kale, Jayant R., Omesh Kini and Harley E. Ryan (2003): "Financial Advisors and Shareholder Wealth Gains in Corporate Takeovers," *Journal of Financial and Quantitative Analysis* 38, 475-501.
- Kaplan, Steven N. and Antoinette Schoar (2005): "Private Equity Performance: Returns, Persistence, and Capital Flows," *Journal of Finance* 60, 1791-1823
- Kisgen, Darren, Jun Qian and Weihong Song (2009): "Are Fairness Opinions Fair? The Case of Mergers and Acquisitions," *Journal of Financial Economics* 91, 179-207.
- Lehn, Kenneth and Mengxin Zhao (2006): "CEO Turnover After Acquisitions: Are Bad Bidders Fired," *Journal of Finance* 61, 1759-1811.
- Lemmon, Michael L., Michael R. Roberts and Jaime F. Zender (2008): "Back to the Beginning: Persistence and the Cross-Section of Corporate Capital Structure," *Journal of Finance* 63, 1575-1608.
- Ljungqvist, Alexander, Felicia Marston and William J. Wilhelm, Jr. (2006): "Competing for Securities Underwriting Mandates: Banking Relationships and Analyst Recommendations," *Journal of Finance* 61, 301-340.
- Ljungqvist, Alexander, Felicia Marston and William J. Wilhelm, Jr. (2009): "Scaling the Hierarchy: How and Why Investment Banks Compete for Syndicate Co-management Appointments," *Review of Financial Studies* 22, 3977-4007.
- Ljungqvist, Alexander and William J. Wilhelm, Jr. (2005): "Does Prospect Theory Explain IPO Market Behavior?" *Journal of Finance* 60, 1759-1790
- Maksimovic, Vojislav and Gordon M. Phillips (2002): "Do Conglomerate Firms Allocate Resources Inefficiently Across Industries? Theory and Evidence," *Journal of Finance* 57, 721-768.
- Masulis, Ronald, Cong Wang and Fei Xie (2007): "Corporate Governance and Acquirer Returns," *Journal of Finance* 62, 1851-1889.
- McLaughlin, Robyn (1990): "Investment-Banking Contracts in Tender Offers: An Empirical Analysis," *Journal of Financial Economics* 28, 209-232.

Michel, Allen, Israel Shaked and You-Tay Lee (1991): "An Evaluation of Investment Banker Acquisition Advice: The Shareholders' Perspective," *Financial Management* 20, 40-49.

Mikhail, Michael, Beverly Walther and Richard Willis (2004): "Do Security Analysts Exhibit Persistent Differences in Stock Picking Ability?" *Journal of Financial Economics* 74, 67-91.

Moeller, Sara B., Frederik P. Schlingemann and René M. Stulz (2004): "Firm Size and the Gains from Acquisitions," *Journal of Financial Economics* 73, 201-228.

Morrison, Alan D. and William J. Wilhelm, Jr. (2007): "Investment Banking: Institutions, Politics, and Law," Oxford University Press, Oxford.

Morrison, Alan D. and William J. Wilhelm, Jr. (2008): "The Demise of Investment Banking Partnerships: Theory and Evidence," *Journal of Finance* 63, 311-350

Rau, P. Raghavendra (2000): "Investment Bank Market Share, Contingent Fee Payments, and the Performance of Acquiring Firms," *Journal of Financial Economics* 56, 293-324.

Rau, P. Raghavendra and Theo Vermaelen (1998): "Glamour, Value and the Post-Acquisition Performance of Acquiring Firms," *Journal of Financial Economics* 49, 223-253.

Servaes, Henri and Marc Zenner (1996): "The Role of Investment Banks in Acquisition," *Review of Financial Studies* 9, 787-815.

Yasuda, Ayako (2005): "Do Bank Relationships Affect the Firm's Underwriter Choice in the Corporate-Bond Underwriting Market?" *Journal of Finance* 60, 1259-1292.

Figure 1

Plots of estimated bank fixed effects against number of deals announced in the full sample. The fixed effects are estimated from regressions of the (-1,+1) CAR of deals on bank fixed effects and control variables. Plot (1) includes time fixed effects as controls, (2) includes acquirer characteristics and time fixed effects, and (3) includes acquirer characteristics, acquirer fixed effects, and time fixed effects.

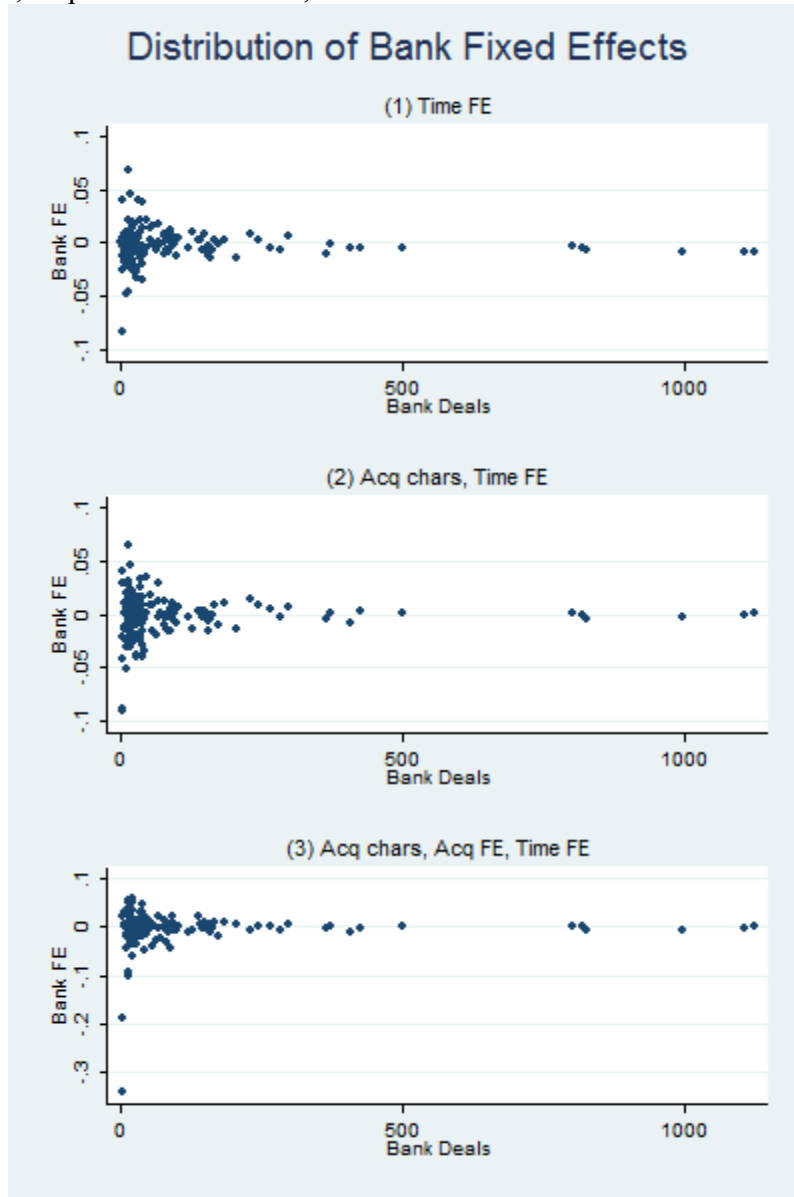


Table 1

Definition of variables used in the analyses. Where applicable, we include the Compustat item number in the description.

Panel A: Used in the calculation of residuals for CAR	
Variable	Definition
RUNUP	Log stock return for the acquirer from -210 to -11.
Q	Log of Tobin's Q. Tobin's Q = Market value of assets / Total assets (#6). Market value of common stock = Common shares outstanding (#25) * Price (#199). Market value of assets = Book value of assets (#6) + Market value of common stock – Book value of common stock (#60) – Balance sheet deferred taxes (#74).
LEVERAGE	LEVERAGE = Book debt / (Total assets (#6) – Book equity + Market equity). Book equity = Total assets (#6) – Total liabilities (#181) – Preferred stock (#10) + Deferred taxes (#35, if available) Substitute Redemption value of preferred stock (#56) if Preferred stock is missing. Book debt = Total assets (#6) – Book equity. Market equity = Common shares outstanding (#25) * Price (#199).
FCF	FCF = Free cash flow / Total assets (#6). Free cash flow = Operating income before depreciation (#13) – Interest expense (#15) – Income taxes (#16) + Δ Deferred taxes and investment tax credit (#35 - #35 from previous year) – Preferred dividends (#19) – Common dividends (#21).
SIZE	Log of Total assets (#6).
HERFINDAHL	$\sum_i \left(\frac{firm_sales_i(\#12)}{industry_sales} \right)^2$, where industries are defined by the Fama-French 49 industries.
SELLEXP	SELLEXP = median selling expenses (#189) over Sales (#12) for industry
INST	Fraction of outstanding common shares owned by institutions from Thomson Financial 13f filings.
OPPERF	Firm operating performance minus the industry median in the past year. Operating performance = Operating income before depreciation (#13) / 0.5(Total assets + last year's total assets (#6)).
INSIDER	Insider ownership as a fraction of total shares outstanding, from Compact Disclosure. Where missing, we impute it using Sales (#12) and firm age (from CRSP).

ACQSIC	Log of number of acquirer SIC codes.
REPEAT ACQUIRER	Dummy variable that equals 1 if the acquirer announced an acquisition in the previous 5 years.

Panel B: Constructed for direct use in quintile analysis and regressions

Variable	Definition
RET	Average CAR (3-day cumulative abnormal return) for deals advised by an investment bank over a given number of years.
RETRES	Average residual from a regression of CAR on acquirer characteristics defined in Panel A.
SHARE	Market share by value of acquirer-advised deals for an investment bank over a calendar year.

Table 2

Regression of CAR on acquirer characteristics. CAR is the return in excess of the CRSP value-weighted index over a (-1,+1) window relative to the announcement date. The regressors are described in Table 1. The sample period is 1980-2007 and t-statistics are in parentheses.

	CAR
RUNUP	-0.0018 (1.07)
Q	-0.0055 (2.89)***
LEVERAGE	0.0185 (4.05)***
FCF	-0.0569 (7.45)***
SIZE	-0.0033 (8.57)***
HERFINDAHL	0.0008 (0.06)
SELLEXP	-0.0433 (2.22)**
INST	-0.0097 (4.06)***
OPPERF	0.0475 (5.72)***
INSIDER	0.0110 (2.08)**
ACQSIC	-0.0018 (1.92)*
REPEAT ACQUIRER	-0.0028 (1.89)*
Year FE	Yes
Acquirer Industry FE	Yes
# obs	12,622
R-sqd (%)	4.17

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 3

Bank fixed effects to a deal's CAR. Panel A reports F-tests for the joint significance of bank fixed effects from a regression of (-1,+1) CAR on bank fixed effects and listed controls. Acquirer characteristics are defined in Table 1. Panel B reports the distribution of bank fixed effects, weighted by the inverse of the standard errors of the fixed effects. Panel C reports analysis on fixed effects for banks that announced at least 84 deals over the full sample. Panels D and E repeat these analyses filtering out acquirers with stock prices below \$1 and missing trading volume either on the day after announcement or both 2 and 3 days before announcement. F-statistics, p-values, and numbers of constraints are listed. The number of constraints equals the number of bank fixed effects estimated in the regression minus one. In specification (3), the adjusted R-squared for this specification is after removing acquirers that undertake only one transaction, and then demeaning by acquirer before regressing on acquirer characteristics, time dummies and bank dummies. The sample period is 1980-2007.

Panel A: Investment Bank Fixed Effects				
	Controls	Bank FE F-test	Obs	Adj R-sqd (%)
(1)	Time FE	1.65 (0.0000, 142)	15,344	0.97
(2)	Acq chars, time FE	1.44 (0.0006, 141)	12,622	3.98
(3)	Acq chars, acq FE, time FE	1.47 (0.0003, 138)	10,430	3.27

Panel B: Distribution of Bank Fixed Effects				
	Std Dev	25th	75th	Interquartile Range
(1)	1.37%	-0.91%	0.35%	1.26%
(2)	1.39%	-0.53%	0.41%	0.94%
(3)	2.00%	-0.65%	0.58%	1.23%

Panel C: Fixed Effects for Active Banks					
	Bank FE F-test	Std Dev	25th	75th	Interquartile Range
(1)	1.69 (0.0038, 41)	0.64%	-0.85%	0.21%	1.06%
(2)	1.41 (0.0431, 41)	0.66%	-0.45%	0.28%	0.74%
(3)	1.60 (0.0092, 41)	0.86%	-0.47%	0.27%	0.74%

Panel D: Investment Bank Fixed Effects with Filters					
	Controls	Bank FE F-test (all banks)	Banks FE F-test (active banks)	Obs	Adj R-sqd (%)
(1)	Time FE	1.60 (0.0000, 142)	1.68 (0.0043, 41)	14,955	0.98
(2)	Acq chars, time FE	1.45 (0.0004, 141)	1.45 (0.0305, 41)	12,347	3.62
(3)	Acq chars, acq FE, time FE	1.48 (0.0002, 138)	1.70 (0.0036, 41)	10,235	3.37

Panel E: Distribution of Bank Fixed Effects with Filters

	Banks	Std Dev	25th	75th	Interquartile Range
(1)	All	1.36%	-0.88%	0.34%	1.22%
(1)	Active Banks	0.64%	-0.80%	0.31%	1.11%
(2)	All	1.40%	-0.74%	0.39%	1.12%
(2)	Active Banks	0.67%	-0.45%	0.17%	0.61%
(3)	All	2.00%	-0.73%	0.51%	1.23%
(3)	Active Banks	0.88%	-0.53%	0.25%	0.78%

Table 4

Summary statistics for the top 15 investment banks by number of announced deals from 1980-2007. The averages provided in the last row include deals for all investment banks in the sample. *RET* is a bank's average (-1,+1) CAR; *RETRES* is a bank's average CARRES, the acquirer characteristic unexplained return (residuals from regressing CAR on acquirer characteristics). The three final columns display bank fixed effects as estimated in Table 3. Specification (1) includes time fixed effects; specification (2) includes time fixed effects and acquirer characteristics; specification (3) includes time and acquirer fixed effects, and acquirer characteristics.

Investment Bank	Number of Deals	Market Share by Value	RET	RETRES	Bank FE (1)	Bank FE (2)	Bank FE (3)
Goldman Sachs	1,126	23.64%	0.07%	0.13%	-0.93%	0.13%	0.17%
Morgan Stanley	1,108	14.91%	0.09%	0.02%	-0.91%	-0.03%	-0.31%
Merrill Lynch	997	16.91%	0.18%	-0.13%	-0.85%	-0.22%	-0.47%
CSFB	828	10.85%	0.38%	-0.41%	-0.60%	-0.45%	-0.70%
SSB/Citigroup	821	16.74%	0.51%	-0.00%	-0.38%	-0.08%	0.24%
Lehman	803	8.08%	0.58%	0.15%	-0.35%	0.07%	0.09%
JP Morgan Chase	500	8.22%	0.28%	0.02%	-0.48%	0.02%	0.27%
Lazard	427	7.74%	0.46%	0.27%	-0.47%	0.28%	-0.24%
DLJ	407	3.02%	0.68%	-0.64%	-0.45%	-0.75%	-1.12%
Bear Stearns	374	4.43%	0.98%	0.23%	-0.04%	0.14%	0.05%
UBS Warburg	367	7.32%	-0.12%	-0.45%	-0.98%	-0.45%	-0.41%
Bank of America	299	4.21%	1.47%	0.67%	0.64%	0.65%	0.58%
Salomon (pre-merger)	284	1.98%	0.66%	-0.23%	-0.56%	-0.33%	-0.62%
JP Morgan (pre-merger)	267	3.41%	0.62%	0.43%	-0.46%	0.41%	0.21%
Deutsche Bank	244	4.34%	1.04%	0.82%	0.26%	0.88%	0.08%
Avg over entire sample	15,344		0.72%	0.00%			

Table 5

Persistence in a bank's average returns and source of low returns. Panel A sorts banks into quintiles based on their *RET* (average (-1,+1) CAR) over the past j calendar years, where $j = \{1,2,3\}$. To be included in the analysis, a bank must have announced at least 2j deals over the relevant period. Q1 represents the banks with the lowest past *RET*, Q5 the highest. For each quintile, we then calculate the average CAR to future acquisitions announced by the banks in that quintile over the next k calendar years, where $k = \{1,2,3\}$. Panel B and repeats the analysis for *RETRES* (average of CARRES, the acquirer characteristic unexplained return). Panel C examines *RET* and *RETRES* calculated using transaction-value weighted measures. Panel D studies the correlation between *RET* and the contemporaneous percentage of positive CAR deals. Panels E subdivides the sample into the top 2/3 of banks by number of deals in each sorting period (Large Advisors) and the bottom 1/3 (Small Advisors). Banks are sorted each period into terciles and halves, respectively. The sample period is 1981-2007. Newey-West t-statistics are in parentheses.

Panel A: Persistence in Raw Returns			
Quintiles Measured Over	Future RET Measured Over		
	1yr	2yrs	3yrs
1yr RET			
Q1	0.92%	0.66%	0.69%
Q5	1.49%	1.48%	1.44%
Q5 - Q1	0.57%	0.82%	0.76%
	(1.32)	(2.73)***	(2.85)***
2yrs RET			
Q1	0.52%	0.61%	0.74%
Q5	1.47%	1.55%	1.36%
Q5 - Q1	0.95%	0.94%	0.63%
	(2.58)**	(3.07)***	(1.99)**
3yrs RET			
Q1	0.59%	0.57%	0.60%
Q5	1.68%	1.73%	1.54%
Q5 - Q1	1.09%	1.16%	0.94%
	(2.74)***	(3.55)***	(2.91)***
Panel B: Persistence in Residual Returns			
Quintiles Measured Over	Future RETRES Measured Over		
	1yr	2yrs	3yrs
1yr RETRES			
Q5 - Q1	0.78%	0.80%	0.85%
	(1.71)*	(2.51)**	(3.32)***
2yrs RETRES			
Q5 - Q1	1.35%	0.92%	0.55%
	(2.86)***	(2.85)***	(1.88)*
3yrs RETRES			
Q5 - Q1	0.75%	0.55%	0.37%
	(1.76)*	(1.82)*	(1.29)

Panel C: Persistence in Returns (Transaction value-weighted measures)							
Quintiles Measured Over	Future RET Measured Over			Quintiles Measured Over	Future RETRES Measured Over		
	1yr	2yrs	3yrs		1yr	2yrs	3yrs
1yr RET				1yr RETRES			
Q5 - Q1	0.62% (1.07)	1.01% (2.01)**	1.00% (2.22)**	Q5 - Q1	0.95% (1.63)	1.31% (2.93)***	0.82% (1.95)*
2yrs RET				2yrs RETRES			
Q5 - Q1	0.98% (1.79)*	0.98% (1.88)*	0.81% (1.52)	Q5 - Q1	0.38% (0.69)	0.65% (1.26)	0.23% (0.43)
3yrs RET				3yrs RETRES			
Q5 - Q1	0.45% (0.84)	1.36% (2.47)**	1.07% (2.01)**	Q5 - Q1	0.62% (1.08)	0.75% (1.27)	0.50% (0.80)

Panel D: Percentage of Positive CAR deals, by RET Quintile			
	RET Measured Over		
	1yr	2yrs	3yrs
Q1	26.51%	34.90%	37.56%
Q5	71.64%	67.41%	64.67%
Q5 - Q1	45.13% (25.12)***	32.51% (22.07)***	27.11% (19.26)***

Panel E: Persistence by Size of Advisor							
Terciles Measured Over	Large Advisors Future RET Measured Over			Halves Measured Over	Small Advisors Future RET Measured Over		
	1yr	2yrs	3yrs		1yr	2yrs	3yrs
1yr RET				1yr RET			
T3 - T1	0.40% (1.50)	0.48% (2.53)**	0.41% (2.29)**	H2 - H1	1.07% (1.62)	0.80% (1.62)	1.24% (2.79)***
2yrs RET				2yrs RET			
T3 - T1	0.45% (1.82)*	0.43% (2.23)**	0.33% (1.58)	H2 - H1	1.69% (3.12)***	1.04% (2.50)**	0.96% (2.48)**
3yrs RET				3yrs RET			
T3 - T1	0.48% (1.77)*	0.41% (1.97)**	0.37% (1.73)*	H2 - H1	1.17% (2.26)**	1.16% (2.56)**	1.02% (2.46)**

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 6

Determinants of *RET*. The dependent variable is *RET*, a bank's average (-1,+1) CAR across all deals announced by the bank over a single calendar year. The explanatory variable *RET* is the average CAR over the past *j* calendar years, where $j = \{1,2,3\}$. *SHARE* is the bank's market share, by value of deals, over the past *j* calendar years. To be included in the regression, a bank must have announced at least 2*j* deals over the relevant period. In Panel B, an interaction term between *RET* and *SHARE* is included. The marginal effect of *RET* at a *SHARE* of 5% is also included. In Panel C, *FIRSTHALF* equals 1 if the dependent variable is in 1994 or earlier and 0 otherwise. The data is pooled across all banks and regressions are estimated using year fixed effects, clustering standard errors by bank. The sample period is 1981-2007 and t-statistics are in parentheses.

Panel A: Determinants of Bank-Level RET						
	1yr	1yr	2yrs	2yrs	3yrs	3yrs
Past j years						
RET	0.0958 (2.22)**	0.0908 (2.09)**	0.1974 (3.38)***	0.1876 (3.21)***	0.1789 (2.82)***	0.1619 (2.56)**
SHARE		-0.0346 (3.17)***		-0.0351 (3.00)***		-0.0416 (3.59)***
# obs	993	993	947	947	897	897
R-sqd (%)	6.16	6.51	6.22	6.56	5.06	5.56
Panel B: Determinants of Bank-Level RET with RET-SHARE Interaction						
	1yr	1yr	2yrs	2yrs	3yrs	3yrs
Past j years						
RET	0.0968 (2.03)**	0.0919 (1.93)*	0.2044 (3.25)***	0.1920 (3.05)***	0.1786 (2.66)***	0.1566 (2.33)**
SHARE		-0.0346 (3.16)***		-0.0347 (2.95)***		-0.0421 (3.66)***

RET X	-0.0893	-0.0945	-0.6364	-0.3889	0.0280	0.4964
SHARE	(0.11)	(0.11)	(0.46)	(0.27)	(0.02)	(0.35)
# obs	993	993	947	947	897	897
R-sqd (%)	6.16	6.52	6.24	6.57	5.06	5.57
RET (at 5% SHARE)	0.0924 (2.12)**	0.0871 (1.92)*	0.1726 (2.40)**	0.1725 (2.34)**	0.1800 (2.31)**	0.1814 (2.30)**

Panel C: Determinants of Bank-Level RET with First-Half Interaction

	1yr	1yr	2yrs	2yrs	3yrs	3yrs
Past j years						
RET X	0.0406	0.0290	0.0998	0.0806	0.1222	0.0921
FIRST HALF	(0.43)	(0.31)	(0.81)	(0.64)	(0.88)	(0.64)
RET	0.0826 (1.49)	0.0805 (1.46)	0.1666 (2.19)**	0.1618 (2.14)**	0.1404 (1.87)*	0.1310 (1.76)*
SHARE X FIRST HALF		-0.0256 (1.05)		-0.0219 (0.77)		-0.0326 (1.16)
SHARE		-0.0244 (2.01)**		-0.0265 (2.36)**		-0.0304 (2.58)**
# obs	993	993	947	947	897	897
R-sqd (%)	6.19	6.58	6.33	6.67	5.19	5.72

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 7

Determinants of market share. The dependent variable is a bank's market share, by value of deals, in one particular year. *RET* is the bank's average (-1,+1) CAR over the past j calendar years, where $j = \{1,2,3\}$. *SHARE* is the bank's market share, by value of deals, over the past j calendar years. The data is pooled across all banks and regressions are estimated using bank fixed effects and clustering standard errors at the bank level. To be included in the results, a bank must have announced at least $2j$ deals over the period used to estimate *RET* and *SHARE*. The sample period is 1981-2007 and t-statistics are in parentheses.

	1yr	2yrs	3yrs	1yr	2yr	3yrs	1yr	2yrs	3yrs
Constant				0.0099 (4.55)***	0.0068 (4.08)***	0.0059 (4.64)***	0.0098 (4.59)***	0.0068 (4.07)***	0.0059 (4.65)***
RET	0.0007 (0.03)	-0.0259 (0.46)	-0.0499 (0.63)	-0.0025 (0.14)	-0.0370 (1.14)	-0.0357 (1.09)	-0.0313 (1.49)	-0.0486 (1.74)*	-0.0518 (1.52)
SHARE				0.6805 (13.09)***	0.8118 (17.67)***	0.8489 (28.08)***	0.6830 (13.26)***	0.8114 (17.70)***	0.8480 (28.82)***
RET X SHARE							3.1504 (1.80)*	1.0993 (0.30)	1.5095 (0.42)
Bank FE	Yes	Yes	Yes	No	No	No	No	No	No
# obs	1,168	1,079	1,017	1,168	1,079	1,017	1,168	1,079	1,017
R-sqd (%)	59.72	60.69	61.14	44.53	54.83	58.23	44.81	54.85	58.24
RET (at 5% SHARE)							0.1262 (1.60)	0.0063 (0.04)	0.0237 (0.15)

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 8

Relationship between a deal's (-1,+1) CAR and the use of a past advisor. Deals in which the acquirer has made an acquisition in the last five years while public are considered. Panel A divides deals into groups according to whether the acquirer retained an advisor from a past transaction. Panel B examines the differences in average CAR between groups. The sample period is 1985-2007 and t-statistics are in parentheses.

Panel A				
	(1)	(2)	(3)	(4)
	Did not retain and old advisor	Retained an old advisor	Retained only advisors with positive past performance	Retained an old advisor with negative past performance
CAR	0.33%	0.09%	0.46%	-0.33%
t-statistic	(3.28)***	(0.89)	(3.37)***	(2.41)**
# obs	3,793	4,291	2,263	2,028

Panel B				
	(1) - (2)	(1) - (3)	(1) - (4)	(3) - (4)
CAR	0.24%	-0.13%	0.66%	0.79%
t-statistic	(1.74)*	(0.78)	(3.89)***	(4.09)***

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 9

Logit regressions of advisor choice by acquirers without a previous M&A, issuance or lending relationship over the last 5 years with one of our 143 banks. The analysis is at the acquirer-bank level and the dependent variable equals 1 if the acquirer mandated that particular bank. Banks that do not advise on M&A in the year of the deal are treated as unavailable and excluded from the analysis. *RET* is the bank's average (-1,+1) CAR over the past *j* calendar years. *SHARE* is the bank's market share by value of deals over the past *j* calendar years. Standard errors are clustered by deal. The sample period is 1993-2007 and t-statistics are in parentheses.

	1yr	1yr	2yrs	2yrs	3yrs	3yrs
<i>Past j years</i>						
Constant	-4.4597 (168.92)***	-4.5908 (144.50)***	-4.4199 (154.13)***	-4.5797 (125.75)***	-4.4063 (141.84)***	-4.5746 (114.91)***
RET	-0.3508 (0.37)	0.0059 (0.01)	-2.2120 (1.56)	-1.3952 (0.90)	-2.5828 (1.47)	-1.1367 (0.59)
SHARE		4.0123 (8.26)***		4.5560 (8.40)***		4.5307 (8.07)***
# obs	67,806	67,806	63,586	63,586	60,791	60,791
Pseudo R-sqd (%)	0.00	0.56	0.02	0.68	0.02	0.66

* significant at 10%; ** significant at 5%; *** significant at 1%