
Industry Variations of Relationship Banking in Mergers and Acquisitions

Zeynep Topaloglu

Department of Banking and Finance, Bursa Orhangazi University, Bursa, Turkey

Email address:

zeynep.topaloglu@bou.edu.tr

To cite this article:

Zeynep Topaloglu. Industry Variations of Relationship Banking in Mergers and Acquisitions. *Journal of Investment and Management*. Vol. 4, No. 6, 2015, pp. 409-418. doi: 10.11648/j.jim.20150406.25

Abstract: In this study we examine the acquirer-advisor relation in mergers and acquisitions. Among other issues we study the effect of this relation in major industry sectors. We have found that the average log abnormal return from acquirer-advisor relation is \$0.5 millions. Relationship advisers are rewarding in the range of \$1.5 millions to \$2.5 millions in all sectors except media, consumer products and services, high technology, industrials and real estate.

Keywords: Mergers and Acquisitions, Relationship Advisers, Relationship Banking, M & A Advising

1. Introduction

The rapid pace of mergers and acquisitions in recent years stimulated extensive research on this issue. Maximizing shareholder value, increasing market power or efficiency are proposed as the main motivations behind the merger activity; the details of consequences, the role of managers, the effect of financial conditions and deregulation issues are pointed out particularly. As an ancillary to this subject matter, M&A advising emerges as another theme.

This paper focuses primarily on the advising side of mergers, mainly the bidder advising using the SDC M&A data from the beginning of 1995 to the end of 2006. The impacts of the analysts over the merger success, the motivations behind hiring an advisor, the pricing and performance issues have been investigated in prior research to understand the reasoning behind advisor choice. Beyond the issues related to advisor choice, in this study we aimed to use the M&A advising as a tool to comprehend relationship banking or more broadly relationship intermediation. Acquirer-advisor relation will be treated as a proxy to examine the effect of prior relation between two parties over future advising activities.

Relationship banking in borrowing-lending framework is most directly intended to resolve information asymmetries, which is the main subject for financial intermediation literature. We can incorporate the know-how regarding the origin and scope of relationship banking, its potential informational and contractual benefits and its primary

problems like soft-budget constraint problem and the hold-up problem into M&A context with a parallel insight. The primary purpose of this paper is not to deal with the cost-benefit analysis of relationship banking but more to study the outcome of this relation in different industries.

We will start our discussion with a review of M & A advising and relationship banking literature in the following section. Then we will describe our data and methodology in the third section; and elaborate our results in the fourth one. In the fifth and last section we will conclude our discussion.

2. Literature Review

2.1. The Scope of Relationship Banking

Relationship banking is present when the financial intermediary gathers confidential information beyond what is publicly available through provision of multiple financial services, which is not the case in transactions-based services. Banks can obtain this customer specific information when they involve in screening¹ or monitoring services² and reuse this information in multiple occasions³.

Relationship banking has not been taken literally, it is a terminology also used for investment banks and other non-bank financial intermediaries like finance companies, as long as the financial services provided involve the propriety

1 For the analysis of screening: Allen, 1990; Ramakrishnan and Thakor, 1984

2 For banks providing monitoring services: Diamond, 1984; Winton, 1995

3 Information reusability: Chan *et al.* 1986

information and multiple interactions. While lending is the main service referred in the definition, the financial products like syndicated loans, underwriting public issues, the operations in private equity and private debt markets and other financial services like deposits, check clearing and letters of credit involve varying degrees of relationship. Degryse and Van Cayseele (2000) have argued the information obtained through the relationship in multiple services has value in lending. Likewise the lending and advising role of financial intermediaries in mergers and acquisitions are two faces of relationship banking.

2.2. Benefits and Problems of Relationship Banking

Motivations for relationship banking can be classified as informational and contractual benefits. Bhattacharya and Chiesa (1995) show the borrower may share the confidential information with its bank that it would otherwise never reveal to the market. Informational gains stemming from this interaction produce flexible contracts with more effective covenants and collaterals⁴, and reducing the moral hazard and adverse selection problems provides smoother contract terms for the borrower compared to transactions-based services. The relationship established through lending activity possessing a certification role, provides credibility for the borrower in public-debt markets as shown by Hoshi *et al.* (1993).

The major costs of relationship banking are the soft-budget constraint problem and the hold-up problem. The borrower knowing that the relationship bank, which is already loaned money, would easily extend credit to recover its previous loan, would be as Bolton and Scharfstein (1996) stated, reluctant to take necessary precautions to prevent poor outcomes. On the other hand in the hold-up problem, the information monopoly of the creditor might let him make loans with non-competitive terms like higher interest rates⁵.

2.3. Relationship Banking and Mergers and Acquisitions

2.3.1. The Link Between Relationship Banking and M & A

The connection between relationship banking and M&As in the literature mainly evolves around the question of whether relationship banking diminishes as a result of banking mergers. The main argument behind this debate is the larger institutions formed by M&As might prefer to offer less relationship-based credit to small borrowers because of organizational inconvenience of providing these services along with providing transactions-based services to large customers⁶. The change in the availability of services to small customers is one of the consequences of merger and acquisition activity besides the changes in the firm's market power and efficiency, payment system efficiency, and financial system safety and soundness.

On the other hand there is another link between M&A and relationship banking literature through M&A advising role held by financial intermediaries. Serving as the lender and the advisor in mergers, they hold a certification role in the merger process. Allen *et al.* (2004) found that this certification effect is positive for targets, yet neutral for acquirers. The target firm receives positive abnormal returns when its own bank is hired as the merger advisor since it certifies its value in the deal, whereas the acquirer would suffer from a similar situation, due to the concerns of the bank regarding previous and future lending activity between them.

2.3.2. Mergers and Acquisitions

As put forward by Berger *et al.* (1999) in their review, the main reason behind consolidations is to maximize shareholder value besides managers and governments' value. The value maximization would be realized by increasing market power or efficiency. Most of the literature employs abnormal returns framework using market based information to assess the results of mergers and acquisitions, yet the analysis based on financial performance are also available. The empirical evidence agreed on the positive and significant abnormal return for target firms; however the acquirer firms' return is, generally, not determined⁷.

Discussions regarding diversification, M & A announcements, tender offers, payment method in mergers, and target firms' book to market value built the body of research. Firstly, focus rather than diversification is proposed in mergers⁸, Berger and Ofek (1995) found a negative relationship between diversification and merger returns, supporting this proposition. Asquith *et al.* (1987) demonstrated the positive announcement effect in mergers and stock-based deals are associated with negative returns while cash payment is neutral in return. Rau and Vermaelen (1998) found that in the long-run value-oriented buyers (low book-to-market ratios) outperform glamour buyers (companies with high book-to-market value ratios) and there are positive returns to bidders in tender offers.

2.3.3. M & A Advising

The literature on M&A advising mostly deals with investment bank advising. Earlier studies were presenting higher returns for the acquirers when a high quality adviser was hired. However the recent empirical evidence suggests no positive return in hiring an advisor and no superiority of first-tier banks over lower-tier banks⁹. Allen *et al.* (2004) proposes the conflict of interest between acquirer and its bank advisor as a reason for this finding. On the other hand Hunter and Jagtiani showed that top tier acquirer advisors are more likely to complete the deals and complete them in less time compared to lower tier advisor.

4 For the analysis of collateral in long-term contracts: Boot and Thakor (1994)

5 Banks charging higher loan interest rates: Sharpe (1990) and Rajan (1992)

6 An empirical study and discussion on small business lending after M&As: Berger *et al.* (1998), Berger *et al.* (1999)

7 For a review of empirical evidence: Bruner, 2001

8 Focus increases share value: DeLong, 2001

9 Servaes and Zenner, 1996, Rau, 2000

3. Data and Methodology

3.1. Sample Construction

The sample used in this study consists of all completed and unconditional M&A transactions involving US acquirers and targets that are announced from January 1995 to December 2006. The data source is *Thomson Financials Securities Data Collection Platinum* (SDC) database. We have started identifying 46,625 transactions with the above condition and we have imposed some criteria. The first one was to drop the transactions with a value less than 50 million dollars, leaving 5612 transactions. Then, in order to compute the acquirer abnormal returns in the transactions, the deals with the missing values for acquirer's market data have been dropped. Out of 2068 transactions left, in 163 transactions the bidder company did not retain any advisor and in 281 transactions there was a prior relationship between the acquirer and advisor. To construct the second sample of 281 transactions, we have sorted all the mergers by the acquirers and advisors. Then first transaction of the same acquirer-advisor couple is assumed to be the reference point and dropped. As a result, in the remaining sample of relationship advisors, all the acquirer companies has a prior "M&A advising relationship" with his advisor.

3.2. Methodology

We have used an abnormal returns framework to determine the association between acquirer-advisor relation and the acquirer's industry sector. The definitions of the variables used in the regressions are presented in Table 1.

Table 1. Definition of Variables Used.

Variable Name	Variable Type	Variable Label
AAREL	Binary	Acquirer-Advisor Relation Dummy 1= Relationship acquirer advisor hired. 0= No acquirer advisor hired
VALUE	Continuous	Value of Transaction (\$mil)
AMV4WP	Continuous	Acquirer Market Val 4 Weeks Prior to Announcement (\$ mil)
TARMV4WP	Continuous	Tgt. Market Val 4 Weeks Prior to Announcement(\$ mil)
MARET	Continuous	Mean Adjusted Abnormal Return
AR	Continuous	Abnormal Return in Logs
AIND	Categorical	Acquirer Macro Code 1= Media 2= Finance 3= Consumer Products and Services (CPS) 4= High Technology 5= Health 6= Industrials 7= Telecommunications 8= Retail 9= Staples 10= Real Estate 11= Energy 12= Materials

Variable Name	Variable Type	Variable Label
TARIND	Categorical	Target Macro Code The same categories in acquirer Macro codes are used.
TARBVPS	Continuous	Target Book Value Per Share LTM (US\$)
TARCPA	Continuous	Target Closing Price At Announcement Date (\$)
P/B	Continuous	Offering Price/ Book Value
GEA	Continuous	Ratio of Total Debt to Shareholders Equity (Gearing)
TOTDF	Continuous	Total Deal Fees (\$mil)
NOAA	Continuous	Number of Acquirer Advisors
NOTARA	Continuous	Number of Target Advisors
IS	Binary	Intrastate 1= Intrastate 0= In-state
DEF	Binary	Defense 1= Target used defense strategy. 0= No defense.
AIMAN	Binary	Acquirer Includes Mgmt 1= Acquirer includes management 0= Management is not involved.
OCASH	Continuous	% of Cash used in the payment.
SAMEIND	Binary	Acquirer and Target Firms in the same industry 1= Acquirer and Target in the same industry. 0= Acquirer and Target in different industries.
TTCOMP	Continuous	Days to Complete Deal
T	Ordinal	Year: 1= 1995 2= 1996 3= 1997 4= 1998 5= 1999 6= 2000 7= 2001 8= 2002 9= 2003 10= 2004 11= 2005 12= 2006
AT	Categorical	Attitude 1= Friendly 2= Hostile 3= Neutral 4= Unsolic. 5= Not Appl.

Acquirer-Advisor Relationship Model:

The first regression is a logistic regression to test the factors that effect the decision to use a relationship advisor:

$$AAREL = \beta_0 + \beta_1 \text{TOTDF} + \beta_2 \text{AMV4WP} + \beta_3 \text{TARMV4WP} + \beta_4 \text{MARET} + \beta_5 \text{TARIND} + \beta_6 \text{IS} + \beta_7 \text{TTCOMP} + \beta_8 \text{T} + \beta_9 \text{VALUE} + \beta_{10} \text{SAMEIND} + \beta_{11} \text{OCASH} + \beta_{12} \text{AT} + \beta_{13} \text{GEA} + \beta_{14} \text{P/B} + \beta_{15} \text{TARBVPS} + \varepsilon$$

Abnormal Returns Model-1

The second regression is an OLS regression where the significance of acquirer advisor relation is tested with a dummy variable:

$$AR = \beta_0 + \beta_1 AAREL + \varepsilon,$$

where the dummy variable gets a value of 1 when there is a prior M&A advising relation between the acquiring company and advisor, and zero otherwise. The coefficient incorporates the information regarding the absence of adviser relation.

Afterwards to show the outcome of prior relationship in different industries, the sample has been divided into twelve subgroups of acquirer major industry sectors (MIS): media, finance, consumer products and services (CPS), high technology, health, industrials, telecommunications, retail, staples, real estate, energy and materials. We have run the same regression in these groups.

To calculate the abnormal returns, first we identified the returns. Returns are defined as the return of the target company¹⁰ in the stock market from 4 weeks prior to 4 weeks after the announcement date of the merger. Abnormal returns are the logarithm of the sample mean adjusted values of the returns defined above.

Abnormal Returns Model - 2

Lastly to test the robustness of the model, total deal fees, the value of the transaction, target closing price at announcement, offering price to book value, gearing, number of acquirer advisors, number of target advisors, intrastate, defense, managerial involvement to the bidder side, percentage of cash payment, acquirer and target being in the same industry, year and time to complete the transaction are included into the model. The regression turns out to be:

$$AR = \beta_0 + \beta_1 \text{TOTDF} + \beta_2 \text{VALUE} + \beta_3 \text{TARCPA} + \beta_4 \text{P/B} + \beta_5 \text{GEA} + \beta_6 \text{NOAA} + \beta_7 \text{NOTARA} + \beta_8 \text{IS} + \beta_9 \text{DEF} + \beta_{10} \text{AIMAN} + \beta_{11} \text{OCASH} + \beta_{12} \text{SAMEIND} + \beta_{13} \text{T} + \beta_{14} \text{TTCOMP} + \beta_{15} \text{TARBVPS} + \varepsilon$$

We expect total deal fees and the number of acquirer and target advisors to improve the abnormal returns since they can be considered as a proxy to the contribution of advisors in the model. The value of the transaction and the target closing price at announcement date present the size and complexity of the deal and the size of the target and supposed to have significantly positive influence. Regarding the effect of financials, the coefficient of P/B ratio presumed to be positive, while the coefficient for gearing should be negative. Likewise intrastate, defense and time to complete the transaction are supposed to deteriorate returns. On the other hand the presence of management in the acquirer side, the percentage of cash payment, same industry merger and year are assumed to contribute to the regression.

4. Results

4.1. Summary Statistics

Table 2a represents the distribution of the advisors to the years in the sample. More than sixty percent of the sample is

coming from the year 1997 to 2000. We have 281 transactions with acquirer-advisor relationship, which makes the 63.29 percent of the total sample. Out of these 281 mergers, 216 of them contain one relationship advisor; the remaining 65 include more than one relationship advisor. The number of advisors exceeds one after 1997. From 1998 to 2000 the number of mergers with multiple advisors was augmented by two to three fold, later it doubled again in 2005. We have 163 mergers completed without any acquirer advisors. This group lies in 1995-2001 period, with the bulk in three years from 1997 to 1999. After 2001, all transactions were completed hiring at least one relationship advisor.

Our sample shows the elevation of mergers in 1997. The companies were completing mergers with or without advisors; we can say before that the amount of deals including or excluding advisor were more or the less evenly balanced. As the number of transactions in both groups went up, the balance faded out towards exclusion of advisors, yet we also observe the use of multiple advisors with this boom. Towards the end of that merger balloon, multiple advisors became popular. In 2000 when merger balloon started to burst with a sharp drop in transactions without advisors, we witness the highest percentage of multiple advisors in total for that stage. The merger wave totally disappears in 2002 putting an end to the no-advisor mergers. Then in 2005, we observe an increase in the number of mergers and acquisitions again. It is reflected on the mergers with multiple advisors.

Table 2b and Figure 1 displays the density and distribution of mergers and acquisitions of the major industry sectors. Finance, high technology and health constitute more than sixty percent of the M&As. 154 mergers in finance industry with 34.68% in total is the top consolidated industry. It is followed by 88 deals of high technology with 19.82% in total. The third one is health with 48 transactions which makes 10.81% of total mergers and acquisitions. For the remaining industries we observe that media, consumer products and services, industrials, telecommunications and energy demonstrate higher consolidation than retail, staples and real estate industries.

Most of the industries accomplished same industry mergers, yet the percentages vary for each. Overall, 81.98% of all mergers are horizontal mergers. Except consumer products and services, staples and materials, in all industries the amount of horizontal mergers is higher than 60%. In industries like finance, retail and real estate the percentage goes up even further, more than 90% of the deals are in the same industry. Financial industry pioneering the horizontal mergers has 148 same industry mergers out of 154 total deals with a percentage of 96.1.

The amount of deals with relationship advisors lies between 50% and 70% in most of the industries. Health being the first with 89.58%, in consumer products and services, telecommunications and materials more than 70% of the deals employ relationship advisors. Unexpectedly, with 53.9% of deals using relationship advisor, finance industry seems to be indifferent to relationship advisors.

¹⁰ In his review Bruner (2001) shows the significant positive returns to target firm as a result of mergers, however the return to acquirer firms are undetermined. Since the main purpose of the paper is not to examine the results of the merger itself but the influence of the relationship advising, we have taken this information given.

Table 2a. Distribution of Advisors.

Years	Number	% of Total	Number of Transactions							
			Without Advisor	% of Total	With Advisor	% of Total	With One Advisor	% of Total	With More Than One Advisor	% of Total
1995	16	3.60%	8	1.80%	8	1.80%	8	1.80%		
1996	27	6.08%	10	2.25%	17	3.83%	17	3.83%		
1997	56	12.61%	27	6.08%	29	6.53%	26	5.86%	3	0.68%
1998	96	21.62%	47	10.59%	49	11.04%	41	9.23%	8	1.80%
1999	99	22.30%	67	15.09%	32	7.21%	23	5.18%	9	2.03%
2000	42	9.46%	2	0.45%	40	9.01%	29	6.53%	11	2.48%
2001	25	5.63%	2	0.45%	23	5.18%	17	3.83%	6	1.35%
2002	15	3.38%			15	3.38%	12	2.70%	3	0.68%
2003	16	3.60%			16	3.60%	14	3.15%	2	0.45%
2004	12	2.70%			12	2.70%	9	2.03%	3	0.68%
2005	28	6.31%			28	6.31%	13	2.93%	15	3.38%
2006	12	2.70%			12	2.70%	7	1.58%	5	1.13%
Total	444	100.00%	163	36.71%	281	63.29%	216	48.65%	65	14.64%

Table 2b. Distribution of Industries.

Acquirer Macro Industry	Number	% of Total	Number of Transactions							
			Same Industry	% of Total	% of Industry	Without Advisor	% of Total	With Advisor	% of Total	% of Industry
MEDIA	23	5.18%	16	3.60%	69.57%	10	2.25%	13	2.93%	56.52%
FINANCE	154	34.68%	148	33.33%	96.10%	71	15.99%	83	18.69%	53.90%
CPS	17	3.83%	6	1.35%	35.29%	5	1.13%	12	2.70%	70.59%
HT	88	19.82%	67	15.09%	76.14%	35	7.88%	53	11.94%	60.23%
HEALTH	48	10.81%	44	9.91%	91.67%	5	1.13%	43	9.68%	89.58%
IND	20	4.50%	17	3.83%	85.00%	8	1.80%	12	2.70%	60.00%
TELECOM	26	5.86%	16	3.60%	61.54%	7	1.58%	19	4.28%	73.08%
RETAIL	10	2.25%	9	2.03%	90.00%	3	0.68%	7	1.58%	70.00%
STAPLES	9	2.03%	5	1.13%	55.56%	3	0.68%	6	1.35%	66.67%
REALEST	10	2.25%	9	2.03%	90.00%	4	0.90%	6	1.35%	60.00%
ENERGY	27	6.08%	22	4.95%	81.48%	9	2.03%	18	4.05%	66.67%
MATERLS	12	2.70%	5	1.13%	41.67%	3	0.68%	9	2.03%	75.00%
Total	444	100.00%	364	81.98%	81.98%	163	36.71%	281	63.29%	63.29%

Distribution of M&As among Industries

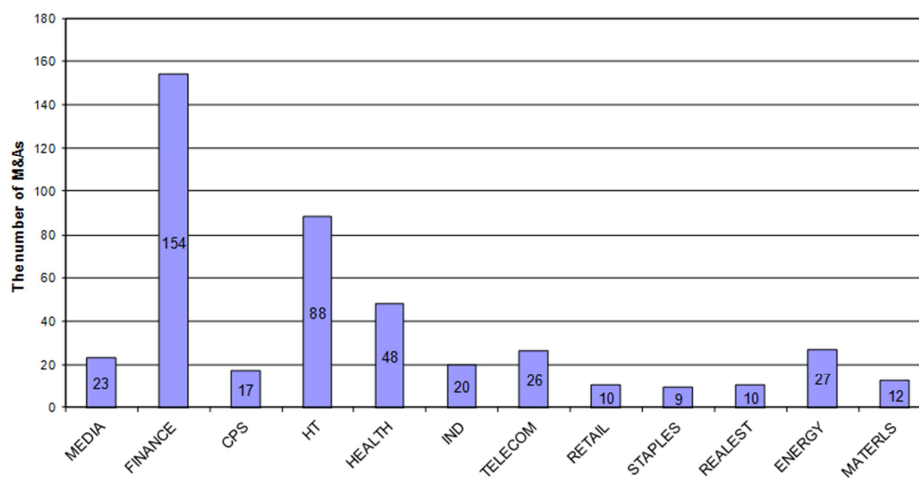


Figure 1. Distribution of M&A's among industries.

Table 3a represents the descriptive statistics for two sub-samples, M & As with acquirer employing relationship

advisor and M & As without acquirer advisor. The second sample works as a control group for the first one. The values

in the table are mean values for each variable, below which in italics standard deviations can be found. In the table the statistics regarding returns, values, advisors, financials and deal listed in order.

Examining the return and value statistics, for the acquirer we observe the superiority of employing a relationship advisor over not employing any. Logarithm of abnormal returns in the first group is 0.57 million dollars while in the second group it is a loss of 0.94 million dollars.¹¹ Using a relationship advisor brings on average mean adjusted 317.5 million dollars to the acquirer. Likewise, the mean value of transaction is more than eight fold higher when there is a relationship advisor compared to a transaction without any acquirer advisor. The size of the deal can be considered as a proxy for complexity of the deal. Higher transaction value shows that the target is more complex and hard to execute. For that reason acquirers would prefer to use relationship advisors in those deals.

The statistics regarding advisors show that, the control group contains target advisors; however the mean is lower, confirming that the likelihood of not hiring a target advisor is higher when there is no acquirer advisor. As expected the mean total deal fees are excessive when both acquirer and target hire an advisor.

In the sample with acquirer advisor relationship, the target's book value per share is on average \$10.53 which is higher than the control group value of \$9.29. Both numbers are lower than the mean closing price for the target at announcement date, implying that the companies are on average overvalued in the market. On the other hand we can consider this difference as a positive expectation regarding target companies; in essence the market believes that target companies have more than their accounting value. Price to book ratio as well contains information regarding overvaluation. The P/B ratio for the first group is 6.90 while for the control group it is 6.17, indicating the same intuition stated above. The debt to equity ratios demonstrate that the targets are riskier in the control group compared to the sample with relationship advisors. The mean gearing of the target company is 4.51 when the acquirer hires a relationship advisor, yet it is 4.78 when acquirer hires no advisor. Therefore it can be stated that relationship advisor has a positive effect on selecting stronger targets.

Deal statistics show the deal properties of both groups. In our sample acquirer companies do not include managers, and on average they have a friendly attitude¹², in exchange of which, target companies do not follow a defense strategy. Another property of the sample that is valid for the both groups is the industry focus. About 80% of the sample is composed of consolidations in the same industry.

On the other hand, we observe that the deals without an advisor are concentrated around the year 1998¹³ while the

average for the other is the year 2000¹⁴. Hence we can conclude that there is a higher demand for relationship advising in recent years. Regarding the time to complete the deals, there is difference between two groups. It takes on average 138.69 days to complete the transaction when there is no acquirer advisor which is faster, compared to 144.6 days of the deals where there is a relationship advisor. At this point, we should note that one reason behind that longer span is the complexity of the deals in the first group. Another reason can be the payment method of the deal. Higher percentage of the cash payment in the deals without an advisor makes them to be completed faster since in cash bids acquirers do not need to engage in share registry and target shareholders would prefer the certainty of cash payment¹⁵. Lastly, the percentage of intrastate transactions are more or the less equal for both groups.

Table 3a. Descriptive Statistics.

		Sample With Relationship Advisor	Sample Without Acquirer Advisor
Returns	Number of Observations	281.00	163.00
	AR	0.57 <i>1.78</i>	-0.94 <i>1.39</i>
Values	MARET	317.50 <i>3517.29</i>	-547.35 <i>376.65</i>
	VALUE	4600.46 <i>14082.89</i>	551.79 <i>1867.22</i>
	AMV4WP	25679.46 <i>49790.50</i>	30461.62 <i>71011.67</i>
	TARMV4WP	3091.12 <i>9087.17</i>	385.84 <i>1422.36</i>
	TARCPA	34.08 <i>28.64</i>	23.85 <i>22.35</i>
Advisors	NOAA	1.30 <i>0.62</i>	
	NOTARA	1.27 <i>0.57</i>	1.08 <i>0.30</i>
	TOTDF	12.58 <i>17.72</i>	2.82 <i>4.50</i>
Financials	TARBVPS	10.53 <i>8.77</i>	9.29 <i>8.23</i>
	P/B	6.90 <i>25.42</i>	6.17 <i>32.00</i>
	GEA	4.51 <i>13.06</i>	4.78 <i>4.73</i>
Deal	AIMAN	0.00 <i>0.00</i>	0.00 <i>0.00</i>
	AT	1.04 <i>0.26</i>	1.02 <i>0.31</i>
	DEF	0.00 <i>0.00</i>	0.00 <i>0.00</i>
	SAMEIND	0.81 <i>0.39</i>	0.83 <i>0.37</i>
	T	6.13	4.04

11 It should be kept in mind that these figures are in logarithms. The actual mean abnormal return for the relationship advising sample is 317.5 million dollars.

12 Mean attitude is 1.04 where 1 stands for friendly.

13 Mean year is 4.04 where 4 stands for the year 1998.

14 Mean year is 6.1 where 6 stands for the year 2000.

15 Percentage of cash payment is higher in the no-advisor group.

	Sample With Relationship Advisor	Sample Without Acquirer Advisor
	2.99	1.20
TTCOMP	144.60	138.69
	105.43	72.43
OCASH	73.47	89.70
	31.51	22.77
IS	0.21	0.26
	0.41	0.44

Table 3b represents the descriptive statistics for the industries. The data exhibits interesting properties. The mean value for the logarithm of abnormal returns in the industries finance and consumer products and services are negative

while for the rest it is positive. The highest mean value of transaction is in the telecommunications industry with 9.6 billion dollars and the highest average for the number of acquirer advisors is as well in this industry. As a result, telecommunications industry pays the highest average total deal fees of \$22.49 million among other industries. Furthermore the average P/B ratio for telecommunications is 24.59, showing the amount of overvaluation in the target companies, and 13.75 debt-to-equity ratio implies that they engage in high risk transactions on average. On the other hand, the longest time to complete the transactions can be found in the energy sector with an average of 205.81 days. Regarding the percentage of cash payment, we observe that 100% of real estate mergers were paid in cash.

Table 3b. Descriptive Statistics II.

		Industries											
		Media	Finance	CPS	HT	Health	IND	Telecom	Retail	Staples	Realest	Energy	Materls
Returns	Number of Observations	23.00	154.00	17.00	88.00	48.00	20.00	26.00	10.00	9.00	10.00	27.00	12.00
	AR	0.44	-0.79	-0.15	0.23	0.40	0.38	1.47	0.21	1.48	0.40	0.48	0.29
	MARET	171.95	-390.11	-433.29	380.98	255.83	-249.74	1230.26	-418.31	463.33	-267.47	-37.90	-466.63
Values		2540.58	1067.25	570.55	4850.79	3286.21	668.05	4620.41	418.26	1388.34	714.45	1053.97	633.86
	VALUE	2453.54	2169.32	1073.94	3482.88	5319.23	1493.83	9599.66	924.88	3553.53	936.25	2344.88	1559.73
		5065.14	7058.08	2666.94	18029.79	15866.76	1880.72	16461.19	1014.01	5898.46	1401.21	3912.84	2644.98
	AMV4WP	9410.89	17462.96	9709.05	45726.42	45176.21	11335.29	77071.34	9036.27	22914.04	4370.53	8874.54	8960.00
		11198.61	43850.63	18403.97	89065.58	64277.77	10926.60	75970.52	7309.50	35234.88	4590.02	12561.64	10617.46
Advisors	TARMV4WP	1457.85	1671.93	796.31	1866.69	4002.56	974.84	6375.58	582.30	2176.95	497.10	1708.74	1002.08
		2412.22	5871.92	2144.85	9130.17	11701.37	1239.11	12437.77	528.74	3806.05	628.94	3065.58	1660.05
	TARCPA	26.13	32.10	19.14	29.72	37.00	31.25	36.04	26.40	26.09	15.93	27.77	19.38
		22.44	24.74	12.85	39.05	26.50	19.96	22.99	14.25	10.67	7.55	20.45	17.76
	NOAA	1.46	1.18	1.08	1.23	1.28	1.42	1.68	1.14	1.50	1.50	1.61	1.22
Financials		0.66	0.63	0.29	0.51	0.59	0.51	0.75	0.38	0.55	0.84	0.92	0.44
	NOTARA	1.36	1.11	1.12	1.13	1.42	1.20	1.46	1.20	1.11	1.00	1.15	1.58
		0.79	0.32	0.33	0.33	0.77	0.41	0.81	0.42	0.33	0.00	0.36	0.79
	TOTDF	9.93	5.74	8.12	8.92	11.02	10.95	22.49	5.93	9.93	4.41	7.21	9.80
		11.05	10.62	11.56	17.07	18.80	13.91	27.70	8.79	10.89	4.77	9.50	11.00
Deal	TARVPS	6.16	14.56	6.23	5.73	8.02	11.10	6.67	10.19	12.21	12.79	10.23	6.82
		6.98	9.92	4.19	4.36	7.75	7.93	6.88	7.01	7.71	7.20	6.19	8.93
	P/B	5.16	2.77	4.10	12.39	7.10	3.57	24.59	3.50	3.11	1.59	3.14	5.03
		5.49	1.62	3.09	44.34	5.62	1.95	81.59	2.34	1.21	0.93	1.83	4.93
	GEA	1.26	8.26	1.17	0.83	0.95	1.29	13.75	3.29	1.10	1.93	1.65	0.79
Deal		1.22	4.43	1.63	2.10	1.94	1.06	44.81	5.53	0.80	2.66	2.59	0.73
	AIMAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AT	1.00	1.03	1.00	1.06	1.04	1.10	1.00	1.00	1.00	1.00	1.04	1.08
		0.00	0.32	0.00	0.38	0.20	0.31	0.00	0.00	0.00	0.00	0.19	0.29
	DEF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SAMEIND	0.70	0.96	0.35	0.76	0.92	0.85	0.62	0.90	0.56	0.90	0.81	0.42
		0.47	0.19	0.49	0.43	0.28	0.37	0.50	0.32	0.53	0.32	0.40	0.51
	T	5.30	5.14	3.82	5.41	5.60	5.50	6.58	5.30	6.00	4.40	6.00	5.25
		2.58	2.80	2.46	2.31	2.94	2.21	3.07	2.79	2.35	1.26	3.21	1.86
TTCOMP	149.65	161.97	98.41	101.20	114.33	160.85	180.65	125.30	160.11	113.90	205.81	123.50	
Deal		71.53	50.76	37.00	49.96	75.79	189.37	140.05	83.18	99.64	38.04	208.18	63.67
	OCASH	70.80	71.04	93.80	89.58	87.94	76.19	61.19	62.61	73.72	100.00	79.62	76.49
		32.91	31.42	13.87	24.12	26.65	29.76	36.44	38.67	23.63	0.00	29.45	38.91
	IS	0.30	0.31	0.06	0.30	0.04	0.20	0.12	0.00	0.11	0.10	0.26	0.08
		0.47	0.46	0.24	0.46	0.20	0.41	0.33	0.00	0.33	0.32	0.45	0.29

4.2. Models

Acquirer-Advisor Relationship Model

Table 4 displays the results of the logistic regression. Total deal fees, acquirer and target market values 4 weeks prior to transaction, time and value of the transaction are significant at the 5% level. Odds ratio shows that acquirer and target market values 4 weeks prior to transaction and the value of the transaction are equally likely in both groups. However total deal fees and time have a positive relation with the presence of acquirer advisor relation. An additional \$ 1 million in total deal fees increases the odds of using relationship advisor by a factor of 2.33. Total deal fees can be considered as a proxy for the quality of the advisors and the complexity of the deals. When the deal size is significant and the target is large, advisors charge higher fees and the acquirers would prefer to employ the advisors they trust. Therefore it is reasonable to observe the positive association between the deal fees and the choice of relationship advisor. Furthermore, a rise of one year in the time of the transaction improves the odds of using relationship advisor by 3.74 times. The reason behind this finding can be the confidence and trust built up between the acquirer and advisor as time passes. If the acquirer is satisfied with the previous jobs of the advisor, it would be more inclined to work with the same company rather than a new and unknown one. This outcome satisfies the informational benefits hypothesis of relationship banking literature.

Mean adjusted return, target's industry, P/B ratio, book value per share, gearing, transaction being intrastate or in the same industry, the time to complete it, the percentage of cash payment are not significant in the decision to use a relationship advisor.

Table 4. *Acquirer-Advisor Relationship Model.*

	Coefficients	Odds Ratio
TOTDF	0.8477303*	2.334343*
	<i>3.12</i>	<i>3.12</i>
AMV4WP	-0.0000381*	0.9999619*
	<i>-2.22</i>	<i>-2.22</i>
TARMV4WP	0.0149318*	1.015044*
	<i>2.62</i>	<i>2.62</i>
MARET	0.0021039	1.002106
	<i>0.67</i>	<i>0.67</i>

Table 5. *Abnormal Returns Model-I.*

	Total	Media	Finance	Cps	Ht	Health	Ind	Telecom	Retail	Staples	Realest	Energy	Materls
No. of Obs.	400	20	142	15	77	45	18	22	9	8	9	24	11
Constant	-0.9437*	-0.3609	-1.5750	-0.9451	-0.2282	-1.4088	-0.1334	-0.2322	-0.8892	-0.0784	0.0434	-0.7706	-1.4311*
	<i>-7.02</i>	<i>-0.65</i>	<i>-8.37</i>	<i>-1.7</i>	<i>-0.74</i>	<i>-1.96</i>	<i>-0.25</i>	<i>-0.3</i>	<i>-1.35</i>	<i>-0.14</i>	<i>0.06</i>	<i>-1.52</i>	<i>-2.46</i>
AAREL	1.5108*	1.4481	1.4582*	1.1982	0.7617	2.0296*	0.8358	2.3472*	1.6456*	2.4881*	0.6429	1.8759*	2.3701*
	<i>8.89</i>	<i>1.95</i>	<i>5.67</i>	<i>1.76</i>	<i>1.91</i>	<i>2.66</i>	<i>1.21</i>	<i>2.61</i>	<i>2.04</i>	<i>3.46</i>	<i>0.67</i>	<i>3.02</i>	<i>3.47</i>
R-squared	0.1657	0.1737	0.1866	0.1929	0.0466	0.1411	0.0839	0.2540	0.3720	0.6666	0.0597	0.2925	0.5720

* Significant at the 5 % level.

The abnormal returns model ' $\text{Log}(\text{Abnormal Returns}) = \beta + \beta \text{ acquirer-advisor relationship} + \varepsilon$ ' is estimated using an OLS regression. The dependent variable in all cases is the logarithm of the abnormal returns. The numbers in italics are the t-statistics for the variable above.

	Coefficients	Odds Ratio
TARIND	0.1930939	1.212997
	<i>1.17</i>	<i>1.17</i>
IS	-2.143171	0.1172824
	<i>-1.52</i>	<i>-1.52</i>
TTCOMP	-0.0068809	0.9931427
	<i>-1.35</i>	<i>-1.35</i>
T	1.320643*	3.74583*
	<i>2.96</i>	<i>2.96</i>
VALUE	-0.0108832*	0.9891758*
	<i>-2.57</i>	<i>-2.57</i>
SAMEIND	-0.9380254	0.3913999
	<i>-1.01</i>	<i>-1.01</i>
OCASH	-0.0361571	0.9644888
	<i>-1.85</i>	<i>-1.85</i>
AT	-0.7137831	0.4897878
	<i>-0.92</i>	<i>-0.92</i>
GEA	0.3709398	1.449096
	<i>1.8</i>	<i>1.8</i>
P/B	0.1592554	1.172637
	<i>0.93</i>	<i>0.93</i>
TARVPS	0.1303441	1.13922
	<i>1.79</i>	<i>1.79</i>
CONS	-4.420985	
	<i>-1.16</i>	
Pseudo R2	0.634	0.634

* Significant at the 5 % level.

The acquirer-advisor relationship model ' $\text{Acquirer-Advisor Relation} = \beta_0 + \beta_1 \text{ total deal fees} + \beta_2 \text{ acquirer market value 4 weeks prior to announcement} + \beta_3 \text{ target market value 4 weeks prior to announcement} + \beta_4 \text{ mean adjusted abnormal return} + \beta_5 \text{ target macro code} + \beta_6 \text{ intrastate} + \beta_7 \text{ time to complete the deal} + \beta_8 \text{ year} + \beta_9 \text{ value of the transaction} + \beta_{10} \text{ same industry} + \beta_{11} \text{ percent of cash} + \beta_{12} \text{ attitude} + \beta_{13} \text{ gearing} + \beta_{14} \text{ P/B ratio} + \beta_{15} \text{ target book value per share} + \varepsilon$ ' is estimated using logistic regression. The numbers in italics are the z-statistics for the variable above.

Abnormal Returns Model -1

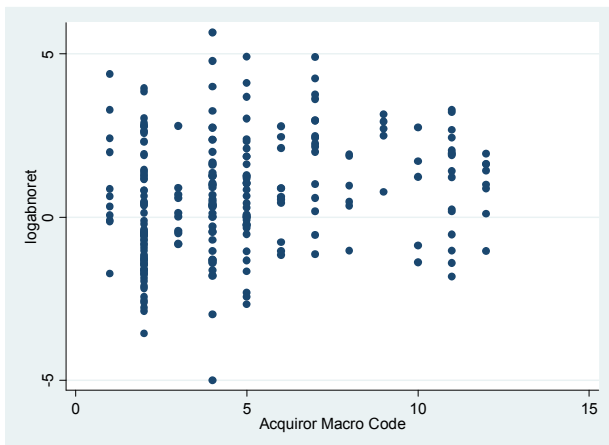
The results of the model are presented in the Table 5. The coefficient for the acquirer-advisor relationship is significantly positive for the whole sample. Advisor relationship increases log of abnormal returns by \$1.5 million.

Relationship advisor is not significant in media, consumer products and services, high technology, industrials and real estate industries. The presence of relationship advisor in a transaction increases the log abnormal returns by \$1.46 million in Finance, \$2.03 million in Health, \$2.35 million in Telecommunications, \$1.64 million in Retail, \$2.49 million in Staples, \$1.87 million in Energy, and \$2.37 million in Materials.

Figure 2a and 2b demonstrates the distribution of abnormal returns to the industries in two cases. In the first graph, there is relationship advising, while in the second one there is no advisor.

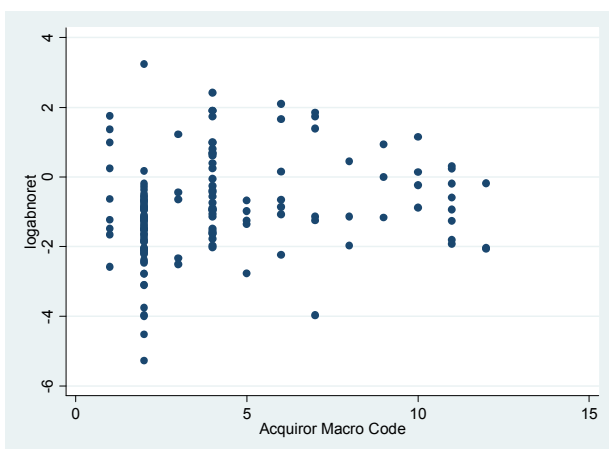
Abnormal Returns Model-2

Table 6 represents the outcome for the second abnormal returns model. The number of acquirer and target advisors, intrastate, the percentage of cash payment, same industry acquisition, year and time to complete the transaction are not significant. On the other hand total deal fees, value of the transaction, target closing price at the announcement and P/B ratio have significantly positive impact on the abnormal returns, while debt-to equity ratio has a negative impact.



*Mean value is 0.57 million dollars.

Figure 2a. Sample with Relationship between Acquirer and Advisor.



*Mean value is -0.94 million dollars.

Figure 2b. Sample Without Acquirer Advisor.

Table 6. Abnormal Returns Model-2.

	Coefficients
TOTDF	0.043518*
	<i>2.38</i>
VALUE	0.0000733*
	<i>2.01</i>
TARCPA	0.0229557*
	<i>2.15</i>
P/B	0.0753676*
	<i>2.81</i>
GEA	-0.0865124*
	<i>-2.34</i>
NOAA	0.3109213
	<i>0.79</i>
NOTARA	0.2364301
	<i>0.81</i>
IS	0.5156145
	<i>0.99</i>
OCASH	-0.0069311
	<i>-0.94</i>
SAMEIND	0.2412365
	<i>0.64</i>
T	-0.0649156
	<i>-0.97</i>
TTCOMP	-0.0007589
	<i>-0.45</i>
CONS	-0.7772764
	<i>-0.72</i>
R-squared	0.6955
* Significant at the 5 % level.	

The abnormal returns model 'Log (Abnormal Returns)= $\beta_0 + \beta_1$ total deal fees+ β_2 value of the transaction+ β_3 target closing price at announcement + β_4 P/B ratio + β_5 gearing + β_6 number of acquirer advisors+ β_7 number of target advisors+ β_8 intrastate+ β_9 percent of cash+ β_{10} same industry+ β_{11} year+ β_{12} time to complete the transaction+ ϵ ' is estimated using an OLS regression. The numbers in italics are the t-statistics for the variable above.

5. Conclusion

In this paper we examine the role of M&A advising in major industry sectors. We used a sample of 444 completed US transactions from Thomson Financial SDC Platinum Database. We have started our analysis by examining the motivations behind the choice of acquirer-advisor relationship. Deal fees and the time realized to be the most important motivations. When the deals are large and complex, the acquirers choose the advisors they rely on. In addition, as time passes as the confidence and trust between the two parties improve, there is a tendency in acquirers to use relationship-advisors.

Furthermore, we have found the positive effect of relationship advising over abnormal returns. Macro industries Finance, Health, Telecommunications, Retail, Staples, Energy and Materials observe this positive influence, yet Media, Consumer Products and Services, High Technology, Industrials and Real Estate do not receive any contribution from relationship advising.

Finally, we checked the robustness of our model and get

the results for fees, deal size, target closing price, P/B ratio and gearing that we anticipated. This study tries to fulfill the need for the expansion of relationship advising literature into industry specification. The reasons and consequences of the findings regarding the industry differences of relationship advising need further research to be done.

References

- [1] Allen, F. (1990). The market for information and the origin of financial intermediation, *J. Finan. Intermed.* 1, 3–30.
- [2] Allen, L., J. Jagtiani, S. Preistiani, and A. Saunders. (2004). The role of commercial bank advisors in mergers and acquisitions, *Journal of Money, Credit, and Banking*, 36, No. 2.
- [3] Berger, A. (1999). The ‘Big Picture’ of relationship finance, in “Business Access to Capital and Credit” (J. L. Blanton, A. Williams, and S. L. Rhine, Eds.), pp. 390–400. A Federal Reserve System Research Conference.
- [4] Berger, A. N., R. S. Demsetz, and P. E. Strahan. (1999) “The Consolidation of the Financial Services Industry: Causes, Consequences, and Implications for the Future,” *Journal of Banking and Finance*. 23, 135-194.
- [5] Berger, A., Saunders, A., Scalise, J. M., and G. F. Udell (1998). The effects of bank mergers and acquisitions on small business lending, *J. Finan. Econ.* 50, 187–230.
- [6] Berger, P. G., and E. Ofek. (1995) “Diversification’s Effect on Firm Value,” *J. Finan. Econ.* 37, 39-65.
- [7] Bhattacharaya, S., and Chiesa, G. (1995). Proprietary information, financial intermediation, and research incentives, *J. Finan. Intermed.* 4, 328–357.
- [8] Bolton, P., and Scharfstein, D. S. (1996). Optimal debt structure and the number of creditors, *J. Polit. Econ.* 104, 1–25.
- [9] Boot, Arnoud W. (2000) “Relationship Banking: What Do We Know?” *J. Finan. Intermed.* 9, 7-25.
- [10] Boot, A. W. A., and Thakor, A. V. (1994). Moral hazard and secured lending in an infinitely repeated credit market game, *Int. Econ. Rev.* 35, 899–920.
- [11] Bruner, R. (2002) Does M & A pay? A survey of evidence for the decision-maker, *Journal of Applied Finance*. Vol. 12, pp. 48–68.
- [12] Chan, Y., Greenbaum, S. I., and Thakor, A. V. (1986). Information reusability, competition and bank asset quality, *J. Banking Finance* 10, 255–276.
- [13] Chang, X., Shekhar, C., Tam, L., & Zhu, A. (2010). Prior relationship, industry expertise, information leakage, and the choice of M & A advisor. *SSRN Working Paper Series*.
- [14] Francis, B. B., Hasan, I., & Sun, X. (2014). Does relationship matter? The choice of financial advisors. *Journal of Economics and Business*, 73, 22-47.
- [15] Degryse, H., and van Cayseele, P. (2000). Relationship lending within a bank-based system: Evidence from European small business data, *J. Finan. Intermed.* 9, 90–109.
- [16] DeLong, Gayle (2001), “Stockholder Gains from Focusing versus Diversifying Bank Mergers.” *Journal of Financial Economics* 59: 2 (February), 221-252.
- [17] Diamond, D. (1984). Financial intermediation and delegated monitoring, *Rev. Econ. Stud.* 51, 393–414.
- [18] Hoshi, T., Kashyap, A., and Scharfstein, D. (1993). “The Choice between Public and Private Debt: An Analysis of Post-deregulation Corporate Financing in Japan,” NBER Working Paper, 4421.
- [19] Ismail, A. (2010). Are good financial advisors really good? The performance of investment banks in the M & A market. *Review of Quantitative Finance and Accounting*, 35(4), 411-429.
- [20] Kisgen, D. J., & Song, W. (2009). Are fairness opinions fair? The case of mergers and acquisitions. *Journal of Financial Economics*, 91(2), 179-207.
- [21] Kolasinski, A. C., & Kothari, S. P. (2008). Investment banking and analyst objectivity: Evidence from analysts affiliated with mergers and acquisitions advisors. *Journal of Financial and Quantitative Analysis*, 43(04), 817-842.
- [22] Rajan, R. (1992). Insiders and outsiders: The choice between relationship and arms length debt, *J. Finance* 47, 1367–1400.
- [23] Ramakrishnan, R. T. S., and Thakor, A. V. (1984). Information reliability and a theory of financial intermediation, *Rev. Econ. Stud.* 51, 415–432.
- [24] Rau, P. R. (2000) Investment bank market share, contingent fee payments, and the performance of acquiring firms, *Journal of Financial Economics* 56, 293-324.
- [25] Rau, R. P., and T. Vermaelen. (1998) Glamour, value and the post-acquisition performance of acquiring firms, *Journal of Financial Economics* 49, 223-253.
- [26] Sharpe, S. (1990). Asymmetric information, bank lending and implicit contracts: A stylized model of customer relationships, *J. Finance* 45, 1069–1087.
- [27] Song, W., Wei, J. D., & Zhou, L. (2013). The value of “boutique” financial advisors in mergers and acquisitions. *Journal of Corporate Finance*, 20, 94-114.
- [28] Winton, A. (1995). Delegated monitoring and bank structure in a finite economy, *J. Finan. Intermed.* 4, 158–187.