

How Often Do “Conflicts of Interests” in the Investment Banking Industry Arise During Hostile Takeovers?

Charles W. Calomiris[†]

Hal J. Singer^{††}

We analyze all hostile takeovers in the past ten years where the market capitalization of the target firm exceeded \$1 billion and the identity of the financial advisor of the acquirer is known. Our analysis reveals that, in the majority of cases, at least one of the advisors for the acquirer previously represented the takeover target in some way. The existence of overlapping relationships provides incentives for clients and investment banks to limit flows of private information about clients. If a firm believes that material secret information about its business that is to be revealed to an investment bank would be of interest to a competitor or potential acquirer, then that firm may obtain assurances or a written agreement about disclosure from the investment bank to ensure the confidentiality of the information. Similarly, if a bank believes that there is potential for a conflict to arise among clients relating to private information, it will often decide that it is appropriate to restrict access to that information within the investment bank by constructing a Chinese wall. Next, we test whether acquisition premia are significantly different for the acquisitions where there is a potential conflict. We find no significant differences in the means. However, we find somewhat significant differences in the variances of the two samples, which suggests that buyers with inside information may be more discriminating, both in choosing their acquisition targets and in determining the premia offered. Finally, we propose an economic test for determining whether private information has been transmitted to an acquirer, and the materiality of that private information, when an investment bank faces a potential conflict of interest, and we apply that test to a specific case involving a hostile takeover.

[†] Henry Kaufman Professor of Financial Institutions at the Columbia University Graduate School of Business, Research Associate, National Bureau of Economic Research, and Arthur Burns Fellow in International Economics, American Enterprise Institute.

^{††} Senior Vice President, Criterion Economics L.L.C. We thank Jeffrey West, Christopher Bowen and Brian O’Dea for research assistance.

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I. INTRODUCTION

This article seeks to examine conflicts of interests in the investment banking industry. The first question we address is: How common is it for a given investment bank to advise client *A* in a meaningful capacity while, at the same time, assisting client *B* in the hostile takeover of client *A*? The article also seeks to determine whether specific information obtained from client *A* could be used to the advantage of client *B* in a hostile takeover of client *A*. The concentrated industrial organization of the investment banking industry and the sharing of risks among investment banks implies that every large U.S. firm should, in theory, have a relationship of some kind with a substantial proportion of the investment banking industry. Hence, we are not surprised to find that potential “conflicts of interest” related to the flow of private information are routine in the investment banking industry, and such “conflicts” are dealt with through the use of “Chinese walls.”

Although economists have written extensively on conflicts of interest within investment banking, they have not focused on conflicts between an investment bank and a client that is the target of a hostile takeover. Articles on conflicts in investment banking have tended to focus on the conflict that arises from a bank both underwriting stocks or bonds and providing investment management services to individual clients.¹ For example, Womack and Kent, after studying the performance of stock recommendations from firms with an underwriting business and those without, found that the recommendations of those with an underwriting

1. Michaely Roni & Kent Womack, *Conflict of Interest and the Credibility of Underwriter Analyst Recommendations*, 12 REV. OF FIN. STUDIES 653 (1999); Mathew L. A. Hayward & Warren Boeker, *Power and Conflicts of Interest in Professional Firms: Evidence from Investment Banking*, 43 ADMIN. SCI. Q. 1 (Mar. 1998); Amar Gande & Manju Puri, Anthony Saunders & Ingo Walter, *Bank Underwriting of Debt Securities: Modern Evidence*, 10 REV. OF FIN. STUDIES 1175 (1997).

connection performed significantly worse than those of the analysts without an underwriting connection, indicating a conflict of interest within investment institutions that both underwrite financial instruments and provide investor services.² Although some articles have focused on potential conflicts of interest between an investment bank and the target it represents, these articles have examined the incentives of the investment bank to complete the merger to gain higher fees, even if the merger is not in the best interests of the investment bank's client.³ In their article on friendly acquisitions, Kessner and Shapiro found that investment banks generally received larger compensation for acquisitions where the bidder paid a higher premium, indicating that although the interests of the bank and the target coincided, the interests of the bank and the acquirer were at odds.⁴

The determination of how often an investment bank is asked to assist in a hostile takeover of a current or recent client, and the potential incentive problems faced by such a bank, are topics that remain unexplored. This paper examines the potential for conflict of interest in light of evidence from past hostile takeover attempts in which private information could have created a potential conflict. We restrict ourselves to hostile takeovers, as targets in friendly acquisitions and mergers would be unlikely to have reason to complain about the actions of the investment bank assisting the acquirer. Examining the hostile takeover attempts in the United States since 1993 that involved a price exceeding one billion dollars, we determined that the majority of cases had a potential for an investment bank conflict of interest involving the advisor of the acquirer and the target. Only two cases resulted in a lawsuit alleging that the acquirer's advisor had acted improperly: Computer Science Corporation's suit against Bear Stearns and Computer Associates, and the Dana Corporation's suit against UBS Warburg.⁵

Of these two cases, the UBS Warburg case seems more relevant to our investigation than the Bear Stearns case. In the Bear Stearns case, the target had never been a client of the investment bank.⁶ Bear Stearns was accused of misusing trade secrets that it had gained through contact with another client, not through direct contact with the target itself.⁷ Furthermore, the Bear Stearns' suit involved accusations that the investment bank had misused another investment bank's assessment of the company, unlike the situation with UBS, in which the target worried about the misuse of the information it had provided to UBS.⁸ Thus, we focus on Dana's suit against UBS Warburg, as it involved a more direct contact between the target and the acquirer's investment advisor than did the Bear Stearns case.

2. Roni & Womack at 653.

3. Idalene F. Kesner & Debra L. Shapiro & Anurag Sharma, *Brokering Mergers: An Agency Theory Perspective on the Role of Representatives*, 37 ACAD. MGMT. J. 703 (1994).

4. *Id.*

5. Gabrielle Jonas, *Tech Issues Hit Midday Mark As Mixed Lot, Dow Loses its Edge*, CMP TECHWEB (Mar. 4, 1998).

6. *Computer Sci. Corp. v. Computer Assoc. Int'l, Inc.*, Nos. CV 98-1374-WMB SHX, 1999 WL 675446, at *4 (C.D. Cal Aug. 19, 1999).

7. *Id.*

8. *Id.*

In Part III, we analyze all hostile takeovers in the past ten years where the market capitalization of the target firm exceeded \$1 billion and the identity of the financial advisor of the acquirer is known. Our analysis reveals that, in the majority of cases, at least one of the advisors for the acquirer previously represented the takeover target in some way. The existence of overlapping relationships provides incentives for clients and investment banks to limit flows of private information about clients. If clients believe that material secret information about their business that is to be revealed to an investment bank would be of interest to a competitor, then the clients may obtain assurances or a written agreement about disclosure from the investment bank to ensure the confidentiality of the information. Similarly, if banks believe that there is potential for a conflict to arise among clients relating to private information, they will often decide that it is appropriate to restrict access to that information within the investment bank by constructing a Chinese wall. Banks may have an incentive to do so, even if the client has not requested such action, as doing so may preserve “option value” for future business for the bank.

In Part IV, we test whether acquisition premia are significantly different for the acquisitions in our sample where there is potential conflict. We find no significant differences in means—the mean premia of deals with and without conflicts are 30 and 32 percent, respectively. We find, however, that the standard deviation of acquisition premia is greater in deals with a potential conflict of interest. That finding could be interpreted as evidence that private information made available to acquirers helped them to distinguish the true value of targets. Examining differences in the standard deviations of acquisition premia, however, is not helpful for identifying whether abuse of private information has occurred in a particular case.

In Part V, we propose an economic test to determine whether private information is material to the price or probability of a hostile takeover. In particular, if the information in question is material to the takeover, then it follows that the public revelation of that information should affect the abnormal returns of the target’s stock price in a significant way. As a case study, we perform an analysis of the Dana Corporation’s (“Dana”) abnormal returns surrounding announcements about an attempted joint venture with DaimlerChrysler (“Chrysler”) during the attempted hostile takeover over Dana by ArvinMeritor. The potential for a conflict of interest arose because of UBS’ simultaneous representation of Dana and ArvinMeritor. In particular, UBS was retained by Dana to negotiate a potential joint venture between Dana and Chrysler involving Detroit Axle, an axle production facility, and served as a participant in a loan syndicate for Dana. During this existing relationship with Dana, UBS assisted ArvinMeritor in an attempted takeover of Dana. The abnormal returns around the announcement of the attempted joint venture with Chrysler imply that the financial market did not perceive the planned purchase of Detroit Axle from Chrysler to be a significant contributor to the probability of a successful takeover by ArvinMeritor, or to the price at which such a takeover would take place. If the prospect of the joint venture had been material to the takeover,

announcements related to it would have affected the current price of Dana's stock through one or the other channel, or both. The market spoke clearly about the lack of materiality of the joint venture to the takeover: The market's view was that the prospect of the joint venture was not of any material relevance.

II. WHAT ARE THE STANDARDS FOR CONFLICTS OF INTERESTS IN THE INVESTMENT BANKING INDUSTRY?

The standards of conflicts in the investment banking industry are different than those in the legal profession, where law firms often refuse to represent clients if they are involved in an adversarial position with respect to a former or current client. As we demonstrate below, in contrast, it is common for an investment bank to work for client *A* while assisting client *B* in the acquisition of client *A*. Although the academic literature has not covered this specific issue, news stories indicate that such behavior does occur and does not violate laws or regulations so long as the investment bank does not pass confidential information from the target to the acquirer. Larger investment banks engage in this behavior more frequently than smaller investment banks because of the paucity of banks that can handle large deals.

A. *The Economics of the Investment Banking Industry Necessitates Representation of Firms That Could Have Adverse Interests*

Because the supply of investment banking exhibits economies of scale, the industry is prone to concentration.⁹ Companies contemplating takeovers gravitate towards those investment banks with more capital, information, and experience, thus making entry difficult.¹⁰ The few investment banks that can take on large projects will tend to merge with each other to obtain more capital and share risk.¹¹

The concentrated industrial organization of the investment banking industry and the sharing of risks among investment banks imply that virtually every large U.S. firm has relationships of some kind with a substantial proportion of the investment banking industry. Representation in an investment banking transaction entails enormous risks for the investment bank. Even for the largest U.S. investment banks, the associated risk is so large that many deals are shared across multiple banks. Without dispersion of the risk, the collapse of a large deal could pose significant difficulties for the

9. *Hear no evil, see no evil, speak no evil*, USBANKER, May 1, 2002, at 10 (available at 2002 WL 5644685); *Bankers vie for scarce IPO business*, EFINANCIAL NEWS, Feb 26, 2002 (available at 2002 WL 19799745) (noting that the top 4 underwriters handled 82 percent of the IPOs in 2001).

10. Bharat Anand & Alexander Galetovic, *Information, Nonexcludability, and Financial Market Structure*, 73 J. OF BUSINESS 357, 358 (Jul. 2000); Thomas J. Chemmanur & Paolo Fulghieri, *Investment Bank Reputation, Information Production, and Financial Intermediation*, 49 J. OF FINANCE 57, 57 (Mar. 1994).

11. *Citigroup makes the most of a bad year*, SAIGON TIMES DAILY, Dec. 31, 2002 (available at 2002 WL 101161743).

bank. Thus, any bank organizing a large transaction will need to array multiple financial institutions to support it.¹²

The need to disperse the risk of large deals combined with the tendency towards concentration means that in a large takeover or merger there is a significant likelihood that any investment bank representing the acquirer would have had prior dealings with the target.

B. *Potential “Conflicts of Interest” Related to the Transmission of Private Information*

Potential “conflicts of interest”—that is, situations where two corporations in an adversarial position both have some relationship with a particular investment bank—are routine in the investment banking industry and often are dealt with through the use of “Chinese walls.”¹³ There has been no ruling of which we are aware that such overlapping relationships constitute a breach by the investment bank. In other cases, where there is no potential for conflict via the flow of material secret information—for example, as in a passive role as a member of a loan syndicate—there may be no need to even create a Chinese wall.

Several investment banks have been known to represent potentially adverse interests on two separate transactions or even on a single transaction. For example, Goldman Sachs faced pressure in 2001 from its decision to help Montedison, an Italian energy company, fend off a takeover from EDF, a French energy company, and Fiat.¹⁴ Goldman Sachs had longstanding relationships with all three of the companies and had started advising Montedison on its takeover defense a few weeks before the announcement of the offer.¹⁵ Despite the possibility of losing future business from Fiat and EDF, Goldman Sachs decided to stay as Montedison’s advisor rather than to drop out of the defense.¹⁶

In 1999, Goldman Sachs arranged the hostile takeover attempt of Mannesmann by Vodafone Airtouch, PLC. Mannesmann, which had previously used Goldman Sachs to acquire Orange Ltd., filed suit, arguing that Goldman Sachs had assured Mannesmann that it would not assist another client in a hostile bid against Mannesmann and that this assurance

12. For example, the five-year revolving line of credit issued to the Dana Corporation in this case had over twenty banks participating in the loan. *See also* William L. Megginson & Annette B. Poulsen & Joseph F. Sinkey, Jr., *Syndicated Loan Announcements and the Market Value of the Banking Firm*, 27 J. OF MONEY, CREDIT & BANKING 457, 458 (May 1995); Ian McNulty, *Lenders moving back toward familiar terrain*, NEW ORLEANS CITY BUSINESS, Jul. 30, 2001, at 1 (available at 2001 WL 11424843).

13. A “Chinese wall” is a name for procedures instituted within a securities firm to separate various departments or project teams so as to prevent general access to non-public information provided by clients.

14. Deborah Ball, Marcus Walker; *Goldman Sachs Draws Fire for Montedison Role—Clients Fiat, EDF are Miffed That the Bank Is Advising Their Takeover Target*, WALL ST. J., Jul. 5, 2001, at A8.

15. *Id.*

16. *Id.*

prompted Mannesmann to hand over confidential information to Goldman.¹⁷ Although the British court granted a temporary injunction against Goldman Sachs' acting as the advisor for the deal, one week later the court dismissed the case because Kurt Kinzius, the managing director of Mannesmann, changed his testimony about whether he was present when Goldman Sachs had made the assurances.¹⁸ In court filings, Goldman Sachs asserted that while it would not assist a hostile bid against a current client, it would do so against a former client provided that it could keep the former client's sensitive information confidential.¹⁹ Goldman Sachs, one of three investment banks initially retained by Vodafone, withdrew its services from the deal after the judgment, prompting concern over Vodafone's ability to line up an alternative investment bank large enough to handle the deal.²⁰ There are fewer investment banks in Europe than in the United States, and commentators have noted that initiators of takeovers in Europe often have had difficulty finding backing from an investment bank that did not already have a relationship with the target of the takeover.²¹

NatWest faced a similar situation to that of Goldman Sachs in 1985 when it provided \$200 million to The Icahn Group to launch a hostile takeover of TWA. TWA, citing its banking relationship with NatWest's parent, National Westminster Bank, PLC, challenged the participation of NatWest in the attempted takeover, prompting NatWest to end its participation in the attempted takeover.²² The practical significance of NatWest's action was small, however, as The Icahn Group had already withdrawn the entirety of the \$200 million loan.²³

Murray Ohio Manufacturing Company filed suit against Sullivan & Cromwell in 1988 seeking to enjoin the law firm from assisting AB Electrolux in its hostile bid against Murray.²⁴ Murray had retained Goldman Sachs to devise its anti-takeover strategy and Goldman Sachs had in turn used Sullivan & Cromwell to assist in its preparation.²⁵ Murray claimed that Goldman Sachs might have passed confidential information to Sullivan & Cromwell during the course of its consultations, thus giving Electrolux an advantage in its bid.²⁶ The federal judge refused to issue the injunction,

17. Erik Portanger, *Mannesmann can't block Goldman's Vodafone Role*, WALL ST. J., Nov. 19, 1999, at *1; Paula Hawkins, *Hang on to your Vodafone Shares*, THE TIMES OF LONDON, Dec. 8, 1999, at *1.

18. *Id.*

19. *Id.*

20. *Id.*

21. David Lascelles, *Atmosphere is Rather Close as Sisters Crowd in*, FIN. MAIL, Nov. 26, 1999, at 20.

22. Mike Carroll, *Nat West backs off Icahn's bid for TWA after parent cites Conflict of Interest*, AMER. BANKER, May 28, 1985, at 1.

23. *Id.*

24. Laurie Cohen & Ed Bean, *AB Electrolux Gets Permission For Murray Bid—Sullivan & Cromwell Cleared As Judge Lifts Hurdle; Tender Offer Launched*, WALL ST. J., May 24, 1988 at A1.

25. *Id.*

26. *Id.*

stating that Murray had failed to produce any evidence that confidential information had passed between Sullivan and Goldman.²⁷

III. ANALYSIS OF LARGE HOSTILE TAKEOVERS SINCE 1993

In the majority of hostile takeovers since 1993, at least one of the advisors for the acquirer previously represented the takeover target in some way. Using SDC Platinum from Thomson Financial Securities Data, we identified every unsolicited or hostile transaction with a U.S.-based target firm announced from November 1, 1993 to November 6, 2003 in which the target of the transaction's market capitalization was greater than \$1 billion four weeks preceding the date on which the transaction attempt was announced. These proposed transactions include mergers, acquisitions of partial interests in the target, and acquisitions of remaining interests in the target. Of the 72 hostile and unsolicited transaction proposals contained in the database that met these criteria, 55 contain a list of the acquiring firm's financial advisors in the takeover attempt. Two of these transactions are duplicates of other transactions (in terms of announcement dates, target firms, and acquirer advisors). Table 1 (presented in the Appendix) shows a list of the 72 attempted takeovers that met our criteria.

27. *Id.*

For each of the 52 takeover attempts in our sample, we searched for any relationship between the takeover target and the acquirer's financial advisor in the five calendar years preceding the unsolicited offer that might entail a transfer of relevant private information. We find that many of these unsolicited offers feature relationships where information of some kind was exchanged between the target and the acquirer's financial advisor before the unsolicited offer was announced. These relationships are of several types: a financial advisor in a transaction, a member of a loan syndicate, an underwriter of a new issue, and a financial advisor of a poison pill.

Thirteen of the 52 transactions in our sample featured an acquirer's financial advisor that served as an advisor for the target in a transaction that preceded the unsolicited offer by no more than five calendar years. Six of these thirteen transactions featured an acquirer's financial advisor that served as an advisor for the target in a transaction that preceded the unsolicited offer by no more than two calendar years. These previous transactions included mergers and acquisitions of assets in which the acquirer's financial advisor would have obtained detailed information about the target company.

Five of the 52 transactions in the sample featured an acquirer's financial advisor with a role in a loan syndicate for the target that was established no more than five calendar years preceding the unsolicited offer. Four of the five transactions featured an acquirer's financial advisor with a role in a loan syndicate for the target that was established no more than two calendar years preceding the unsolicited offer. Two of the acquirers' financial advisors served only as participants in loan syndicates for the target, just as UBS is with Dana, whereas the others had even more significant roles, including agent, administrative agent, syndications agent, and arranger.

At least 29 of the transactions featured an acquirer's financial advisor that served some role as an underwriter, such as agent, book runner, or co-manager in underwriting a new issue (such as stock, bonds, or notes) for the target no more than five calendar years before the unsolicited offer was announced. Twelve of these 29 transactions featured an acquirer's financial advisor that served a role in underwriting a new issue for the target no more than two calendar years before the unsolicited offer was announced.

Finally, in one transaction, Newmont Mining's hostile takeover of Santa Fe Pacific Gold, the acquirer's financial advisor, Goldman Sachs, was the target's financial advisor in designing its poison pill—the very instrument a company uses to prevent a hostile takeover. In that case, Santa Fe Pacific Gold adopted the poison pill less than two years before Newmont launched its hostile takeover.

In summary, we found that at least 33 of the 52 transactions featured situations where some private information could have flowed from the target to the acquirer's financial advisor, based on relationships that occurred no more than five calendar years before the unsolicited offer was announced, and seventeen transactions featured a potential flow of information from the target to the acquirer's financial advisor no more than two calendar years before the unsolicited offer was announced. Table 2 shows the number of

transactions in our sample that feature each type of relationship in the five calendar years and two calendar years preceding the unsolicited offer.

TABLE 2: RELATIONSHIPS BETWEEN TARGETS OF UNSOLICITED OR HOSTILE TRANSACTION OFFERS AND THE ACQUIRER'S FINANCIAL ADVISOR

Type of Relationship	Transactions Featuring the Relationship Five Calendar Years Preceding the Unsolicited Offer	Transactions Featuring the Relationship Two Calendar Years Preceding the Unsolicited Offer
Financial Advisor in a Transaction	13	6
Participant in a Loan Syndicate	2	2
More Active Role than Participant in a Loan Syndicate	3	2
Underwriter of a New Issue	29	12
Financial Advisor of a Poison Pill	1	1
Total	33	17

Note: The "Total" row does not equal the sum of the columns because some transactions feature multiple types of relationships between the target and the acquirer's financial advisor.

Sources: Thomson Financial Securities Data; Loan Pricing Corporation; Pennzoil Co. Re Public Offerings, REGULATORY NEWS SERVICE, Oct. 11, 1993; Pennzoil Co. Completion of Public Offering, Pennzoil Co. Re Disposal of Subsid, etc., REGULATORY NEWS SERVICE, Oct. 28, 1992.

Based on Tables 1 and 2, it is reasonable to conclude that potential "conflicts of interests" are common in the investment banking industry. Table 3 (presented in the Appendix) describes the relationships that existed between the target firm and the acquirer's financial advisor in each of the 52 transactions in our sample.

IV. COMPARISON OF ACQUISITION PREMIA IN DEALS WITH AND WITHOUT A POTENTIAL CONFLICT OF INTEREST

Using Tables 2 and 3, we compared acquisition premia associated with 34 takeovers where a potential conflict of interest existed to acquisition premia associated with 32 takeovers without a potential conflict of interest. The analysis was intended to determine if the average announced premia was different when the acquirer may have had inside information about the target from its investment advisor. We generated the initial premiums by subtracting the stock price the day before the announcement from the

announced offer price and then dividing it by the pre-announcement stock price.

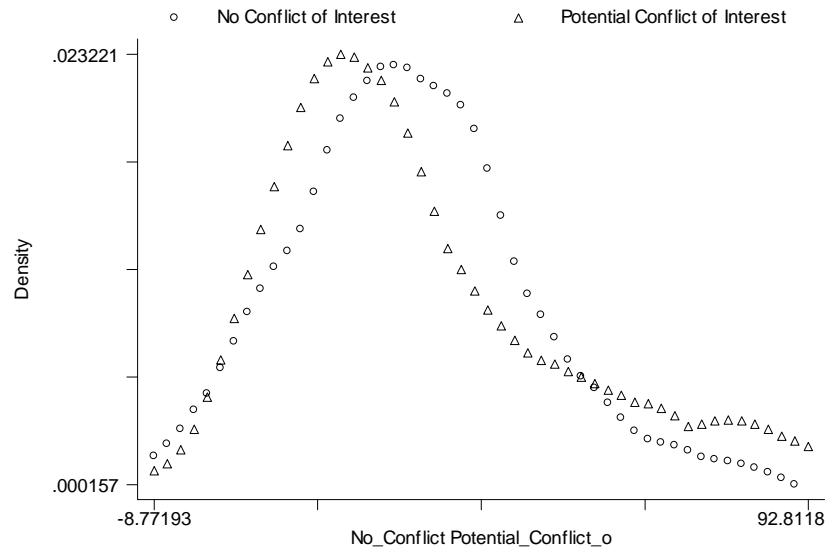
We tested the equality of the means of the initial stock offers for those companies with potential inside information and those without potential inside information. The average initial premium for those targets without a potential conflict of interest was 30.0 percent with a sample variance of 0.0295, while the average initial premium for those targets with a potential conflict of interest was 32.7 percent with a sample variance of 0.0493. Table 4 summarizes the results.

TABLE 4: SUMMARY STATISTICS OF ACQUISITION PREMIA

	<i>Sample with No Potential Conflict</i>	<i>Sample with Potential Conflict</i>
Mean	0.3004	0.3287
Variance	0.0295	0.0493
Observations	32	34
Pooled Variance	0.0397	
Hypothesized Mean Difference	0	
Degrees of Freedom	64	
<i>t</i> Stat	-0.5763	

For mean differences, we calculated a *t* statistic of -0.57 with 64 degrees of freedom, which was not significant at the 10 percent confidence interval. We then tested whether acquisitions with potential private information tended to have more variation in their premia than those without insider information. Our hypothesis is that bidders with inside information do not need to pay the “average” premium if those bidders can discriminate between “good” and “bad” targets. To the extent that private information helps bidders to sort targets according to their true values, we expect to see greater variation in the premia paid by acquirers. We calculated an *F* statistic of 1.67 with 31 and 33 degrees of freedom, which was significant at the 10 percent confidence interval. Figure 1 presents the density plots of the acquisition premium for the two samples.

FIGURE 1: DENSITY PLOTS OF ACQUISITION PREMIUM



As Figure 1 shows, the upper tail of the distribution of premium for deals with a potential for conflict (represented by triangles) is fatter, indicating a larger proportion of targets attracting very high premia. The lower tail of the distribution is smaller for deals with a potential conflict. One possible explanation for the smaller lower tail is that private information may help acquirers to avoid targeting some lower-quality targets.

Given the differences in the two distributions, we conclude that it is possible that some information may be transferred from some of the conflicted banks to acquirers. Nevertheless, the evidence in favor of that view is weak. Furthermore, even if one accepts the differences in the two distributions as evidence for some “abuse” of private information, it is not possible to determine with any confidence whether private information affected the offered acquisition premium in any particular case. Finally, this evidence is of little use for gauging the damage from the transmission of private information. Indeed, the evidence suggests that private information may often be used to *benefit* acquirers (by raising the acquisition premium they receive). As we argued, the small relative size of the lower tail for deals with a potential conflict may indicate that when the private information communicated to the acquirer is unfavorable, the target may not receive a bid at all. If that is the case, however, it may be impossible to determine damages, since the “damaged” firms did not become the targets of hostile takeovers. In the next section, we develop an approach for identifying whether private information has been transferred to acquirers by investment banks, and for measuring the damages from such information flow in individual hostile takeovers.

V. AN ECONOMIC TEST FOR MATERIALITY OF PRIVATE INFORMATION: A CASE STUDY OF THE PROPOSED TAKEOVER OF DANA BY ARVINMERITOR

Suppose an investment bank obtains private information about client *A* during the course of its representation of client *A*. Suppose further that the investment bank shares that private information with client *B* while representing client *B* in the hostile takeover of client *A*. If the private information that breached the “Chinese Wall” is material to the takeover, then it follows that the public revelation of that information should affect the abnormal returns of the target’s stock price in a significant way.

For an application of this test, we examine the attempted hostile takeover of Dana by ArvinMeritor in the winter of 2003. The relevant details of the case are as follows: UBS was retained by Dana, an automobile equipment manufacturer, to negotiate a potential joint venture between Dana and Chrysler involving Detroit Axle, an axle production facility. During its representation of Dana, UBS assisted ArvinMeritor, a rival automobile equipment manufacturer, in an attempted takeover of Dana. Dana sued UBS shortly after the announcement of ArvinMeritor’s hostile takeover attempt, alleging that UBS obtained material information about Dana and shared that information with ArvinMeritor.

An analysis of Dana’s abnormal returns surrounding announcements about the joint venture—that is, the announcement of the transaction, and the subsequent announcement that it would not take place—reveals that the market did not perceive the planned joint venture to be a significant contributor to the probability of a successful takeover by ArvinMeritor, or to the price at which such a takeover would take place. If the joint venture had been material to the takeover, its announcement would have affected the current price of Dana’s stock through one or the other channel, or both. We use an event study to estimate the impact of these events on Dana’s stock price.

The first step in the event study is estimating the market model for Dana’s stock returns, adjusted for dividends. The market model is given by the following equation:

$$[1] R_t = \alpha + \beta R_{mt} + \varepsilon_{it},$$

where R_t represents the return to Dana on day t , R_{mt} represents the return to the S&P 500 Index on day t , and ε_{it} represents an error.²⁸ The estimate of α , or “alpha,” is the average rate of return Dana’s stock would expect on a day when the S&P 500 index realized a zero return. The estimate of β , or “beta,” represents the sensitivity of Dana’s returns to general market movements, or its “systematic risk.” We estimate an alpha of -0.00247 and a beta of 1.3679 using the ordinary least squares method for Equation 1 over a 200-trading-day estimation period (which is $t = -250$ to -50 , where $t = 0$ is July 8, 2003,

28. Dividend payments are counted as returns to a particular stock on the ex-dividend date.

the date of the announcement of ArvinMeritor's tender offer). The "expected return" of a stock is defined as the stock's estimated alpha plus the product of the actual daily return of the S&P 500 Index and the stock's estimated beta. We calculate the "abnormal returns" for Dana by subtracting the expected returns from the actual returns. That is, the daily abnormal returns are the residuals for each observation in the regression analysis.

Consider now an unexpected announcement on an event day. We consider three windows in which to measure the market's reaction to the announcement. The first is a one-day window that considers the abnormal returns solely on the event day itself. The second is a window of three days, from one day before the announcement to a day after the announcement. The third is a window of eleven days, from five days before the announcement to five days after the announcement. For each window, we compute the cumulative abnormal returns for that period. Finally, for each window, we compute the standard errors of the abnormal returns (for each company and each portfolio) by using information covering the 200-day estimation period.

ArvinMeritor first announced its tender offer for Dana on July 8, 2003.²⁹ The previous day, Dana's stock closed at \$12.02. At the end of trading on July 8, Dana's stock closed at \$16.20—an increase of 35 percent. After the markets closed on July 22, 2003, Dana announced that it was rejecting ArvinMeritor's tender offer.³⁰ Dana's stock closed at \$15.60 on July 23, up 2 percent from its closing price of \$15.28 on July 22. However, because Dana reported its quarterly earnings at the same time that it announced its rejection of the tender offer,³¹ the market was responding to multiple events on that date, and so it is not possible to measure the specific effect of Dana's rejection of the tender offer with precision.

On September 15, 2003, Automotive News published an article on Dana's negotiations with Chrysler to buy Detroit Axle.³² On September 15, 2003, Dana's stock price closed at \$15.62—0.9 percent higher than its previous closing price. Detroit Axle was one of several factories that Chrysler was attempting to sell or close at the time, and Chrysler was the only Big Three automobile manufacturer that still produced axles.³³ When the talks between Dana and Chrysler were announced, Chrysler was also negotiating a new labor contract with the United Auto Workers ("UAW"), which represented the Detroit Axle employees. The UAW typically had veto power over any plant sale or shutdown in its labor agreements.³⁴ On September 26, 2003, the UAW announced a new labor agreement between

29. Press Release, ArvinMeritor, ArvinMeritor to Commence Tender Offer to Acquire Dana for \$15 Per Share in Cash (Jul. 8, 2003) (*this document can be accessed at* http://www.arvinmeritor.com/media_room/press_releases_2003.asp).

30. Press Release, Dana Corp., Dana Corporation's Board of Directors Rejects Unsolicited Offer From ArvinMeritor (July 22, 2003) (*available at* <http://www.dana.com/news/pressreleases/>).

31. Sholnn Freeman, *Dana Board Rejects ArvinMeritor Takeover Bid*, WALL ST. J., July 23, 2003, at D7.

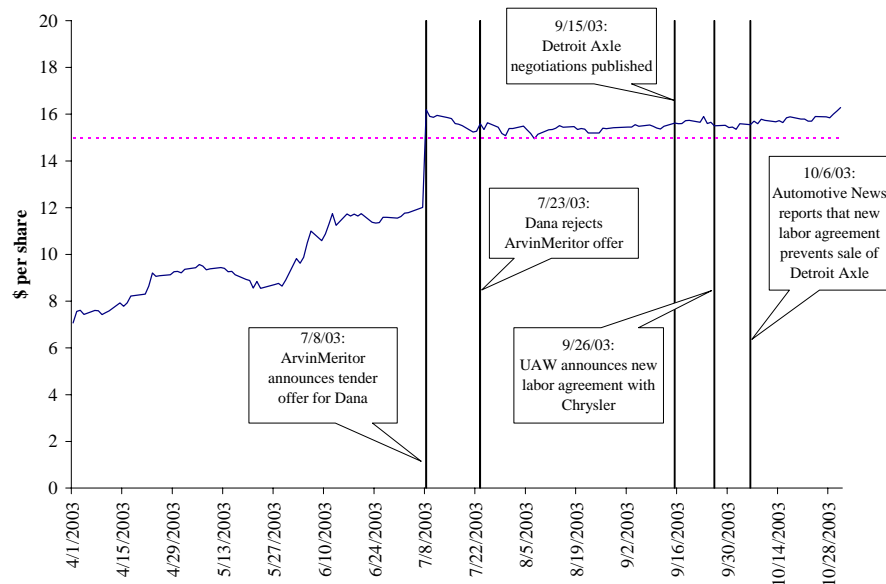
32. Robert Sherefkin, *Dana Wants To Buy DCX Axle Plant*, AUTOMOTIVE NEWS, Sept. 15, 2003, at 1.

33. Mark Truby & Mike Hudson, *DaimlerChrysler deal may sell, close 7 plants*, DETROIT NEWS, Sept. 16, 2003, at 1.

34. Sherefkin, *supra* note 32.

Chrysler and Detroit Axle's workers in which the workers would "retain their right to remain DaimlerChrysler employees."³⁵ On October 6, 2003, Automotive News elaborated on the implication of UAW's press release and reported that this labor agreement would prevent Chrysler from selling Detroit Axle in the near future.³⁶ Dana's stock price closed at \$15.50 and \$15.55 on September 26 and October 6—a decrease of 1.0 and 0.3 percent from the previous day's close, respectively. These slight movements were not out of the ordinary for Dana's stock after ArvinMeritor's tender offer had been announced. Between July 9 and October 28, Dana's stock price closed within a narrow trading range of \$14.96 to \$15.96. As Figure 2 shows, the movements in Dana's stock price flattened significantly after the announcement of ArvinMeritor's tender offer.

FIGURE 2: DANA'S CLOSING STOCK PRICE



Note: Stock prices are adjusted for dividends.

Source: Yahoo! Finance, available at <http://finance.yahoo.com/q/hp?s=DCN>.

Figure 2 shows that movements in Dana's stock price were flat during the three months following the tender offer announcement on July 8 relative to movements before announcement.

35. Press Release, United Auto Workers, UAW members at DaimlerChrysler ratify new labor pact (Sept. 26, 2003) (available at <http://www.uaw.org/news/index.cfm>).

36. Robert Sherefkin, *UAW Deal Unravels Dana's Plan for DCX Plant*, AUTOMOTIVE NEWS, Oct. 6, 2003, at 50.

TABLE 5: CUMULATIVE ABNORMAL RETURNS FOR DANA FOR EVENT DATES RELATED TO TENDER OFFER AND NEGOTIATIONS WITH CHRYSLER ON DETROIT AXLE

Cumulative Abnormal Returns	July 8, 2003	July 23, 2003	Sept. 15, 2003	Sept. 26, 2003	Oct. 6, 2003
1-Day	34.6%**	2.3%	1.7%	0.2%	-0.6%
3-Day	33.5%**	1.1%	0.4%	0.6%	0.5%
11-Day	35.3%**	-0.2%	3.6%	3.1%	-2.7%
Z-Statistic					
1-Day	12.74	0.84	0.61	0.06	-0.22
3-Day	7.04	0.24	0.10	0.14	0.11
11-Day	3.56	0.03	0.40	0.36	-0.22

Note: * Significant at 10 percent level; ** Significant at 1 percent level.

As Table 5 shows, none of the cumulative abnormal returns were significant other than the returns in the windows around the initial announcement of the tender offer. The evidence shows that Dana's planned purchase of Detroit Axle did not significantly affect the market value of Dana and did not change in investors' minds the probability that the tender offer would be accepted or altered.

CONCLUSION

The existence of overlapping relationships often leads to precautionary measures by both clients and investment banks. Investment banks may choose, in their own self-interest, to erect Chinese walls to limit information flows. Doing so reduces the possibility that private information may become abused (for example, through insider trading). Furthermore, investment banks that limit information flow will be better able to attract clients that might otherwise be concerned about potential conflicts with adversarial firms.

Clients should also take precautions, and should ask the investment bank to agree not to divulge confidential information without assurances or a written agreement about disclosure if they believe that material secret information about their business of interest to a competitor is going to be revealed to the investment bank. Hiring investment banks as a means to protect against their involvement in a hostile takeover does not generally work, since there is no legal obligation on the bank not to advise the acquirer. In recognition of that fact, the dean of Tuck Business School remarked that "[t]oday nobody in his right mind would show his investment banker sensitive information without assurances or a written agreement about disclosure."³⁷ Concerns about possible conflicts of interest have influenced some companies to demand written assurances about the confidentiality of the information they give over to the investment bank. It is the client's responsibility to secure confidentiality agreements before providing

37. John A. Byrn, *Corporate Clients feel Seduced and Abandoned*, BUS. WK., Mar. 2, 1987, at 34.

confidential information. Conditional on such agreements being secured, it is the banks' responsibility to protect confidential information.

We show that the potential for conflict in investment banking is extremely common, and by itself, the presence of a potential conflict is neither unusual, nor a reasonable grounds for presuming that private information has been transmitted by the bank. Our comparison of the acquisition premia for hostile takeovers in cases with and without a potential for private information transmission does not indicate significant harm, on average, to targets, *conditional on an offer being made*. If anything, targets receiving offers seem to enjoy a greater possibility of very high offers. Finally, we develop an approach for identifying the transmission of private information in individual cases, and for measuring the extent of damages that could be used to assess a specific case of a hostile takeover.

APPENDIX

TABLE 1: UNSOLICITED OR HOSTILE OFFERS MADE FROM NOVEMBER 1993 TO NOVEMBER 2003 TO U.S.-BASED TARGETS WITH MARKET CAPITALIZATIONS EXCEEDING \$1 BILLION

Date Announced	Target Name	Acquirer Name	Target Market Cap (\$ mil)	Acquirer Market Cap (\$ mil)	Target's Advisors	Acquirer's Advisors	Attitude of the Target's Board / Management Towards the Transaction	Attitude of the Target's Board Upon Initial Offer Price	Tender Offer?	Form of Deal
3/14/1994	Kemper Corp	General Electric Capital Corp	1,380.70		Goldman Sachs & Co	Kidder Peabody & Co Inc; Lazard Freres & Co LLC	Hostile	Hostile	No	Merger
8/2/1994	American Cyanamid Co	American Home Products Corp	5,126.90		Morgan Stanley & Co; Credit Suisse First Boston	Gleacher & Co	Hostile	Hostile	Yes	Merger
8/2/1994	Unitrin Inc	American General Corp	2,060.60	5,889.30	Morgan Stanley & Co	Merrill Lynch & Co Inc; Fox-Pitt Kelton	Hostile	Hostile	No	Merger
8/29/1994	Columbia Gas System Inc	Investor Group	1,999.20		Smith Barney Shearson; Salomon Brothers		Unsolic.	Agreed	No	Acq. Part. Int.
9/21/1994	Borden Inc	Japonica Partners LP	1,750.10		Lazard Freres & Co LLC; CS First Boston Corp		Hostile	Unsolic.	No	Acq. Part. Int.

Date Announced	Target Name	Acquirer Name	Target Market Cap (\$ mil)	Acquirer Market Cap (\$ mil)	Target's Advisors	Acquirer's Advisors	Attitude of the Target's Board / Management Towards the Transaction	Attitude of the Target's Board Upon Initial Offer Price	Tender Offer?	Form of Deal
3/27/1995	Wellpoint Health Networks Inc	Blue Shield of California	2,773.60		Goldman Sachs & Co; Furman Selz LLC; Merrill Lynch & Co Inc; Morgan Stanley & Co	Credit Suisse First Boston Int	Hostile	Hostile	No	Merger
4/11/1995	Chrysler Corp	Tracinda Corp	15,224.30		CS First Boston Corp; Salomon Brothers; Morgan Stanley & Co		Hostile	Hostile	No	Merger
6/5/1995	Lotus Development Corp	IBM Corp	1,499.20	55,047.40	Lazard Houses	CS First Boston Corp	Hostile	Hostile	Yes	Merger
6/20/1995	LILCO	Long Island Power Authority	1,993.30		Dillon, Read & Co Inc	Bear Stearns & Co Inc	Hostile	Hostile	No	Merger
7/21/1995	Bank of Boston Corp,Boston,MA	BANC ONE Corp,Columbus,Ohio	4,199.30	12,915.90	Goldman Sachs & Co	UBS Securities Inc	Unsolc.	Unsolc.	No	Merger
8/14/1995	PP&L Resources Inc	PECO Energy Co	3,047.70	6,181.80	Morgan Stanley & Co	Salomon Brothers	Hostile	Hostile	No	Merger
9/12/1995	Rockefeller Center Properties	Investor Group	1,205.50		PaineWebber; Morgan Stanley & Co		Hostile	Agreed	No	Acq. Part. Int.
10/18/1995	First Interstate Bancorp,CA	Wells Fargo Capital C	7,593.40		Morgan Stanley & Co; Goldman Sachs & Co	CS First Boston Corp; Montgomery Securities	Hostile	Hostile	No	Merger

Date Announced	Target Name	Acquirer Name	Target Market Cap (\$ mil)	Acquirer Market Cap (\$ mil)	Target's Advisors	Acquirer's Advisors	Attitude of the Target's Board / Management Towards the Transaction	Attitude of the Target's Board Upon Initial Offer Price	Tender Offer?	Form of Deal
10/19/1995	Cordis Corp	Johnson & Johnson	1,381.20		Morgan Stanley & Co	JP Morgan Securities Inc	Hostile	Hostile	Yes	Merger
1/24/1996	Hasbro Inc	Mattel Inc	2,674.60	8,240.10	Bear Stearns & Co Inc; Donaldson Lufkin & Jenrette	CS First Boston Corp	Hostile	Hostile	No	Merger
3/5/1996	WR Grace & Co	Hercules Inc	6,810.90		Merrill Lynch & Co Inc		Hostile	Hostile	No	Merger
4/12/1996	Kansas City Power & Light Co	Western Resources Inc	1,617.20	2,100.40	Merrill Lynch & Co Inc	Salomon Brothers	Hostile	Hostile	No	Merger
4/25/1996	Dayton Hudson Corp	JC Penney Co	6,022.60	11,214.20	Goldman Sachs & Co	CS First Boston Corp	Hostile	Hostile	No	Merger
10/23/1996	Conrail Inc	Norfolk Southern Corp	5,901.00	11,480.60			Hostile	Unsolc.	Yes	Acq. Part. Int.
10/23/1996	Conrail Inc	Norfolk Southern Corp	5,901.00		Lazard Freres & Co LLC; Morgan Stanley & Co	JP Morgan; Merrill Lynch & Co Inc	Hostile	Hostile	Yes	Merger
10/28/1996	Loctite Corp	Henkel KGaA	1,448.90		Dillon, Read & Co Inc	Rothschild Inc.	Hostile	Hostile	Yes	Merger
12/5/1996	Santa Fe Pacific Gold Corp	Newmont Mining Corp	1,528.30	4,776.90	SBC Warburg; Chase Securities Inc	Goldman Sachs & Co	Hostile	Hostile	No	Merger
1/27/1997	ITT Corp	Hilton Hotels Corp	5,073.70		Goldman Sachs & Co; Lazard Freres & Co LLC	Donaldson Lufkin & Jenrette	Hostile	Hostile	Yes	Merger
2/18/1997	Great Western Finl Corp,CA	HF Ahmanson & Co,Irwindale,CA	4,337.90	3,837.40	Merrill Lynch & Co Inc; Goldman	Credit Suisse First Boston Int; Montgomery	Hostile	Hostile	No	Merger

Date Announced	Target Name	Acquirer Name	Target Market Cap (\$ mil)	Acquirer Market Cap (\$ mil)	Target's Advisors	Acquirer's Advisors	Attitude of the Target's Board / Management Towards the Transaction	Attitude of the Target's Board Upon Initial Offer Price	Tender Offer?	Form of Deal
					Sachs & Co	Securities				
2/24/1997	Read-Rite Corp	Applied Magnetics Corp	1,325.20		Goldman Sachs & Co	Gleacher NatWest; Montgomery Securities	Hostile	Hostile	No	Merger
6/23/1997	Pennzoil Co	Union Pacific Resources Group	2,535.40		Lehman Brothers; Evercore Group; JP Morgan	Smith Barney Inc	Hostile	Hostile	Yes	Merger
7/15/1997	New York State Electric & Gas	CE Electric(NY) Inc	1,472.80		Morgan Stanley & Co; Goldman Sachs & Co	Lehman Brothers; Credit Suisse First Boston Int	Hostile	Unsolc.	Yes	Acq. Part. Int.
7/15/1997	New York State Electric & Gas	CalEnergy Co Inc	1,472.80	2,563.70	Morgan Stanley & Co; Goldman Sachs & Co	Lehman Brothers; Credit Suisse First Boston	Hostile	Hostile	Yes	Merger
10/15/1997	MCI Communications Corp	GTE Corp	18,161.10	38,964.40	Lehman Brothers; Lazard Freres & Co LLC	Goldman Sachs & Co; Bear Stearns & Co Inc	Unsolc.	Unsolc.	No	Merger
10/20/1997	LIN Television Corp	Raycom Media Inc	1,198.80				Unsolc.	Unsolc.	No	Merger
1/27/1998	American Bankers Ins Group Inc	Cendant Corp	1,905.50		Salomon Smith Barney	Merrill Lynch & Co Inc; Lehman Brothers	Hostile	Hostile	Yes	Merger
2/10/1998	Computer Sciences Corp	Computer Assoc Intl Inc	6,630.80	27,643.80	Goldman Sachs & Co; JP Morgan	Bear Stearns & Co Inc	Hostile	Hostile	Yes	Merger
2/17/1998	Echlin Inc	SPX Corp	1,997.70	478.9	Salomon Smith Barney	CIBC Oppenheimer	Hostile	Hostile	No	Merger

Date Announced	Target Name	Acquirer Name	Target Market Cap (\$ mil)	Acquirer Market Cap (\$ mil)	Target's Advisors	Acquirer's Advisors	Attitude of the Target's Board / Management Towards the Transaction	Attitude of the Target's Board Upon Initial Offer Price	Tender Offer?	Form of Deal
4/22/1998	Mellon Bank Corp, Pittsburgh, PA	Bank of New York Co Inc	13,198.20	17,532.00	Morgan Stanley & Co; Goldman Sachs & Co	Merrill Lynch & Co Inc	Hostile	Hostile	No	Merger
5/21/1998	Excite Inc	Zapata Corp	1,409.30	267.3			Unsolic.	Unsolic.	No	Merger
8/4/1998	AMP Inc	AlliedSignal Inc	7,459.80		Credit Suisse First Boston; Donaldson Lufkin & Jenrette	Lazard Houses; Goldman Sachs & Co	Hostile	Hostile	No	Merger
8/4/1998	AMP Inc	AlliedSignal Inc	7,459.80	25,298.10	Credit Suisse First Boston; Donaldson Lufkin & Jenrette	Lazard Houses; Goldman Sachs & Co	Hostile	Hostile	Yes	Acq. Part. Int.
8/18/1998	Adobe Systems Inc	Quark Inc	2,662.70		Goldman Sachs & Co; JP Morgan		Unsolic.	Unsolic.	No	Merger
12/15/1998	Coltec Industries Inc	Crane Co	1,004.90	1,955.80	Credit Suisse First Boston	Donaldson Lufkin & Jenrette; Salomon Smith Barney	Unsolic.	Unsolic.	No	Merger
5/6/1999	Newport News Shipbuilding Inc	Litton Industries Inc	1,052.00	2,496.40	Credit Suisse First Boston; Lazard Houses	Merrill Lynch, Pierce, Fenner	Unsolic.	Unsolic.	No	Merger
6/7/1999	Columbia Energy Group	NiSource Inc	4,212.10	3,364.10	Morgan Stanley & Co; Salomon Smith Barney; Duff and Phelps	Credit Suisse First Boston Int; Wasserstein Perella Group Inc	Hostile	Hostile	Yes	Merger
6/14/1999	Frontier Corp	Qwest Commun Int Inc	5,963.60	18,040.00	Morgan Stanley & Co	Donaldson Lufkin & Jenrette	Unsolic.	Unsolic.	No	Merger

Date Announced	Target Name	Acquirer Name	Target Market Cap (\$ mil)	Acquirer Market Cap (\$ mil)	Target's Advisors	Acquirer's Advisors	Attitude of the Target's Board / Management Towards the Transaction	Attitude of the Target's Board Upon Initial Offer Price	Tender Offer?	Form of Deal
8/11/1999	Reynolds Metals Co	Alcoa Inc	3,939.00	22,664.60	Merrill Lynch & Co Inc; Goldman Sachs & Co	Credit Suisse First Boston	Hostile	Hostile	No	Merger
8/20/1999	Cyprus Amax Minerals Co	Phelps Dodge Corp	1,203.90	3,559.40	Merrill Lynch & Co Inc	Morgan Stanley & Co	Hostile	Hostile	No	Merger
11/4/1999	Warner-Lambert Co	Pfizer Inc	59,670.40	50,476.50	Bear Stearns & Co Inc; Goldman Sachs & Co	Lazard Houses; Merrill Lynch & Co Inc	Hostile	Hostile	No	Merger
2/22/2000	Mirage Resorts Inc	MGM Grand Inc	2,439.10	2,474.50	Goldman Sachs & Co	Salomon Smith Barney; Merrill Lynch & Co Inc	Hostile	Hostile	No	Merger
2/24/2000	Aetna Inc	Investor Group	7,567.80		Goldman Sachs & Co; Donaldson Lufkin & Jenrette	Merrill Lynch & Co Inc	Unsolic.	Unsolic.	No	Merger
3/2/2000	Shared Medical Systems Corp	Eclipsys Corp	1,318.10	859.8	Goldman Sachs & Co	Warburg Dillon Read Inc	Unsolic.	Unsolic.	No	Merger
3/6/2000	Dime Bancorp Inc, New York, NY	North Fork Bancorp, Melville, NY	2,161.40	2,551.00	Credit Suisse First Boston; Merrill Lynch & Co Inc	Salomon Smith Barney; Sandler O'Neill Partners	Hostile	Hostile	Yes	Merger
3/14/2000	Howmet International Inc	Alcoa Inc	1,838.10	27,472.10	Goldman Sachs & Co	Salomon Smith Barney	Hostile	Unsolic.	Yes	Acq. Rem. Int.
3/30/2000	Nabisco Group Holdings Corp	Carl Icahn	2,751.90		Warburg Dillon Read Inc; Morgan Stanley & Co		Unsolic.	Unsolic.	No	Acq. Part. Int.

Date Announced	Target Name	Acquirer Name	Target Market Cap (\$ mil)	Acquirer Market Cap (\$ mil)	Target's Advisors	Acquirer's Advisors	Attitude of the Target's Board / Management Towards the Transaction	Attitude of the Target's Board Upon Initial Offer Price	Tender Offer?	Form of Deal
4/4/2000	Nabisco Group Holdings Corp	Carl Icahn	2,751.90		Warburg Dillon Read Inc; Morgan Stanley & Co		Unsolic.	Hostile	Yes	Merger
5/2/2000	Bestfoods	Unilever PLC	13,185.90		Merrill Lynch & Co Inc; Salomon Smith Barney	Goldman Sachs & Co; UBS Warburg	Hostile	Hostile	No	Merger
10/16/2000	Hercules Inc	International Specialty Prods	1,342.90	381.1	Donaldson Lufkin & Jenrette; Goldman Sachs & Co		Unsolic.	Unsolic.	No	Acq. Part. Int.
11/13/2000	Willamette Industries Inc	Weyerhaeuser Co	2,941.80	8,034.40	Goldman Sachs & Co	Morgan Stanley & Co	Hostile	Hostile	Yes	Merger
3/7/2001	Barrett Resources Corp	Shell Oil Co	1,634.60		Goldman Sachs & Co; Petrie Parkman & Co Inc	Lehman Brothers	Hostile	Unsolic.	Yes	Merger
5/8/2001	Newport News Shipbuilding Inc	Northrop Grumman Corp	1,830.00	6,657.30	Credit Suisse First Boston Ltd	Salomon Smith Barney; JP Morgan	Hostile	Unsolic.	Yes	Merger
5/14/2001	Wachovia Corp, Winston-Salem, NC	SunTrust Banks Inc, Atlanta, GA	12,446.30	19,248.50	Credit Suisse First Boston Ltd; Goldman Sachs & Co	Morgan Stanley	Hostile	Unsolic.	No	Merger
6/6/2001	Niagara Mohawk Holdings Inc	Arpine Investments Inc	2,770.50				Unsolic.	Unsolic.	No	Acq. Part. Int.
8/1/2001	Cooper Industries Inc	Danaher Corp	3,815.60	8,320.50	Credit Suisse First Boston Int; Goldman	Lehman Brothers; Merrill Lynch &	Unsolic.	Unsolic.	No	Merger

Date Announced	Target Name	Acquirer Name	Target Market Cap (\$ mil)	Acquirer Market Cap (\$ mil)	Target's Advisors	Acquirer's Advisors	Attitude of the Target's Board / Management Towards the Transaction	Attitude of the Target's Board Upon Initial Offer Price	Tender Offer?	Form of Deal
					Sachs & Co	Co Inc				
8/6/2001	US Airways Group Inc	Global Airlines Corp	1,106.70				Unsolic.	Unsolic.	No	Merger
8/14/2001	CenturyTel Inc	ALLTEL Corp	4,561.70	20,134.50	JP Morgan; Lehman Brothers	Merrill Lynch & Co Inc; Stephens Inc	Hostile	Unsolic.	No	Merger
2/15/2002	ImClone Systems Inc	Carl Icahn	1,541.20				Unsolic.	Unsolic.	No	Acq. Part. Int.
2/15/2002	NRG Energy Inc	Xcel Energy Inc	2,634.60	9,543.50	Credit Suisse First Boston Int	Lehman Brothers	Unsolic.	Unsolic.	Yes	Acq. Rem. Int.
2/22/2002	TRW Inc	Northrop Grumman Corp	4,921.40	8,992.10	Goldman Sachs & Co; Credit Suisse First Boston Int	Salomon Smith Barney; Stephens Financial Group	Hostile	Unsolic.	Yes	Merger
5/31/2002	Hotels.com	USA Interactive	3,791.90	12,419.20	Lazard		Unsolic.	Unsolic.	No	Acq. Rem. Int.
9/23/2002	Dole Food Co Inc	David H Murdock	1,590.90		Goldman Sachs & Co	Deutsche Bank AG	Unsolic.	Unsolic.	No	Merger
11/13/2002	Taubman Centers Inc	Simon Property Group Inc	1,106.60	6,299.00	Goldman Sachs & Co	Merrill Lynch & Co Inc	Hostile	Unsolic.	Yes	Merger
1/15/2003	Taubman Centers Inc	Investor Group	1,350.10		Goldman Sachs & Co	Merrill Lynch & Co Inc; Citigroup	Hostile	Unsolic.	Yes	Merger
6/6/2003	PeopleSoft Inc	Oracle Corp	5,940.90	65,118.00	Citigroup; Goldman Sachs & Co	Credit Suisse First Boston Int	Hostile	Hostile	Yes	Merger

Date Announced	Target Name	Acquirer Name	Target Market Cap (\$ mil)	Acquirer Market Cap (\$ mil)	Target's Advisors	Acquirer's Advisors	Attitude of the Target's Board / Management Towards the Transaction	Attitude of the Target's Board Upon Initial Offer Price	Tender Offer?	Form of Deal
7/8/2003	Dana Corp	ArvinMeritor Inc	1,617.00	1,426.40	Credit Suisse First Boston; Goldman Sachs & Co	UBS Investment Bank	Unsolic.	Unsolic.	Yes	Merger
7/11/2003	Clayton Homes Inc	Cerberus Capital Management LP	1,723.10		Bear Stearns & Co Inc		Unsolic.	N/A	No	Merger

Source: Thomson Financial Securities Data.

TABLE 3: DESCRIPTIONS OF RELATIONSHIPS BETWEEN TARGETS OF UNSOLICITED OR HOSTILE TRANSACTION OFFERS AND THE ACQUIRER'S FINANCIAL ADVISOR

Date of Transaction Offer Announcement	Target	Acquirer's Financial Advisors	Previous Relationship Between Acquirer's Financial Advisor and Target
3/14/1994	Kemper Corp	Kidder Peabody & Co Inc; Lazard Freres & Co LLC	
8/2/1994	American Cyanamid Co	Gleacher & Co	
8/2/1994	Unitrin Inc	Merrill Lynch & Co Inc; Fox-Pitt Kelton	
3/27/1995	Wellpoint Health Networks Inc	Credit Suisse First Boston Int	
6/5/1995	Lotus Development Corp	CS First Boston Corp	Lotus Development used CS First Boston as its financial advisor when it acquired SoftSwitch in 1994. Lotus Development used First Boston (a predecessor to CS First Boston) as its financial advisor when it acquired Samna in 1990 and when it attempted to merge with Novell in 1990. Credit Suisse First Boston was an arranger of three \$50 million revolving lines of credit for Lotus Development, the latest of which Credit Suisse First Boston had a 16.67 percent share and was active in July 1991 with maturity in June 1994. Credit Suisse First Boston was also an agent on a \$50 million line of credit active in June 1992 and a \$75 million line of credit active in May 1993. First Boston was the lead placement agent of Lotus Development senior notes issued in 1990.
6/20/1995	LILCO	Bear Stearns & Co Inc	Bear Stearns was an underwriter for numerous LILCO bonds, common stock, and preferred stock issued in every year from 1991 through 1994.
7/21/1995	Bank of Boston Corp,Boston,MA	UBS Securities Inc	
8/14/1995	PP&L Resources Inc	Salomon Brothers	Salomon Brothers was a co-manager of multiple PP&L first mortgage bonds issued from 1991 through 1994.
10/18/1995	First Interstate Bancorp,CA	CS First Boston Corp; Montgomery Securities	First Interstate Bancorp used Montgomery Securities as its advisor in its merger with Cal Rep Bancorp in 1993. Credit Suisse (predecessor to CS First Boston) was a participant in a \$500 million revolving line of credit for First Interstate Bancorp (active in May 1994 with maturity in May 1997). Montgomery Securities was a co-manager of First Interstate Bancorp common stock issued in 1990.
10/19/1995	Cordis Corp	JP Morgan Securities Inc	
1/24/1996	Hasbro Inc	CS First Boston Corp	Tonka used First Boston (a predecessor to CS First Boston) as a financial advisor when it merged with Hasbro in 1991. First Boston was the book runner of Hasbro convertible subordinated notes issued in 1991.
4/12/1996	Kansas City Power & Light Co	Salomon Brothers	
4/25/1996	Dayton Hudson Corp	CS First Boston Corp	CS First Boston was the book runner for Dayton Hudson asset-backed certificates issued in September 1995.
10/23/1996	Conrail Inc	JP Morgan; Merrill Lynch & Co Inc	Morgan Guaranty Trust, a subsidiary of JP Morgan, was an administrative agent with a 16 percent share on a \$500 million term loan for Conrail, active in April 1995 with maturity in April 2000. Merrill Lynch was an agent of Conrail medium-term notes issued in 1994. Merrill Lynch was also the book runner, lead placement agent, and co-manager of various certificates and debentures issued from 1991 to 1994.
10/28/1996	Loctite Corp	Rothschild Inc.	
12/5/1996	Santa Fe Pacific Gold Corp	Goldman Sachs & Co	Goldman Sachs advised Santa Fe Pacific Gold on a poison pill adopted in 1995 with an expiration date in 2005. Goldman Sachs acted as a co-manager, global coordinator, book runner of Santa Fe Pacific Gold common shares issued in 1991, 1992, and 1994. Goldman Sachs was a co-manager of Santa Fe Pacific Gold senior notes and senior debentures issued in 1994 and 1995.

Date of Transaction Offer Announcement	Target	Acquirer's Financial Advisors	Previous Relationship Between Acquirer's Financial Advisor and Target
1/27/1997	ITT Corp	Donaldson Lufkin & Jenrette	Donaldson Lufkin & Jenrette was a co-manager of ITT Financial Corp (then owned by ITT Corp) senior notes issued in 1992.
2/18/1997	Great Western Finl Corp,CA	Credit Suisse First Boston Int; Montgomery Securities	First Boston Corp (a predecessor to Credit Suisse First Boston) was a co-manager of Great Western Finl Corp notes issued in 1993 and a book runner and co-manager of Aristar (a subsidiary of Great Western Finl Corp) senior notes issued in 1992 and 1993.
2/24/1997	Read-Rite Corp	Gleacher NatWest; Montgomery Securities	
6/23/1997	Pennzoil Co	Smith Barney Inc	Smith Barney Shearson co-managed the underwriting of Pennzoil common stock and debentures issued in 1993. Pennzoil used Smith Barney , Harris Upham and Co. as co-manager of the initial public offering for Pennzoil subsidiary Purolator Products in 1992.
7/15/1997	New York State Electric & Gas	Lehman Brothers; Credit Suisse First Boston	Lehman Brothers was the book runner of New York State Electric & Gas adjustable rate serial preferred stock and a co-manager of cumulative preferred stock issued in 1993.
10/15/1997	MCI Communications Corp	Goldman Sachs & Co; Bear Stearns & Co Inc	MCI used Goldman Sachs as an advisor when British Telecommunications acquired partial interests in MCI in 1993 and 1994. MCI also used Goldman Sachs as an advisor when it acquired BT North America from British Telecommunications in 1994. Bear Stearns was a co-manager of MCI debentures and a book runner and lead agent for multiple MCI notes issued in 1996. Goldman Sachs was the book runner for MCI QUIPS issued in 1996 and was an agent for medium-term notes issued in 1992, 1993, and 1995. Goldman Sachs was also a co-manager of MCI debt, senior notes, and senior debentures in 1992, 1993, and 1994
1/27/1998	American Bankers Ins Group Inc	Merrill Lynch & Co Inc; Lehman Brothers	Merrill Lynch was the book runner for American Bankers Insurance Group common stock issued in 1993 and an agent for medium-term notes issued in 1994.
2/10/1998	Computer Sciences Corp	Bear Stearns & Co Inc	
2/17/1998	Echlin Inc	CIBC Oppenheimer	
4/22/1998	Mellon Bank Corp, Pittsburgh,PA	Merrill Lynch & Co Inc	
8/4/1998	AMP Inc	Lazard Houses; Goldman Sachs & Co	Lazard Freres & Co. LLC advised M/A-COM when it merged with AMP in 1995.
12/15/1998	Coltec Industries Inc	Donaldson Lufkin & Jenrette; Salomon Smith Barney	
5/6/1999	Newport News Shipbuilding Inc	Merrill Lynch, Pierce, Fenner	
6/7/1999	Columbia Energy Group	Credit Suisse First Boston Int; Wasserstein Perella Group Inc	
6/14/1999	Frontier Corp	Donaldson Lufkin & Jenrette	
8/11/1999	Reynolds Metals Co	Credit Suisse First Boston	CS First Boston was a co-manager for Reynolds Metals PRIDES issued in 1994.
8/20/1999	Cyprus Amax Minerals Co	Morgan Stanley & Co	Cyprus Amax Minerals used Morgan Stanley as its financial advisor when it sold Amax Oil & Gas to Union Pacific in 1994.
11/4/1999	Warner-Lambert Co	Lazard Houses; Merrill Lynch & Co Inc	
2/22/2000	Mirage Resorts Inc	Salomon Smith Barney; Merrill Lynch & Co Inc	Smith Barney was a co-manager of Mirage Resorts senior notes issued in 1996.
2/24/2000	Aetna Inc	Merrill Lynch & Co Inc	US Healthcare Inc used Merrill Lynch as its financial advisor when it was acquired by Aetna Life & Casualty Co. in 1996. Aetna used Merrill Lynch as its advisor when it sold Human Affairs International to Magellan Health Services in 1997. Merrill Lynch was a co-manager of Aetna puttable reset securities (PURS) issued in

Date of Transaction Offer Announcement	Target	Acquirer's Financial Advisors	Previous Relationship Between Acquirer's Financial Advisor and Target
			1998, and was the book runner of guaranteed notes issued in 1996.
3/2/2000	Shared Medical Systems Corp	Warburg Dillon Read Inc	
3/6/2000	Dime Bancorp Inc. New York, NY	Salomon Smith Barney; Sandler O'Neill Partners	Dime Bancorp used Salomon Brothers as its advisor in a merger with North American Mortgage in 1997. Lakeview Financial Corp used Sandler O'Neill Partners as its advisor when it was acquired by Dime Bancorp in 1999. Anchor Bancorp used Salomon Brothers as its advisor when it was acquired by Dime Bancorp in 1995. Smith Barney was a syndicate member in underwriting Dime Bancorp common shares issued in 1996, and Salomon Smith Barney was a co-manager of Dime Bancorp notes issued in 1999.
3/14/2000	Howmet International Inc	Salomon Smith Barney	Salomon Brothers and Smith Barney were syndicate members in underwriting Howmet International common shares issued in 1997.
5/2/2000	Bestfoods	Goldman Sachs & Co; UBS Warburg	Arisco Produtos Alimenticios used Goldman Sachs when it was acquired by Bestfoods in February 2000.
11/13/2000	Willamette Industries Inc	Morgan Stanley & Co	
3/7/2001	Barrett Resources Corp	Lehman Brothers	Lehman Brothers was a co-manager for a \$150 million note for Barrett Resources, active in February 1997 with maturity in February 2007.
5/8/2001	Newport News Shipbuilding Inc	Salomon Smith Barney; JP Morgan	JP Morgan was used as an advisor when Tenneco spunoff Newport News Shipbuilding to shareholders as a new company in 1996. JP Morgan was the lead placement agent of Newport News Shipbuilding senior notes and senior subordinated notes issued in 1996.
5/14/2001	Wachovia Corp, Winston-Salem, NC	Morgan Stanley	Morgan Stanley acted in various roles, including agent, co-manager, and book runner, of multiple Wachovia securities, notes, CDs, and certificates from 1996 through 2000.
8/1/2001	Cooper Industries Inc	Lehman Brothers; Merrill Lynch & Co Inc	Climate System, a unit of Wynn's International, used Lehman Brothers as its advisor when it was acquired by Moog Automotive, a unit of Cooper Industries in 1996. Eagle Electric Manufacturing Co Inc used Lehman Brothers as its advisor when it was acquired by Cooper Industries in 2000. Cooper Industries used Merrill Lynch as its advisor when Federal-Mogul Corp purchased Cooper's Cooper Automotive unit in 1998. Lehman Brothers was the book runner of Cooper medium-term notes issued in 1998, and was an agent of Cooper medium-term notes issued in 1996.
8/14/2001	CenturyTel Inc	Merrill Lynch & Co Inc; Stephens Inc	Merrill Lynch was an agent of Pacific Telecom (acquired by CenturyTel in 1997) medium-term notes issued in 1996, was a co-manager of CenturyTel notes and debentures issued in 1998, and was the book runner of Pacific Telecom medium-term notes issued in 1999. Stephens Inc was a syndicate member of CenturyTel remarkable or redeemable securities (ROARS) and global notes issued in 2000 and a co-manager of debentures and notes issued in 1998.
2/15/2002	NRG Energy Inc	Lehman Brothers	Lehman Brothers was the joint-lead placement agent of NRG senior secured bonds issued in 2000 and was a co-manager of NRG common stock issued in 2000.
2/22/2002	TRW Inc	Salomon Smith Barney; Stephens Financial Group	Salomon Smith Barney was a syndications agent for a \$3.3 billion 364-day facility (active in January 2000 with maturity in January 2001), a \$1.5 billion 364-day facility active in January 2002 with maturity in January 2003, and a \$1.5 billion term loan active in January 2002 with maturity in January 2005. Salomon Smith Barney had a 14 percent share in both the latter 364-day facility and the term loan. Salomon Smith Barney was a co-manager of TRW notes issued in 2001, the joint book runner of TRW senior unsecured notes issued in 2000, the book runner of TRW medium-term floating rate notes issued in 2000, and the joint lead placement agent and global coordinator of TRW global bonds issued in 1999. Salomon Brothers was the book runner of TRW medium term notes issued in 1997.
9/23/2002	Dole Food Co Inc	Deutsche Bank AG	Dole Food used Deutsche Bank as an advisor when it sold a majority interest in Cerveceria Hondurena SA to South African Breweries PLC in 2001. Flexi-Van Leasing Inc, a unit of Dole Foods, used Deutsche Bank AG as its advisor in its merger with Castle & Cooke Inc in 2000 and in its acquisition of the marine chassis division of Transport International Pool in 2002. Deutsche Bank was also a participant in a \$200 million 364-day facility with Dole Food (August 2001 – August 2002) and held a 7.5 percent share of the facility. Deutsche Bank was a co-manager of Dole Food notes issued in 1998.
11/13/2002	Taubman Centers Inc	Merrill Lynch & Co Inc	Merrill Lynch was a co-manager of Taubman Centers cumulative perpetual preferred stock issued in 1997, and the book runner of Taubman Centers common stock issued in 1998.
1/15/2003	Taubman Centers Inc	Merrill Lynch & Co Inc; Citigroup	Merrill Lynch was the book runner of Taubman Centers common stock issued in 1998.
6/6/2003	PeopleSoft Inc	Credit Suisse First Boston Int	Vantive Corp used Credit Suisse First Boston when it was acquired by PeopleSoft in 1999.

Sources: Thomson Financial Securities Data; Loan Pricing Corporation; Pennzoil Co. Re Public Offerings, REGULATORY NEWS SERVICE, Oct. 11, 1993; Pennzoil Co. Completion of Public Offering, Pennzoil Co. Re Disposal of Subsid, etc., REGULATORY NEWS SERVICE, Oct. 28, 1992.