

LEGAL ADVISORS: POPULARITY VERSUS ECONOMIC PERFORMANCE IN ACQUISITIONS

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Abstract

Law firms provide extensive intermediation in corporate acquisitions, including negotiation, certification, and drafting of contracts and agreements. Using a broad sample of U.S. acquisition offers, we find that large-market-share law firms are regularly called upon to facilitate completion of large, legally-complex offers. Complex offers are often withdrawn but, controlling for complexity, large-share law firms are associated with enhanced deal completion. Further, we document that some law firms are consistently associated with deal completion over time, and that acquirers with good deal completion **experience use fewer different law firms**. Acquirers' risk-adjusted returns, though, are smaller around announcements of offers advised by large-share law firms. Post-offer long-run returns of the acquirers are also lower and often negative following offers advised by large-share law firms. We find no evidence that particular law firms are consistently associated over time with strong returns. Our conclusion is that large law firms enhance deal completion in difficult situations, consistent with the aims of acquirer management. However, we find no systematic evidence that these popular law firms act as "gatekeepers" in the sense of not wanting to be associated with value-destroying deals.

Keywords: Law firms, Market-share, M&A deal completion, Post-merger Returns

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Parties to mergers and acquisitions often engage law firms to advise on the structure of the deal, on the negotiation and drafting of contracts, and on corporate law, regulatory and antitrust issues. Such work supports an industry with more than 2000 firms and around 14,000 lawyers as of 2002, according to specialties listed in a standard legal directory. Due to extensive information asymmetries, skilled intermediaries are expected to be important in deal situations, so the prominence of the merger and acquisition (M&A) legal advisory industry is not surprising. What is more surprising is that little work focuses on transactions microstructure, and very little statistical evidence has been brought to bear on the role played by legal advisors.

The lack of research into the importance of lawyers in M&A deals stands in contrast to a large body of research on investment bankers acting as financial advisors. Of particular relevance here is the finding that deal characteristics have been found to be material to the engagement of investment bankers (Servaes and Zenner, 1996), and bankers' incentives have been found to be material to deal outcomes (Rau, 2000). Lawyers activities also seem likely to be material. For example, given their central role in

negotiation protocol, due diligence, and contract drafting, the intermediation activities of lawyers seem likely to be material to the process of closing or failing to close an acquisition.

Some have suggested that M&A lawyers' activities are material even beyond deal completion, to the value created or destroyed in an acquisition. Observers have long noted that a substantial part of the work of lawyers grows out of efforts to economize on transactions costs, or at least to exploit their presence. For example, George Stigler, after commenting on the topic in many ways over his career, sums up in his memoir, claiming that lawyers would not exist without transactions costs (Stigler, 1988). Generally, in the presence of transactions costs, the Coase theorem implies that processes for the allocation of property rights can affect real-valued outcomes. With M&A services specifically in mind, Gilson (1984) draws on this Coasian tradition to propose that lawyers are (or can be) "transaction costs engineers", adding to the value created in a transaction by virtue of their central role in crafting acquisition agreements. In contrast, others have suggested that lawyers themselves are a significant source of transactions costs. Thus, we address the following questions as well: do the lawyers

play a more important and positive role as "transaction costs engineers" and use their expertise to enhance the value for their clients? Indeed, do the large well-known and well-respected law firms act as "gatekeepers" in the sense of avoiding engagements on value-destroying deals?

In this article, we study the statistical influences of M&A legal advisors on deal completion outcomes and on the characteristics of the deals that are completed. Understanding these influences should be of interest to both financial economists and practitioners. Complementing the financial economics reasoning above, some key questions to which our research suggests answers are: Are the activities of such lawyers, necessary though they may be, actually impediments to getting the deal done, as sometimes suggested by managers?¹⁴ Or are acquirers' legal advisors mere tools of managers, finding a way to complete even bad deals, as suggested by the fact that acquirers' lawyers are hired by managements that initiated these deals? Can law firms build their businesses by emphasizing deal completion? Can they build their businesses by emphasizing "good deal" completion via gatekeeping and/or transaction cost engineering?

More broadly, our article provides empirical evidence on industry structure and economic effects of legal advisors to acquirers in mergers and acquisitions, based on an extensive sample of offers announced over 1994-2000. We choose that time period for two reasons. Most importantly, although our three-year post-merger stock-return data need could have allowed extension of the sample until 2003, the temporal decline in stock market levels and M&A activity early in the new century, though soon reversed, led to the closings of a number of high-profile law firms, especially firms associated with software and technology clients in California. The most striking example is perhaps Brobeck, Phleger & Harrison, which closed after growing from a regional firm to more than 1000 lawyers in more than 10 cities at the height of the tech boom, with profits of more than \$750,000 per partner. We want to guard against our

¹⁴ See, for example, the quote at the beginning of Coates and Subramanian (2000). The implied negative view of lawyers' work seems especially powerful if lawyers' compensation is determined mainly by hours worked rather than deal-completion results, as has been traditional. More recently, however, changes in compensation structure have reduced the dependence on hourly billings somewhat. One news-writer has claimed that an 80 percent hourly fee/20 percent contingent fee split has become "typical" (Welsh, 2000). A partner at Wachtell Lipton Rosen and Katz has been quoted as saying that the firm sometimes "bases its fee in part on the amount involved in the transaction and firm's contribution to the accomplishment of the client's objective" (Starbuck, 1993). Whether law firm compensation is on an hourly basis or based on client goals (e.g., for acquirers, successful deal completion), the incentives of legal advisors do not appear to be fully aligned with shareholder value enhancement. We test this in Section IV.

results being skewed or muddled by this sharp industry-wide break early in the new century. Second, mergers of law firms themselves have accelerated since 2000, inducing sharp but non-economic market share changes due to firm name changes and named-firm exits from our database. No central index of the name changes exists, so we cannot reliably sort the name-change-induced changes in market share from the economic changes that are our interest. With this sample, we provide an analysis of the legal advisory industry for mergers during a healthy and growing period.

We find that, for our sample period, the legal advising industry is characterized by a very small number of dominant firms with 2 to 8 percent share of the announced value of offers, a few prominent contenders with 1 to 2 percent market-share, and many smaller players. These market-share cohorts are relatively stable over our sample period, suggesting that only a few firms have the capability to advise on many large and complex offers at the same time, even though many firms can and do handle one or two offers in a year.¹⁵ The largest firms, as a group, increase their market-share somewhat at the end of the 1990s, even though very few small law firms become large firms.

Large market-share law firms are engaged in more legally complex deals as compared to small and medium market-share law firms, but, after controlling for deal complexity and for target legal advisor size, they complete these deals efficiently. These deals involve large and profitable acquirers. However, acquirers' abnormal stock returns around the offer announcement are smaller and often statistically zero for offers in which big-market-share law firms are involved on behalf of the acquirers, as compared to the more positive acquirers' abnormal stock returns around offer announcements in which small-market-share law firms are involved. The post-offer long-run returns of the acquirers are often negative for offers in which the big market-share law firms are involved. We find that some law firms are able to consistently cause or be associated with high rates of deal completion over time, but we find no evidence of such consistent performance/association when it comes to long-run returns. Finally, we find that acquirers whose bids were

¹⁵ Over longer periods than our sample period, the identity of the market leaders has shifted. Many of the current leading service providers came to the fore only in the 1970's and 1980's. Two reasons have been suggested in our discussions with practitioners. One is that some former top law firms were either unable or unwilling to advise on hostile offers, and the firms that ramped up to handle this business remained as the market leaders afterward. Another is that the local law firms that handled much corporate business in previous decades were loathe to facilitate transactions that might reduce the potential for future fees from their client (e.g., if taken over). Investment banks that saw business opportunities in takeovers, responded by encouraging the growth of more transaction-oriented law firms whose future business depended on the market for corporate control rather than a small set of long-term clients.

not all successful tend to employ a significantly greater number of different law firms than acquirers who have had a 100 percent success rate, suggesting that acquirers whose bids had been unsuccessful tend to shop around for law firms that can close deals more efficiently. On the other hand, we find that negative post-acquisition long run returns do not cause bidders to spread their business across a greater number of law firms.

These cross sectional and time series patterns fit together sensibly. Large, profitable acquirers engage large-market-share well-known law firms for difficult deals, and those law firms build their businesses by enhancing their deal completion skills. Deal completion is something acquirer managements value highly, judging by their penchant to change law firms when they experience less than 100 percent deal completion success. We find evidence that the large law firms possess deal completion expertise even in difficult situations. However, we find no evidence that law firms possess any consistent value-added "transaction costs engineering" capability that gets reflected in returns around the time of the M&A deals. Neither do we uncover evidence that the large and prestigious law firms act as "gatekeepers" by avoiding engagement on value destroying deals. Managers (who hire the law firms) apparently do not expect or require this capability from their legal advisors, judging by their tendency to rehire firms that are involved with bad economic outcomes but not those with bad deal completion outcomes.

The remainder of this paper is organized as follows. Section I explains why law firms are economically important in mergers and acquisitions. Section II describes the industry structure of M&A legal advisors. Sections III and IV focus on acquirers' lawyers and, respectively, analyze the deal completion efficiency and the stock returns effectiveness of the big and small market-share law firms. Section V reports on the time-series relations between law firm market-share and deal completion/stock returns. Section VI concludes.

I. The importance of legal intermediaries

In mergers and acquisitions lawyers act as intermediaries between the acquirer and the target. They compose and negotiate the legal documents underlying the merger. Lawyers also act as intermediaries between the firms and government entities, including courts and the system of corporate law. They organize the necessary regulatory compliance and disclosure activities. Both types of intermediary roles are emphasized in the casebooks used in training business lawyers (see, for example, Gilson and Black, 1996). Lawyers are also increasingly involved in intermediary roles that have traditionally been considered the domain of bankers, such as deal generation and financing (Welsh, 2000).

Legal intermediaries could have a wide variety of influences on M&A outcomes. We focus on two

important ones that may potentially leave systematic tracks in the data available for a statistical study. First, lawyers may effectively rent their reputations to a transaction (Ribstein, 2004), acting as a certifier on the client's behalf. Through their central role in negotiations, lawyers help collect, structure, convey, and add confidence to information that needs to pass between the parties, thereby enabling deal completion. Lawyers' most explicit certifications pertain to matters within their legal expertise (such as valid and binding procedures and forms, for example). In specific cases, these direct certifications may be crucial, as in the case of a target with substantial and difficult-to-assess environmental liabilities. Indirect certifications of law firms may be central in other cases --- that is, the mere fact that a top-tier law firm is willing to be involved. Some anecdotal evidence suggests this may be so---some top-tier business law firms of the 1970s are said to have avoided the hostile takeovers of the 1980s out of concern for their reputations.

Additionally, as discussed in the introduction, Gilson (1984) argues business lawyers are transactions cost engineers, crafting agreements that allow the parties to behave as if perfect-market assumptions apply. The central role of lawyers in the due-diligence process surrounding mergers certainly suggests this possibility. Lawyers can add value by writing contracts that align the expectations of the parties, minimize the incentives for opportunistic behavior, and set incentives to supply useful information at lowest cost. For example, the timing and nature of non-disclosure agreements is central to enabling information to pass between the parties. Overall, these activities can create value by minimizing the deadweight costs of transacting.

Thus, lawyers, through their roles as deal certifiers --- or "gatekeepers," to use currently popular language --- and as transactions cost engineers have the potential to affect the economics of mergers and acquisitions. If these mechanisms for economic effects are important, their tracks should be evident in deal outcomes. Given the central roles often played by legal advisors during the negotiation and contracting process, efficient deal completion is one important outcome that might be affected. The acquiring firm management, at least, would prefer a high likelihood of deal completion. Further, if effective lawyering helps the parties achieve perfect market outcomes, as Gilson (1984) argues, then the likelihood of completing good deals might be increased, where good deals are those that add value. From the point of view of acquiring firm shareholders, the tendency to add value in this way can be assessed by examining the short-run stock returns around the acquisition announcement. Such a measure would incorporate the short-run value effects of the deal as well as the market's assessment of post-deal value creation. An alternate measure is the post-offer long-run stock returns of the acquirer. Long-run returns would capture any unexpected effects of lawyers' activities that carry through the closing of the transaction to the period following that, or, more

likely, effects of lawyers' ability assess their non-public information about the deal and their choice to avoid (or not avoid) engagements on long-run value-destroying deals.

Although the role of lawyers in M&A work has not been the subject of much statistical study, one significant recent exception is Subramanian (2007), which provides evidence that advice from more-experienced law firms has benefits in freeze-out merger situations. Subramanian finds that lawyering is associated with effects on both deal completion and deal value. Our results obtain for a very broad sample of mergers (not freeze-outs only), and are less sanguine concerning the value that might be created. Additionally, a few other studies have examined specific acquisition agreement provisions that are likely influenced by legal advice, and found that they tend to be used in economically beneficial ways (e.g., Coates, 2001, Bates and Lemmon, 2003, and Gilson and Schwartz, 2005).

Our major focus is therefore to study the statistical associations of law firms with deal completion and acquirer's stock returns. If legal advisors have statistical associations with these economic outcomes, then it is interesting to know whether the prominence or success of the law firm is affected. Deal-completions efficiency and returns effectiveness are the shorthand nomenclature we use below. Therefore, we relate law firms' market-share to "efficiency" in closing deals and "effectiveness" in terms of the deals' returns. Additionally, given the lack of any systematic evidence on the roles played by legal advisors in mergers and acquisitions, we begin by laying out the industry structure of legal advisors in the mergers and acquisitions market.

II. Law firm market shares in M&A advisory work

In this section, we study the market-shares of law firms that are active in mergers and acquisitions, examine who are the biggest service providers, who their clients are, and how their market-shares change from year to year.

We use data from the Thomson Financial SDC Platinum "Mergers and Acquisitions" database. We first screen for all M&A offers for the period 1994-2000. Many SDC records include little or no information beyond the identities of the parties, and we discard all records that do not contain valid data for the value of the proposed deal. Many records do not identify the acquirer's legal advisor. We discard these as well. Some records identify more than one acquirer's advisor to an offer. When calculating market-share league tables, it is common practice to give full credit to each advisor when an offer is advised by more than one firm. Considering this shared credit, we define a law firm's market-share as the dollar value of the engagements on which it advises as a proportion of the dollar value of all engagements in a calendar year, whether or not the offer is subsequently withdrawn. An

engagement is defined as an acquirer-law-firm/offer-record combination. Of the 47,021 such engagements, the names of the legal advisor(s) are included in only 10,028 engagements corresponding to 7766 distinct offers. We nonetheless believe that market shares give a more appropriate impression when the $47,021 - 10,028 = 36,993$ no-name offers are also included as part of the market for the purpose of computing law-firm-market-shares, because no-name-law-firm engagements altogether account for 37.5 percent of the total value of offers in an average year. Therefore, we compute market shares using all 47,021 engagements, treating the no-name engagements as a discrete group.

To obtain a sample with data fields for cross-sectional analysis, additional screens are necessary. Our next screen requires offer characteristics and acquirer particulars from COMPUSTAT to be available for each offer. This reduces the sample to 9895 engagement events corresponding to 7640 distinct offers (that is, a reduction of 126 offers versus the less-stringent sample described above). For several of these deals, the acquirer law firm is listed in the SDC M&A database as either "in-house attorneys" or "independent". After screening out such deals, we are left with 9677 legal advisor engagement corresponding to 7477 offers. For analysis at the deal level, we average market shares for advisors to an offer when there is more than one law firm.

For analyses at the law firm level, we aggregate engagement-level lawyer characteristics (such as market share) and offer/client characteristics across all a firm's engagements in a year. When doing so, we fully credit each of multiple advisors to each offer (that is, consistent with common practice in computing league tables). When aggregated this way, the cross-sectional sample of acquirers' legal advisors contains 1820 law firm-year combinations.

Stock returns data are needed for some of our analyses, so we subject the sample to an additional screening in which we require Center for Research in Security Prices (CRSP) data for acquiring firms. We compute acquirers' abnormal returns both around the offer and in the long-run post-offer (covering 750 days from the day of the offer). When we analyze the cross-section of offers in this final sample, we have 3042 distinct offers corresponds to 3805 acquirers' legal advisor engagements advised by/in 1088 law firm-years, under the convention of full credit for the offer to each of multiple advisors.¹⁶ Some of our analyses involve both acquirer and target legal advisors. For these analyses, we describe the additional screens necessary in a subsequent section.

¹⁶ For one analysis involving short-run abnormal returns of the acquirer firms around offer announcements, we are restricted to 2894 unique offers because we impose an additional screen that daily returns for the acquirer firms be available from CRSP beginning 255 days prior to the event window to estimate market model parameters.

Some firms with extremely prominent merger and acquisitions advisory practices are themselves very large and broad (for example, Skadden, Arps, Slate, Meagher & Flom), while others are smaller and more focused (for example, Wachtell Lipton Rosen & Katz). Some large/prestigious law firms have only a moderate market share in M&A advisory work (for example, Clifford Chance and Gibson Dunn & Crutcher). Garicano and Hubbard (2002) find that, in general, corporate law practices tend to exist as part of non-specialized law firms. Since we want to focus on the market for M&A advisory services and the

associated economic effects, we adopt a classification scheme for reporting purposes that distinguishes among firms with a major presence in the market for M&A services, firms with a substantial but lesser presence, and firms that dabble.

For reporting purposes, we initially classify law firms in each year as: "one-deal firms", those that are involved in just one acquisition offer; "small firms", those that are involved in more than one acquisition offer in a year but which have market-share less than or equal to one percent; and "large firms", those that have more than one percent market-share.

Table I. Summary Statistics for Acquirer Legal Advisors: Market shares

The table describes market shares of legal advisors to acquirers in our sample of 10,028 engagement events (defined as a law-firm M&A-offer combination), corresponding to 7766 unique M&A offers made during the period 1994-2000, for which the names of acquirer legal advisors were non-missing, where full credit is given to each of multiple advisors to an offer. The sample is from the SDC Mergers and Acquisitions database. No-name offers are included when computing shares of known firms. PANEL A shows descriptive statistics for each law firm cohorts. One-deal firms advise on only one offer in a year. "Small" firms advise on more than one acquisition deal in a year and have a dollar market-share of less than or equal to 1 percent in the year. "Large" firms advise on more than 1 percent dollar market-share in a year. PANEL B shows the year-by-year number of firms that comprise the small and large law firm cohorts, the number of deals per firm, and the average dollar market-share for the small and large law firms. PANEL C shows the proportion of law firms that migrate each year from the small (large) law firm cohort to the large (small) law firm cohort.

PANEL A: Summary statistics by market-share cohort across all sample years

Law firm cohort	Number of advising law firms, Average per year	Number of offers advised by all firms, Total during 1994-2000	Percentage market-share per firm, Average during 1994-2000
One-deal firms	144	1003	0.02 percent
Small firms	104	4572	0.14 percent
Large firms	18	4453	2.61 percent
All, excluding no-name offers	266	10028	2.77 percent

PANEL B: Summary statistics by market-share cohort for each year

Law firm cohort	1994		1995		1996		1997		1998		1999		2000	
	No. firms (deals)	Mean share	No. firms (deals)	Mean share	No. firms (deals)	Mean share	No. firms (deals)	Mean share	No. firms (deals)	Mean share	No. firms (deals)	Mean share	No. firms (deals)	Mean share
Small firms	92 (351)	0.13%	104 (438)	0.15%	73 (388)	0.15%	109 (760)	0.14%	130 (975)	0.11%	137 (995)	0.12%	79 (665)	0.19%
Large firms	16 (403)	2.21%	13 (415)	2.66%	16 (433)	2.43%	15 (588)	2.71%	18 (685)	2.94%	21 (898)	2.78%	20 (1031)	2.69%

PANEL C: Stability of law firm cohorts

Law firm cohort (FROM cohort)	Proportion migrated to the other cohort during year					
	1995	1996	1997	1998	1999	2000
Small firms	0.00%	4.21%	5.97%	1.98%	5.79%	2.34%
Large firms	7.41%	2.11%	4.48%	6.93%	1.65%	3.13%

Table I provides descriptive statistics on the volume of advisory work during the period 1994-2000 for each of these market-share cohorts. Panel A shows that there are 18 large law firms that advise on roughly the same number of offers in an average year as do all the small firms combined, even though there are about five times as many small firms. Even more striking, the average market-share of a big law firm is almost 19 times the average market-share of a small law firm.

Panel B shows that the number of offers per year and law firms in both cohorts tends to grow over the years, as should be expected given the growth in mergers and acquisitions over the period (Holmstrom and Kaplan, 2001). More striking, the market-shares of typical firms in the large law firm cohort also grow over the years, at the expense of the small firm cohort. For example, the average large firm advises on 2.21 percent of announced offer value in 1994, but on 2.69 percent in 2000---an increase of about 20 percent over starting year's figure. This impression is confirmed by a t-test (not shown in the table): the mean year-over-year change in share for small firms is significantly negative, and the mean change in share for large firms is significantly positive, both at the five percent level. Even so, Table I is evidence the market for advisory services is not concentrated during the sample period. The Herfindahl index (sum of squared market-shares, not shown in the table) is below 400 for every year, which is far below conventional standards for even a moderately concentrated industry.¹⁷ The impression of an unconcentrated industry is not driven by the presence of one-deal law firms or offers with no named legal advisors: the Herfindahl index is also small when computed using data on the small firms and large firms alone.

Panel C shows that the market-share changes evident in Panel B do not detract from the appropriateness of our characterization of the industry in terms of market-share cohorts. Only a few firms change from one cohort to the other over time; the industry structure seems stable in our sample period. The large firm cohort contains some disproportionately dominant firms. Table II shows that Skadden Arps is the most dominant firm in the acquisitions market, holding a 3-1/2 to 8-1/2 percent share in every sample year.¹⁸ Simpson Thacher and Sullivan Cromwell often hold similar shares, especially towards the end of our sample period. These three firms have generally increased their market-shares over the years in our sample period. A few other large law firms become

contenders for dominant status every once in a while --- for instance, Fried Frank in 1995, Wachtell Lipton in 1997 and Davis Polk in 1999.

¹⁷ Industries for which the Herfindahl Index is between 1000 and 1800 points are considered to be moderately concentrated, and those in which this index is in excess of 1800 points are considered to be concentrated (see the U.S. Department of Justice and the Federal Trade Commission Horizontal Merger Guidelines, 1997).

¹⁸ For conciseness, we sometimes follow the convention of identifying law firms by two names (generally, the first two named partners) where it would not lead to confusion. This is often roughly consistent with common practice for referring to the firms, though their formal names are generally longer.

Table II. Descriptive Statistics for Very Large Share Legal Advisors

The table shows the dollar market-shares (in percentages) of six of the largest acquirer law firms in our sample for each year from 1994 through 2000. The sample contains 10,028 engagement events (defined as a law-firm M&A-offer combination), where full credit is given to each of multiple advisors to an offer. All figures represent proportion of the dollar value of all engagement events announced that year, including deals that are subsequently withdrawn. Legal advisors are identified by the first two proper names in the law firm name.

Law firm	Market-share						
	1994	1995	1996	1997	1998	1999	2000
Davis Polk	2.55	2.92	2.48	2.41	2.64	5.47	1.94
Fried Frank	1.67	5.48	1.89	2.19	2.46	2.02	2.61
Wachtell Lipton	1.31	2.32	3.36	4.71	4.84	4.58	3.37
Simpson Thacher	2.11	2.86	2.25	3.33	5.85	5.89	5.08
Sullivan Cromwell	2.44	3.21	2.88	3.85	3.67	4.40	6.30
Skadden Arps	4.49	5.31	5.31	4.47	8.59	3.88	6.22

These dominant firms and others that are nearly in their class are also large by standards other than market-share. Table II shows that the ten firms with the largest average market-share over all the years of our sample employ an average of 600 lawyers per firm and generate average revenue of \$600 million in 2000, or about \$1 million per lawyer.¹⁹ Overall, the structure of the industry is in keeping with Rosen's (1992) observation concerning developments in the industrial organization of the legal profession more generally, in that small highly-paid groups of law firms have emerged.

¹⁹ These firms are Cleary Gottlieb, Cravath Swaine, Davis Polk, Dewey Ballantine, Fried Frank, Shearman Sterling, Simpson Thacher, Skadden Arps, Sullivan Cromwell, and Wachtell Lipton. Data on number of lawyers is from the Martindale Hubbell Directory on Lexis Nexis, and data on revenues is from the American Lawyer. It must be noted, however, that firms such as Skadden Arps and Wachtell Lipton were not dominant law firms in the M&A market prior to the acquisition boom of the 1980's. Thus, the law firms names and their market share status reported in this article holds for our sample period, but not necessarily for earlier periods.

Table III. Summary Statistics on Legal Advisors' Clients and Associated Financial Advisors

The table shows the average acquirer firm size (measured by total assets in billions on dollars), the average acquirer firm profitability (measured by operating income as a percentage of sales) and the average number of employees in thousands, as well as the average investment bank league table score, averaged across all "small" and "large" law firms in our final sample of acquisition offers. "Small" firms advise on more than one acquisition deal in a year and have a dollar market-share of less than or equal to 1 percent in the year. "Large" firms advise on more than 1 percent dollar market-share in a year. The investment bank decile rank is based on the bank's dollar market-share of acquisition offers announced in a year; it ranges from 1 through 10, based on deciles, with 10 denoting the most reputable investment banks in the sense of being in the top market share decile. The cross-sectional sample analyzed in this table consists of 1820 law firm/years (from 7477 offers that generate 9677 legal advisor engagements), after screening out deals in which the acquirer law firm was listed in the SDC M&A database as either "in-house attorneys" or "independent".

Law-Firm Cohort	Number of Law-firm/years	Average Acquirer Total Assets (\$ billion)	Average Acquirer Profitability	Average Number of Acquirer Employees (in 1000s)	Average Investment Bank Decile Rank
Small firms	712	82.03	-14.60%	14.25	2.78
Large firms	117	168.41***	9.80%***	29.81***	4.48***
All firms, including one-deal firms	1820	112.61	0.01	20.69	3.07

*, **, and *** denote significantly different from the other cohort at the 10, 5 and 1 percent level respectively.

Table III provides another descriptive view of large versus small firms, in terms of the nature of the clients and investment bankers with which they work. The clients of large law firms are also large, having nearly \$170 billion in assets and 30 thousand employees on average, significantly more than the clients of small law firms. The investment banks with which they work are prestigious; having an average league table score that is significantly greater than that of the investment banks that work with the small law firms.

Overall, the tabulation of market-shares for acquirer legal advisors results in several general characterizations.

- The advisory industry is not concentrated overall, but there are a few dominant firms with shares of two to eight percent of a year's announced offer value. These dominant firms are generally the same ones from year to year. About 10 to 15 additional firms advise on one to two percent of announced offer value in any given year.

- The advisory industry does not show any strong tendency to become more concentrated during our sample period, although the largest 20 or so firms have experienced modest increases in market-share during the sample period. This tendency is strongest for the four to six dominant firms.

- Large market-share firms are engaged by larger and more profitable acquirers and work with more reputable investment bankers.

Why do large profitable acquirers prefer to employ large market-share law firms, and why are they successful in maintaining and even enhancing their market-share over the years? The most obvious conjecture is that they are capable of providing the appropriate services, using the internal human capital and networks of relationships they have developed

over a long period of time. After all, it seems plausible that the small law firms, and especially those that advise on only one deal, would not be capable of handling the negotiation and drafting issues for a large acquisition. Moreover, they would have little experience or reputation to bring to bear to encourage or certify the sorts of information flows between the parties that are envisioned for "transaction cost engineering." Among other things, management probably hopes to engage a legal advisor of sufficient competence to handle specific legal dimensions of the situation, of sufficient reputation and skill to either reduce or exploit the information barriers between the parties, and of appropriate stature and cost to be a defensible choice should there be subsequent problems. One prominent legal practitioner with whom we have discussed the matter opined that a prominent law firm is an acquirer's way of signaling serious intent.

In subsequent sections, we go beyond this conjecture to examine whether the large law firms actually are associated with different economic outcomes than the smaller firms. We begin by examining their success on a criterion that is clearly of central concern to acquirer management: deal completion.

III. Deal completion efficiency

In this section, we show that large market-share law firms are more effective in completing the acquisition offers upon which they advise, considering the nature of those deals. This relationship is not a simple one, however, because large firms tend to advise on more complex deals that are inherently more likely to fail. To accomplish our goal in this section, we begin by developing observable indicators of a deal's legal complexity, and working out an overall measure of

deal complexity that is directly related to deal failures. We next show that large firms advise on more complex deals by this measure, and that firms which complete all their deals advise on less complex deals. Finally, we show that the large law firms complete deals efficiently after controlling for deal complexity.

A. Features that affect deal completion

From the point of view of acquirer management, which makes the decision on engaging an advisor, deal complexity has many dimensions. Our goal in this section is not to fully explore all the aspects of complexity, but rather to develop a list of observable indicators for a usable index of deal complexity. First, Servaes and Zenner (1996) establish that economic deal complexity is positively correlated with the size of the transaction. A related measure could be the proportion of a target sought to be acquired in a transaction. Third, stock deals may be more complex from the acquirer's point of view, because stock prices are affected by stock price reaction at the time of the announcement of the deal, and from the acquirer legal advisor's point of view because of the possibility that stock-based acquisitions can be alleged to be market timed by the acquirer (see Loughran and Vijh, 1997). Fourth, deals are more legally complex when the target is a public company because the law stipulates that shareholders be given some ability to affect the outcome of the acquisition bid. An acquirer's legal advisor can increase the probability of success by negotiating lockups of various sorts (for example, stock or asset

lockups, and/or breakup and termination fees (see Bates and Lemmon, 2003). Fifth, hostile bids are more difficult to complete than friendly bids. Friendly transactions represent at least a partially cooperative exercise; hostile transactions are entirely competitive. Lastly, offers with multiple bidders are more complex than single-bidder offers. Running a successful auction adds a level of transactional complexity that also may differentiate between types and experience of counsel.

For our analysis, we use (a) *SIZE*, the dollar value of the transaction, (b) *PCTDES*, the percentage of target ownership desired, as expressed in the offer (c) *CASH*, a dummy variable equal to one in cases where terms of payment are 100 percent cash, (d) *TPRIV*, a dummy variable equal to one in cases where the target is a private company, (e) *HOSTILE*, a dummy variable equal to one for hostile bids (marked as such in the SDC database), and (f) *MULTIBID*, a dummy variable equal to one for deals with multiple bidders.

To begin, we estimate a binomial probit using data on all 7477 acquisition offers in our final sample, based on the model:

$$\Pr(WITHDREW) = \beta_0 + \beta_1 \ln(SIZE) + \beta_2 PCTDES + \beta_3 CASH + \beta_4 TPRIVATE + \beta_5 HOSTILE + \beta_6 MULTIBID + \varepsilon, \quad (1)$$

where *WITHDREW* is an indicator variable equal to 1 for deals that are withdrawn and 0 otherwise, and $\Pr(\cdot)$ indicates a probability.

Table IV. Offer Withdrawal as a Function of Deal Characteristics

The table shows coefficient estimates for the binomial probit specification:

$$\Pr(WITHDREW) = \beta_0 + \beta_1 \ln(SIZE) + \beta_2 PCTDES + \beta_3 CASH + \beta_4 TPRIVATE + \beta_5 HOSTILE + \beta_6 MULTIBID + \varepsilon,$$

where *WITHDREW* is an indicator variable equal to 1 for deals that are withdrawn and equal to 0 otherwise, $\ln(SIZE)$ is the natural log of the dollar size of the proposed acquisition, *PCTDES* is proportion of target ownership desired, *CASH* is a 100% cash deal indicator, *TPRIVATE* is a private target indicator, *HOSTILE* is an indicator for hostile deals, marked as such in the SDC database, and *MULTIBID* is an indicator for deals that have multiple bidders. The cross-sectional sample analyzed in this table consists of 7477 offers. Maximum-likelihood-based z-statistics, based on standard errors that are corrected for heteroskedasticity and autocorrelation, are shown in parenthesis.

Explanatory variables	Coefficient estimate (p-value)
<i>ln(SIZE)</i>	0.199 (6.75)***
<i>PCTDES</i>	0.006 (2.00)**
<i>CASH</i>	-0.314 (-2.68)***
<i>TPRIVATE</i>	-0.820 (-4.62)***
<i>HOSTILE</i>	2.357 (12.93)***
<i>MULTIBID</i>	0.862 (3.06)***
<i>Intercept</i>	-4.418 (-13.24)***
<i>Pseudo R</i> ²	0.15

*, **, and *** denote significantly different from zero at the 10, 5 and 1 percent level respectively.

Table IV shows that the probability of a deal not being completed is significantly positively related to the size of the deal, to the percentage of the target desired by the bidder, to less-than 100 percent cash as the means of payment, to whether the target is a public firm, to hostile deals, and to multiple bidder offer situations. In other words, a deal is more likely to be withdrawn if it is a "complex" deal by all of our complexity indicators.

We have checked for the statistical importance of other measures of deal complexity. First, target firms incorporated under the Delaware law could be operating in a more legally complexity environment, given the extensive body of Delaware case law that applies. On the other hand, more certainty could be the effect of the extensive precedents. We checked whether a dummy variable that equals one for target firms incorporated under the Delaware law is significantly associated with deal withdrawals, and found no such association. Second, deal withdrawal rates could exhibit industry effects. M&A transactions involving regulated target firms could be more difficult to bring to successful conclusions because of the regulatory approvals needed. Following Agrawal and Knoeber (1996), we designate M&A offers involving target firms in the railroad, public utility, banking, finance, or insurance industries (two-digit SICs of 40, 48, 49, 60, 61, or 63) as regulated industries, for which a dummy variable takes the value of 1. However, this dummy variable is not significantly associated with deal withdrawals. Third, M&A offers within industries in which there has been a significant number of challenges under antitrust laws as a proportion of the total number of offers announced are industries in which, one could conjecture, it would be more difficult to bring M&A offers to successful conclusions. Following the evidence set out in Eckbo (1992), we designate the food and drugs, paper, chemicals, petroleum, rubber, concrete, metal, machinery, electronics, and transport equipment industries (two-digit SICs of 20, 26, 28, 29, 30, 32, 33, 34, 35, 36, and 37) as the industries in which horizontal mergers have been most challenged; these are industries for which a dummy variable takes the value of one. However, this dummy variable is not significantly associated with deal withdrawals.

B. Legal advisors and deal complexity

A deal-specific probability of failure can be computed as the fitted value of the probit given by equation (1). This is a weighted average of the complexity characteristics, where the weights are determined by the covariances of the deal characteristics to withdrawal rates. In subsequent analysis, we use this fitted value as an index of deal complexity. We also compute the average of all deal-specific complexity estimates all the engagements for each law firm/year to obtain a law firm/year specific estimate of the complexity of the deals on which each firm advises. We denote this measure as *COMPLEXITY* for each law firm each year. *COMPLEXITY* encapsulates all the situational features

that contribute to deal failure into a single index, facilitating further analysis.²⁰

²⁰ Deal complexity is economically and statistically distinct from legal advisor prominence, even though more prominent firms tend to advise on more complex deals. For example, deal size (an element of complexity) is positively related to offer withdrawal even when large-share firms advise.

Table V. Legal Advisors and Deal Complexity

The table shows the average dollar value of acquisition (*SIZE*), the average of the percentage of target desired to be acquired in a deal (*PCTDES*), 100% cash deal indicator (*CASH*), private-target indicator (*TPRIVATE*), hostile deal indicator (*HOSTILE*), multiple-bidder deal indicator (*MULTIBID*), and average probability of deal failure, or *COMPLEXITY*, for the 2 market-share acquirer-law-firm cohorts. The cross-sectional sample analyzed in this table consists of 1820 law firm/years (from 7477 offers that generate 9677 legal advisor engagements). “Small” firms advise on more than one acquisition deal in a year and have a dollar market-share of less than or equal to 1 percent in the year. “Large” firms advise on more than 1 percent dollar market-share in a year.

Law firm cohort	Number of law firm/years	Average <i>SIZE</i> (in \$ million)	Average <i>PCTDES</i>	Average <i>CASH</i>	Average <i>T-PRIVATE</i>	Average <i>HOSTILE</i>	Average <i>MULTIBID</i>	Average <i>COMPLEXITY</i>
Small firms	712	515	94.5%	0.388	0.233	0.042	0.013	0.057
Large Firms	117	10313***	93.8%	0.495**	0.137***	0.086**	0.009	0.099***
All firms, including one-deal firms	1820	1266.57	94.8%	0.374	0.232	0.046	0.012	0.058

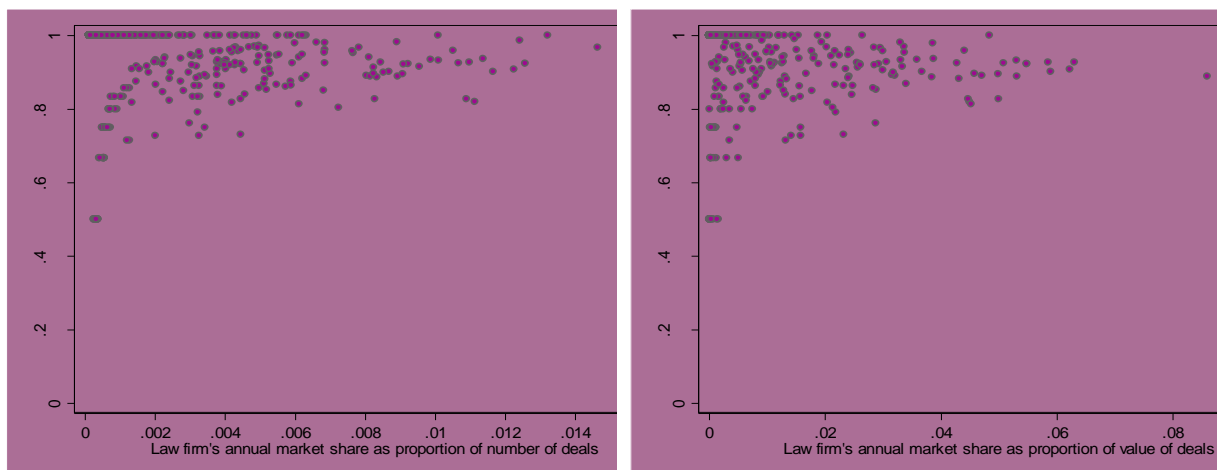
*, **, and *** denote significantly different from the other cohort at the 10, 5 and 1 percent level respectively.

Table V describes the types of deals the large and small market-share acquirer legal advisors are called upon to advise on, showing that large market-share law firms are involved in significantly larger deals and in a significantly higher proportion of hostile offers. Large law firms are also involved in significantly higher proportion of deals in which the target is a public firm. These are deal features that are significantly associated with failures. However, large law firms are also associated with significantly more 100 percent cash deals than the small law firms; and this feature is associated with deal success. One can conjecture that

the mode of payment for the target -- via cash or via stock or a combination of both -- at least partly endogenously determined, perhaps influenced by the advice of the acquirer law firm. In any case, the last column shows that large law firms are associated with significantly more legally-complex deals than the smaller law firms. The more legally-complex deals are, by definition, more likely to fail. Next, we investigate whether large law firms enhance deal completion. If they do, then we have one explanation for their market-shares, and why they continue to remain big year after year.

Figure 1. Scatter-Plots of Legal Advisors’ Deal Completion Rates and Market-Shares

The scatter-plots show deal completion efficiency (on the vertical axis) against law firm’s market-share of number of offers in a year (the left scatter plot) and against law firm’s market-share of the dollar value of offers in a year (the right scatter plot). The market-value-based definition of market share in the right plot is the definition used in other the analyses in this paper. The cross-sectional sample analyzed in the figure consists of 7477 offers that generate 9677 legal advisor engagements for/in 1820 law firm/years.



C. Legal advisors and deal completion

Figure 1 depicts the relationship of deal completion rate to market-share with scatter-plots of deal completion efficiency against the market-share of law firms---measured both as a proportion of the number of offers announced and of the dollar value of deals announced in a year. The plots show that extremely small market-share firms tend to complete all their deals. If we were to ignore this group of perfectly efficient law firms, deal completion efficiency appears to be positively related to market-share in a curvilinear fashion. Therefore, to understand the relation between deal completion efficiency and market-share, we must account for deal complexity and also understand the "perfect" law firms, that is, those that have 100 percent deal completion efficiency and which seem to follow their own distribution, based on the scatter-plots. In the following subsections, we describe our analyses that provide such an understanding.

D. Perfect deal completion efficiency and deal complexity

To gain insight as to what makes some law firms "perfect" in terms of deal completion efficiency, we run two binomial probit regression specifications, in which an indicator variable for these firms is regressed on market-share and deal complexity. The indicator is

PERFECT, a dummy variable equal to one for law firms that have 100 percent deal completion efficiency in a year, and zero otherwise. In Specification A, *PERFECT* is regressed on the log of market-share and the complexity of the deals done by a law firm. The reason for the log specification is that it allows us to additively break down a firms' log market-share, using the definition of a market-share, into three log components: average deal size, number of deals, and the value of deals advised by all law firms in a year. A probit using the breakout version of market-share is Specification B, allowing each component to have its own separate effect. Formally, the two specifications are:

$$Pr(PERFECT) = \delta_0 + \delta_1 \ln(SHARE) + \delta_2 COMPLEXITY + \omega_1, \tag{2a}$$

$$Pr(PERFECT) = \delta_0 + \delta_{11} \ln(AVGSIZE) + \delta_{12} \ln(NUMDEALS) + \delta_{13} \ln(TOTMKT) + \delta_2 COMPLEXITY + \omega_2, \tag{2b}$$

where *SHARE* is acquirer's law-firm's market-share of acquisition offers in a year, *AVGSIZE* is the average dollar value of acquisitions on which it advises, *NUMDEALS* is the number of deals on which it advises, *TOTMKT* is the total value of all acquisition offers in the sample that year. The δ 's are probit slope coefficients and ω 's are error terms.

Table VI. Analysis of Legal Advisors with Perfect Deal Completion Efficiency

The table shows coefficient estimates for two different probit specifications:

$$Pr(PERFECT) = \delta_0 + \delta_1 \ln(SHARE) + \delta_2 COMPLEXITY + \omega_1,$$

$$Pr(PERFECT) = \delta_0 + \delta_{11} \ln(AVGSIZE) + \delta_{12} \ln(NUMDEALS) + \delta_{13} \ln(TOTMKT) + \delta_2 COMPLEXITY + \omega_2,$$

where *PERFECT* is an indicator variable equal to 1 for a law firm that completes all deals on which it advises in a year, *SHARE* is the acquirer law firm's market-share, *AVGSIZE* is the average dollar value of acquisition offers on which it advises, *NUMDEALS* is the number of offers on which it advises, *TOTMKT* is the total value of acquisition offers in the sample that year, and *COMPLEXITY* is a computed measure of the firm's average deal complexity based on Table IV (the fitted value of the probit regression specification). The cross-sectional sample analyzed in this table consists of 1820 law firm/years. Maximum-likelihood-based *t*-statistics, after correcting standard errors for heteroskedasticity and autocorrelation, are shown in parenthesis.

Explanatory Variable	Coefficient estimate (<i>t</i> -statistic)	Coefficient estimate (<i>t</i> -statistic)
$\ln(SHARE)$	-0.312 (-15.84)***	
$\ln(AVGSIZE)$		0.225 (0.78)
$\ln(NUMDEALS)$		-0.638 (-16.37)***
$\ln(TOTMKT)$		0.577 (1.79)*
COMPLEXITY	-2.116 (-3.29)***	-4.810 (-7.21)***
Intercept	-1.278 (-7.43)***	-2.911 (-1.03)
Pseudo R^2	0.26	0.33

*, **, and *** denote significantly different from zero at the 10, 5 and 1 percent level respectively.

Table VI shows the probit estimates for our sample of 1820 law firm-years. In Specification A, the results indicate that the perfectly efficient firms (those with 100 percent deal completion efficiency) tend to be smaller law firms that are involved in less complex deals. Specification B confirms this result by showing that the perfectly efficient firms tend to be ones that do fewer, less complex deals. To some extent, the finding that perfect firms do fewer deals is mechanical: the more offers advised by even a highly competent firm, the higher the probability that one fails, all else equal. Specification B adds the finding that these deals tend to occur in hot markets, that is, years in which the aggregate value of acquisition deals is large. We conjecture that one additional reason these firms are able to complete their deals is that the market (not just the client) is very anxious to have them completed, given the "merger waves" nature of the market for corporate control (Andrade, Mitchell and Stafford, 2001).

These results help explain the clustering of perfect deal completion efficiency that we found in the scatter plots from Figure 1: deal completion perfection is more likely when a law firm does a small number of less complex deals. This is also consistent with our earlier finding (Table V) that large law firms tend to be involved more in more complex deals. Finally, the probit analysis confirms what is suggested by the scatter-plots: there is something economically different about the perfect firms. Therefore, we need to track them separately in our final analysis of the relation between market-share and deal completion efficiency.

E. Deal completion efficiency, deal complexity and legal advisors

Figure 1 appears to indicate that large market share law firms complete more of their deals in general, but a distinct cohort of *PERFECT* firms, which tend to be small, complete all its deals. In this section we apply a variation on the previous section's analysis of the

PERFECT firms to net out their effects, thereby better understanding the remaining part of the market.

We run the following two-stage regression for our sample of 1820 law firm-years:

$$\ln(\text{EFFICIENCY}) = \lambda_0 + \lambda_1 \ln(\text{SHARE}) + \lambda_2 \ln(\text{TA_SHARE}) + \lambda_3 \text{COMPLEXITY} + \lambda_4 \text{PERFECT} + v, \quad (3a)$$

$$\text{Pr}(\text{PERFECT}) = \mu_0 + \mu_1 \ln(\text{SHARE}) + \mu_2 \text{COMPLEXITY} + \mu_3 \ln(\text{TOTMKT}) + \varepsilon, \quad (3b)$$

where, in the first equation, *EFFICIENCY* is the proportion of successful (non-withdrawn) acquisition offers on which a law firm advises in a year. In addition to regressors to register the influence of *COMPLEXITY* and *PERFECT* on *EFFICIENCY* in the system's first equation, we also include *TA_SHARE*, the average market share of the acquisition target legal advisors faced by the average acquirer law firm for the offer. *TA_SHARE* is based on market shares in work for the targets of acquisition offers during the particular year (computed similarly to the method we have already described for the acquirer lawyer shares). Some law firms (such as Wachtell Lipton Rosen & Katz) specialize in defending against acquisitions, and acquirer lawyers who routinely face such target-specialist law firms may bear a reduced probability of deal completion.

The second equation just above is a specification of the *PERFECT* model from the previous section. In the first equation, *PERFECT* is, of course, endogenous. It is therefore instrumented using the fitted values of the second (probit) equation above. From our previous analysis of a similar equation, we retain $\ln(\text{TOTMKT})$ as an exogenous variable excluded from the other equation; identification is also aided by the non-linearity of the probit. Thus, in this regression system, *PERFECT* is a control variable that helps us characterize interesting relationships involving the remaining larger, more economically important group of non-*PERFECT* firms.

Table VII. The Relation between Deal Completion Efficiency and Legal Advisor Prominence Controlling for Perfect Law Firms

The table shows maximum likelihood regression coefficients of the following 2-stage regression for 2 different specifications, without and after controlling for target law firm market share:

$$\ln(\text{EFFICIENCY}) = \lambda_0 + \lambda_1 \ln(\text{SHARE}) + \lambda_2 \ln(\text{TA_SHARE}) + \lambda_3 \text{COMPLEXITY} + \lambda_4 \text{PERFECT} + v,$$

$$\text{Pr}(\text{PERFECT}) = \mu_0 + \mu_1 \ln(\text{SHARE}) + \mu_2 \text{COMPLEXITY} + \mu_3 \ln(\text{TOTMKT}) + \varepsilon,$$

where *SHARE* is a law firm's market-share of M&A advisory business in a particular year, *EFFICIENCY* is the proportion of offers on which a firm advises in a year that are not withdrawn, *COMPLEXITY* is a computed measure of the firm's average deal complexity based on Table IV, and *PERFECT* is an indicator variable equal to 1 for a law firm that completes all deals on which it advises in a year. The total value of acquisition offers of the sample the year, $\ln(\text{TOTMKT})$, is the instrumental variable that is used in the first stage probit regression but not in the second stage OLS regression. The cross-sectional sample analyzed in this table consists of 1820 law firm-years. Maximum-likelihood-based *t*-statistics, after correcting standard errors for heteroskedasticity and autocorrelation, are shown in parenthesis.

Explanatory Variable	Stage 1	Specification 1	Specification 2
		Stage 2	Stage 2
	<i>Probability (PERFECT)</i>	<i>ln(EFFICIENCY)</i>	<i>ln(EFFICIENCY)</i>
<i>ln(SHARE)</i>	-0.468 (-15.19)***	0.009 (7.81)***	0.022 (8.07)***
<i>ln(TA_SHARE)</i>			-0.002 (-2.81)***
<i>COMPLEXITY</i>	-1.514 (-2.84)***	-0.283 (-3.85)***	-0.038 (-6.44)***
<i>ln(TOTMKT)</i>	0.570 (1.60)		
<i>PERFECT</i>		0.251 (15.42)***	0.294 (15.81)***
<i>Intercept</i>	-2.309 (-10.91)***	-0.148 (-10.23)***	-0.238 (14.47)***
Pseudo R ²	0.40	0.63	0.65

*, **, and *** denote significantly different from zero at the 10, 5 and 1 percent level respectively.

The regression coefficients, along with the heteroskedasticity-corrected test statistics, are shown in Table VII. The relationship between efficiency and market-share is significantly positive: the large market-share law firms are more efficient after controlling for deal complexity and the tendency of the *PERFECT* firms to be involved in less complex deals.

The regression results tie in tightly to the pattern we observe in the scatter plots shown in Figure 1. Once we segregate the small cluster of perfect firms in this manner, there is a positive relationship between market-share and efficiency. This relationship is robust to the inclusion of a target law firm regressor, which is, itself, found to be associated with a negative effect on deal-completion efficiency.

As a simple check of our findings above, we note that, among non-*PERFECT* firms doing deals of more than median complexity, the mean deal completion rate for law firms with more than 1 percent market-share is 90 percent, whereas the mean efficiency for smaller firms is only 81 percent.

As additional robustness checks of the result that large-market-share acquirer legal advisors enhance deal completion of complex deals, we change the regression specification to (a) use offer-by-offer rather than by law-firm-year data, (b) use lagged market shares of law firms, in order to reduce any concerns of reverse-causality or look-ahead bias, (c) include the lagged average *COMPLEXITY* of deals advised on by the acquirer-law-firm in the past year, to measure the

impact of past experience with difficult deals, and (d) exclude the *PERFECT* law firms. Note that excluding the *PERFECT* law firms enables us to focus on those law firms that are more economically significant -- that is, those that advise on a large number of deals, sometimes in less-than-ideal market conditions.

Table VIII reports the results of several specifications of the following logit regression equation as estimated for the full sample of 7477 offers:

$$\Pr(\text{DEAL_COMPLETE}) = \lambda_0 + \lambda_1 \ln(\text{LAG_SHARE}) + \lambda_2 \text{DEAL_COMPLEXITY} + \lambda_3 \ln(\text{LAG_SHARE}) \times \text{LAG_COMPLEXITY} + v, \quad (4)$$

where *DEAL_COMPLETE* is an indicator variable for deal completion, *LAG_SHARE* and *LAG_COMPLEXITY* are, respectively, the previous year's acquirer law firm market-share and the law firm's average deal complexity from the previous year. These firm-oriented regressors register the importance of a firm's past experience and reputation, in terms of advising on a lot of merger business and also in terms of advising on difficult situation. An interaction term is also included, to allow for the possibility that advising on a large market share of difficult situations is important for later efficiency. *DEAL_COMPLEXITY*, the offer-specific (and current) complexity measure of the deal is included as a control variable.

Table VIII. The Relation between Deal Completion Efficiency and Legal Advisor Prominence: Excluding Perfect Law Firms

This table shows maximum likelihood regression coefficients for several specifications of the following logit regression equation:

$$\Pr(DEAL_COMPLETE) = \lambda_0 + \lambda_1 \ln(LAG_SHARE) + \lambda_2 DEAL_COMPLEXITY + \lambda_3 \ln(LAG_SHARE) \times LAG_COMPLEXITY + v,$$

where *LAG_SHARE* and *LAG_COMPLEXITY* are respectively the acquirer law firm's market-share of M&A advisory business and the fitted average deal complexity of all deals advised on, in the previous year, and *DEAL_COMPLEXITY* is the fitted complexity measure of the deal. The sample over which the regression is run excludes the "perfect" law firms and includes 4449 deals. Heteroskedasticity-consistent *t*-statistics are shown in parenthesis.

Explanatory Variable	Coefficient estimate (<i>t</i> -statistic)	Coefficient estimate (<i>t</i> -statistic)	Coefficient estimate (<i>t</i> -statistic)
<i>ln(LAG_SHARE)</i>	0.207 (7.79)***	0.108 (3.80)***	0.286 (5.17)***
DEAL_COMPLEXITY	-8.387 (-15.61)***	----	-14.502 (-3.48)***
<i>ln(LAG_SHARE)</i> <i>X</i> <i>LAG_COMPLEXITY</i>	----	1.057 (5.18)***	0.096 (1.72)*
<i>Pseudo R</i> ²	0.18	0.17	0.20

*, **, and *** denote significantly different from zero at the 10, 5 and 1 percent level respectively.

Several restricted and unrestricted versions are reported in the table. In the first column, the regressors are lagged market share of the acquirer legal advisor and the complexity of the particular deal. Both regressors are highly statistically significant, based on heteroskedasticity-consistent standard errors. Deals advised by larger law firms are more likely to be completed. More complex deals are less likely to be completed.

Does law firm experience, and especially experience with complex deals, aid in deal completion? The logit specifications in the second and third columns show that it does. These models include the interaction cross-product term to capture the combined statistical influence of large lagged market share and lagged experience on complex deals. The positive effect of lagged market share on deal completion is significantly incremented when the law firm has previously been working on complex deals, according to the significant positive coefficient (at either the one percent or ten percent level, depending on whether *DEAL_COMPLEXITY*, which accounts for a large amount of cross-sectional variation and is correlated with *LAG_COMPLEXITY*, is included).²¹

The interaction of the quantity and quality of a law firm's experience even appears to be useful in building the firm's business: a regression of deal complexity on lagged legal advisor share (not reported in the table) shows an extremely highly statistically significant positive coefficient: larger law firms tend to be engaged for more complex deals in the next year. We explore this issue in a subsequent section.

To summarize the findings of this section, large market-share law firms are involved in more complex deals. Deals are less likely to be withdrawn, *ceteris paribus*, when large firms are advising. This result fits well with our earlier finding that large firms are engaged by larger, more profitable clients. Large law firms enhance the production of something that is quite important to acquirer management, a successfully concluded acquisition, and so tend to be engaged by the management of well-heeled acquirers. The ability to facilitate deal completion is arguably of substantial benefit to law firms in sustaining large market-shares. What we have not yet shown, and proceed to examine next, is whether large-share legal advisors tend to be associated with acquisitions that are beneficial to the shareholders as well.

IV. Returns effectiveness

As discussed in the introduction, Gilson (1984) argues that legal advisors in acquisitions deals might add

significant as a determinant of deal completion, and that the interaction term is offset as expected.

²¹ To further explore this finding, we have additionally considered the arguably-offsetting effect of the target firm's legal advisors on deal completion. In a logit that also includes terms for the target legal advisors' market share and complexity experience, we find (not reported in the table) that the acquirer law firm's characteristics remain statistically

value to transactions in three major ways. First, they can write contracts that align the expectations of the parties, or else find ways to make such alignment unnecessary. Second, they can write contracts that minimize the incentives for opportunistic behavior. Third, they can engage in an agreement negotiation process that provides incentives to develop the proper set of common information at the lowest cost. Gilson argues that these are all ways in which law firms can directly add value for their clients in their role as "transaction costs engineers". Legal advisors may also be associated with shareholder value enhancing deals indirectly, in much the same way that top investment banks are thought to be associated with high-quality IPOs---they can try to associate themselves only with deals that they perceive to be value-creating. They are likely to do so if they judge that this will protect or enhance their market-shares. In this way, law firms may play a "gatekeeper" role. In this section, we investigate law firms "effectiveness" in being associated with returns for their M&A acquirer clients, both in the short-run and the long-run.

A. Short-run effectiveness

Lawyers' importance in structuring a transaction, and the associated value created by eliminating information asymmetries and incentive conflicts, may apply only around the time of the deal if counsel plays little role in post-closing integration and

implementation. If this is the case, the link between law firm prominence and acquirer shareholder value can be best measured by the acquirer's abnormal returns around the offer announcement. The window over which returns are measured should be wide enough to allow for the fact that the market may not know the lawyer's identity on the exact offer date, but narrow enough to avoid excessive noisiness due to other causes of returns.

Following Schwert (2000), the acquirer's short-run prediction error on any day t is calculated as $\epsilon_{it} = R_{it} - \beta_i R_{mt}$, where R_{it} is the daily return on the acquirer's stock, R_{mt} is the return on the CRSP NYSE/AMEX/Nasdaq value-weighted index, and β_i is the firm's market-model beta. As in Schwert, the intercept in this market model is constrained to be zero to eliminate any distortion in the abnormal returns caused by a positive intercept term due to strong prior performance of the bidder that does not continue during the event period. The market model estimated using over the days (-255, -64) relative to the offer announcement day.

The focus of our analysis is on cumulative prediction errors over days -63 through +126 around the offer announcement date. We refer to this measure of abnormal returns around the announcement as the market-model abnormal returns, *MMAR*.

Table IX. Acquirer Legal Advisor Market-Share and Effectiveness

Panel A shows the average effectiveness (deal by deal) measured as the percent market-model adjusted cumulative abnormal return (intercept suppressed) over days -63 through +126 of acquirers around the offer announcement, *MMAR*, associated with various acquirer law firm market-share cohorts. In parentheses are heteroskedasticity-consistent t statistics to test the null hypothesis of zero abnormal return. In square brackets are the difference-in-means t -statistics vis-à-vis effectiveness of the small law firms (0.1 to 0.5 percent market share). The sample examined in this Panel consists of 2894 unique offers with all required CRSP and SDC data.

Panel B shows the average *MMAR*, associated with various acquirer and target law firm market-share cohort combinations. The cross-sectional sample analyzed in this table consists of 1952 unique offers with all required SDC and CRSP data including target law firm names. The number of deals in each cell is shown in square brackets.

Panel C shows regression coefficients for the regression specification:

$$MMAR = \gamma_0 + \gamma_1 \ln(LAG_SHARE) + \gamma_2 LAG_COMPLEXITY + \gamma_3 TECH + \mathbf{v},$$

where the dependent variable *MMAR* is the market model abnormal return, *LAG_SHARE* is acquirer law firm's market-share of M&A advisory business in the previous year, *LAG_COMPLEXITY* is the mean complexity of the legal advisor's deals from the previous year, and *TECH* is an indicator variable set to one if the deal is in a technology industry. This sample excludes the "perfect" law firms from the previous year and is run over 1519 firm-months. Each observation represents the outcome of one offer. Regressions are estimated by weighted least squares, with heteroskedasticity-consistent t -statistics shown in parenthesis.

PANEL A

Cohort of law firms with market-share	Number of deals	<i>MMAR</i> (-63, 126)
0.1 to 0.5 percent	1006	9.48 (6.75) ***
0.5 to 1 percent	373	9.33 (2.86) *** [-0.05]

Table IX continued

1 to 1.5 percent	272	2.88 (0.87) [-1.83] *
1.5 to 2.5 percent	279	3.10 (1.27) [-2.26] **
> 2.5 percent	606	4.88 (2.90) *** [-2.10] **
All firms including the 1 deal Law firms	2894	7.50 (8.71) ***

*, **, and *** denote significantly different from zero at the 10, 5 and 1 percent level respectively.

PANEL B

Acquirer Law firm market share	Target Law firm market share		
	< 0.5 percent	0.5 - 5 percent	> 5 percent
< 0.5 percent	8.68 (6.04) *** [832]	7.20 (2.13) ** [176]	15.16 (3.18) *** [54]
0.5 - 5 percent	8.18 (2.56) *** [227]	5.26 (2.04) ** [255]	5.74 (1.68) * [116]
> 5 percent	3.19 (0.79) [82]	2.85 (0.91) [151]	0.05 (0.01) [59]

PANEL C

Explanatory Variable	Coefficient estimate (t-statistic)	Coefficient estimate (t-statistic)
$\ln(LAG_SHARE)$	-2.52 (-5.18) ***	-2.50 (-5.16) ***
LAG_COMPLEXITY	0.278 (0.79)	0.253 (0.71)
TECH		-0.085 (-2.65) ***
R ²	0.18	0.20

*, **, and *** denote significantly different from zero at the 10, 5 and 1 percent level respectively.

We find that large-share law firms exhibit negative effectiveness in being associated with large returns. Table IX provides the details. In constructing Panel A, we measure the abnormal return for each offer in our final sample, and then average across legal advisor market-share cohorts. Each offer counts as one data point in this analysis. When an offer is advised by multiple law firms, we average their market-shares, in effect, treating the team as a single firm. To present a more detailed picture as compared to earlier tables,

Panel A breaks out the large firm and small firm cohorts into more specific market-share buckets.

Panel A shows that effectiveness, as measured by short-run abnormal returns around the offer date (*MMAR*) is generally lower for larger market-share cohorts. The small-share law firm cohorts are associated with significantly positive *MMARs*, while the large-share cohorts (except the most dominant firms) are associated with (statistically) zero *MMARs*. Although the dominant law firms are associated with significantly positive *MMARs*, the magnitude of the

average abnormal return for their client firms is lower than that for the small-share law firm clients.

In untabulated results we find that the same pattern of law-firm-market-share and returns effectiveness also holds for the short-run market-adjusted returns computed by the cumulative abnormal returns (over and above the value-weighted CRSP market index) from day -63 before the offer announcement to day +126 after the announcement. The significance of the mean abnormal returns is also similar when we compute the event-study z -statistics instead of heteroskedasticity-consistent t -statistics reported in the table. Additionally, we note that our findings are not driven by the more detailed cohort breakout used in this table. Difference of means tests for the cohort with greater than 1 percent share versus the 0.1 to 0.5 percent share cohort generally reject the null at 5 percent significance level.

If acquirer lawyers are in fact effective in being associated with strong short-run returns, their influence might be offset by the influence of strong legal advisors on the other side. We perform several analyses to check on the relation between acquirer law firm size and returns effectiveness for their clients, after controlling for target law firm size.

Panel B shows a contingency table analysis of the mean $MMAR$ within 9 classes defined by small, medium and large acquirer versus target legal advisors. Our earlier results on the relation between acquirer law firm size and acquirer returns are confirmed: as acquirer law firm size increases, $MMAR$ decreases, irrespective of the target's advisor. For deals associated with small-share acquirer law firms, acquirer $MMARs$ are significantly positive. For deals associated with large-share acquirer law firms (dollar market shares of greater than or equal to 5 percent), acquirer $MMARs$ are insignificantly different from zero. The magnitudes of average $MMARs$ also monotonically decreases as we move from one acquirer-law-firm-size cohort to the next bigger cohort. This pattern holds regardless of the target law firm size. No pattern is apparent across target law firm size. Thus, the negative relation between law firm size and effectiveness as measured by the client's abnormal returns, hold after accounting for target law firm market share. Most certainly, there is no evidence that larger market-share cohorts are associated with superior transactions cost engineering that results in short-run value creation around the offer.

Panel C provides regression results that substantiate the impression from the descriptive statistics, and also demonstrate additional economically interesting aspects of the situation. The regression specification used is:

$$MMAR = \gamma_0 + \gamma_1 \ln(LAG_SHARE) + \gamma_2 LAG_COMPLEXITY + \gamma_3 TECH + \xi, \quad (5)$$

where the dependent variable $MMAR$ is the market model abnormal return around deal announcements around each offer as described above, LAG_SHARE is acquirer law firm's market-share of

M&A advisory business in the previous year, $LAG_COMPLEXITY$ is a computed measure of the law firm's average deal complexity in the previous year. $TECH$ is an indicator variable set to one if the deal is in a technology industry, included because returns to tech stocks were especially strong over our sample period.²² As before, in these regression analyses, we exclude the perfect firms, use a deal-by-deal sample architecture, and use lagged variables to alleviate any concerns about reverse-causality.

The first column of Panel C shows the market share regressor is associated with a statistically-strong negative coefficient, confirming the univariate results. Past experience with complex deals is not significant, suggesting perhaps that investors view the legal advisors as having been chosen to handle the degree of complexity. In the second column, we additionally include the tech-industry dummy variable as a regressor. Indeed, we find that the law firms associated with most value creation around the deal dates do a significant amount of their work for tech firms. Market share, however, retains its strong negative coefficient estimate, evidence that lack of a control for tech deals is not the source of this result in the first column. Additionally, the tech-dummy is associated with a negative coefficient. Thus, it is unlikely that association with tech deals alone is the source of our report of positive returns associated with certain smaller law firms' advisory work.

B. Long-run effectiveness

Transaction engineering by lawyers could conceivably involve the creation of governance or other structural devices, the influence of which becomes apparent only over time. Masulis, Wang and Xie (2007), for example, have found that antitakeover charter and bylaw provisions are a determinant of firm's success over time as bidders. Most typically, an acquirers' provisions would stay in place for the combined firm, but the merger represents a breakpoint at which such structures can be reassessed and that carry through the closing of the deal to influence post-closing performance. Alternatively, in a gatekeeping role, prestigious law firms may want to be associated only with deals that they perceive as value-creating in the long run. If this is the case or if there is less than complete efficiency in the market, the link between law firm prominence and acquirer shareholder value can be measured by the acquirer's post-offer long-run abnormal stock returns.

To study such issues, we need to measure long-run returns for acquirer firms. Each particular measure in the literature has its drawbacks.

²² Tech firms are defined as those with issuer SIC codes 3571, 3572, 3575, 3577, 3578 (computer hardware), 3661, 3663, 3669 (communications equipment), 3674 (electronics), 3812 (navigation equipment), 3823, 3825, 3826, 3827, 3829 (measuring and controlling devices), 3841, 3845 (medical instruments), 4812, 4813 (telephone equipment), and 4899 (communication services).

Buy-and-hold abnormal returns are appealing because the implied investment strategy is both simple and representative of the returns a long horizon investor might earn. However, Fama (1998) and Mitchell and Stafford (2000) argue that cumulative abnormal returns and calendar time methods are less likely to yield spurious rejections of market efficiency than buy-and-hold returns, partly because buy and hold returns can exaggerate small initial differences through compounding. Moreover, distributional properties of parametric test statistics for cumulative abnormal returns are better understood.

In view of these concerns and our desire for robust inferences, we employ three different measures of long run abnormal returns. Informally, we refer to these together as "effectiveness" in producing or being associated with long run returns. We measure abnormal returns as a) *BHAR*, buy-and-hold market-adjusted returns with compounding, b) *CAR*, cumulative market-adjusted returns without compounding, and c) *FFAR*, calendar-time Fama and French (1992) three-factor-adjusted returns. To avoid any survivorship bias, we use n days of data (where $n < 750$) for acquirers that are delisted from CRSP before 750 days after the offer announcement.

For *BHAR*, we measure the sample average and use non-parametric tests to evaluate statistical significance. For *CAR*, we use the CRSP value-weighted NYSE/AMEX/Nasdaq index as the market proxy. For *FFAR*, the three factors are *RM*, the excess return on the CRSP value-weighted NYSE/AMEX/Nasdaq market index, *SMB*, the return on a zero investment portfolio formed by subtracting the return on a small firm portfolio from the return on a big firm portfolio, and *HML*, the return on a zero investment portfolio calculated as the return on a portfolio of high book-to-market stocks minus the return on a portfolio of low book-to-market stocks.²³ We use the for market adjustments. The Fama and French time-series regression model

$$r_{it} = \alpha_i + b_i \times RM_t + s_i \times SMB_t + h_i \times HML_t + \zeta_{it}, \quad (6)$$

where r_i is the excess return on stock or portfolio i over each time period (time subscripts are suppressed), and δ is an error term. The coefficients b , s and h are time-invariant risk-loadings. We follow Fama (1998) and Mitchell and Stafford (2000) in using this model in calendar-time fashion. We compute a full-sample calendar time regression by adding each acquirer's stock to a virtual portfolio on the offer announcement date, and then estimating the Fama and French regression model using the time-series of portfolio returns. The regression intercept a measures the mean per-period risk-adjusted abnormal return for the

sample portfolio. As Gompers and Lerner (2003) emphasize, the resulting a estimates have an interpretation analogous to that of Jensen's alpha in a CAPM framework. A similar method for calculating calendar time post-event monthly abnormal returns is employed in Moeller, Schlingemann and Stulz (2004) to evaluate gains from acquisitions.

For all our long-run returns effectiveness measures, we calculate post-offer returns beginning with, alternatively, the day prior to the announcement of the acquisition offer or the 26th trading day after the announcement. Our results are generally about the same in either case. We do not generally know whether the identity of the legal advisor is public information at the time of the announcement, so we compute returns assuming that the advisor is known at the same time as the offer and, alternatively, that the advisor is not known until one month later. Our results are generally about the same in either case.

²³ We are grateful to Kenneth French for making the necessary factor portfolio returns available from his web site at http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html.

Table X. Market-share and Long run effectiveness

The first 6 columns show the average effectiveness measured in terms of post-offer long-run abnormal returns for acquirers: market-adjusted buy-and-hold abnormal returns (*BHAR*), market-adjusted cumulative abnormal returns (*CAR*), or cumulative Fama French three-factor-model-adjusted abnormal returns from a calendar time regression (*FFAR*), associated with various acquirer law firm market-share cohorts over the years 1994-2000. Long-run abnormal returns are measured over days -1 to +750 or, alternatively, +26 to +750 around the announcement of an acquisition offer. The long-run abnormal returns are reported as annualized percent returns. The final sample analyzed in the table consists of 3042 unique offers with required SDC and CRSP data for long-run returns. In parentheses are sign-test *z* statistics (for *BHAR*) and heteroskedasticity-consistent *t* statistics (for *CAR* and *FFAR*) to test the null hypothesis of zero abnormal return. In square brackets are the difference-in-means *t*-statistics vis-à-vis effectiveness of the small law firms (0.1 to 0.5 percent market share).

Cohort of law firms with market-share	Number of Deals	Effectiveness (average long run abnormal returns, as percentages) for 3 returns measures and 2 returns windows measured in days relative to the offer					
		<i>BHAR</i>		<i>CAR</i>		<i>FFAR</i>	
		-1, 750	26, 750	-1, 750	26, 750	-1, 750	26, 750
0.1 to 0.5 percent	1013	9.08 (4.57)***	8.98 (4.19)***	14.13 (5.55)***	13.99 (5.81)***	16.2 (1.80)*	16.2 (2.00)**
0.5 to 1 percent	380	-13.99 (-5.80)*** [-3.50]***	-12.12 (-5.90)*** [-3.23]***	7.41 (0.60) [-1.21]	6.37 (0.32) [-1.38]	7.80 (0.58) [-2.28]**	7.80 (0.83) [-2.19]**
1 to 1.5 percent	273	-6.13 (-3.62)*** [-2.05]**	-7.37 (-4.83)*** [-2.05]**	-4.24 (-0.16) [-2.71]***	-4.08 (-0.18) [-2.75]***	-7.23 (-1.31) [-1.49]	-7.23 (-0.82) [-1.43]
1.5 to 2.5 percent	283	-12.68 (-3.62)*** [-3.13]***	-9.63 (-2.29)** [-2.81]***	-1.52 (-0.42) [-3.04]***	-0.31 (0.00) [-2.83]***	-13.9 (-1.57) [-0.40]	-13.9 (0.63) [-0.29]
> 2.5 percent	606	-0.52 (-3.54)*** [-1.38]	-0.56 (-3.13)*** [-1.52]	-2.29 (-0.35) [-3.85]***	-2.25 (-0.42) [-3.87]***	-7.23 (-0.05) [-1.50]	-7.23 (-0.68) [-1.46]
All firms including the 1 deal Law firms	3042	-0.43 (-9.16)***	-0.27 (-8.87)***	6.73 (4.70)***	6.54 (4.72)***	7.80 (0.75)	7.80 (0.85)

*, **, and *** denote significantly different from zero at the 10, 5 and 1 percent level respectively.

Table X reports *BHAR*, *CAR* and *FFAR*, calculated over two windows. Both windows end 750 trading days after the announcement, or three years. Long-run return effectiveness, as measured by the post-offer long-run abnormal returns (*BHAR*, *CAR* and *FFAR*) is generally lower for larger market-share cohorts. Depending on the measure, post-offer long-run abnormal returns for some large-share law firm cohorts are significantly negative. Large-share cohort effectiveness measures are most often significantly lower than small-share cohort effectiveness measures. Thus, the table shows a consistent pattern in which the long-run returns of large-share-law-firms' clients are worse than those of small-share law-firms' clients.

In untabulated results, we find that the same pattern of law-firm-market-share and returns effectiveness also holds when, for the long-run returns, we employ Fama and French's adjustment in traditional event study fashion, with risk loadings

computed from data during an estimation period ending 45 days prior to the announcement. In this case, the estimated risk-loadings computed with the pre-announcement data, along with post-announcement data on the factor portfolios, are applied to risk-adjust the post-event returns for each acquirer stock *i*. From these post-event risk-adjusted returns, *FFAR*, for each stock is computed (but not reported in the table). Additionally, we note that our findings are not driven by the more detailed cohort breakout used in this table. Difference of means tests for the cohort with greater than one percent share versus the 0.1 to 0.5 percent share cohort generally reject the null at five percent significance level. Thus, there is no evidence that larger market-share cohorts are associated with superior transactions cost engineering or gatekeeping that results in superior long-run returns effectiveness.

To summarize our findings so far, big market-share law firms are called upon by the large

successful firms to facilitate the completion of complex acquisition deals. After controlling for deal complexity, these law firms are efficient in bringing these deals to successful conclusions. We also find that acquirers' abnormal stock returns around the offer announcement are significantly smaller (and often statistically zero) and the post-offer long-run returns often negative for completed deals in which prestigious large-market-share law firms are involved on behalf of those acquirers. This contrasts with more positive acquirers' abnormal stock returns, both around offer announcements and also post offer, for completed deals in which small-market-share law firms are involved on behalf of the acquirers²⁴. In other words, the data does not suggest that law firm incentives are effectively aligned with either a gatekeeping role or the transactions costs engineering role for M&A lawyers, both of which entail shareholder value enhancement.

V. Do law firms succeed via efficiency and effectiveness?

Thus far we have demonstrated that large market-share law firms are asked to advise acquirers on legally complex acquisition offers. They are associated with enhanced deal completion efficiency, but not with enhanced value creation for the acquirers. Thus, they appear to be efficient at producing one outcome of great interest to acquirer management---deal completion. However, they are not effective at producing valuable transaction cost engineering as reflected in stock performance, though this would, presumably, also be of interest to management.

In this section, we provide an explanation. In a nutshell, some law firms appear to be able to consistently associate themselves with efficient deal completion. On the other hand, there is no evidence that any cohort of law firms consistently causes or associates itself with effectiveness in the sense of strong stock returns for the acquirer. Given no evidence of persistent success in effectiveness, we cannot suggest that transaction cost engineering of a type that affects returns is something that particular law firms can excel at producing. Firms that want to build market-share could then reasonably concentrate on deal completion efficiency, something that they can produce. Furthermore, their employers care about deal completion efficiency: we show that acquirers that have had unsuccessful bids tend to employ significantly more different law firms than acquirers that are always successful in their bids. This implies that unsuccessful bidders tend to change their legal advisors more often than the successful bidders. On the other hand, we do not find that acquirers who experience negative post-acquisition abnormal stock returns employ more different law firms than acquirers

who experience positive post-acquisition abnormal stock returns.

To demonstrate persistence (or the lack thereof) in efficiency and effectiveness, we work with a restricted set of offers in our data set for which there is a unique, single legal advisor. We remove deals advised by several firms to avoid crediting any one of them with time series effects that might actually be due to one or more of the others. If these advisor "teams" were stable over time, we could credit effects to the team, but they are not. This issue does not arise in our earlier cross-sectional analysis, where we do treat a team on any deal as a law firm with average characteristics. In the time series setting, this approach is conservative---we will only report effects if they are evident with our cleanest, most restrictive data. This most-restricted sample is a panel of 851 law firm/years, in which the firms act as the sole advisor on offers in at least two years over 1994-2000.

²⁴ Because hostility reflects a tactical choice with extensive implications, we have also replicated our analyses for the sample of hostile offers only. Our central conclusions hold for the hostile sample as well.

Table XI. Consistency over Time in Deal Completion Efficiency and Long-run Returns Effectiveness

Panel A reports regression tests of the general form:

$$EFFICIENCY_INDICATOR = \theta_{0,effic} + \theta_{1,effic} LAGGED_EFFICIENCY + \theta_{2,effic} COMPLEXITY + \eta_{effic}$$

where *EFFICIENCY_INDICATOR* is either *EFFICIENCY*, the proportion of non-withdrawn offers for a law firm in a year, in which case estimation is by ordinary least squares, or, alternatively, *EFFICIENCY_INDICATOR* is *PERFECT*, our indicator for zero deals withdrawn, in which case estimation is by maximum likelihood probit. *LAGGED_EFFICIENCY* is the proportion of last year's deals completed. Panel B reports regression tests of the form:

$$EFFECTIVENESS_INDICATOR = \theta_{0,effect} + \theta_{1,effect} LAGGED_EFFECTIVENESS + \eta_{effect}$$

where *EFFECTIVENESS_INDICATOR* is the short-run returns measure, *MMAR*, or one of our three long-run returns measures (*BHAR*, *CAR*, or *FFAR*) measured over one of two time periods relative to the offer, either day -1 to +250, or days +26 to +250. *LAGGED_EFFECTIVENESS* refers to the same returns measure and time period as for the left-hand side, but applied to the same firm's deals in the *previous* year. The θ s are coefficients, and η s are error term. In both panels, the tests are applied to a panel sample of 851 law firm/years where each observation summarizes offers in a year from our final sample for which a particular law firm is the unique legal advisor. For ordinary least square regressions, heteroskedasticity consistent *t* statistics are in parentheses. For probits, standard maximum-likelihood-based *t* statistics are in parentheses.

Panel A. Tests of consistency over time in deal completion efficiency

<i>EFFICIENCY_INDICATOR</i>	<i>EFFICIENCY</i>	<i>PERFECT</i>	<i>EFFICIENCY</i>	<i>PERFECT</i>
Regressor:				
<i>LAGGED_EFFICIENCY</i>	0.839 (12.92)***	21.711 (15.09)***	0.766 (8.93)***	18.917 (12.33)***
<i>COMPLEXITY</i>			-0.225 (-2.33)**	-12.550 (-5.19)***
<i>INTERCEPT</i>	0.152 (2.40)**	-20.355 (-14.58)***	0.237 (2.69)***	-16.840 (-11.13)***

Panel B. Tests of consistency over time in long-run returns effectiveness

<i>EFFECTIVENESS_INDICATOR</i>	<i>MMAR</i> (-63,126)	<i>BHAR</i> (-1, 250)	<i>BHAR</i> (26, 250)	<i>CAR</i> (-1, 250)	<i>CAR</i> (26, 250)	<i>FFAR</i> (-1, 250)	<i>FFAR</i> (26, 250)
Regressor:							
<i>LAGGED_EFFECTIVENESS</i>	-0.016 (-0.28)	-0.004 (-0.05)	-0.062 (-1.13)	-0.052 (-0.86)	-0.076 (-1.18)	-0.028 (-0.47)	-0.034 (-0.51)
<i>INTERCEPT</i>	0.069 (5.22)***	0.022 (0.31)	0.013 (0.33)	0.005 (0.22)	0.005 (0.25)	-0.166 (5.99)***	-0.149 (-6.07)***

*, **, and *** denote significantly different from zero at the 10, 5 and 1 percent level respectively.

Table XI reports our results. Panel A shows results for time-consistency in efficiency, and Panel B shows results for effectiveness. Specifically, in Panel A, we report several regression tests of the general form:

$$EFFICIENCY_INDICATOR = \theta_{0,effic} + \theta_{1,effic} LAGGED_EFFICIENCY + \theta_{2,effic} COMPLEXITY + \eta_{effic} \quad (7)$$

where *EFFICIENCY_INDICATOR* is either the proportion of non-withdrawn offers for a particular law firm in a particular year, in which case estimation is by

ordinary least squares, or, alternatively, *EFFICIENCY_INDICATOR* is *PERFECT*, our indicator for zero deals withdrawn, in which case estimation is by maximum likelihood probit. *LAGGED_EFFICIENCY* is the proportion of last year's deals completed, and *COMPLEXITY* is the same as defined earlier. The ζ s are coefficients, and ϵ_{effic} is an error term. We estimate various versions of equation (7), excluding some coefficients in some versions.

Panel A shows that the coefficient on *LAGGED_EFFICIENCY* is always positive and

strongly statistically significant, whatever the measure of current efficiency. The first two specifications show this point without any additional control variables, whereas the third and fourth specifications show that the point also holds when controlling for *COMPLEXITY*. In all these tests, last year's more efficient firms tend to be this year's more efficient firms. The conclusion is that law firms can produce, or at least consistently associate themselves with, deal completion efficiency.

In Panel B, we report similar regression tests, but where the acquirer's abnormal returns around the offer and in the long run post-offer is the focus. We estimate seven regressions of the form:

$$EFFECTIVENESS_INDICATOR = \theta_{0, effect} + \theta_{1, effect} LAGGED_EFFECTIVENESS + \eta_{effect}, \quad (8)$$

where *EFFECTIVENESS_INDICATOR* is short-run *MMAR* measured over days -63 through +126 relative to the offer announcement, or,

alternatively, long-run *BHAR*, *CAR* or *FFAR* measured over one of two time periods relative to the offer: either day -1 to +250, or days +26 to +250. We use shorter windows for long-run analysis than for our previous analyses in order to avoid overlapping returns periods in this time-series analysis. *LAGGED_EFFECTIVENESS* is the same returns measure and time period as for the left-hand side, but applied to the same firm's deals in the previous year. Thus, the regression tests for persistence over time in law firm's long-run returns effectiveness.

None of the seven specifications reported in Panel B shows any evidence of persistence in producing or being associated with strong long-run returns. All the regression coefficients are near zero and statistically insignificant. Overall, law firms do show evidence of being able to produce, or at least consistently be associated with, efficient deal completion. This is not the case when it comes to long-run returns effectiveness.

Table XII. Relationship between Acquirers' Law Firm Choices and Legal Advisor Efficiency/Effectiveness

The table reports means and difference of means tests for the number of different lawyers used by acquirers represented in our final sample of 3042 acquisition offers over 1994-2000. The table reports on several sub-samples, described in the table, formed by distinguishing GOOD versus BAD acquirer outcomes of various types. GOOD acquirer outcomes are defined, alternatively, as acquirers experiencing no withdrawn offers, experiencing positive long-run market adjusted cumulative abnormal returns (*CAR*(-1, 750)), experiencing positive long-run market adjusted buy-and-hold returns (*BHAR*(-1, 750)), and experiencing positive Fama-French-factor adjusted returns (*FFAR*(-1, 750)). BAD acquirer outcomes are defined, respectively, as acquirers outside the GOOD subsample on each criterion.

	No. withdrawn offers vs. some withdrawn offers	Positive <i>CAR</i> (-1, 750) vs. negative <i>CAR</i> (-1, 750)	Positive <i>BHAR</i> (-1, 750) vs. negative <i>BHAR</i> (-1, 750)	Positive <i>FFAR</i> (-1, 750) vs. negative <i>FFAR</i> (-1, 750)
Total number of <i>different</i> law firms used by acquirers that experience BAD efficiency or effectiveness outcome	3.22 <i>N</i> =101	1.67 <i>N</i> =668	1.63 <i>N</i> =951	1.73 <i>N</i> =947
Total number of <i>different</i> law firms used by acquirers that experience GOOD efficiency or effectiveness outcome	1.69 <i>N</i> =1457	1.70 <i>N</i> =890	1.77 <i>N</i> =607	1.63 <i>N</i> =611
Difference	1.53	-0.03	-0.14	0.10
t statistic	(9.44) ^{***}	(-0.48)	(-2.41) ^{**}	(1.85)

^{*}, ^{**}, and ^{***} denote significantly different from zero at the 10, 5 and 1 percent level respectively.

In Table XII, we provide some suggestive evidence that deal completion efficiency is valued by clients. The table compares the number of different law firms used by acquirers that experience no withdrawn deals (that is, 100 percent deal completion effectiveness) to the number of different law firms used by bidders with lower deal completion success. Acquirers that have had unsuccessful bids use a significantly larger number of different law firms, on average---more than three as compared to about one

and two-thirds for bidders that had 100 percent success, over the full sample period. This result suggests the possibility of acquirers shopping for law firms that can improve deal completion. Since this result could be affected by systematic differences in the number of deals, type of deals, and so on, we have investigated several normalized versions of the number of different lawyers, with no change in the conclusion. In particular, we normalized the number of different law firms employed by a bidder by the number of deals

attempted by the bidder, the average number of law firms employed by the bidder per deal, and by both number of deals and the average number of law firms employed per deal. Our results do not change.

The table also reports the number of different lawyers used by acquirers that experience positive versus negative post-acquisition long-run returns. In this analysis, we do not examine only short-run returns because *MMAR* is positive for any law-firm-size cohort. For two of the three returns measures (*CAR* and *FFAR*) the difference is insignificant, and for the third measure (*BHAR*), the difference, though statistically significant, is small and opposite to the hypothesized direction. Thus, acquirers do not appear to shop for law firms to create post-acquisition shareholder value.

Our earlier finding that large market-share law firms working for the acquirers are associated with deal completion but not long run returns thus seems natural. Table XI shows that law firms are able to consistently produce only deal completion. Table XII suggests that clients care only about deal completion. Thus, large law firms produce what their employers seem to care about the most -- deal completions. This helps the law firms to build their businesses.

VI. Conclusion

The process of attempting to combine two corporations is fraught with information asymmetries and other difficulties, so intermediaries can be important. Prior research has examined the role of investment bankers (Servaes and Zenner, 1996 and Rau, 2000), but not that of legal advisors. There are several reasons to suspect that legal advisors are also economically important intermediaries. First, prior research finds that legal advisors are material to economic outcomes in IPOs (Beatty and Welch, 1996); if anything, the potential for lawyers to make a difference would seem greater in acquisition situations than in the tightly-prescribed process of the IPO of an S.E.C.-regulated client. After all, in merger situations, a wide variety of tactics, responses, forms, and constraints may apply under state and federal corporate laws as well as the laws of non-U.S. jurisdictions. Second, a large body of research beginning with LaPorta, de Silanes, Shleifer and Vishny (1998) finds that legal institutions are material to economic outcomes. Some of this evidence shows that particular legal institutions are material to acquisition-related outcomes (for example, Coles and Hoi, 2003, Nowak, 2001). It seems reasonable to expect that the activities of the agents most closely associated with these institutions might be associated with economic effects.

In this paper, we first characterize the market for legal advisory services in terms of size and market-shares in the second half of the 1990s. This characterization provides a ranking of firms in terms of their prominence, which is useful for our other investigations. The advisory industry has one perennial largest firm, Skadden Arps, which often advises on more than five percent of the value of all offers in our

sample. Sullivan Cromwell and Simpson Thacher generally carry a two- to four-percent share, and a few other large firms are almost as large in market-share. Around a hundred other "small" firms in any year advise on several-to-many deals totaling to less than a one percent market-share apiece. Firm-specific market-shares are fairly stable across over sample period- the late nineties. Bigger firms do larger deals, work with more prominent investment bankers, and work for larger, more profitable clients.

Legal intermediaries play a central role in the negotiation and drafting of the documents that define a deal, from non-disclosure agreements near the start of the process to the eventual acquisition agreement. Given this role, a clear possibility exists that lawyers' activities could be material to the eventual closure or withdrawal of the deal. Knowing this, clients interested in completing a deal might reasonably engage higher-quality legal talent for more difficult deals. We investigate, and find that, after accounting for the influence of variables correlated with the difficulty of the legal issues involved, large market-share law firms are significantly more likely to be associated with successful deal completions. This suggests that market-share is an index of the ability to facilitate deal completion, and measures law firm quality in this sense. Even if high-share law firms are hired in situations that are difficult in ways that we cannot observe (as is likely), the fact that they complete more of such deals is direct evidence of economic effects of their activities.

Lawyers may also be associated with shareholder value creation. Gilson (1984) suggests that lawyers as, transaction costs engineers, could structure agreements and negotiations to mitigate asymmetric information, thereby enabling counter-parties to act as they would in a frictionless market. Additionally, well-known and prestigious law firms may want to associate themselves only with value-creating transactions that enhance their reputations in the market. Presumably, then, the better deals would tend to be completed and structured in an economically advantageous manner for the shareholders. We find that clients of large market-share law firms (the acquirers) tend to experience lower stock returns both in the short run and in the long run, and that there is little consistency over time. The market for M&A advisory services does not exhibit evidence of transactions costs engineering or gatekeeping roles played by large market-share law firms, at least as reflected in stock returns. This even seems natural, for the clients are really the managers of large and profitable corporations, not their shareholders. The law firms with large market-shares in the M&A business are associated with delivering what their managerial clients want -- deal completion -- and not necessarily with what their clients' principals presumably want --shareholder value creation. Indeed law firm compensation, whether based on an hourly rate or on the accomplishment of client goals (which, for acquirers, is successful deal completion), skews their incentives that way.

References

1. Agrawal, A. and C. Knoeber, 1996, Firm Performance and Mechanisms to Control Agency Problems Between Managers and Shareholders, *The Journal of Financial and Quantitative Analysis* 31, 377-397.
2. Andrade, G., M. Mitchell, and E. Stafford, 2001, New Evidence and Perspectives on Mergers, *Journal of Economic Perspectives* 15, 103-120.
3. Bates, T. and M. Lemmon, 2003, Breaking Up is Hard to Do: An Analysis of Termination Fee Provisions and merger Outcomes, *Journal of Financial Economics* 69, 469-504.
4. Beatty, R. and I. Welch, 1996, Issuer Expenses and Legal Liability in Initial Public Offerings, *Journal of Law and Economics* 39, 545-603.
5. Coates, J., 2001, Explaining Variation in Takeover Defenses: Blame the Lawyers, *California Law Review* 89, 1301.
6. Coates, J. and G. Subramanian, 2000, A Buy-Side Model of M&A Lockups: Theory and Evidence, *Stanford Law Review* 53, 307.
7. Coles, J. and C.K. Hoi, 2003, New Evidence of the Market for Directors: Board Membership and the Pennsylvania Senate Bill 1310, *Journal of Finance* 58, 197-230.
8. Eckbo, B.E., 1992, Mergers and the Value of Antitrust Deterrence, *Journal of Finance* 47, 1005-1029.
9. Fama, E., 1998, Market Efficiency, Long Run Returns and Behavioral Finance, *Journal of Financial Economics* 49, 283-306.
10. Fama, Eugene and Kenneth French, 1992, The Cross-Section of Expected Stock Returns, *Journal of Finance* 47, 427-465.
11. Garicano, L. and T. Hubbard, 2002, Specialization, Firms, and Markets: The Division of Labor Within and Between Law Firms, University of Chicago working paper.
12. Gilson, R., 1984, Value Creation by Business Lawyers: Legal Skills and Asset Pricing, *Yale Law Journal* 94, 239-313.
13. Gilson, R. and A. Schwartz, 2005, Understanding MACs: Moral Hazard in Acquisitions, *Journal of Law, Economics and Organization* 21, 330-358.
14. Gilson, R. and B. Black, 1996, *The Law and Finance of Corporate Acquisitions* (Foundation Press, New York, New York).
15. Gompers, P. and J. Lerner, 2003, The Really Long Run Performance of Initial Public Offerings: The Pre-Nasdaq Evidence, *Journal of Finance* 58.
16. Holmstrom, B. and S. Kaplan, 2001, Corporate Governance and Merger Activity in the United States: Making Sense Out of the 1980s and 1990s, *Journal of Economic Perspectives* 15, 121-144.
17. La Porta, R., F. Lopez de Silanes, A. Shleifer, and R. Vishny, 1998, Law and Finance, *Journal of Political Economy* 106, 1113-1155.
18. Loughran, T. and A. Vijh, 1997, Do Long-Term Shareholders Benefit from Corporate Acquisitions?, *Journal of Finance* 52, 1765-90.
19. Masulis, R., C. Wang, and F. Xie, 2007 (forthcoming), Corporate Governance and Acquirer Returns, *Journal of Finance*.
20. Mitchell, M. and E. Stafford, 2000, Managerial Decisions and Long-term Stock Price Performance, *Journal of Business* 73, 287-329.
21. Moeller, S., F. Schlingemann, and R. Stulz, 2004, Firm Size and Gains from Acquisitions, *Journal of Financial Economics* 73, 201-228.
22. Nowak, E., 2001, Recent Developments in German Capital Markets and Corporate Governance, *Journal of Applied Corporate Finance* 14.
23. Rau, P.R., 2000, Investment Bank Market-Share, Contingent Fee Payments and the Performance of Acquiring Firms, *Journal of Financial Economics* 56, 293-324.
24. Ribstein, L.E., 2004, Limited Liability of Professional Firms after Enron, *Journal of Corporation Law* 29.
25. Rosen, S., 1992, The Market for Lawyers, *Journal of Law and Economics* 35, 215-247.
26. Schwert, G.W., 2000, Hostility in Takeovers: In the Eyes of the Beholder?, *Journal of Finance* 55, 2599-2640.
27. Servaes, H. and M. Zenner, 1996, The Role of Investment Banks in Acquisitions, *Review of Financial Studies*, 787-815.
28. Starbuck, W., 1993, Keeping a Butterfly and an Elephant in a House of Cards: The Elements of Exceptional Success, *Journal of Management Studies* 30, 885-921.
29. Stigler, G., 1988, *Memoirs of an Unregulated Economist* (New York, New York).
30. Subramanian, G., 2007 (forthcoming), Post-Siliconix Freezeouts: Theory and Evidence, *Journal of Legal Studies* 36.
31. Welsh, C., 2000, Corporate Lawyers Have Become the New Deal-Makers, *Knight Ridder/Tribune Business News*, Sunday Business November 5.