Financial Advisor Centrality in Mergers and Acquisitions

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ABSTRACT

This paper examines the role of the social network *hierarchy* of financial advisors in a mergers and acquisitions framework. Our findings indicate that more centrally located financial advisors are more likely to be involved in higher M&A activity, more likely to advise bidders, large and complex deals and require more time to complete the deal. Central financial advisors fail to create value for both bidders and targets while they charge higher advisor fees. Our results highlight that financial advisors exploit their relative power in their network to undertake takeover deals and pursue private benefits.

Keywords: Centrality, financial advisors, mergers and acquisitions, advisory fees

JEL classification: G14, G30, G34

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1. Introduction

The social network literature (Brass, 1984; Ibarra, 1993; Tsai and Ghoshal, 1998) suggests that not every relationship and connection in a network is equal. While personal connections contribute to a more efficient and faster way of spreading and sharing information, knowledge and the flow of ideas, an actor's location in a network can determine the benefits and disadvantages they face. The positions of actors in the network differ significantly, and there is a hierarchy. El-Khatib et al. (2015) examine the role of CEO network centrality in merger and acquisition decisions in order to unveil the importance of dominant CEOs in their network. Bajo et al. (2015) study the informational advantage of higher centrality underwriters in initial public offerings. However, the implication of the social network hierarchy of financial advisors in M&As is still unexplored.

The main objective of this paper is to investigate the impact of financial advisor centrality in its peer social network on merger activity, on acquirers and deal characteristics, on the merger outcome and on the advisor's fee structure. This paper utilises four centrality dimensions to measure financial advisors' centrality in its peer network. Three dimensions of centrality in a social network are proposed by Freeman (1977, 1979) i.e., degree (number of direct connections), closeness (fewer steps between actors/nodes) and betweenness centrality (gatekeeper between other nodes). The fourth dimension, introduced by Bonacich (1972), is eigenvector centrality, which determines the influential position of an actor. The financial advisory firms are classified as being connected when their board members are socially linked. Financial advisors are key players in merger and acquisition (M&A) deals. Financial advisors were involved in around 82% of takeovers by transaction value during 1984 to 2003 (Francis et al., 2014). Apart from an advisor's reputation, skill and scope, "personal relationship" is a key determinant when choosing financial advisors for an M&A deal. In this paper, we develop testable hypotheses linking dominant financial advisors to mergers and acquisitions related issues.

Central financial advisors are expected to have a wealth of knowledge due to their greater connectivity, which provides valuable information about market conditions, industry trends, firm insider information, and critical legal and regulations changes (Ahuja, 2000; Berg et al., 1982). Central financial advisors also have better access to information due to the direct and close linkages in the network. This comparative information advantage would make it easy for financial advisors to identify wealth-creating takeover options for bidders and also reduce transaction costs. Central financial advisors could also bid for M&A deals at favourable terms for their clients due to their better negotiation and bargaining position. Schoorman et al. (1981) suggest that centrality helps to leverage social relationships, which reduces information asymmetry when designing contracts. Apart from the information advantage, leading financial advisors would face less rivalry from their network while competing in the choice of their clients. Central advisors would use their inherent power, which comes from their higher position in the network hierarchy, to mould decisions in their favour and overwhelm their competitors. The discussion above leads to the expectation that central financial advisors are involved in higher M&A activity than disconnected or less central advisors. Our findings indicate that financial advisors' centrality is positively associated with frequency of acquisition. The number of M&A deals advised by more central financial advisors is higher than deals advised by their less central counterparts.

Acquirers and targets may consider different criteria in choosing a financial advisor. Acquirers could benefit from the network contacts of dominant advisors, who in turn could negotiate and bid for value-enhancing deals. On the other hand, target firms could enhance their visibility and bargaining power through the involvement of central advisors on their side. Central advisors for target firms could propose better anti-takeover strategies to their clients due to their connectedness and information advantage. If the latter is not achieved, leading advisors could better negotiate higher premiums paid for their clients. The above arguments make central advisors the best choice for both acquirers and target firms. We

investigate whether central advisors involved in takeovers mostly advise acquiring or target firms. Our findings indicate that leading financial advisors are more likely to be involved on the bidder's side than on the target's. There are two explanations for this finding. Central advisors prefer to work with acquirers since, after a successful deal completion, only bidders would survive in the market, and financial advisors would expect to get future contracts with them. An alternative explanation suggests that if leading financial advisors for the target firm have successfully managed to implement their anti-takeover strategies, these deals have never been reported. That creates a survivorship bias in favour of central financial advisors for acquirers.

We further investigate the relationship between advisors' centrality and acquirer and deal characteristics. El-Khatib et al. (2015) find that higher centrality CEOs are more likely to manage larger firms. Motivated by their findings, we hypothesise that central advisors have a higher likelihood of being involved with larger acquirers. Our results confirm that there is a positive association between financial advisor centrality and acquirers' size. This can be attributed to the fact that central financial advisors have a larger network overlap with larger firms. In economic terms, it is also beneficial for financial advisors to advise large acquirers, since they can charge higher advisory fees. One of the main motivations to involve financial advisors in M&A deals is to reduce transaction cost and information asymmetry, particularly when the deal is complex. Public target firms have more power to capture acquisition gains, and public deals demand more disclosure liabilities (Golubov et al., 2012). Public firms have dispersed ownership and governance issues, which makes them more complex takeover targets. Due to their informational advantages, we expect that central financial advisors would be preferred when dealing with the complexity of public acquisitions. Bhardwaj et al. (2008) argue that the central position of an actor enables him to have a structural advantage in his network. We find that leading financial advisors are more likely to be involved in takeovers for listed target firms. Our findings also suggest that high relative size deals (larger

target firms) are more likely to be advised by leading advisors.[1] We further explore the duration to completion for central financial advisors. Our results show a positive relationship between time to completion and advisor centrality. Central financial advisors are more likely to possess and process more information and therefore require more time to close the deal. This is also likely to be attributed to the fact that they engage in large and more complicated deals, where more meticulous analysis of the transaction is required. One major component of advisory fees is estimated as the percentage of the deal value (Walter et al., 2008). If the deal completion time increases, the deal value will also increase due to potential competition; hence, financial advisors can increase their income from advisory fees.

A natural question that follows is whether leading advisors create value for their clients in M&A deals. Many studies[2] examine the relation between acquirer returns and advisor reputation and find mixed evidence. Recent studies suggest that acquisition announcement returns depend upon the reasons for choosing a particular advisor rather than the choice itself. Francis et al. (2014) argue that the past performance of financial advisors is positively related to bidder announcement abnormal returns. They also argue that a prior relationship can be a reason to choose financial advisors, but advisors' past performance actually determines the market reaction. Sibilkov and McConnell (2014) show that the market reacts positively if a bidder hires an advisor that has been involved in value-creating deals in the past.

In addition to the above factors related to financial advisors, this paper examines the role of financial advisors' centrality in creating value for their clients. We develop a two-sided hypothesis on the relation between financial advisory centrality and bidders' financial performance. On the one hand, central financial advisors could identify value-creating deals due to their high connectedness. Characteristics such as information advantage, power and

[1] In untabulated results, we find that deal value, which proxies for target size, is also positively related with advisors' centrality.

[2]McLaughlin (1992), Rau (2000) and Hunter and Jagtiani (2003) report a negative relation between acquirers' abnormal return and advisors' reputation. Kale et al. (2003) show that reputable advisors create greater absolute wealth gain for their clients, either bidder or target. Golubov et al. (2012) find that reputable advisors deliver higher acquirers' returns only in public takeover deals.

control also contribute to value creation for both acquirers' and targets' shareholders. A central position in the network not only helps in information extraction but also makes it easy to disseminate information (Bajo et al., 2015), which is considered vital for the successful completion of merger transactions. Effective information dissemination creates positive recognition by investors, which may translate into a positive merger outcome. On the other hand, the disadvantage of centrality is that central actors have a weak monitoring system and may become overconfident due to their powerful position, which could potentially result in value-destructive takeovers. Central advisors may also take advantage of their relative power in the network and work for their own benefit, by identifying large target firms rather than synergy-enhancing targets. Our findings indicate that there is no relationship between advisor centrality and acquirer announcement abnormal returns. Our results show that leading central advisors are more likely to be associated with large acquirers and acquisitions of public target firms. Moeller et al. (2004) report that bidder size is negatively associated with announcement returns. Travlos (1987) shows that public deals generate negative announcement abnormal returns. To address these issues of self-selection bias, we match deals engaging highly central advisors with deals advised by peripheral advisors through propensity score matching on the basis of bidder size as well as bidder size and target public status. The results indicate that after matching acquirers' size with high and low centrality advisors, there is still no significant relationship between centrality and the short-run performance of acquiring firms. When high and low centrality advisors are matched on both bidder size and target public status, we observe a negative and significant relationship between advisor centrality and acquirer abnormal returns. This indicates that high centrality advisors fail to create value for their clients. Similarly, we find a negative relationship between target advisor centrality measures and deal premiums. Targets fail to receive higher acquisition premiums in deals involving highly central bidders. Despite their leading position in their networks, central advisors do not seem to benefit their clients.

If leading financial advisors fail to create value for acquirers' shareholders, who benefits from this relationship? We investigate whether financial advisors benefit from being involved in M&A transactions. Kolasinski and Kothari (2008) claim that M&A advisory fees are a major source of revenue for investment banks. Golubov et al. (2012) report that over 85% of M&A deals by transaction value around the world were advised by investment banks in 1997 alone, and these advisors generated $39.7 billion in income from their advisory services. Central financial advisors that can reduce the risk of information asymmetry and transaction cost for their clients tend to charge a higher fee for their superior services. Corporations also invest their resources in building a relationship, and central advisors have to invest more to sustain their connectivity and strong ties. M&A advisory fees are a major income stream for them, which can be used to maintain a central position in the social network. Our results show that there is a positive and significant relationship between a bidder's advisor centrality and the fees they charge. Target financial advisor centrality is also positively and significantly associated with advisory fees. Targets pays higher advisory fees to central advisors – around 0.79 million USD more than to less central advisors. These findings imply that central advisors are mostly interested in ensuring their economic benefits. The clients of central advisors expect them to provide superior service due to their comparatively advantageous position in the market; hence, they are willing to pay high fees. The results support the passive-execution hypothesis. Financial advisors seem to simply be "execution houses" that undertake deals as instructed by the client (Bowers and Miller, 1990; Michel et al., 1991; Rau, 2000; Servaes and Zenner, 1996).

In the regression analysis, we control for factors related to financial advisor characteristics, i.e. prior relationship, past performance and advisor reputation. For robustness, we perform additional tests to account for these factors. We orthogonalize the centrality measures by these three variables and re-run the analysis with the orthogonal version of the centrality measures. In untabulated results, we find similar results for the centrality coefficients.

This paper makes several contributions to the existing literature. This is the first paper that examines the impact of financial advisor centrality in a mergers and acquisitions framework. Our findings suggest that the position of the financial advisor in their network has a significant effect on various issues related to M&As, such as activity, bidder and deal characteristics, bidder and target performance and advisory fees. Our paper closely relates to El-Khatib et al. (2015), who examine the impact of CEO centrality on mergers and acquisitions. El-Khatib et al. (2015) show that central CEOs are more likely to undertake value-destroying acquisitions because they are self-motivated and use their power to increase entrenchment. Our paper presents similar findings for financial advisors. This study also relates to Bajo et al. (2016), who discuss the role of underwriter centrality in an IPOs framework.

Second, the existing literature suggests numerous non-economic factors for the bidder's choice of financial advisors, like advisor's performance (Sibilkov and McConnell, 2014), scope (Song et al., 2013), reputation (Rau, 2000; Kale et al., 2003; Derrien et al., 2015), the prior relation of bidders with their advisory banks (Francis et al., 2014), and the advisor's industry-specific expertise (Wang et al., 2014; Chang et al., 2015). This study claims that financial advisor centrality is a key determinant which significantly affects the choice of financial advisors during the acquisition process.

Third, most previous studies provide evidence about bidders' choice of advisors. This paper is one of the few to also shed light on the target's choice of financial advisors. The empirical results show that financial advisor centrality is negatively related with premiums received by target firms, despite the fact that target firms pay higher advisory fees to central advisors.

The rest of the paper is organised as follows. Section 2 discusses the sample of M&As, financial advisors and the various measures of centrality employed in this paper. Section 3 discusses the impact of advisor centrality on merger activity. Section 4 explores the relationship between advisors' centrality and bidder and deal characteristics. Section 5

investigates the impact of centrality on bidder and target performance and Section 6 examines the relationship between centrality and advisory fees. Section 6 concludes.

2. M&As and Network Centrality Data

2.1 M&A Sample

A sample of US mergers and acquisitions is downloaded from the Securities Data Company's Merger and Acquisition database (SDC) over the period 2000-2012. We include all domestic merger deals announced by public bidders. The sample is further screened. We exclude: i) all deals characterised as leveraged buyout, exchange offer, repurchase, spin-off, recapitalisation, privatisation and self-tender; ii) mergers in the utilities and financials industry; iii) transactions with no deal value disclosed by SDC; v) all M&A deals with a value of either less than 1 million USD or less than 1% of the acquirer market value; vi) deals in which the percentage of share acquired by the bidder is less than 50% of the target's share; and vii) deals for which neither the targets' nor the bidders' advisor information is available in SDC.

After exclusion, our final sample consists of 4,193 acquisition deals. The financial information of the final M&A sample is downloaded from DataStream. In the final sample, 25% of deals involve public targets and 40.7% private targets; 12.3% of deals are financed with stock, 37% with cash, and the remainder with a mix of cash and stock; and 37.8% of all the acquisitions deals are diversifying mergers. Acquirers and targets equally most of the times (approximately 84%) involve at least one advisor. Table 1 presents further information related to the distribution of the sample over time (Panel A) and across industries (Panel B).

[Insert Table 1 about here]

2.2 Financial Advisors Sample

We use the Securities Data Company (SDC) to download data on financial advisors, which are involved in USA domestic takeovers either as the bidder's or target's advisor over the period January 2000 to December 2012. As SDC sometimes provides multiple codes for the same bank or mention the same advisor names in different styles, we manually check advisors' codes and names to avoid repetition of the same advisor. Most previous studies[3] define a corporation's peer network on the basis of their past work relationship, e.g. if two banks have been working together in the same IPO syndicate or their members served in the same advisory board. These connections are generally short-lived and end with the suspension of the project. We use the Boardex database to determine financial advisors' peer network, which is defined as the organisation's peer network on the basis of their individuals' social connections. The individuals remain connected with the old organisation when they join another firm or retire. The organisations' networks become more vast and stronger when they share their individuals with other organisations. For example, two companies may share a board member or individual working for two companies, who also work as an independent director of a non-professional organisation (club, charity, etc.). Hence, the organisational network keeps multiplying and becoming stronger with the increase of its individual connections. Boardex provides information for 511 of the 627 financial advisors in our sample. In many cases, we consider the subsidiary name of the individual financial advisor, since Boardex provides different information about the connections of the parent and the subsidiary bank. For example, Barclays is included in our financial advisors sample. Barclays is a British multinational banking and financial services company headquartered in London. Since we examine US M&As, instead of checking Barclays social network, we consider Barclays American Corp. Barclays American Corporation operates as a subsidiary of

[3] Hochberg et al. (2007) define a venture capital network as where two venture capitalists have co-invested. Bajo et al. (2015) consider two underwriters being connected in a peer network when both of them have been part of the same IPO syndicate in the past.

Barclays Bank PLC in the US. Boardex provides different information for the parent company and for subsidiaries. A similar example is that of KPMG. We extract social network data for KPMG US LLP from Boardex rather than the parent company. Investment banks which operate globally are excluded from the financial advisors sample, as Boardex does not provide separate information for their US division.

At the next stage, point to point matching is done among financial advisors to determine the financial advisor peer network. Financial advisors exhibit first-degree connections when they are connected with their peers through an individual's overlapping; for example, when one individual is an independent director of two advisory firms. Financial advisors are connected with their peers through second-degree connections when individuals are linked through a third party, e.g. individuals belonging to two separate financial advisors, who went to the same educational institution, worked together in any professional institution, were members or officers in a charity organisation or spend leisure time together in a club. In our final sample, 450 advisors have first-degree connections and all except one (510) have second-degree connections.

2.3 Financial Advisor Centrality

Wasserman and Faust (1994) define centrality as the extent to which a central actor is connected with others in a specified network. The basic concept of network centrality is that the central position of an actor in a network is defined by its well-connectedness and tie quality, giving him quick access to new knowledge, information and resources which result in better performance. Central firms have greater access to informational and technological resources within the industry (Stuart et al., 1999), which help to gear the firms' performance through effective utilisation of acquired resources. Network centrality allows the central player to access diverse strategic resources and also play facilitating roles in integrating the knowledge and technology of other firms (Wellman, 1982). Tsai (2001) shows that central

organisational units are more innovative and enjoy better performance due to their access to new knowledge developed by other units. Apart from the information advantage, network centrality enhances the bargaining and negotiation power of central actors and makes them prestigious.

In the context of this study, bidders are competing with their peers for one target, and greatly rely on information and assessment provided by their advisors during the M&A transaction. The more quickly financial advisors obtain information and pass it on bidders, the faster bidders are able to execute a competitive bid and complete it successfully. Moreover, indirect connection is an additional benefit in the M&A context. Bidder financial advisors who are connected with other advisors, which in turn have connections with targets' advisors, then it would be easier for bidders' financial advisors to have access to targets' private insider information. This would help financial advisors better estimate the target's fair value and synergetic gain. Central advisors can also filter negative information and be in a better position to control the flow of information, which may have an adverse effect on the merger outcome. This can enhance the bargaining power of financial advisors during the M&A negotiation process and give them the power to suppress the rivalry in M&A activity.

Centrality is a multi-dimensional concept. We use four dimensions to measure financial advisors' centrality in their peer networks. Three dimensions of centrality in a social network are proposed by Freeman (1977, 1979): degree (number of direct connections), closeness (fewer steps between actors/nodes) and betweenness (acting as gatekeepers between other nodes). The fourth dimension is eigenvector centrality, introduced by Bonancich (1972), which determines the influential position of an actor.

Degree centrality indicates the number of direct connections that a financial advisor has in his peer network. The underlying concept is that the more connections a financial advisor has, the more centrally located he is within its network. It is calculated as:

$$Degree_i = \sum_j x_{ij} \qquad (1)$$

Where x is the connecting individual between financial advisor i and j. It is a simple centrality measure which describes the quantity of information or number of sources of information that a central advisor has, i.e. the higher the financial advisor's degree centrality, the greater the amount of information. Davis and Greve (1997) argue that direct connections provide access to insider information about other actors' (other firms in a social network) decision process, which is not readily available to any stakeholders like business process innovations, or effective corporate practices. A disadvantage of the degree measure is time bias; over the sample time period, financial advisors' networks change in composition and size. To address this potential problem, we normalise degree by the maximum possible number of connections N-1. The normalised degree for financial advisor i is calculated as:

$$Degree_i = \frac{1}{(N-1)} \sum_j x_{ij} \qquad (2)$$

This is the degree centrality measure we use in our analysis in this paper.

The shortcoming of degree centrality is that it does not fully capture the direction and flow of information. To overcome this shortcoming, we also employ *closeness centrality*. Closeness centrality counts the number of steps between two financial advisors. Similar to degree centrality, it measures the strength of connections but it considers both direct and indirect connections. It is estimated as the normalised inverse of the average distance between advisors:

$$Closeness_i = \left(\frac{\left[\sum_{j=1}^{N} d(i,j) \right]^{-1}}{N-1} \right) \qquad (3)$$

Where $d(i,j)$ is the shortest length between two financial advisors i and j. N is the number of financial advisors in the network and sigma is the sum of all the shortest paths between two financial advisors.

Closeness centrality enhances the flow of information and quicker exchange of resources by shortening the distance between financial advisors. In M&A, bidders are competing with their peers for one target and greatly rely on information and assessment provided by their

advisors. Moreover, indirect connection is also a privileged benefit in the M&A context. If a bidder's financial advisors are connected with other advisors, who themselves have connections with a target's advisor, then it would be easier for the bidder's advisor to access the target's private insider information, helping the financial advisor achieve a better estimation of the target's fair value and synergetic gain.

The third proxy of centrality is *betweenness centrality*, which determines the extent to which a financial advisor is a link between two other advisors. The underlying concept is how well situated a financial advisor is, in terms of the network paths he has. Burt (2000) highlights the significance of those actors who bridge different actors in a network. He argues that building and maintaining weak ties over large structural holes enhances the network's efficiency and effectiveness. Tsai (2001) suggests that the central members in a network are more likely to access diverse strategic resources through intermediating roles in integrating the knowledge and technology of other firms. Betweenness is defined as the average proportion of paths between two financial advisors passing through a financial advisor. The higher the number of paths passing through the advisor, the higher the advisor's betweenness. Betweenness of financial advisor i is calculated as:

$$Betweenness_i = \frac{\frac{\sum_{j \neq k} g_{jk}(i)/g_{jk}}{g_{jk}}}{\frac{(N-1)(N-2)}{2}} \qquad (4)$$

Where $\sum_{j \neq k} g_{jk}(i)$ is the sum of the total number of paths between k and j passing through agent I, and g_{jk} is the total number of paths between k and j. Betweenness centrality makes an agent a key broker with the ability to control the flow of information or resources. Gatekeepers are firms situated at the centre of a network, who enable the infusion of new and fresh knowledge into the network (Morrison, 2008). They allow central agents to manage and mediate relationships among other agents. This control enhances the bargaining position of financial advisors during the takeover negotiation process. The central advisor can also filter the information, which could have a negative impact on the merger deal.

The influential position of financial advisors is also determined through *Eigenvector centrality*. This is our fourth measure of centrality. Ties with higher status actors (well-connected actors) in a network help to elevate one's own status, whereas ties to lower status actors can compromise it (Podolny, 1993). Eigenvector centrality determines the well-connectedness of an agent through well-connectedness of its direct link. It is calculated as:

$$Eigenvector_i = \lambda \sum_{j=1}^{N} x_{ij} * e_j \qquad (5)$$

Where λ is a constant represented by the biggest eigenvalue and e_j is the eigenvector centrality score. $\sum_{j=1}^{N} x_{ij}$ is the sum of connecting individuals between financial advisor i and j. If a financial advisor is connected with another advisor that has high centrality, this will strengthen his influence in the network. The power and control of central advisors are further enhanced when well-connected nodes have reached outside peers, i.e. direct and indirect relations with investors, regulators, other financial institutions, tax authorities, government and media. Eigenvector centrality gives a financial advisor the power to suppress the rivalry in M&A activity and make them prestigious.

Panel A of Table 2 reports summary statistics about the centrality of financial advisors. The mean degree and eigenvector centrality of the financial advisor sample are around 0.045 and 0.041, respectively. The mean value of closeness centrality is the highest among all centrality measures, at 0.417, whereas the betweenness centrality is lowest, at 0.001. The low betweenness centrality is attributed to the fact that almost all of the financial advisors in our sample are connected with each other directly or indirectly, so a bridge is not required to further connect.

Panel B of Table 1 shows that the centrality of acquirers' advisors is slightly higher than targets' advisor centrality, but the difference is relatively small. Although our total M&A sample is 4,193, the bidders' advisors code/name is available for 2,606 deals, while the targets' is available for 3,477 deals. Only for 1,811 deals is data available both for bidders'

and targets' advisors. In Panel B of Table 2, we compare advisors' centrality for only these 1,811 deals.

[Insert Table 2 about here]

3. Financial Advisor Centrality and Acquisition Activity

We first examine the impact of financial advisors' centrality on their involvement in merger activity. Central financial advisors have a comparative information advantage, better access to and control of resources, and the power to influence others' decisions. Hence, their involvement in merger activity would be relatively high. The centrality of each financial advisor is estimated through the four measures of degree, closeness, betweenness and eigenvector centrality. A financial advisor is classified as highly central if his centrality measure is above the median value, and low if it is below the median. To estimate financial advisors' M&A activity, we sum all the acquisition deals (either as a bidder or target advisors) advised by each financial advisor during the sample period, i.e. 2000-2012. Panel A of Table 3 presents the univariate analysis results between high and low centrality advisors. High centrality advisors undertake significantly more takeover deals than their low centrality counterparts. The number of deals advised by a high centrality advisor is around 18-20 over the sample time period, whereas the number of deals advised by a low centrality advisor is 2-4. The difference in merger activity between high and low centrality advisors is statistically significant at the 1% significance level. These results suggest that more central advisors are more actively involved in takeover activity. The result remains robust for all centrality measures.

We further examine whether high centrality advisors are more involved in advising acquiring or target firms. Both bidding and target firms have incentives to be associated with a central financial advisor. The network contacts of dominant advisors could prove beneficial for

acquiring firms. Leading advisors could negotiate and bid for value-enhancing deals. Central advisors could enhance the visibility and bargaining power of target firms. Furthermore, dominant advisors could propose a better anti-takeover strategy to target firms due to their connectedness and information advantage. If that is not achieved and the deal proceeds, leading advisors in their network could better negotiate higher premiums for their clients. Panel B of Table 3 shows that high centrality advisors are involved in around 13-15 deals as a bidder's advisor. On the other hand, targets hire a high centrality advisor for about 2-3 deals on average. The difference between acquirer and target hiring of a leading advisor is around 10-12 deals, which is statistically significant at the 1% level of significance. That implies that high centrality advisors are mostly associated with bidders. The results show an obvious difference in the connection of high centrality advisors between acquirers and targets, and the difference remains robust for all measures of financial advisor centrality. There are two potential explanations for the picture presented above. Central advisors prefer to work with acquirers, since, after a successful deal completion, only bidders would survive in the market, and financial advisors expect to get future contracts with them. Alternatively, if leading financial advisors for target firms have successfully managed to implement their anti-takeover strategies, these deals have never been reported. That creates a survivorship bias in favour of central financial advisors for acquirers.

[Insert Table 3 about here]

4. Financial Advisor Centrality and Bidder and Deal Characteristics

4.1 Bidder Size

This section explores the association of financial advisors' centrality with various bidder and deal characteristics. It is well established in M&A literature that bidder size has a significant impact on almost all dimensions of merger decision, such as acquisition activity and bidders'

announcement returns. El-Khatib et al. (2015) argue that more central CEOs are more likely to manage large acquirers. Similarly, we expect more central financial advisors to be more involved with larger acquirers, as those central financial advisors may have a larger network overlap with larger firms. They could also charge higher advisory fees for larger bidding companies. We explore the likelihood that bidder size may be associated with advisor centrality. We use the following multivariate Tobit model specification:

$$\text{Prob (Bidder Size}_i) = \alpha_i + \text{Centrality}_i + \text{Control Variables}_i + \varepsilon_i \quad (6)$$

where Bidder Size is calculated as the natural log of the market value of a bidder's total assets, and the main independent variable is the four centrality measures. We also account for a number of centrality measures as described in Appendix A. Table 4 presents the results for degree, closeness, betweenness and eigenvector centrality in Columns 1, 2, 3 and 4, respectively. All centrality variable coefficients carry positive and statistically significant values. The results show that high centrality advisors are more likely to be associated with large acquirers.

[Insert Table 4 about here]

4.2 Deal Complexity

We examine whether central financial advisors have a higher probability of being involved in complex deals. Sarver and Zenner (1996) argue that deals for which the target is publicly listed are more complex. We create a dummy variable (D1) which is equal to one if the target is publicly listed, and zero otherwise. The following multivariate Probit model specification is employed:

$$\text{Prob (D1 = bidder's choice in public deals)} = \alpha_i + \text{Centrality}_i + \text{Control Variables} + \varepsilon_i$$

Panel A of Table 5 reports the results of the probability of a central financial advisor being employed in public deals. The coefficients of all four centrality measures show that a central

financial advisor tends to have a higher likelihood of being involved in pubic deals. The coefficients are positive and statistically significant at 1% and 5% significance levels. They remain robust even after controlling for a number of other determinants.

We also assume that complexity is associated with target size. It would involve a greater effort to complete deals of relatively large target firms. For that reason, we investigate whether central advisors are associated with large relative size deals. The following multivariate Tobit model specification is employed:

$$\text{Prob (RS)} = \alpha_i + \text{Centrality}_i + \text{Control Variables} + \varepsilon_i$$

where Prob (RS) is the relative size of the deal, calculated as the deal value over the market value of the acquirer. Panel B of Table 5 presents the multivariate results. The coefficients of all four centrality measures are positive. Three out of the four (degree, closeness, betweenness) are statistically significant at the 5% significance level, while the p-value for the eigenvector measure is close to the 10% level (p-value = 0.124).

There are two potential explanations for the findings presented above. Acquirers that bid for public target firms or for relatively large target firms prefer to involve central financial advisors who are more capable of reducing transaction costs and information asymmetry. Alternatively, central advisors are more likely to accept to advise acquisitions for public or relatively large target firms which can have a higher economic benefit for them. Advisors' fees depend on the size of the deal. In untabulated results, we find similar evidence if we employ deal value instead of relative size as an independent variable.

[Insert Table 5 about here]

4.3. Deal Completion Time

In this section, we examine the association of financial advisors' centrality and deal completion time. The literature suggests that reputable advisors are more likely to complete deals in less time (Hunter et al., 2003; Golubov et al., 2012). On the other hand, Walter et al.

(2008) argue that highly paid advisors do not tend to complete their deals in a short period of time. Recently, Renneboog and Zao (2014) argue that central bidders through directors are highly likely to complete deals in a short time due to their greater negotiation power. If acquirers choose central advisors due to their superior skills and information advantage, we would expect that central advisors would complete M&A deals in less time. Deal completion time is calculated as the number of days between the merger announcement and merger completion.

Panel A shows the univariate analysis between the number of days required by high and low centrality advisors to complete takeover deals. The results show that central advisors take longer to complete their deals than low centrality advisors. All the centrality measures show that central financial advisors take on average 18-20 days more to complete the deal. In Panel B of Table 6, the regression analysis results also show a positive and significant association between financial advisors' centrality and completion time. Two potential reasons can explain these results. Central financial advisors are more likely to possess and process more information and therefore require more time to close the deal. This is also likely to be attributed to the fact that they engage in large and more complicated deals, where a more meticulous analysis of the transaction is required. Alternatively, they may purposely delay the completion of the deal. Walter et al. (2008) claim that one major component of advisory fees is estimated as the percentage of the deal value. If the completion time increases, the deal value will increase due to potential competition; financial advisors can thus enhance their income from advisory fees. Overall, the results do not support the skilled advisors hypothesis that high-quality advisors tend to complete deals faster but instead they are more likely to favour their own interests.

[Insert Table 6 about here]

5. Acquirer and Target Performance

5.1. Acquirer Performance

Financial advisors can have an impact on various aspects of acquisition deals and merger outcome in terms of bidder's returns; deal premium is perhaps the most significant of these. According to the skilled advice hypothesis, banks help clients identify synergistic targets and negotiate favourable terms (Bao and Edmas, 2011; Golubov, 2012). In this section, we investigate whether leading advisors can help acquirers identify value-creating target firms. We examine the impact of central financial advisors on bidders' announcement abnormal returns. Following Fuller et al. (2002), we use event study methodology to calculate cumulative abnormal returns (CARs), which are the summation of abnormal returns for the five days surrounding the announcement date (-2, +2). Table 5 presents the regression analysis results where the dependant variable is acquirers' cumulative abnormal returns for five days and the main variables of interest are the four centrality measures. We also control for a number of variables that have been shown in the literature to affect bidder performance. A more detailed description of the control variables is available in Appendix A.

Panel A of Table 5 shows the results for the overall sample. The centrality coefficients are all statistically insignificant. The first indication is that central advisors do not seem to be able to create value for their clients. One could argue that bidder size may drive these results. In Table 4, we show that leading financial advisors are more likely to be associated with large acquirers. Moeller et al. (2004) show that bidder size is negatively related with announcement abnormal returns. Although we control for bidder size in the regression analysis in Panel A, for robustness reasons, we employ a propensity score nearest neighbour matching without replacement methodology (nn-1). Acquirers advised by high centrality advisors are matched with acquirers advised by low centrality advisors on the basis of acquirer size. In this way, the two subsamples consist of acquisitions for bidders of a similar size; therefore, the acquirer

size variable is unlikely to drive the abnormal returns results. Panel B presents the regression analysis after propensity score matching on bidder size is applied. The coefficients for the four centrality measures remain statistically insignificant. One may also argue that target public status may drive the acquirer short-run performance results. In Table 5, our findings indicate that high centrality advisors are more likely to work with acquirers that bid for public targets. Furthermore, Travlos (1987) shows that acquisitions of public target firms generate negative abnormal returns, while Draper and Paudyal (2006) show that acquisitions for private target firms generate higher abnormal returns than for public target firms. Does target public status drive the results? We further employ the propensity score matching approach and we now match on two variables, acquirer size and target public status. In other words, the two groups of high and low centrality acquisitions are equalised on the two variables. Panel C of Table 7 presents the regression analysis results. The centrality coefficients for all four measures are negative and statically significant. In unreported results, we re-run the analysis after matching bidder size on the two subsamples, of listed and unlisted targets, and we find no significant results. Our results are also robust to other event windows, such as (-1,+1). These findings indicate that central financial advisors fail to identify synergy-enhancing acquisitions for their clients. They do not create wealth for bidders' shareholders. Central financial advisors are more likely to identify large target firms which can boost their advisory fees rather than value-enhancing targets.

[Insert Table 7 about here]

5.2. Deal Premium

Leading bidder advisors fail to create value for bidders' shareholders. Can target central financial advisors create more value or negotiate higher premiums for target firms' shareholders? In this section, we study the impact of target financial advisors' centrality on acquisition premiums. We examine whether targets receive higher acquisition premiums in

deals involving central advisors or not. Deal premium is the percentage difference between the price offered by the acquirer and the market price of the target one day prior to the merger announcement date, which is downloaded from SDC (Song at el., 2013). Results are presented in Panel A of Table 8. For robustness, an alternative way to calculate premium is as the cumulative abnormal returns of the target firm from 42 days prior to the announcement of the deal until the completion date (Fu et al., 2013). Abnormal returns are calculated with a modified market-adjusted model, as in Fuller et al. (2002). Results are presented in Panel B of Table 8.

The dependant variable is acquisition premium and the main variables of interest are the four centrality measures. We further control for a number of deal-, firm- and advisor-specific characteristics. All four target centrality coefficients are negative, and for the first three measures, they are statistically significant for the first measure of deal premium (Panel A). The p-value for the eigenvector centrality measure is 0.161. The results are consistent for the second measure of deal premium (Panel B). All centrality coefficients are negative and statistically significant. These findings indicate that target central advisors also fail to create value for their clients. Central financial advisors seem to mainly care about closing the deal and getting paid for their services rather than creating value for their clients.

[Insert Table 8 about here]

6. Advisory Fees

Findings show that leading financial advisors fail to create value both for acquiring and target firms. Do central financial advisors benefit from being involved in M&A activity? Can they enhance their revenues by advising larger acquirers, acquisitions for public target firms and larger target firms? We explore the economic implications of financial advisor centrality by examining the effect on M&A advisory fees. Hunter et al. (2003) claim that targets' advisors'

reputation determines the advisory fee paid by bidders. They find that acquirers pay a higher advisory fee when the target advisor is relatively more reputable. Walter et al. (2008) also support the premium quality hypothesis; first- and second-tier advisors charge a substantially higher advisory fee. Golubov et al. (2012) document a significant positive association between advisor reputation and advisory fees.

Panel A of Table 9 reports the univariate results of bidders' advisor centrality level and bidders' advisory fees. Following McLaughlin (1990, 1992), advisory fee is measured as the natural logarithm of advisory fees. The mean value for high centrality advisors is 1.995, while the respective mean value for low centrality advisors is 1.642. The mean difference is 0.353, which is statistically significant and remains consistent for all centrality measures. High centrality advisors seem to request, and be paid, higher advisory fees. Panel B presents the regression analysis results which show the relation of bidders' advisor centrality with bidders' advisory fees. Following the literature (Golubov et al., 2012), we control for a number of deal-specific characteristics, such as the method of payment, relative size of the deal, diversification and attitude of the deal. In addition, we include advisor-specific control variables, such as prior relationship, reputation and past performance. The coefficients of interest are the advisors' centrality measures. All four centrality measures carry positive coefficients and three out of the four (degree, closeness, betweenness) are statistically significant, which indicates that high centrality advisors charge higher fees for acquiring firms.

[Insert Table 9 about here]

We further examine advisory fees for target firms' advisors. The univariate analysis results are reported in Panel A of Table 10. Targets also pay on average higher fees in deals employing central financial advisors. The regression analysis results for targets are shown in Panel B of Table 10. We also control for a number of deal- and advisor-specific characteristics. The coefficients of financial advisor centrality in all centrality dimensions are

positive, implying that high centrality financial advisors for targets charge higher advisory fees. The coefficients are statistically significant for the degree, closeness and betweenness measures.

[Insert Table 10 about here]

Conclusively, the results for both bidders' and targets' advisors suggest that central financial advisors are the only party to benefit financially from M&A transactions. Fees do not seem to be linked with performance. Leading advisors seem to exploit their connections and their position in their network to access and manage "advisory fee" generating deals.

7. Robustness Tests

A natural question is whether the centrality measures capture financial advisor factors such as reputation, past performance or prior relationship that have already been studies in the literature. The pairwise correlations between the various centrality measures and the reputation variable rages from 6% to 20%. The correlations between centrality and the other two variables, past performance and prior relationship, are close to zero. Although, in the regression analysis, we control for factors related to the financial advisors, i.e. prior relationship, past performance and reputation, for robustness, we perform additional tests to account for these factors. We orthogonalise the centrality measures by these three variables and re-run the analysis with the orthogonal version of the centrality measures. In untabulated results, we find similar results both for advisory fees and for the rest of our analysis in general for the centrality coefficients.

8. Conclusion

This paper builds on the growing literature of network centrality in corporate finance. While El-Khatib et al. (2015) examine the role of CEO centrality in an M&As framework, and Bajo et al. (2016) investigate the impact of underwriters' centrality in IPOs, this paper extends this part of the literature by providing evidence of the impact of financial advisors' centrality on M&As. We highlight the impact of financial advisors' centrality in merger activity, bidder and deal characteristics, merger outcome and advisory fees. Four centrality dimensions, i.e. degree, closeness, betweenness and eigenvector centrality, are employed to capture financial advisors' centrality in their peer network for US advisors involved in merger deals over the period 2000-2012.

Using a comprehensive M&A sample, we find that central financial advisors are involved in higher acquisition activity, and they prefer to be involved on the bidder's rather than the target's side. Despite their information and network advantage, central advisors fail to create value both for acquiring firms' and for target firms' shareholders. Nevertheless, central advisors manage to obtain higher advisory fees both from bidding and target companies. Leading advisors seem to exploit their connections and their position in their network to access and advise in "advisory fee" generating deals. This is further supported by our findings which indicate that central financial advisors are more likely to be involved in takeover deals initiated by a large acquirer. We further show that central financial advisors are more likely to be involved in deals of public target firms and deals of relatively larger target firms. These findings further reinforce the argument that central advisors are more likely to choose deals which are more likely to boost their revenue. Lastly, central advisors seem to take longer to complete their deals. Walter et al. (2008) claim that one major component of advisory fees is estimated as the percentage of the deal value. If the time to

complete the deal increases, the deal value will increase due to potential competition, and financial advisors can thus boost their income from advisory fees.

Our paper provides additional insights. While it is hard to know who selects whom in the mergers and acquisitions market (in other words, whether bidders and/or targets select financial advisors or whether financial advisors select bidders or targets), the overall findings of this paper tend to suggest that financial advisors seem to have the upper hand in the M&A framework. Financial advisors seem to be the only beneficiary in M&A transactions. Our study introduces a new non-economic determinant in the choice of financial advisors for takeovers. The overall findings suggest that central financial advisors are self-motivated for their own economic benefit, and do not create value during the M&As process for their clients.

Appendix

Panel A: Control Variables	
Public	It is a dummy variable that takes the value of one if the target is a listed company, and zero otherwise.
Stock	It is a dummy variable that takes the value of one if the acquisition is fully financed with stock, and zero otherwise.
Bidder's Size	Bidder's size is measured by the natural log of acquirer's market value as measured 20 days prior to the deal announcement.
MTBV	It is the bidder's net book value of assets divided by its market value a month before the announcement of the deal.
RS	Relative size is the value of the deal as reported by SDC over the market value of the acquirer.
Diversification	It is a dummy variable which takes the value of one if the first two digits of the acquirer's SIC code are different from the first two digits of the target's SIC code, and zero otherwise.
Free Cash Flow	Free Cash Flow is calculated as a firm's operating income before depreciation minus interest and tax expenses minus capital expenditure, divided by the book value of total assets.
RoA	Return on Assets is defined as earnings before interest, tax, depreciation and amortization scaled by the book value of total assets.
Leverage	Leverage is defined as the total debt of the bidder divided by the market value of its total asset.
Tender Offer	It is a dummy variable that takes the value of one if SDC classifies the deal as a tender offer, and zero otherwise.
Hostile Takeover	It is a dummy variable that takes the value of one if SDC classifies the deal as a hostile deal, and zero otherwise.
Prior Relation	It is a dummy variable that takes the value of one if the firms retain the same advisors from their previous M&A transactions over the sample period, and zero otherwise.
Past Performance	It is calculated as the equal-weighted CARs (EWCAR) of the advisor's clients in takeovers prior to the announcement date of the current M&A deal.
Advisor's Reputation	Advisor's Reputation is defined on the basis of their market share by value of acquirer-advised deals for an investment bank over the sample time period.
Panel B: Independent Variables	
CARs(-2,+2)	It is the sum of abnormal returns over the five-day period (-2, +2) surrounding the announcement date. Abnormal Returns are calculated with a modified market-adjusted model, as in Fuller et al. (2002).
Advisory Fee	It is the natural log of advisory fee downloaded from SDC.
Premium (Offer Price–Market Price)	It is the percentage difference between the price offered by the acquirer and the market price of the target one day prior to the merger announcement date which is downloaded from SDC.
CARs(-42,CD)	An alternative way to calculate premium is as the cumulative abnormal returns of the target firm from 42 days prior to the announcement of the deal until the completion date. Abnormal Returns are calculated with a modified market-adjusted model, as in Fuller et al. (2002).
Deal Completion Time	The number of days between the deal announcement date and the deal effective date.
High Centrality Advisor	An advisor is classified as high centrality if his centrality measure is above the median centrality value.

Low Centrality Advisor	An advisor is classified as low centrality, or peripheral, if his centrality is below the median centrality value.

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Table 1. Descriptive Statistics for the Sample

This table presents the descriptive statistics for 4,193 domestic M&A deals announced by US acquiring firms from 2000 to 2012. The value of each deal is at least $1 million, and more than 50% share is acquired in the transaction. Definitions of all variables are given in the Appendix. Panel A presents statistics by year, Panel B by acquirer's industry and Panel C provides statistics on a number of variables employed in the analysis of this paper.

Panel A: By Year			Panel B: By Acquirer's Industries		
Year	Number	%	Industries	Number	%
2000	427	10.18	Basic Materials	139	3.31
2001	380	9.06	Consumer Goods	337	8.03
2002	349	8.32	Consumer Services	495	11.8
2003	337	8.04	Healthcare	602	14.36
2004	359	8.56	Industrials	953	22.73
2005	374	8.92	Oil & Gas	422	10.06
2006	367	8.75	Technology	1129	26.92
2007	376	8.96	Telecommunications	116	2.76
2008	243	5.79			
2009	197	4.69			
2010	269	6.41			
2011	240	5.72			
2012	275	6.55			
Total	4193	100	Total	4193	100

Panel C: Statistics on Variables			
	N	Mean	Std.dev
Firm Characteristics			
Bidder Size	4193	6.963	1.863
Market to Book	4193	4.11	22.98
Free Cash Flow	4193	0.101	0.299
Return on Assets	4193	0.151	0.198
Leverage	4193	27.183	24.288
CARs(-2,+2)	4193	0.013	0.115
Deal Characteristics			
Relative Deal Size	4193	0.574	7.809
Public	4193	0.256	0.436
Private	4193	0.406	0.491
Cash Deals	4193	0.369	0.483
Stock Deals	4193	0.123	0.328
Diversifying Deals	4193	0.376	0.484
Bidder's Advisors Characteristics			
Prior Relation	2606	0.115	0.319
Past Performance	2606	0.007	0.049
Advisor Reputation	2606	8.14	13.637

Table 2. Summary Statistics for the Financial Advisors' Centrality Measures

This table reports summary statistics for the four centrality measures used to estimate centrality of the US financial advisor sample of 511 advisors involved in M&A transactions over the period 2000-2012. Panel A shows the centrality measure statistics. The calculation of all four centrality measures is explained in Section 2.3. Panel B shows the comparison of centrality between acquirer and target financial advisors for the M&A sample. *, ** and *** depict the level of significance at 10%, 5% and 1%, respectively. P-values are reported in brackets.

Panel A: Summary Statistics for Financial Advisor Centrality					
	N	Mean	Std.dev	Max	Median
Degree	511	0.045	0.063	0.367	0.015
Closeness	511	0.417	0.058	0.585	0.412
Betweenness	511	0.001	0.001	0.01	0.0003
Eigenvector	511	0.041	0.017	0.064	0.043

Panel B: Comparison of Financial Advisory Centrality between Acquirer and Target								
Centrality	Acquirer			Target			Acquirer-target	
	N	Mean	p-value	N	Mean	p-value	Difference	p-value
Degree	1811	0.164***	(0.000)	1820	0.151***	(0.000)	0.013***	(0.000)
Closeness	1811	0.494***	(0.000)	1820	0.486***	(0.000)	0.008***	(0.000)
Betweenness	1811	0.003***	(0.000)	1820	0.002***	(0.000)	0.001**	(0.040)
Eigenvector	1811	0.058***	(0.000)	1820	0.057***	(0.000)	0.001**	(0.043)

Table 3. Financial Advisor Centrality and Frequency of M&A deals

This table shows the association between financial advisor centrality and merger activity. Panel A presents the number of deals advised by high and low centrality financial advisors. Panel B compares the involvement of high centrality financial advisors in M&A deals as acquirers' and as targets' financial advisors. *, ** and *** depict the level of significance at 10%, 5% and 1%, respectively. P-values are reported in brackets.

Panel A: Financial Advisory Centrality and Frequency of M&A deals						
	High Centrality Advisor		Low Centrality Advisor		High-Low	
Centrality	No. of deals	p-value	No. of deals	p-value	Difference	p-value
Degree	18.411***	(0.000)	4.824***	(0.004)	13.585***	(0.000)
Closeness	19.738***	(0.000)	2.968***	(0.000)	16.769***	(0.000)
Betweenness	20.474***	(0.000)	2.141***	(0.000)	18.333***	(0.000)
Eigenvector	20.607***	(0.000)	2***	(0.000)	18.607***	(0.000)

Panel B Involvement of the High Centrality Advisor as Acquirer's and Target's Advisor						
	Acquirer		Target		Acquirer-Target	
Centrality	No. of deals	p-value	No. of deals	p-value	Difference	p-value
Degree	14.811***	(0.000)	2.765***	(0.000)	12.045***	(0.000)
Closeness	13.75***	(0.000)	3.261***	(0.000)	10.458***	(0.000)
Betweenness	15.094***	(0.000)	2.471***	(0.000)	12.623***	(0.000)
Eigenvector	15.094***	(0.000)	2.479***	(0.000)	12.615***	(0.000)

Table 4. Acquirer Financial Advisor Centrality and Bidder Size

This table shows the association between financial advisor centrality and bidder size. A Tobit regression model is used to determine the association between financial advisor centrality and the probability of advising larger/smaller acquirers. The dependent variable is bidder size, which is calculated as the natural log of acquirer's market value as measured 20 days prior to the deal announcement. The main independent variables are the four centrality measures. We control for deal, firm and financial advisor characteristics. Definitions of the variables are given in the Appendix. *, ** and *** depict the level of significance at 10%, 5% and 1%, respectively. P-values are reported in brackets.

Bidder Size	(1)	(2)	(3)	(4)
	Degree	Closeness	Betweenness	Eigenvector
Degree	2.916***			
p-value	(0.000)			
Closeness		5.045***		
p-value		(0.000)		
Betweenness			150.496***	
p-value			(0.000)	
Eigenvector				32.263***
p-value				(0.000)
Public	0.928***	0.936***	0.928***	0.928***
p-value	(0.000)	(0.000)	(0.000)	(0.000)
Stock	-0.791***	-0.795***	-0.791***	-0.787***
p-value	(0.000)	(0.000)	(0.000)	(0.000)
MTBV	0.020***	0.022***	0.023***	0.022***
p-value	(0.000)	(0.000)	(0.000)	(0.000)
RS	-0.111***	-0.111***	-0.111***	-0.109***
p-value	(0.000)	(0.000)	(0.000)	(0.000)
Diversification	0.120*	0.117	0.136*	0.136*
p-value	(0.107)	(0.116)	(0.067)	(0.068)
Free Cash Flow	-0.272**	-0.286**	-0.281**	-0.303***
p-value	(0.014)	(0.010)	(0.011)	(0.007)
ROA	0.200	0.234	0.232	0.324
p-value	(0.497)	(0.408)	(0.411)	(0.253)
Leverage	-0.001	-0.001	-0.001	-0.001
p-value	(0.530)	(0.723)	(0.354)	(0.735)
Tender Offer	2.146***	2.139***	2.021***	2.005***
p-value	(0.001)	(0.001)	(0.001)	(0.001)
Hostile Takeover	1.169	1.149	1.131	1.205*
p-value	(0.110)	(0.117)	(0.121)	(0.100)
Prior Relation	0.686***	0.707***	0.699***	0.718***
p-value	(0.000)	(0.000)	(0.000)	(0.000)
Past Performance	-0.089	0.027	-0.114	-0.167
p-value	(0.902)	(0.970)	(0.875)	(0.819)
Advisor Reputation	0.038***	0.037***	0.035***	0.038***
p-value	(0.000)	(0.000)	(0.000)	(0.000)
Constant	6.111***	4.083***	6.106***	4.676***
p-value	(0.000)	(0.000)	(0.000)	(0.000)
N	2047	2047	2047	2047
Pseudo-R square	0.073	0.073	0.075	0.072

Table 5. Acquirer Financial Advisor Centrality and Deal Complexity

This table reports the probability of central financial advisors being involved in complex deals. In Panel A, the dependent variable is a dummy variable which is equal to one if the target is listed, and zero otherwise. A probit model is used to estimate the likelihood of central advisors' involvement in public deals, and results are shown in Columns 1, 2, 3 and 4. In Panel B, the dependent variable is Relative Size, which is estimated as the ratio of the deal value of the bidder's market value of equity. A Tobit model is used to estimate the probability. The results are shown in Column 5, 6, 7 and 8. The main independent variables are the four centrality measures. We control for deal, firm and financial advisor characteristics. Definitions of the variables are given in the Appendix. *, ** and *** depict the level of significance at 10%, 5% and 1%, respectively. P-values are reported in brackets.

	Panel A: Public Deals				Panel B: Relative Size			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Degree	Closeness	Betweenness	Eigenvector	Degree	Closeness	Betweenness	Eigenvector
Degree	0.769***				0.782**			
p-value	(0.007)				(0.049)			
Closeness		1.372**				1.278**		
p-value		(0.010)				(0.079)		
Betweenness			30.453**					
p-value			(0.027)				41.846**	
Eigenvector				10.068***			(0.030)	7.236
p-value				(0.007)				(0.124)
Public					-0.174*	-0.176*	0.175*	0.177*
p-value					(0.068)	(0.065)	(0.066)	(0.063)
Stock	1.136***	1.136***	1.136***	1.139***	0.149	0.149	0.149	0.152
p-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.260)	(0.259)	(0.264)	(0.252)
Bidder Size	0.205***	0.205***	0.205***	0.205***	-0.149***	-0.149***	-0.151***	-0.147***
p-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
MTBV	-0.001	-0.002	-0.001	-0.001	-0.002	-0.002	-0.002	-0.002
p-value	(0.653)	(0.608)	(0.633)	(0.573)	(0.604)	(0.572)	(0.602)	(0.554)
RS	0.022*	0.022*	0.022*	0.022*				
p-value	(0.086)	(0.083)	(0.083)	(0.083)				
Diversification	-0.157**	-0.157**	-0.154**	-0.153**	-0.123	-0.124	-0.118	-0.120
p-value	(0.013)	(0.013)	(0.015)	(0.016)	(0.154)	(0.152)	(0.170)	(0.167)
Free Cash Flow	0.261	0.252	0.256	0.238	-0.034	-0.037	-0.037	-0.042
p-value	(0.445)	(0.437)	(0.445)	(0.419)	(0.790)	(0.770)	(0.774)	(0.746)
ROA	-0.177	-0.164	-0.171	-0.129	0.120	0.128	0.129	0.145
p-value	(0.650)	(0.664)	(0.657)	(0.714)	(0.714)	(0.697)	(0.693)	(0.658)
Leverage	0.001	0.001	0.001	0.001	0.007***	0.007***	0.007***	0.007***
p-value	(0.596)	(0.544)	(0.602)	(0.559)	(0.000)	(0.000)	(0.000)	(0.000)
Tender Offer					0.059	0.052	0.029	0.015
p-value					(0.935)	(0.943)	(0.968)	(0.983)
Hostile Takeover					0.239	0.233	0.239	0.246
p-value					(0.778)	(0.784)	(0.786)	(0.772)
Prior Relation	-0.182**	-0.178*	-0.178*	-0.176*	-0.099	-0.095	-0.096	-0.092
p-value	(0.048)	(0.053)	(0.054)	(0.056)	(0.432)	(0.454)	(0.451)	(0.468)
Past Performance	0.413	-0.378	-0.433	-0.433	-0.963	-0.938	-0.966	-0.995
p-value	(0.520)	(0.557)	(0.499)	(0.504)	(0.256)	(0.270)	(0.254)	(0.241)
Advisor Reputation	0.005**	0.005**	0.005*	0.005**	0.001	0.001	0.001	0.001
p-value	(0.023)	(0.034)	(0.052)	(0.027)	(0.737)	(0.819)	(0.950)	(0.788)
Constant	-2.189***	-2.749***	-2.171***	-2.662***	1.161***	0.644*	1.166***	0.841***
p-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.084)	(0.000)	(0.006)
N	2035	2035	2035	2035	2047	2047	2047	2047
Pseudo-R square	0.126	0.126	0.125	0.126	0.007	0.007	0.007	0.007

Table 6. Acquirer Financial Advisor Centrality and Duration of Deal Completion

This table reports the results of bidder's centrality and deal completion time. Panel A reports the univariate statistics of advisors' centrality and deal completion time. Deal completion time is calculated as the difference between the deal announcement date and the deal effective date. The first column shows the deal completion time for high centrality bidder advisors, the third column shows the deal completion time for low centrality advisors and the fifth column shows the difference in time taken to complete deals between central and peripheral bidder advisors. Panel B shows the regression analysis results. The dependant variable is completion time. The main independent variables are the four centrality measures. We control for deal, firm and financial advisor characteristics. Definitions of the variables are given in the Appendix. *, ** and *** depict the level of significance at 10%, 5% and 1%, respectively. P-values are reported in brackets.

Panel A: Univariate Analysis						
	High Centrality Advisor		Low Centrality Advisor		Difference (High-Low)	
Centrality	Deal completion time	p-value	Deal completion time	p-value	Deal completion time	p-value
Degree	89.181***	(0.000)	68.624***	(0.000)	20.577***	(0.000)
Closeness	89.492***	(0.000)	71.579***	(0.000)	17.912***	(0.000)
Betweenness	89.768***	(0.000)	69.034***	(0.000)	20.733***	(0.000)
Eigenvector	90.691***	(0.000)	69.297***	(0.000)	21.394***	(0.000)

Panel B: Multivariate Analysis				
Deal Completion Time	Degree	Closeness	Betweenness	Eigenvector
Degree	8.173**			
p-value	(0.012)			
Closeness		8.542***		
p-value		(0.008)		
Betweenness			7.578**	
p-value			(0.020)	
Eigenvector				8.856***
p-value				(0.007)
Public	40.652***	40.635***	40.708***	40.660***
p-value	(0.000)	(0.000)	(0.000)	(0.000)
Stock	24.627***	24.496***	24.741***	24.614***
p-value	(0.000)	(0.000)	(0.000)	(0.000)
Bidder Size	3.079***	3.057***	3.085***	2.978***
p-value	(0.001)	(0.001)	(0.001)	(0.001)
MTBV	0.461***	0.459***	0.461***	0.462***
p-value	(0.007)	(0.008)	(0.007)	(0.007)
RS	7.526***	7.514***	7.525***	7.506***
p-value	(0.000)	(0.000)	(0.000)	(0.000)
Diversification	-13.203***	-13.164***	-13.028***	-13.013***
p-value	(0.000)	(0.000)	(0.000)	(0.000)
Free Cash Flow	-4.363	-4.375	-4.393	-4.344
p-value	(0.367)	(0.366)	(0.364)	(0.369)
ROA	5.966	5.726	5.859	5.810
p-value	(0.626)	(0.640)	(0.633)	(0.635)
Leverage	0.291***	0.291***	0.291***	0.286***
p-value	(0.000)	(0.000)	(0.000)	(0.000)
Tender Offer	-62.076**	-61.993**	-63.111**	-62.956**
p-value	(0.021)	(0.021)	(0.019)	(0.019)
Hostile Takeover	252.091***	252.069***	252.156***	252.066***
p-value	(0.000)	(0.000)	(0.000)	(0.000)
Prior Relation	-2.648	-2.668	-2.591	-2.584
p-value	(0.576)	(0.573)	(0.584)	(0.585)
Past Performance	20.696	19.346	21.095	20.505
p-value	(0.513)	(0.540)	(0.505)	(0.517)
Advisor Reputation	0.268**	0.269**	0.268**	0.266**
p-value	(0.022)	(0.022)	(0.023)	(0.023)
Constant	25.641***	25.636***	25.809***	26.079***
p-value	(0.000)	(0.000)	(0.000)	(0.000)
N	2045	2045	2045	2045
Pseudo-R square	0.198	0.199	0.198	0.199

Table 7. Acquirer Financial Advisor Centrality and Acquirer Short-run Performance

This table presents the impact of bidder financial advisor centrality on bidders' announcement abnormal returns. Bidders' short-run returns are calculated as the cumulative abnormal returns (CARs) over the window (-2, +2) around the acquisition announcement. Abnormal returns are calculated using a modified market-adjusted model. Panel A reports the regression analysis results for the whole M&A sample. Panels B and C present regression results after acquisition deals advised by high centrality advisors are matched with deals advised by low centrality advisors by using a propensity score matching (PSM) technique without replacement (nn-1). In Panel B, the two subsamples are matched on bidder size, and in Panel C, they are matched on both bidder size and target public status. The dependant variable in all regressions is acquirer cumulative abnormal returns. The main independent variables are the four centrality measures. We control for deal, firm and financial advisor characteristics. Definitions of the variables are given in the Appendix. *, ** and *** depict the level of significance at 10%, 5% and 1%, respectively. P-values are reported in brackets.

	Panel A: Whole Sample				Panel B: Propensity Score Matching Matching Covariate: Bidder Size				Panel C: Propensity Score Matching Matching Covariate: Bidder Size & Target Public Status			
	CARs(-2,+2)				CARs(-2,+2)				CARs(-2,+2)			
	Degree	Closeness	Betweenness	Eigenvector	Degree	Closeness	Betweenness	Eigenvector	Degree	Closeness	Betweenness	Eigenvector
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Degree	-0.002				0.006				-0.098***			
p-value	(0.907)				(0.862)				(0.001)			
Closeness		-0.036				-0.042				-0.185***		
p-value		(0.369)				(0.452)				(0.000)		
Betweenness			0.285				1.103				-5.027***	
p-value			(0.791)				(0.510)				(0.001)	
Eigenvector				-0.409				-0.496				-1.049***
p-value				(0.118)				(0.112)				(0.001)
Public	-0.033***	-0.033***	-0.033***	-0.033***	-0.045***	-0.045***	-0.045***	-0.045***				
p-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)				
Stock	-0.017**	-0.017**	-0.017**	-0.017**	-0.005	-0.003	-0.006	-0.005	-0.034***	-0.032***	-0.032***	-0.034***
p-value	(0.019)	(0.020)	(0.019)	(0.019)	(0.563)	(0.729)	(0.508)	(0.584)	(0.000)	(0.000)	(0.000)	(0.000)
Bidder Size	-0.005***	-0.005***	-0.005***	-0.005***								
p-value	(0.000)	(0.000)	(0.000)	(0.000)								
MTBV	-0.0001	-0.0001	-0.0001	-0.0001	-0.00004	0.0005	0.00008	0.0005	-0.00003	0.0002	0.00006	0.00007
p-value	(0.591)	(0.588)	(0.599)	(0.603)	(0.961)	(0.525)	(0.917)	(0.944)	(0.950)	(0.653)	(0.990)	(0.880)
RS	0.002	0.002	0.002	0.002	0.002*	0.001	0.002*	0.002*	0.029***	0.029***	0.031***	0.031***
p-value	(0.139)	(0.131)	(0.144)	(0.127)	(0.074)	(0.860)	(0.074)	(0.065)	(0.000)	(0.000)	(0.000)	(0.000)

Diversification	-0.002	-0.002	-0.002	-0.002	0.0005	-0.002	0.0005	-0.0002	0.002	0.002	0.002	0.002
p-value	(0.627)	(0.633)	(0.631)	(0.602)	(0.942)	(0.771)	(0.942)	(0.967)	(0.829)	(0.771)	(0.844)	(0.793)
Free Cash Flow	-0.005	-0.005	-0.005	-0.005	-0.002	-0.069***	-0.002	-0.002	-0.003	-0.003	-0.003	-0.003
p-value	(0.485)	(0.483)	(0.487)	(0.500)	(0.755)	(0.001)	(0.748)	(0.803)	(0.620)	(0.655)	(0.651)	(0.672)
ROA	-0.061***	-0.062***	-0.061***	-0.063***	-0.064***	0.0003***	-0.064***	-0.068***	-0.068***	-0.073***	-0.072***	-0.070***
p-value	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)	(0.008)	(0.003)	(0.002)	(0.001)	(0.000)	(0.001)	(0.001)
Leverage	0.0003***	0.0003***	0.0003***	0.0003***	0.0003***	-0.026	0.0003***	0.0003***	0.0002*	0.0002	0.0002	0.0002
p-value	(0.005)	(0.004)	(0.005)	(0.003)	(0.007)	(0.699)	(0.009)	(0.003)	(0.095)	(0.124)	(0.144)	(0.194)
Tender Offer	-0.011	-0.012	-0.011	-0.012	-0.022	0.083	-0.044	-0.046	-0.058	-0.060	-0.073	-0.072
p-value	(0.779)	(0.754)	(0.787)	(0.764)	(0.738)	(0.469)	(0.590)	(0.571)	(0.299)	(0.289)	(0.269)	(0.276)
Hostile Takeover	0.032	0.032	0.032	0.032	0.086	-0.006	0.087	0.079	0.047	0.047	0.046	0.038
p-value	(0.499)	(0.496)	(0.500)	(0.504)	(0.453)	(0.513)	(0.448)	(0.491)	(0.551)	(0.556)	(0.563)	(0.737)
Prior Relation	-0.008	-0.008	-0.008	-0.008	-0.006	-0.006	-0.003	-0.006	-0.004	-0.003	-0.0003	-0.003
p-value	(0.229)	(0.231)	(0.226)	(0.227)	(0.550)	(0.513)	(0.765)	(0.526)	(0.669)	(0.715)	(0.972)	(0.789)
Past Performance	0.078*	0.075	0.079*	0.075	0.066	0.063	0.067	0.065	0.097*	0.092*	0.097*	0.086
p-value	(0.098)	(0.112)	(0.095)	(0.111)	(0.232)	(0.256)	(0.232)	(0.245)	(0.073)	(0.091)	(0.077)	(0.117)
Advisor Reputation	0.0003*	0.0003*	0.0003*	0.0003*	0.0002	0.0002	0.0003	0.0002	-0.00007	-0.00003	0.00001	0.00004
p-value	(0.082)	(0.081)	(0.085)	(0.089)	(0.220)	(0.284)	(0.195)	(0.229)	(0.718)	(0.900)	(0.956)	(0.834)
Constant	0.059***	0.076***	0.059***	0.080***	0.022***	0.041	0.020**	0.049***	0.014**	0.089***	0.014*	0.061***
p-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.006)	(0.126)	(0.012)	(0.008)	(0.054)	(0.000)	(0.063)	(0.001)
N	2047	2047	2047	2047	1387	1382	1384	1360	1470	1460	1453	1453
Pseudo-R square	0.055	0.055	0.055	0.056	0.046	0.045	0.046	0.048	0.058	0.059	0.056	0.058

Table 8. Target Financial Advisor Centrality and Deal Premium

This table reports the results of target advisor centrality and deal premium. In Panel A, deal premium is the percentage difference between the price offered by the acquirer and the market price of the target share one day prior to the merger announcement date, which is downloaded from SDC. In Panel B, premium is calculated as the cumulative abnormal returns of the target firm from 42 days prior to the announcement of the deal until the completion date. Abnormal returns are calculated with a modified market-adjusted model, as in Fuller et al. (2002). The dependant variable is Deal Premium. The main independent variables are the four centrality measures for target advisors. We control for deal, firm and financial advisor characteristics. Definitions of the variables are given in the Appendix. *, ** and *** depict the level of significance at 10%, 5% and 1%, respectively. P-values are reported in brackets.

	Panel A: Premium (Offer Price–Market Price)				Panel B: CARs (-42,CD)			
	Degree	Closeness	Betweenness	Eigenvector	Degree	Closeness	Betweeness	Eigenvector
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Degree	-31.563**				-0.548*			
p-value	(0.027)				(0.086)			
Closeness		-60.115**				-1.307**		
p-value		(0.025)				(0.020)		
Betweenness			-1864.19***				-29.103**	
p-value			(0.004)				(0.038)	
Eigenvector				-286.844				-9.349***
p-value				(0.161)				(0.006)
Stock	-8.998**	-8.909**	-9.013**	-9.311**	0.072	0.074	0.074	0.046
p-value	(0.031)	(0.033)	(0.030)	(0.026)	(0.550)	(0.527)	(0.534)	(0.691)
Bidder Size	-2.465**	-2.526**	-2.347**	-2.746***	-0.287	-0.033	-0.026	-0.041*
p-value	(0.017)	(0.014)	(0.022)	(0.007)	(0.233)	(0.164)	(0.263)	(0.082)
MTBV	0.122	0.126	0.122	0.131	-0.08	-0.002	-0.002	-0.002
p-value	(0.317)	(0.305)	(0.317)	(0.288)	(0.339)	(0.308)	(0.324)	(0.290)
RS	-5.189*	-5.359**	-4.911*	-5.811**	-0.08	-0.084	-0.066	-0.092
p-value	(0.057)	(0.048)	(0.070)	(0.032)	(0.223)	(0.194)	(0.314)	(0.148)
Diversification	3.984	3.976	4.125	4.263	0.227***	0.239***	0.229***	0.257***
p-value	(0.241)	(0.242)	(0.223)	(0.213)	(0.005)	(0.003)	(0.004)	(0.001)
Free Cash Flow	18.749	18.852	18.711	18.871	0.377	0.255	0.32	0.269
p-value	(0.466)	(0.463)	(0.465)	(0.465)	(0.591)	(0.714)	(0.647)	(0.694)
ROA	5.51	6.102	5.031	5.034	0.631	0.826	0.623	0.767
p-value	(0.839)	(0.822)	(0.852)	(0.853)	(0.336)	(0.210)	(0.334)	(0.230)
Leverage	-0.037	-0.036	-0.038	-0.041	0.001	0.001	0.001	0.001
p-value	(0.622)	(0.632)	(0.607)	(0.580)	(0.339)	(0.369)	(0.282)	(0.237)
Tender Offer	8.018	7.444	6.879	7.013	0.482**	0.453**	0.467**	0.364*
p-value	(0.568)	(0.596)	(0.623)	(0.622)	(0.014)	(0.019)	(0.016)	(0.059)
Hostile Takeover	50.061**	49.229**	50.733**	50.233**				
p-value	(0.011)	(0.012)	(0.010)	(0.011)				
Advisor Reputation(T)	-0.000001	-0.000001	-0.000001	-0.000001	-0.000001	-0.000001	-0.000001	-0.000001
p-value	(0.422)	(0.532)	(0.486)	(0.396)	(0.654)	(0.912)	(0.660)	(0.841)
Constant	62.660***	87.374***	63.162***	77.549***	0.492**	1.055***	0.487**	1.030***
p-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.024)	(0.002)	(0.023)	(0.001)
N	462	462	462	462	92	92	92	92
Pseudo-R square	0.051	0.051	0.058	0.045	0.086	0.113	0.101	0.135

Table 9. Acquirer Financial Advisor Centrality and Advisory Fees

This table reports the results for advisory fees and acquirer financial advisors' centrality. Panel A reports the univariate statistics of acquirer advisor centrality and advisory fees, downloaded from SDC. Panel B shows the regression result, where the natural log of acquirer advisory fee is the dependent variable. The main independent variables are the four centrality measures. We control for deal and financial advisor characteristics. Definitions of the variables are given in the Appendix. *, ** and *** depict the level of significance at 10%, 5% and 1%, respectively. P-values are reported in brackets.

Panel A: Univariate Analysis of Acquirer Financial Advisor Centrality and Advisory Fee

	High Centrality Advisor		Low Centrality Advisor		Difference	
Centrality	Advisory fee	p-value	Advisory fee	p-value	Advisory fee	p-value
Degree	1.850***	(0.000)	1.315***	(0.000)	0.535***	(0.000)
Closeness	1.816***	(0.000)	1.362***	(0.000)	0.454***	(0.000)
Betweenness	1..816***	(0.000)	1.359***	(0.000)	0.457***	(0.000)
Eigenvector	1.842***	(0.000)	1.133***	(0.000)	0.709***	(0.000)

Panel B: Regression Analysis of Acquirer Financial Advisor Centrality and Advisory Fee

Advisory Fee	(1)	(2)	(3)	(4)
	Degree	Closeness	Betweenness	Eigenvector
Degree	1.050**			
p-value	(0.035)			
Closeness		1.518*		
p-value		(0.089)		
Betweenness			62.824**	
p-value			(0.011)	
Eigenvector				0.994
p-value				(0.862)
Stock	-0.112	-0.116	-0.108	-0.132
p-value	(0.306)	(0.288)	(0.318)	(0.229)
RS	0.044***	0.045***	0.044***	0.045***
p-value	(0.000)	(0.000)	(0.000)	(0.000)
Diversification	-0.072	-0.079	-0.072	-0.082
p-value	(0.538)	(0.495)	(0.533)	(0.484)
Hostile Takeover	1.426**	1.448**	1.393	1.517**
p-value	(0.035)	(0.033)	(0.039)	(0.026)
Prior Relation	0.493**	0.504**	0.506**	0.526**
p-value	(0.022)	(0.022)	(0.018)	(0.022)
Past Performance	1.945	1.849	1.919	1.707
p-value	(0.150)	(0.172)	(0.154)	(0.209)
Advisor Reputation	0.031***	0.031***	0.029***	0.031***
p-value	(0.000)	(0.000)	(0.000)	(0.000)
Constant	1.094***	0.520	1.059***	1.206***
p-value	(0.000)	(0.243)	(0.000)	(0.000)
N	278	278	278	278
Pseudo-R square	0.256	0.273	0.262	0.244

Table 10. Target Financial Advisor Centrality and Advisory Fees

This table reports the results for advisory fees and target financial advisors' centrality. Panel A reports the univariate statistics of target advisor centrality and advisory fee, which is downloaded from SDC. Panel B shows the regression result, where the natural log of target advisory fee is the dependent variable. The main independent variables are the four centrality measures for target advisors. We control for deal and financial advisor characteristics. Definitions of the variables are given in the Appendix. *, ** and *** depict the level of significance at 10%, 5% and 1%, respectively. P-values are reported in brackets.

Panel A: Univariate Analysis of Target's Financial Advisor Centrality and Advisory Fee

	High Centrality Advisor		Low Centrality Advisor		Difference	
Centrality	Advisory fee	p-value	Advisory fee	p-value	Advisory fee	p-value
Degree	1.869***	(0.000)	1.557***	(0.000)	0.312***	(0.000)
Closeness	1.807***	(0.000)	1.658***	(0.000)	0.149***	(0.000)
Betweenness	1.898***	(0.000)	1.512***	(0.000)	0.386***	(0.000)
Eigenvector	1.900***	(0.000)	1.522***	(0.000)	0.378***	(0.000)

Panel B: Regression Analysis of Target's Financial Advisor Centrality and Advisory Fee

Advisory Fee	(1)	(2)	(3)	(4)
	Degree	Closeness	Betweenness	Eigenvector
Degree	1.286***			
p-value	(0.001)			
Closeness		1.522**		
p-value		(0.034)		
Betweenness			52.116***	
p-value			(0.003)	
Eigenvector				5.216
p-value				(0.315)
Stock	-0.188**	-0.191**	-0.183**	-0.185**
p-value	(0.080)	(0.079)	(0.090)	(0.090)
RS	-0.0008	-0.0002	-0.0008	-0.0008
p-value	(0.838)	(0.951)	(0.837)	(0.955)
Diversification	0.024	0.027	0.023	0.023
p-value	(0.785)	(0.761)	(0.803)	(0.799)
Hostile Takeover	1.227	1.279	1.230	1.207
p-value	(0.174)	(0.160)	(0.174)	(0.186)
Advisor Reputation(T)	-0.000003***	-0.000003***	-0.000003***	-0.000003***
p-value	(0.000)	(0.000)	(0.000)	(0.000)
Constant	1.069***	0.519	1.080***	0.933***
p-value	(0.000)	(0.134)	(0.000)	(0.003)
N	435	435	435	435
Pseudo-R square	0.319	0.309	0.316	0.303