The Impacts of Interbank Connections: Evidence from Mergers and Acquisitions

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The paper identifies the difference between connected and unconnected deals and examines the impact of the interbank connections among M&A deals. Deals with connected advisors are generally more complex and larger than the ones without. In addition, target valuation is significantly higher for deals with connected advisors than the ones without. However, the completion rate is generally indifferent between the two types of deals, but the completion time is typically shorter for the deals with connected advisors. Moreover, targets' announcement returns are significantly positive when connected advisors are hired. Overall, it appears that interbank connections benefit the target firms.

INTRODUCTION

The Merger and Acquisition (M&A) deals have grown dramatically both in terms of size and volume over the last two decades. Although it is not required by law to hire financial advisors for M&A transactions, investment banks advised on over 85% of these deals by transaction value (Golubov et al., 2011). Investment banks specialize in reducing information asymmetry between the acquirers and targets. As financial advisors, they can use their expertise to gather information from both parties and process it efficiently. Because of this, an appropriate price that benefits both acquirer and target can be derived, and the deal can be completed in a timely fashion. Investment banks will receive their advisory fee upon the completion of the deal, which is one of their main revenue streams.

Between 1990 and 2015, there are over 10,000 M&A deals worldwide that hire at least one financial advisor. Financial advisors are typically hired to explore strategic opportunities that can maximize shareholder value or expand its businesses. To avoid conflict of interests, acquirers and targets often hire different financial advisors. However, in some extreme cases, one bank can assume both roles. For example, Goldman Sachs were hired by both NYSE and Archipelago as their financial advisor during their merger despite the potential conflict of interests. The incident raised a lot of questions. Majority of the people questioned the ability of Goldman Sachs to stay neutral and treat both parties equally. One of their main concerns is the quality of the deal may be compromised for deal completion. Because advisory fee is contingent on deal completion, bank may simply want to complete the deal regardless of the deal quality. When acquirer and target hire separate advisors, information will be verified by both parties, so the deal quality is checked twice. On the other hand, when a common advisor is used, the integrity of the verification process becomes questionable. It becomes relatively easy for the bank to hide potential problems that can break a deal when they are eager to complete such deal to earn their advisory fee. Thus, bad deals are more likely with occur, and both acquirer and target will experience a loss in wealth.

Contrary to the common belief, Agrawal et al. suggest it is unnecessary to have such concern. They believe it is in the advisor's best interests not to exploit its clients because potential damage to bank's reputation and high litigation costs outweighs the advisory fee received in a single transaction. The fees each bank charges for its service are the quasi-rents of its reputation. The higher the reputation, the more likely it will be chosen for various business deals and the more money it can collect from those future businesses. Hence, a bank should not be motivated to ruin its reputation for one deal. Furthermore, they think a common advisor can indeed improve deal outcomes because a common advisor has an information advantage over an unshared financial advisor. A common advisor has better access to firm-level private information, so it can reduce information asymmetry more effectively, which is one of the main reasons for hiring financial advisors in M&A deals in the first place.

This paper extends their findings by examining the difference between M&A deals using unconnected financial advisors and the ones using connected financial advisors. We propose when the acquirer's financial advisor(s) and the target's financial advisor(s) have prior connections, the information flows more smoothly between the two parties than if the advisors are not connected. In our sample, the acquirers and targets still hire separate financial advisors, but the advisors they use can either be connected via prior business transactions or be complete strangers. Our criteria allow us to have a lot more observations than the study with common advisors, so our results can be more applicable in the real world. In addition, we can have a better understanding of the advantages and disadvantages of interbank connections by directly testing their impacts on the outcomes of M&A deals.

Much of the existing M&A research has been focused on studying the benefits and use of bank-firm relationships. For example, banks are more likely chosen as financial advisors if they have prior relationships with the firms, ceteris paribus. The bank is more likely to work as the financial advisor for the acquirer than for the target if it has relationship with both parties. However, we are unaware of any prior study that looks at interbank connections and how they play a role in M&A deals. This paper is the first to explicitly examine the impact of interbank connections on M&A deals. It hopes to fill the gap in the M&A literature regarding determinants of financial advisors. At the same time, it helps to shed lights on research regarding the advantages and disadvantages of banking relationships. Perhaps, the idea of Agrawal et al.'s paper is the closest to what we are looking here, but the focus of their paper is the use of common advisor, and it does not examine the interbank connections between the financial advisors. One may argue common advisor can be viewed as an extreme case of interbank connections since the use of one common advisor indicates complete interbank connections. If that's the case, this paper will be a more general study of such connections. It hopes to address questions that cannot be answered if we only look at deals with common advisors.

We start by examining the determinants of using connected financial advisors in M&A deals. We then compare the deal outcomes following the advisor choice, such as the deal completion rate, completion speed, deal premium, and announcement returns of both the acquirers and targets. Among the 4,667 deals we examine, 2,929 deals use connected advisors. The deals with connected advisors are generally larger and more complicated than the ones without. The average deal value for connected advisor is $1.7 billion while it is only $0.32 billion for the unconnected advisor deals. The deal completion rate and completion time is generally indifferent between the two types of M&A deals. Target valuation is significantly higher when the financial advisors are connected than if they are not. On the contrary, announcement returns are significantly lower for the acquirers if they use connected advisors than if unconnected advisors are hired.

Some may argue interbank connections can be correlated with advisor reputation since connection is measured as prior business interactions. Thus, larger and more reputable banks are more likely to have connections with each other than the smaller and less reputable ones. Indeed, our sample reveals the connected advisors are more likely to be involved in deals that are larger, with more financial advisors and more reputable advisors. In order to address this issue, we include advisor reputation variable in all the regression tests to control for the reputation effect. Results hold after controlling for advisor reputation in the multivariate regression. The interbank connections bring in additional benefits to the M&A deals. Interestingly, the connected advisors are less likely to be associated with deals involving public targets.

One possible reason is the fact that public targets are often more transparent than their private counterparts, so there is little information asymmetry. Hence, it is easier to exchange and verify valuable firm-level information between the acquirers and targets. As a result of this, the value of interbank connection is significantly reduced.

The remainder of the paper is organized as follows. Section 2 briefly reviews the prior literature. Section 3 discusses the roles of M&A advisors and develops main hypotheses. Section 4 describes the sample and data. Section 5 presents the test results and discussion, and Section 6 concludes.

LITERATURE REVIEW

Investment banks value their M&A advisory business. M&A advisory fees are correlated with the deal size (Kosnik and Shapiro, 1997). In addition, majority of the advisory fees are contingent on deal completion, which creates a conflict of interest between advisors and their clients (McLaughlin, 1990). The financial advisors have a strong incentive to complete the deals in a timely manner, so they can receive the payments for their services. On the other hand, the firms want to make sure the deals they are pursuing are indeed valuable to them. These two interests don't align perfectly. Banks are better off when a larger M&A deal is completed under their assistances, but it may not be the case for the firms. Studies find that contingent-fee structures often lead to poor outcomes. Acquirers have worse post-acquisition stock performance (Rau, 2000), which suggests advisors choose deal completion over deal quality. Banks are so motivated by the fees to complete the deal that they ignore problems associated with the deals. The acquirer's announcement returns are also lower under the contingent-fee structure. Targets, on the other hand, appears to be unaffected or less affected by the conflict of interest than their counterparts (Allen et. al, 2004).

Relationship often aids in information production and processing. For example, firms often get better loan terms and prices from their relationship lenders (Peterson and Rajan, 1994). Banks are more likely to be selected as financial advisors if they have lending relationship with the clients because they have greater knowledge about the business and it is easier for them to process the information (Francis et. al, 2006). This is very useful in the case of an M&A deal since the role of a financial advisor is to assist its clients in getting a more favorable deal price and terms than what they would have gotten on their own (Allen et. al, 2000). The more knowledgeable banks are about their clients, the more efficient they can be evaluating and certifying the deals. An M&A deal can be initiated by either party. Contrary to the common belief that acquirers are typically the ones proposing the deal, about 40% of M&A deals are in fact initiated by targets. Once the two parties are interested in participating in a merger or acquisition, it is the advisor's job to help with information gathering and processing. The information asymmetry between the acquirers and the targets often makes it hard for the two parties to handle the deal by themselves. Without an independent third party to verify the deal, both parties worry about being taken advantage of. A lot of firm-level information is not readily available. During the due diligence period, each party is expected to present honest information about itself, so the other party can have a knowledgeable assessment of an appropriate offer price. When the financial advisors have prior connections because of the past deals they have in common, it makes it easier to exchange the relevant information for deal valuation purposes. It also makes them more trustworthy to each other than if they have no connections. The banks can spend less time on verifying the information they gather, so it will be quicker for them to figure out the overall quality of the deal and determine a correct offer price. This is especially useful when the deal is complex and its quality is hard to judge. On the other hand, when the financial advisors don't have any prior connections, such process will be harder to complete because of the lack of trust between the two parties.

BACKGROUND AND HYPOTHESES

A bank can be hired as either a buy-side advisor or a sell-side advisor in an M&A deal. As a buy-side advisor, the bank needs to assist its client in deal valuation, so an appropriate offer price can be derived. The buy-side advisors generally gather the information from the target company via its advisors. They then value the target and assess the proposed acquisition based on the information. In addition, they need to propose various financing methods along with their advantages and disadvantages to their clients, so the clients can choose the one(s) that are feasible and most suitable for them, and the transaction can be executed. From time to time, they may participate in deal negotiations as well (Fleuriet, 2008).

As a sell-side advisor, in addition to preparing information to be delivered to the interested buyers, the bank may need to identify and contact potential buyers first. Once the buyer is identified, the advisor will meet with the buyer's representatives to market the target firm. Essentially, the advisor needs to make the buyer see the potential synergy that can be resulted from a successful merger or acquisition. The buyer needs to know how valuable the target firm is to them. Once it sees the value of the target, the negotiation can begin. The sell-side advisor will most likely be involved in the negotiation process as well, so its clients can get a favorable offer, which allows it to be financially benefited from the transaction.

The availability and credibility of firm-level information is a key element in M&A deals. An M&A deal generally requires collaboration between a buyer and a seller, M&A negotiations also have an adversarial component as the two sides haggle over the purchase price and deal terms (Eccles and Crane, 1998). Connected advisors can help alleviate such concerns. Information flows more smoothly between the buyer and seller when their advisors have prior connections because trust is already established between the two banks. With the existing trust, the needs for information verification is significantly reduced, which in turn reduces the time it requires to process the information. As a result, both parties can make informative decisions more efficiently than they would have without connected advisors. Moreover, connected advisors typically know more about each other, such as how they deal with various transactions and the assumptions they generally make. These understandings can potentially help with the new deal, which leads to our first hypothesis. When the financial advisors are connected, such connections facilitate information flow, so complex deals are more likely to succeed in a relatively shorter period of time.

However, like common advisors, connected advisors may also face conflicts of interest, although it may not be as significant since connected advisors are still separate entities. M&A advisor fee is generally contingent-based, so financial advisors are motivated to complete the deals in order to collect their payment. When the advisors have prior connections, or have strong relationship with each other, it is easier for them to overlook the bad information that can potentially break the deal. As a result, the deal quality may be sacrificed for the sake of deal completion. This leads to our second hypothesis. Deal quality is likely to be worse when the financial advisors are connected. However, some may argue banks care more about their reputation than what they can get from one single deal. If their clients find out the financial advisors being dishonest, it will hurt their reputation significantly, which in turn will affect their future businesses. It is unlikely for banks to take that risk. Hence, deal quality should only be worse for the connected but less reputable banks.

Last but not least, firms are more likely to hire connected financial advisors when they need to minimize information asymmetry. In other words, interbank connections become more valuable as the deal becomes more complicated and information becomes harder to gather and process. Therefore, unlike common advisors, who are typically used by simple and small deals, we should see a greater number of complex deals being associated with connected financial advisors, especially for deals involving private targets. Connected advisors have an information advantage over the unconnected ones. Such advantage is extremely useful when information about the buyer and/or the target is hard to obtain. With public targets, the information asymmetry is usually small because it is generally easy to get relevant information about a firm if it is public. Hence, financial advisors do not need to rely on their connections.

SAMPLE AND DATA

We use the Securities Data Corporation Mergers and Acquisitions database (SDC) to identify all acquisitions made by U.S. public firms from January 1, 1990 to May 31, 2015. We require both acquirer and target use at least one financial advisors for the transaction. Following the literature, we exclude recapitalizations, self-tenders, exchange offers, repurchase, privatizations, and transactions with unreported deal values. We also exclude leverage buyouts, spin-offs, and clean-up mergers (where the target is a partially-owned subsidiary of the acquirer). In addition, we require the acquirer to have majority ownership following the acquisition. Lastly, we delete two acquisitions of real estate investment trusts (REITs) and two consolidations of subsidiaries. Our final sample includes 4,667 deals, out of which 1,850 deals have public targets.

Our variable of interest is *Connection*. To build this variable, we first assign a unique advisor id to each financial institution that appears at least once during our sample period. With the help of the unique id, we then look back 5 years to see if the advisors from two sides are ever involved in the same deal either on the same side or on the opposite sides. If there is at least one past interaction, we consider the advisors are connected. We do this for every pair of advisor combination in our sample to make sure no connection is missing. Unfortunately, like ordinary firms, financial institutions initiate M&A transactions as well. Indeed, there are a lot of mergers and acquisitions involving financial institutions as acquirers or targets. The M&A activities among financial institutions increase the difficulty of identification significantly. For example, Bank of America acquired Merrill Lynch after the 2008 Finance Crisis. Following the acquisition, Bank of America is assumed to inherit all connections that belong to Merrill Lynch, so now it will have two types of connections to be considered, one being the connection it builds on its own and the other being the connection Merrill Lynch builds overtime. Because of this, if Bank of America is hired as a Financial Advisor for one side, we must gather its connections based on both its advisor id as well as the advisor id of Merrill Lynch. When there are multiple financial advisors on the record, we follow the same method to identify interbank connections for each advisor. As long as one of the buy-side advisors is connected with at least one of the sell-side advisor(s) or vice versa, we classify the deal as a connected advisor deal. That leaves us with 2,929 deals with connected advisors. A small number of our deals use common advisors. For the purpose of our study, we classify those deals as connected advisor deals as well because common advisor is an extreme form of advisor connection. In general, connected advisors are more common than unconnected ones, and the number of connected advisor deals increases significantly overtime, which makes sense because it takes time to build connections.

To measure the deal quality, we use the cumulative abnormal returns (CARs) on the stocks of acquirers around the announcement dates. The abnormal return is estimated as the difference between acquirer's stock's return and CRSP's value-weighted market return index. The CAR for the firm is the summation of all abnormal returns around the estimation window. If the market responds to the announcement positively, it implies the M&A deal is of superior quality. If the market responds to the announcement negatively, the deal is of inferior quality. When the target firms are also publicly traded, we get their announcement CAR as well.

The more advisory businesses a bank is involved in, the better connected it will be. The amount of advisory businesses one can be involved in depends greatly on its reputation. Firms are more likely to hire Goldman Sachs than they are with Pacific Valley Bank. Advisor connection should be highly correlated with its reputation. Thus, some may argue the influence from interbank connections is purely a result of bank's reputation. To alleviate this concern, we create another variable, which is *Reputation*, to be used as our main control variable. Following Rau (2000) and others, we use advisors' M&A market share to measure their reputation. The advisor's M&A market share is calculated as total dollar value of all deals for which it was an advisor in a given year divided by the total dollar value of all the deals in the same year, expressed as a percentage. The value of the transaction is adjusted for inflation for consistency. They are all in 2015 dollar, so it allows us to compare the value of the deal across multiple decades. We then rank the advisors by their percent market share for each year. The top five advisors are classified as

top tier, receiving an advisor rank of 1. The next 15 advisors are considered as second tier, receiving an advisor rank of 2, and the remaining gets an advisor rank of 3. When there are multiple financial advisors on the deal, we use the highest rank of all as the deal's advisor rank.

Table 1 Panel A reports the number of M&A deals by year. The number of deals varies each year, but it reaches its peak in the late 1990s. On average, the overall completion rate for the sample is 93%. There is a dramatic increase in deal value over the past 2 decades. The average deal value increases from $429 million in 1990 to almost $2.5 billion in 2015. The aggregate deal value increases from roughly $30 billion to about $1.3 trillion. This indicates M&A has become increasingly popular among large firms. The number of financial advisors used in the deal appears to be stable. Both acquirer and target typically hire at least one advisor to assist with the transaction.

TABLE 1
SUMMARY STATISTICS

Panel A.

year	N	Rate of Completion	Mean Deal Value (in $ millions)	Mean number of Financial Advisors per deal	Number of Completed Deals	Aggregate Deal Value (in $ millions)
1990	72	0.88889	428.87	2.20833	64	30878.4
1991	77	0.90909	399.74	2.36364	70	30780.21
1992	100	0.95	367.94	2.27	95	36793.79
1993	165	0.93939	534.63	2.48485	155	88213.73
1994	200	0.9	485.49	2.315	180	97097.14
1995	250	0.928	774.69	2.248	232	193671.92
1996	303	0.92739	678.07	2.27393	281	205455.59
1997	408	0.93627	900.62	2.31127	382	367454.23
1998	376	0.93883	1473.78	2.28191	353	554142.23
1999	359	0.91922	1926.31	2.34262	330	691546.89
2000	274	0.91241	1944.61	2.36861	250	532824.29
2001	223	0.92377	1499.88	2.37668	206	334473.83
2002	140	0.95714	941.78	2.32143	134	131849.37
2003	163	0.96319	684.16	2.31902	157	111518.54
2004	195	0.9641	1281.29	2.48205	188	249851.3
2005	189	0.95767	1489.42	2.59259	181	281500.55
2006	184	0.94565	1428.89	2.38043	174	262914.96
2007	174	0.94253	1000.71	2.44828	164	174123.5
2008	102	0.83333	2134.72	2.68627	85	217741.26
2009	86	0.9186	2178.46	2.7907	79	187347.28
2010	110	0.93636	1470.64	2.61818	103	161770.04
2011	85	0.88235	2213.97	2.47059	75	188187.11
2012	125	0.968	943.84	2.584	121	117979.66
2013	112	0.96429	1105.45	2.50893	108	123810.93
2014	139	0.96403	1460.49	2.43885	134	203007.42
2015	56	0.92857	2434.31	2.55357	52	136321.49

Panel B.

	Connected advisors	Num of Observations	Mean Completion Rate	Mean Deal Value (in $ millions)	Mean Num of Advisors
1990-1995	No	379	0.94	289.79	2.14
	Yes	485	0.90	654.87	2.45
1996-2000	No	643	0.95	270.37	2.13
	Yes	1077	0.91	2037.12	2.43
2001-2005	No	329	0.96	246.19	2.21
	Yes	581	0.95	1708.64	2.54
2006-2010	No	205	0.96	331.99	2.26
	Yes	451	0.90	2249.59	2.73
2011-2015	No	182	0.95	477.78	2.15
	Yes	335	0.93	2224.20	2.70

Panel C.

Acquirer_sic2	Num of Obs	Percentage of Connected advisors	Percentage of Completed deals	Average Deal Value (in $ millions)	Average Num of advisors
Mining, construction	239	62.16842857	91.26985714	1142.071429	2.48132143
Manufacturing (soft)	587	63.8737	96.6589	2150.359	2.585022
Manufacturing (hard)	993	60.0366	93.7362	680.854	2.255804
Utilities	490	65.73444444	87.991	1226.324444	2.41556111
Wholesale and retail	281	62.1798	92.5006	984.556	2.439725
Insurance, real estate	1282	67.29571429	94.30257143	967.9971429	2.40278
Hospitality	611	52.63085714	93.79657143	927.7471429	2.36810429
Health, legal, education	178	40.96925	90.3975	406.45	2.2887425
Mining, construction	217	61.66157143	89.47971429	998.7028571	2.4486
Manufacturing (soft)	519	63.4181	96.0263	3859.799	2.88681
Manufacturing (hard)	891	63.4157	93.4954	955.18	2.30854
Utilities	486	76.832625	88.02	1487.52	2.4935
Wholesale and retail	301	64.1416	89.0076	805.961	2.360506
Insurance, real estate	1265	67.79428571	94.18714286	981.1542857	2.389528571
Hospitality	724	62.007	94.52542857	921.27	2.550367143
Health, legal, education	248	49.6045	93.69875	518.5475	2.1897525

Panel B breaks the sample down by advisor connection. There are always more deals with connected advisors than the ones without in any given time. The deal completion rate is typically higher with unconnected advisors. On the other hand, the deals are significantly larger when connected advisors are hired. Deal size is often a proxy for deal complexity. As deals get bigger, it becomes harder to complete, so the completion rate is likely to drop. Therefore, without further controlling for deal characteristics, it is hard to determine whether the interbank connection is an advantage or disadvantage for the M&A transactions. Panel C breaks the sample down by industry, which is categorized using 2-digit SIC code. The two industries that are most active in M&A are Manufacturing firms and Financial firms. They also have the highest deal completion rate, which indicates these two industries are fairly mature for M&A transactions.

Table 2 Panel A reports the deal characteristics in terms of deal value. The sample is divided into two groups, one for the connected advisors, and the other one for the unconnected ones. The connected advisor deals receive significantly higher valuation than the unconnected counterparts. It appears that targets receive a lot more premiums when the financial advisors are connected than when they are not. For instance, the Deal Value/Net Income ratio for the connected advisor deal is almost tripled than that of the unconnected advisors. The results suggest targets benefit from the interbank connections significantly.

TABLE 2
DEAL CHARACTERISTICS AND ANNOUNCEMENT RETURNS

Panel A.

Connected advisors	No	Yes	Yes -No
Num of Obs	1738	2929	
Deal Value/Sales	14.96	14.3253	-0.6347
Deal Value/EBIT	50.92	114.054	63.134***
Deal Value/EBITDA	19.7431	31.0454	11.3023***
Deal Value/Net Income	67.813	200.792	132.979***

Panel B.

	Connected advisors	No	Yes	Yes -No
	Num of Obs	1738	2929	
	(1,30)	0.17%	-0.64%	-0.008***
	(-1,1)	0.76%	0.44%	-0.003*
Acquirer CARs	(-5,5)	1.29%	0.81%	-0.005**
	(-20,-1)	1.77%	1.36%	-0.004**
	(-20,5)	2.28%	1.73%	-0.005*
For Public Targets	Num of Obs	657	1193	
	(1,30)	-0.15%	-0.44%	-0.003
	(-1,1)	-0.54%	-1.25%	-0.007*
Acquirer CARs	(-5,5)	-0.22%	-0.83%	-0.006
	(-20,-1)	1.37%	1.34%	-0.0002
	(-20,5)	0.80%	0.07%	-0.007
	(-1,1)	19.37%	20.18%	0.008
Target CARs	(-5,5)	21.28%	23.09%	0.0181*
	(-20,-1)	8.11%	6.88%	-0.012

Panel B of Table 2 reports the announcement returns for both acquirers and targets if they are also public. It appears acquirers perform significantly worse both before and after the merger announcement, while targets' stock performances are either indifferent between the two groups or are significantly better for the connected advisors deals. The result goes well with the previous findings about deal value. Targets are significantly better off with connected advisors, while acquirers are likely to be taken advantage of by the relationship.

REGRESSION ANALYSIS

To further isolate the impact of interbank connections among M&A deals, we decide to pursue multi-variate analysis. We start the analysis by examining if the presence of connected advisors is related to firm, deal, and/or advisor characteristics. If companies select financial advisors randomly, we should not see a trend. This analysis hopes to add to the existing literature on choice of financial advisor in M&A. In addition, it can be used to identify the factors that can affect both decision of having connected advisors as well as deal outcomes. Larger deal is more likely to be associated with connected advisors (Table 3). In addition, as the number of financial advisors increases in a deal, the advisors are more likely to be connected. Moreover, more reputable advisor is more likely to be associated with connected advisor deal. The result suggests connection is somewhat correlated with reputation. More reputable banks tend to be the ones with great connections since the connections help them gain more businesses, which in turns increase their market share. Because the purpose of the study is to document the benefits of interbank connections instead of the benefits of bank reputation, and there appears to be a correlation between the two variables, it is essential to include both variables in all the regressions. Having both variables as independent variables, we are able to identify the additional impacts of interbank connections, which has been studied previously. The choice of hiring connected advisors is not affected by payment method or deal type. Also, having a public target decreases the likelihood of using connected advisors, although it is not significant. Public targets are more transparent in general compared to their private counterparts, so it is relatively easy to obtain firm level information. The benefits of interbank connections will be small when the information asymmetry is insignificant. Therefore, there is no need to hire connected advisors when the targets are public.

TABLE 3
CHOICE OF CONNECTED ADVISORS

Variable	Specification 1	Specification 2
Intercept	-0.522***	-0.466***
	(<0.0001)	(0.0009)
deal_value	0.201***	0.205***
	(<0.0001)	(<0.0001)
num_advisors	0.469***	0.466***
	(<0.0001)	(<0.0001)
deal_advisor_tier	-0.708***	-0.700***
	(<0.0001)	(<0.0001)
same_industry	-0.053	-0.045
	(0.2352)	(0.3212)
target_public		-0.047
		(0.3073)
stock_pay		-0.092
		(0.1656)
white_knight		0.157
		(0.7498)
tender		0.066
		-0.3754
adj-R2	0.29	0.29
N	4667	4667

Next, we are interested to see if connected advisors affect deal completion rate after controlling for deal characteristics. The results indicate the interbank connection has no significant impact on the completion rate (Table 4). After controlling for firm, deal, and advisor characteristics, deals with connected advisors are indifferent from the ones without in terms of deal success rate. The factors that have significant impacts on the completion rate are deal size and target status. It appears as the deal gets larger and/or target is public, the deal is less likely to be completed regardless the use of connected advisors or not.

TABLE 4
IMPACT ON DEAL COMPLETION RATE

Variable	Specification 1	Specification 2	Specification 3	Specification 4
Intercept	2.576***	2.575***	2.298***	2.294***
	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)
connected_advisors	-0.122	-0.120	0.240	0.248
	(0.1068)	(0.1125)	(0.5353)	(0.5198)
deal_value	-0.119***	-0.119***	-0.075*	-0.073*
	(<0.0001)	(<0.0001)	(0.0799)	(0.0869)
connected*deal_value			-0.060	-0.063
			(0.2216)	(0.1941)
num_advisors	0.015	0.015	0.022	0.023
	(0.7113)	(0.7033)	(0.5876)	(0.5765)
deal_advisor_tier	-0.053	-0.056	-0.035	-0.040
	(0.2679)	(0.2466)	(0.6604)	(0.607)
connected*deal_advis			-0.021	-0.014
			(0.8346)	(0.8827)
same_industry	-0.034	-0.037	-0.031	-0.034
	(0.5872)	(0.5502)	(0.6197)	(0.5859)
target_public	-0.4194***	-0.416***	-0.416***	-0.412***
	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)
tender	-0.095	-0.096	-0.099	-0.100
	(0.2991)	(0.2947)	(0.2807)	(0.2745)
white_knight	-0.089	-0.091	-0.097	-0.099
	(0.8371)	(0.8333)	(0.8221)	(0.8191)
adj-R2	0.17	0.17	0.17	0.17
N	4646	4646	4667	4667

Since interbank connections have no significant impact on deal completion rate, why are they still present systematically in some cases? To explore this question, we decide to look at the impact of interbank connection on completion speed. It turns out interbank connection significantly reduces the number of days it takes to complete an M&A deal (Table 5). On average, the deals with connected advisors take 34 days less to complete than the one without, and the difference is significant at 5% level. The result supports the idea that interbank connection facilitates information flow between the acquirer and target during an M&A transaction. Financial advisors can operate more efficiently with the relationship than without. Controlling for connection, as deal size increases, the days to completion also increases. This again supports the argument that as deals become more complicated, it takes more time to process the information. In addition, more reputable banks tend to take significantly longer time to complete the deal. The same is true for public targets. Both are statistically significant at 1% level.

TABLE 5
IMPACT ON DEAL COMPLETION SPEED

Variable	Specification 1	Specification 2
Intercept	27.668***	56.319***
	(0.0011)	(0.0001)
connected_advisors	5.178	-34.036**
	(0.1429)	(0.0491)
deal_value	3.262***	-2.964
	(0.0033)	(0.1228)
connected*deal_value		9.152***
		(<.0001)
num_advisors	13.615***	12.749***
	(<0.0001)	(<0.0001)
deal_advisor_tier	11.387***	12.716***
	(<0.0001)	(0.0002)
connected*deal_advis		-4.323
		(0.3367)
same_industry	18.661***	18.135***
	(<0.0001)	(<0.0001)
target_public	32.949***	31.769***
	(<0.0001)	(<0.0001)
tender	-35.596***	-34.257***
	(<0.0001)	(<0.0001)
white_knight	30.898	27.965
	(0.2808)	(0.3280)
adj-R2	0.18	0.18
N	4646	4667

Finally, we are interested to see if deal quality is influenced by the interbank connection. We use announcement returns as an indirect way to measure deal quality. A positive announcement returns signals superior quality, while a negative announcement returns indicate the deal quality is in doubt. It turns out the interbank connection has no significant impact on acquirer's announcement returns, but it has a significant positive impact on target's returns (Table 6). Target's 11-day cumulative abnormal returns (CARs) that starts 5 days prior to the announcement and 5 days post announcement are higher when the financial advisors are connected than when they are not. It appears the quality of the deal is mostly unaffected by the connections. Connected advisors don't exploit the interbank connections and sacrifice deal quality for deal completion. However, there appears to be a wealth transfer between targets and acquirers. Targets are better off with connected advisors, indicated by their positive announcement stock returns, so it is to their advantage to hire financial advisors that are connected with the ones hired by the acquirers.

TABLE 6
IMPACT ON ANNOUNCEMENT RETURNS

Variable	Acquirer's CARs			Target's CARs		
	(-1,1)	(-5,5)	(-20,5)	(-1,1)	(-5,5)	(-20,5)
Intercept	0.038**	0.053**	0.078***	0.205***	0.254***	0.333***
	(0.0354)	(0.0179)	(0.0082)	(0.0058)	(0.0013)	(0.0001)
connected_advisors	0.028	0.017	-0.010	0.112	0.153*	0.143
	(0.1817)	(0.5003)	(0.7692)	(0.1919)	(0.0921)	(0.1494)
deal_value	-0.005**	-0.007**	-0.009***	0.001	-0.003	-0.004
	(0.0187)	(0.0110)	(0.0083)	(0.8687)	(0.7294)	(0.6841)
connected*deal_value	-0.007**	-0.004	0.001	-0.015	-0.018*	-0.018
	(0.0105)	(0.2121)	(0.8901)	(0.1238)	(0.0926)	(0.1207)
num_advisors	0.008	0.010	0.006	-0.006	-0.008	-0.007
	(0.1565)	(0.1780)	(0.5642)	(0.8022)	(0.7379)	(0.7966)
connected*num_advisor	0.005	0.002	0.006	-0.006	-0.000	-0.009
	(0.4504)	(0.7753)	(0.5594)	(0.8193)	(0.9908)	(0.7740)
deal_advisor_tier	-0.007*	-0.009*	-0.007	-0.002	-0.004	-0.019
	(0.0568)	(0.0503)	(0.2865)	(0.8707)	(0.8135)	(0.2663)
connected*deal_advisor	-0.002	-0.002	-0.005	0.009	-0.006	-0.002
	(0.6509)	(0.7018)	(0.5582)	(0.6573)	(0.7675)	(0.9366)
target_public	- 0.021***	- 0.022***	-0.023***			
	(<0.0001)	(<0.0001)	(<0.0001)			
adj-R2	0.13	0.13	0.13	0.12	0.12	0.11
N	4667	4667	4667	1850	1850	1850

CONCLUSION

Connected advisors in general, should have information advantages over unconnected advisors. The trust they have built via prior connections facilitate the exchange of information between the acquirer and the target. Hence, they are able to handle complex deals more efficiently. Deals that have significant information asymmetry, which requires smooth information flow, are more likely to use connected advisors. We find larger and more complex deals are more frequently associated with connected advisors. In addition, connected advisors can process the information better and handle the negotiation faster because of the knowledge about each other. As a result, they can complete the deals quicker even when the deals are more complicated. After controlling for deal complexity, we find interbank connection significantly reduces the amount of time it takes to complete a deal. However, we fail to find any evidence on the impact of interbank connections on deal completion rate. It appears the impact is insignificant. Moreover, interbank connections can bring in immediate financial benefits for the targets, indicated by its positive stock returns surrounding the M&A announcement.

In sum, it appears that hiring connected advisors are beneficial to both acquirers and targets. Although the benefits are more important to the target firms than they are to the acquiring firms. Therefore, firms should take into consideration the interbank connection when making their advisor choices, especially when the deal is large and complex and has strong information asymmetry. The interbank connection can

facilitate the transaction. It can reduce the times needed to complete the transaction, which is important for both parties. The longer they wait, the lower the returns will be. Also, as time passes, the number of uncertainties also increases, which is likely to reduce or destroy the potential synergies that are resulted from the M&A deal. All these terrible outcomes can be potentially prevented if firms use connected financial advisors. Since connections are useful for merger and acquisitions, banks should work on building their networks. They should emphasize more on establishing connections with various financial institutions to ultimately increase their chances of being selected as financial advisors in future deals.

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