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Abstract

To transfer loans from one debtor to another debtor, banks might transmit borrower information which is collected in the lending process to potential acquirers. In this paper, we investigate the importance of banks in the effectiveness of the takeover mechanism and hence in corporate governance. Using unsolicited takeovers between 1992 and 2003, we find that bank lending intensity and bank client network (the number of firms that the bank deals with) have a significant and positive effect on the probability of a borrower firm becoming a target. We find that this effect is enhanced in cases where the target and acquirer have a relationship with the same bank and is robust to the inclusion of several firm characteristics including the presence of large external shareholders. Moreover, takeover completion rates are positively related to bank lending intensity. Finally, we find that the equity market views takeovers where the target and the acquirer deal with the same bank more positively relative to takeovers with no bank involvement. Overall, the evidence supports the view that banks increase the disciplining role of the market for corporate control.

Introduction

As is well known, there is a long literature dating back to Fama (1985) and James (1987) that views banks as “insiders” to a firm. Specifically, in their role as suppliers of private debt (bank loans) they gather information that may well be unavailable to outside investors. Such information collection advantages places them in a position of acting as firm monitors¹

Banks, however, not only gather information but can also facilitate the transmission of this information to potential acquirers since such transmission can increase their ability to reallocate bank debt from bad debtors to good debtors. In this paper, we investigate whether this role of banks is important in affecting the efficiency of the takeover mechanism.² Unlike most of the recent corporate governance literature that views governance emanating from equity-holders or institutional investors, we examine the corporate governance role of private debt (in this case, bank debt). In particular, we examine the role of bank loans and their associated information production in impacting the takeover probability of firms.

In what follows the paper focuses on unsolicited takeovers, excluding those cases where the takeovers are initiated by a firm that puts itself up for sale (see Boone and

¹ Thus, a large number of studies have shown that bank loan announcements of loan renewals are taken as positive signals by investors in the capital markets and vice-versa for loan sales (see, e.g., Dahiya, Puri and Saunders, 2004).

² Esterbrook and Fishel (1991) and Jensen (1993) argue that takeovers constitute the critical mechanism in the US and the UK without which managerial discretion cannot be controlled. Gompers, Ishii and Metrick (2003) and Cremers and Nair (2004) show a significant link between firm value, equity returns and takeover vulnerability.

Mulherin, 2004).³ In such cases, the governance role of banks we highlight is less relevant. Moreover, a bank's informational role in unsolicited takeovers is potentially more identifiable than in takeovers in general. In the latter case lending activity may be related to financing a consensual agreement by the target to be takeover. We examine the impact of bank lending intensity on the probability that a firm will be subject to a takeover attempt using a sample of unsolicited targets among Compustat firms over the 1992 to 2003 period. We document several findings consistent with a positive information-based corporate governance role of banks in impacting the probability of unsolicited takeovers.

First, we find that greater bank lending intensity is associated with a higher likelihood of a borrower firm receiving an unsolicited takeover bid. Second, we find that those firms having lending relationships with banks that have fewer clients are less likely to be subject to an unsolicited takeover attempt.⁴ Third, we find that the role of bank lending intensity in predicting unsolicited takeover attempts is stronger for those takeovers where the target and acquirer have a relationship with the same bank. Fourth and finally, we find that a greater intensity of the bank lending relationship is related to a higher probability of takeover bid completion.

In addition to the above, we examine the robustness of our results in the context of corporate governance mechanisms emanating from equity-holders. Interestingly, the role of equity-holder governance (takeover defenses and monitoring shareholders) in affecting the likelihood of unsolicited takeovers has been a little researched area.

Introducing various measures of equity holder discipline based on managerial

³ Unsolicited takeovers are included in unsolicited takeovers.

⁴ We focus on clients in the same industry since it is in these cases where relationships that generate potential acquirers are likely to be most important.

entrenchment, blockholder stakes and a governance index compiled by Gompers, Ishii and Metrick (2003), we find that our results supporting a bank-debt related governance mechanism are robust.

Overall, our evidence is consistent with a role for banks in facilitating takeovers through information production via bank lending and the transmission of this information to potential acquirers. Our findings add to the literature on predicting takeover targets following Palepu (1986) and others.⁵ We find that in addition to factors such as leverage, industry, asset structure, and firm value, bank lending intensity as well as the presence of external blockholders are important in predicting takeover targets.

The documented ‘information intermediary’ role of banks is not without controversy. Indeed, there have been recent lawsuits in which target firms (or potential target firms) have sued their own bank over the transfer of “private” information regarding the firm to an outside acquirer. It might be noted that since regulation does not prohibit commercial banks from providing M&A advisory services nor is there a law against a bank “switching sides” and acting against its client in the role of advisor to an unsolicited bidder, the Courts tend to look at case law to assess the merits of such complaints. Thus, the case filed by security systems company ADT Ltd against its long time lender Chase Manhattan Corp in February 1997 received particular attention as it was expected to set a precedent on lenders “duty of loyalty” to their borrowers. ADT claimed that Chase’s managing directors

⁵ Also see Stulz (1988), Mikkelson and Megan (1989), Ambrose and Meggison(1992), Song and Walking (1993).

repeatedly promised not to assist in any unsolicited attempt to takeover the company.⁶ At the time of the filing of the complaint, ADT had \$1.1 billion in debt outstanding that it would have been forced to repay immediately if it lost the case (including a repayment of its loans to Chase). Four months after the case filing the court dismissed most of ADT's claims ruling that *“a bank has no per se obligation to refrain from such participation, and that plaintiff has not pleaded the existence of a fiduciary relationship which might give rise to such an obligation.”*⁷

Even though the ADT ruling has reduced the number of similar pleadings there are other cases relating to similar issues involving banks both in the US and abroad. Most of these disputes center on the disclosure of confidential lending (loan) information. For example, in 1999, Mannesmann, the German telecommunications company, which was the target of an unsolicited takeover bid by Vodafone, sued Vodafone's adviser Goldman Sachs arguing that Goldman used private information generated through a prior lending relationship without Mannesmann's consent. A British court later dismissed the case, calling it *“hopeless.”*⁸ For similar reasons, in 2000, Dime Bancorp sued Salomon Smith Barney on the grounds that it acted as an adviser to North Fork Bancorp in its unsolicited takeover attempt. This case was also dismissed. More recently, in August 2003 auto-parts maker Dana Corp argued that UBS, which had a prior lending relationship with the company, used confidential information to help its rival ArvinMeritor Inc. to launch a \$2.2 billion unsolicited bid. This last case is still awaiting the court's decision.

⁶ *The Wall Street Journal*, 11, 1997, “ADT sues Chase for aiding bidder seeking takeover”; *Bank Loan Report*, February 24, 1997, “ADT sues Chase over Western Resources Financing.”

⁷ *ADT Operations, Inc. v Chase Manhattan Bank, N.A.* 662 N.Y.S. 2d 190 (1997).

⁸ *New York Times*, August 5, 2003, “Auto part manufacturer sues banker of an unwanted suitor.”

The question thus arises as to whether these demands are economically founded or are they just part of a target's effort to thwart an unsolicited bid that is common in unsolicited takeover battles? In order to shed light on such claims of 'conflicts of interest,' we look at how investors in the equity market react to unsolicited takeover announcements, when the same bank has a lending relationship with both the target and the acquirer. We find that the abnormal return to the target shareholders around the bid announcement date is more positive in the case where the same bank has a relationship with both the acquirer and the target than where the target and acquirer do not have a relationship with the same bank. At the same time the abnormal return for acquirers shows no significant difference between lending relationship based takeovers and non relationship based takeovers. From an overall economic efficiency perspective we find that bank relationship-linked unsolicited takeovers are not associated with a value-loss. Thus, even while the bank may be acting in its own best interests, there is no evidence that suggests these interests directly conflict with shareholder interests.

We proceed by outlining a simple framework to specify our hypotheses in section 1. In section 2, we discuss the data sources for our study, in particular the source of our takeover and loan data and the measurement of key variables. Using a sample based on Compustat, section 3 examines the impact of bank lending intensity and bank client networks on the probability of an unsolicited takeover attempt occurring, using control variables from the existing literature on takeover activity in general. In that section we also present a variety of robustness checks including controlling for equity-side corporate governance mechanisms. Section 4 looks at how stock market

investors perceive unsolicited takeovers where the acquirer is linked to the target via the same lending bank. Section 5 looks at alternative bank motives and Section 6 concludes.

1. Banks as Information Intermediaries

In this section we specify our hypotheses that if supported would be consistent with the view that banks act not only as information collectors and monitors but also as information transmitters in the market for corporate control. If these hypotheses are not supported, then this latter role of information transmission is unlikely to be important in affecting the takeover mechanism.

Figure 1 (Panel A) depicts the information intermediary role that a bank plays among firms in the takeover market. The bank shown (Bank I) has one borrower and can transfer information about a firm (potential target) to another (bidder A). More generally, since a bank has lending relationships with many firms, it can transfer information about an underperforming or poorly managed firm to a number of potential acquirers. By doing so, the bank can enable the transfer of its loans from one debtor to another debtor.⁹ Thus, the more extensive a bank's information set is, the greater is the likelihood that an acquirer will appear. Our first hypothesis is then:

H1: Greater bank lending intensity increases the probability of a borrower being an unsolicited target

If banks act as information intermediaries and actively transfer information to a potential acquirer rather than simply respond to interest from a potential acquirer, then a firm is more likely to be a target if it deals with a bank that has many

⁹ There is now an extensive literature on the role of bank relationships in enhancing information collection. For a survey see Boot (2000).

borrowing clients and hence many relationships. In Figure 1 (panel B, I), for example, if the bank deals with both firm A and firm B, there is an additional potential acquirer and hence a greater likelihood of being takeover. Similarly (panel B, II), the pool of potential acquirers is likely to be greater when the target firm deals with both Bank I and Bank II, each with its own client base. Since a greater pool of potential acquirers is likely to increase the chance of a bid, we hypothesize that:

H2: The larger the number of firms (client base) that the lending bank(s) deals with, the greater is the is associated probability of being an unsolicited takeover target

If a bank acts as an information intermediary between clients, it is also more likely that the acquirer will appear from among the bank's clients. Thus, we would expect to see a significant number of takeovers where the acquirer and the target share a relationship with the same bank. More importantly, in such takeovers, the predictive role of bank lending intensity would also be expected to be stronger. This leads us to our third hypothesis:

H3: The importance of bank lending intensity in predicting unsolicited takeovers is higher for takeovers where the acquirer and the target share a relationship with the same bank.

Further, a bank's information transmission may not only increase the probability of receiving an unsolicited bid, but may also increase the probability of its completion. The reasons are two-fold. First, the information produced by the bank might reduce the uncertainty regarding the target and hence encourage the acquirer to pursue the target more aggressively. Second, and perhaps more importantly, the bank

might also help the acquirer finance the deal. In fact, new loan issuances made to the acquirer frequently coincide with the unsolicited event. Thus, we hypothesize that:

H4: Bank lending intensity is positively related to the probability of completing an unsolicited takeover.

2. Data and Methodology

2.1 Sample

In analyzing the impact of bank loans on unsolicited takeovers we employ a number of data sets. Specifically we focus our hypothesis tests on unsolicited takeover activity among all firms on the Compustat database over the 1992 to 2003 period. A full description of our data can be found in the Data Appendix.

2.2 Bank Loans, Takeovers and Firm Characteristics

To generate data on bank lenders and loans we use the Loan Pricing Corporation's (LPC) DealScan database for individual bank loans. These data track large loan originations made by banks to generally large companies from 1987 to the present. Currently, over 139,000 loans have been included in the LPC database with US loans accounting for 60% of these loans. LPC collects data from SEC filings, industry contacts and directly from lenders. As LPC has established a reputation for tracking loans and publishing league tables that rate bankers, e.g. in syndication, banks have an incentive to voluntarily report their loans. These loans tend to be the largest and most important loans made by the bank.¹⁰ Since bank information is likely to be related to their lending intensity to a particular firm, we start by assuming that

¹⁰ Note that even smaller banks also have an incentive to report their large syndicated loans as these ratings are important in syndications where smaller banks are often participants.

LPC loan activity (normalized by the borrowing firm's assets) is an appropriate proxy or indicator of a bank's incentive to gather information since greater loan activity, all else equal, implies greater credit risk exposure. Loans to firms that are not reported on LPC tend to be smaller and less important to the bank concerned. Thus, a firm whose loans do not appear in the LPC database over our sample period is far less likely to be subject to bank monitoring than a firm which has received loans that appear in the LPC database.¹¹

We measure lending intensity by the cumulative credit lines received by a target in the 3 years prior to an unsolicited takeover bid (i.e., t-4 to t-1, where t is the year of the takeover bid) divided by the target firm's assets (t-1). A three year period was chosen based on two criteria: (1) the period is sufficiently long to establish banking relationships that produce valuable private information to potential acquirers and (2) the mean maturity of a loan in the LPC database is approximately three years.¹² We also measure the number of loans received in that period, since each loan is likely to produce new and relevant credit exposure information to the bank lender.¹³ Finally, we also investigate whether the acquirer and target shared a lending relationship (in the three years prior to a takeover attempt) with the same bank and also compute the number of clients the takeover target bank had in the same industry. The Appendix provides further details on how these, and other variables used in the paper, are constructed.

¹¹ In fact, banks commonly take a portfolio view (based on the law of large numbers) for small and medium enterprise loans. To ensure that our results are not driven by any omitted loan information, we use a narrower control for the target sample in Section 5 that is matched on firm size in addition to industry.

¹² The LPC database starts from 1987. We choose to focus on targets from 1992 so that we can use information from 1989. We omit the first two years on LPC to ensure widespread reporting of loans by banks.

¹³ The results using the number of loans are qualitatively similar to those using the loan to asset ratio and are not reported here.

2.3 Takeovers

To detect unsolicited takeovers, we use the Securities Data Corporation's (SDC) database. This includes all unsolicited bids that indicate an attempt to change corporate control. To classify takeovers, we look at the first event that triggers the series of transactions. Therefore, all transactions that are initiated by unsolicited tender offer are classified as "hostile." For example, an unsuccessful unsolicited tender offer followed by a merger would fall into this category.¹⁴ We also collect information on the outcome of the takeover bid in terms of its eventual completion or non-completion (withdrawal).

2.4 Shareholder Control

While our focus is on governance emanating from bank lending activity we also collect data on shareholder (equity) control, as it has been argued that unsolicited takeovers are more likely to occur as shareholder control increases (Shleifer and Vishny (1986)). We control for a large shareholder corporate governance effect by using a dummy for the existence of an institutional blockholder, denoted by BLOCK = 1 if such an institutional blockholder is present and zero otherwise. We define blockholders to be those institutional shareholders that have more than a 5% ownership stake in the firm's outstanding shares. To construct this measure, we use data on institutional share holdings from Thompson / CDA Spectrum, which collects quarterly information from SEC 13f filings.^{15,16} By using institutional blockholdings

¹⁴ We do not include open market purchases in our sample.

¹⁵ The 1978 amendment to the Security and Exchange Act of 1934 requires all institutional investors with more than \$100 million under management to report their shareholdings to the SEC.

¹⁶ Non-institutional external blockholders are omitted in the study, due to the difficulty of collecting reliable data for such a large sample over this time period. This might potentially bias the test of H1, as bank lending intensity might proxy for the importance of an external individual blockholder. As such

rather than simply institutional ownership, we mitigate the problem that institutions with small equity stakes have little incentive to be involved in firm-specific decisions. Furthermore, Shleifer and Vishny (1986) argue that blockholders often have substantial voting control, enabling them to pressure the firm's management. Such control rights can be especially valuable in a proxy fight.

2.5 Other Variables

In addition to blockholder control we introduce two additional corporate governance control mechanisms. The first is a measure of the target firm's managerial entrenchment, defined as the percent of shares held by the top firm executives. The source for these data was ExecuComp. The second is the variable G, the (non-bank related) governance index as compiled by Gompers, Ishii and Metrick (2001). This governance index includes various mechanisms such as staggered boards and poison pills that impact the probability of takeover. Since the index captures managerial protection, a greater value of the G-index signifies a lower probability of an unsolicited takeover bid occurring.

In addition to the bank-side information production and equity-side corporate governance control variables, we introduce a number of other variables in our tests that have been used in prior literature seeking to explain the probability of takeovers in general. These variables might also be expected to impact the probability of an unsolicited takeover bid occurring (see, for example, Hasbrouck (1985), Palepu (1986), Mikkelsen and Partch (1989), Ambrose and Megginson (1992), Song and Walkling (1993) and Billett (1996) among others). The additional variables

monitoring external blockholders are more likely in small firms, any bias that might arise from such an omission is likely to be small in the sample using S&P firms.

introduced based on the extant takeover literature are an industry dummy that measures whether an unsolicited takeover attempt occurred in the same 4-digit SIC industry in the year prior to the merger, the return on assets of the firm (adjusted for the industry median), annual sales growth (adjusted for the industry median), firm leverage (measured by the book debt to assets ratio), cash (the cash and short-term investments to assets ratio), firm size (measured as $\ln(\text{market equity})$), Market/Book Assets (industry adjusted)¹⁷, and asset structure (measured by the property, plant and equipment to assets ratio).

2.6 Methodology

To analyze the impact of a banking relationship on the probability of becoming a target, we use a logit methodology. First we identify companies with valid accounting information that became the target of an unsolicited takeover between 1992 and 2003.¹⁸ To ensure that takeover events are independent we only include the earliest event in any 4-year window.¹⁹ We find 359 such cases.

We then select companies that were not a target of an unsolicited takeover attempt in the sample period. We start with all the companies reported in COMPUSTAT that are not included in the takeover bid sample. We then select only those firms with the same 4-digit SIC code as the target in the same event year.²⁰ Thus, we first use SIC code (4-digit) and year as matching variables to generate

¹⁷ Where market value of assets is defined as total assets plus the market value of common equity minus the book value of common equity plus deferred taxes.

¹⁸ Note that takeovers during date t are logistically related to independent variables at the end of year $t-1$. Therefore, while takeovers are collected from 1992 to 2003, the independent variables are from 1991 to 2002.

¹⁹ Consequently, we are left with only 2 firms that have more than one unsolicited event.

²⁰ Targets for which we are unable to find at least one matching control company with valid accounting information are dropped.

15,530 such control firms.²¹ Thus, each firm has approximately a 2.3% average probability of being a target each year. The cumulative probability of becoming a target between 1992 and 2003 is much higher and equal to 24.4%.²²

The key logit variables and their descriptive statistics are more fully described in the Data Appendix. In addition to a full definition and source of each variable used in the study we present mean, median and standard deviations of each explanatory variable for both the whole Compustat sample and the sample excluding regulatory industries (SIC codes 4 and 6). The key variables of interest in measuring the impact of bank related effects on the probability of unsolicited mergers are bank lending intensity (loan intensity) and the measure of the target bank's relationships with clients in the same industry as the target firm (Bank Net). As discussed above the bank loan intensity variable measures the cumulative dollar sum of loans received over the three years prior to an unsolicited takeover attempt divided by the one-year lagged target's assets, i.e., if an unsolicited takeover bid occurred at time t we measure the cumulative dollar value over the period $t-1$ to $t-4$ (a three-year window lagging the takeover bid by a year) divided by the target firm's assets at time $t-1$.²³ We also used the absolute number of loans (N) made by the bank to the target during the same three year window as a robustness check.²⁴

²¹ Note that we also control for other factors to create the matching sample in the Logit. These include factors identified as important by Barber and Lyon (1996). Results are presented later (in section 4) in the paper.

²² The probability of being a target between 1992 and 2003 is given by $2.3\% + 97.7\% \cdot 2.3\% + 97.7^{11}\% \cdot 2.3\%$.

²³ The LPC database starts from 1987. We choose to focus on targets from 1992 so that we can use information from 1989. We omit the first two years on LPC to ensure widespread reporting of loans by banks.

²⁴ The results using the number of loans are qualitatively similar to those using the loan to asset ratio and are not reported here.

In addition the Bank Net industry variable measures the number of different corporate clients (in the LPC database) the target's bank(s) had in the same industry as the target firm (2-digit SIC code) over a three year period prior to the takeover, scaled by the total amount of loans received by the target firm. Such scaling accounts for the fact that larger loans tend to have larger lending syndicates.

The Data Appendix also shows the correlation matrix among the logit model variables. It is important to note that the correlations of both our loan intensity variables and bank network variables with firm leverage are very small and insignificantly different from zero, thus reducing concerns of multicollinearity in regressions that involve both firm leverage and loan intensity.

3. Results

3.1 Bank Lending Intensity and Likelihood of becoming a Target (H1)

Our first set of tests concern the probability of an unsolicited takeover occurring over the 1992 to 2003 period. A logit model is used to detect the probability of a firm being the target of an unsolicited bid, where a target firm has a dummy of 1 and zero otherwise. The target dummy is the dependent variable in the logit model. The probability of becoming a target in year t is estimated annually by using one-year-lagged values of the non-lending related independent variables. Table 1 shows the logit test results for the total sample of 359 unsolicited events as well as for the sample of 273 that exclude the regulated industries

The first column of coefficients reports the results without the bank loan intensity variable and the second column of coefficients includes it. In addition Wald values are reported indicating significance at the 10%, 5% and 1% levels respectively. The

significant variables in the whole sample panel are the industry dummy, leverage, cash, market to book, asset structure and loan intensity. Consistent with the notion that leverage is a takeover deterrent we find that higher leverage reduces the likelihood of receiving an unsolicited takeover bid. Also consistent with the argument that firms use their cash to repurchase shares in order to block unsolicited takeovers, we find that greater cash reduces the likelihood of being takeover. Consistent with earlier findings we also find that poor performers (low industry adjusted market to book) and firms with more fixed assets are more likely to be takeover. Finally, we also find an industry effect consistent with the earlier literature on predicting takeovers -- the occurrence of a takeover in the previous year reduces the likelihood of future takeovers in the same industry.

With respect to the key variable of focus under H1, bank loan intensity, this has a positive and statistically significant effect on the probability of becoming an unsolicited takeover candidate which in turn is consistent with the presence of a bank lending related information channel in the unsolicited takeover market. (This result is robust to the inclusion of the alternative specification of the loan intensity variable which measures the number (N) of bank loans made to the target over the three years prior to the unsolicited takeover bid). The economic impact of loan intensity is, however, small. For example, a firm with a loan to assets ratio of 1 has a 2.1% probability of being an unsolicited target each year and a firm with no bank loan has a 2.0% probability of being an unsolicited target each year.²⁵ This represents a 1.5%

²⁵ To calculate probabilities we use average variable values. Note that a loan/asset ratio of 1 measure the cumulative loans over the 3 years prior to the merger year (t-4 to t-1) divided by target assets at time t-1.

increase in the cumulative probability of becoming an unsolicited target over the 1992-2003 sample period.

While Table 1 evaluates the impact of variables that have been introduced in the prior literature (in addition to bank loan intensity) in analyzing the determinants of the probability of unsolicited takeovers occurring, alternative governance mechanisms -- especially those relating to equity-holders -- may also impact the probability of unsolicited takeovers. While the prior theoretical literature has raised this possibility, to the best of our knowledge the importance of these alternative (equity-based) corporate governance mechanisms in impacting the probability of unsolicited takeovers have not been investigated.

Table 2A adds three additional corporate governance variables to those in Table 1. These are a measure of insider entrenchment, a measure of institutional blockholder stakes and a measure of takeover exposure as measured by the Metrick, et al (2001) corporate governance (G) index. As can be seen from Table 2A, the number of total observations available for each of these measures varies considerably as does the number of unsolicited takeover bids. The first three logit models consider each of the three corporate governance variables separately. The final logit model (column 4) includes all three together. Overall, it appears that of these three alternative governance measures, only the institutional blockholder variable significantly (and positively) impacts the probability of an unsolicited takeover. In particular, a firm with an institutional blockholder and bank loan to assets ratio of 1 had a 3.3% average probability of being an unsolicited target each year and a firm with no bank loan and no institutional blockholder had only a 1.2% average

probability of being unsolicited target each year. This represents a 20.1% increase in the cumulative probability of becoming a target over the 1992-2003 period. In the presence of the blockholder variable loan intensity is positive and significant of at the 10% level in column (3) of Table 2A. However, most of the variables become insignificant in the presence of all three governance variables (column (4)) reflecting, in part, the sharp reduction in observations due to limited data on the insider entrenchment variable and takeover exposure variable for the same target.²⁶

To examine the robustness of this result we also analyzed the basic model (including the blockholder variable) over a recent sub-period 1999-2003.²⁷ Since the Dealscan data base has been built up over time and has encompassed an increasing number of banks it is important to examine the robustness of our results over different sub-samples. As can be seen over the most recent sub-period, in Table 2B, with institutional blockholders present, the loan intensity variable is highly significant at the 1% level and its economic impact indicates that a company with a loan to assets ratio of 1 and an institutional blockholder presence has a 2.6% annual probability of being takeover.²⁸

3.2 The Number of Potential Acquirers (H2)

We next test hypothesis H2 -- the importance of the target bank's client network in predicting unsolicited takeover bids. Specifically, we examine whether such takeover bids are increasing in the number of the target bank's client firms in the same industry (as the target firm). In calculating Bank Net -- our measure of client

²⁶ Specifically one have 359 targets for just blockholder, but only 71 when we add entrenchment and takeover exposure (the G-index variable).

²⁷ Notice that given that looking at the unsolicited bids over 1999-2003 implies using loan data 1996-2002.

²⁸ Here entrenchment and takeover exposure are excluded because of the limited number (only 33) of observations on these variables for targets.

network -- we consider the clients of all banks that were involved in lending to the target in the three years prior to the takeover bid. We then detect and aggregate the number of different firms in the same industry that each of these banks lent to in the prior three years. Since a larger number of industry-based lending relationships increases the number of potential acquirers to which the target's bank (or banks) can transfer private information, we expect that this variable will have a positive effect on the probability of being an unsolicited takeover candidate.

Table 3 presents the results for our hypothesis (H2). As can be seen, we find a positive and statistically significant coefficient (at the 10% level) on the probability of being an unsolicited takeover target in the full sample resulting from Bank Net (size of bank client network). Furthermore the loan intensity variable is significant at 5% level. Specifically, the average client exposure for each firm is 34.26 potential bidders in the same 2-digit SIC code (not standardized by the loan amount). For this average client exposure, a firm with a bank loan to assets ratio of 1 faces a 2.1% annual average probability of becoming a target. If the firm were to deal with an additional bank of average size (in terms of industry clients) the probability of facing a takeover increases to 2.2%

To examine the robustness of the results for H2 we matched the non-target firms with the target firms based on two additional criteria established by Barber and Lyon (1996). These are return on assets (ROA) and size (Market Equity). The matching calibration was that target and non-target firms had to have an ROA and size measure that was not different by more than 10%. Table 4 shows the results for the full

Compustat sample controlling for this matching.²⁹ As can be seen Bank Net is positive and significant at the 1% level and loan intensity is significant³⁰ at the 5% level. Note also that these variables are significant even in the presence of a strong blockholder effect (see column 4 of Table 4).

Overall, these results appear to support our hypothesis H2, regarding the importance of bank lending in predicting takeovers. That is, this probability (while small) is increasing in the network of different clients (in the same industry) that the target's bank deals with. The evidence is thus consistent with a view that banks not only act as financial intermediaries but also as 'information intermediaries' in the unsolicited takeover market.

3.3 Shared Lending Relationship (H3)

In this sub-section, we test hypothesis (H3), that a bank's transmission of information about one client to another client is indeed a major channel that increases the probability of takeovers. If this hypothesis is supported, we would expect bank lending intensity to be more important in takeovers where the acquirer deals with (has a relationship with) the same bank as the target. In addition, we would expect the economic impact to be more important in this case. We therefore analyze those unsolicited takeover bids where the bidder and the target have a shared lending relationship with the same bank.

²⁹ In addition, the matching is also done by industry and year, as before. Using several screens to create matching targets also addresses another potential bias. While LPC covers most big firms that borrow from banks, it might be case that some small firms that do not appear on LPC are simply ignored by LPC, and hence are incorrectly assigned a bank loan value of 0. By narrowing down the matching sample, and by looking at control firms as the same size of the target, we show that the results are not sensitive to such a potential bias.

³⁰ If regulated industries are excluded the bank net variable is significant at the 5% level.

For the 359 unsolicited takeovers in the Compustat sample, we identified the acquirer in each and checked if the acquirer had a lending relationship with the target's bank and found 71 such cases. In the remaining cases, the acquirer did not borrow directly from the target's bank or from a related syndicate member that had made loans to the target. In these cases, the acquirer and the target had no common bank(s).

Table 5 looks at the sub-sample of 71 unsolicited takeovers in which the target firm had a lending relationship with a bank that also had a lending relationship with the acquirer. Again, firms were matched to these 71 cases based on event year and 4-digit SIC codes to get 2588 control firms that did not face any takeover attempt. The dependent variable is Banklink, which has a value of 1 if the target and acquirer have a common banking relationship and zero otherwise. Focusing again on the bank loan intensity variable it can be seen that it is statistically significant. Its significance is also robust to the inclusion/exclusion of the institutional blockholder variable found earlier to be an important corporate governance mechanism that positively impacts the probability of unsolicited takeovers.

To see the now greater economic importance of bank lending intensity, note that a firm with a bank loan to assets ratio of 1 has an annual average probability of 2.0% of facing a takeover by an acquirer who deals with the target's bank. On the other hand, a similar firm with average bank loans to assets ratio (0.18) has a yearly average probability of 1.5% of facing a takeover by an acquirer who has a relationship with the target's bank.³¹

³¹ All other variables are at the average levels. For the sample here, ROA -5%, growth 22%, leverage 48% cash 20% and size \$167 million, market to book ratio of assets 0.43 and 34% PPE.

The combined impact of bank lending intensity and the presence of a blockholder is even more striking and shows the importance of including equity-related governance variables in models that attempt to predict takeovers. A firm with an institutional blockholder and bank loan to assets ratio of 1 had a 3.3% average probability of receiving an unsolicited bid from a client firm connected to its bank each year and a firm with no bank loan and no institutional blockholder had only a 0.4% average probability of being an unsolicited target of its bank's client each year. This represents a 26.1% increase in the cumulative probability of receiving a bid from a company that is a client of the same bank over the 1992-2003 period.³²

Another interesting observation can be made from Table 5. Perhaps surprisingly, in contrast to earlier results, higher leverage and a bigger size now tends to make a firm more likely to be acquired by one of its lending bank's clients. One reason might be that banks are more concerned about a poor performing firm precisely when it is large and is likely to be in distress.³³ These are cases the bank might have the highest gains by the transfer of debt to a good debtor.

Overall, there appears to be support for the argument, made by some target companies, that bank private information generated in the lending process can be used to enhance the probability of an unsolicited bid, via information transfer from the target's bank(s) to a bank related acquirer. (See for example, the cases of ADT and Dana Inc. discussed earlier).³⁴

³² Thus, even when the importance of the bank lending intensity variable appears small on an annual basis, it can be substantial when considered cumulatively.

³³ When banks have a significant loan to a firm that declares bankruptcy, the bank might also face lawsuits from other lenders.

³⁴ One might wonder whether the results is due to the possibility that firms in similar industries are likely to buy each other while at the same time more likely to deal with the same bank. This view only explains why

3.4 Bank Relationships and Completion Rates (H4)

We now investigate if bank lending intensity affects the completion rate of unsolicited takeover attempts which is our fourth hypothesis (H4). Among the 404 events that we detected in our sample, we find that 152 unsolicited attempts were completed and 252 attempts were not completed (withdrawn). We computed the means of the different variables in the completed and non-completed samples and checked for significant differences using a t-test. As can be seen from Table 6, the bank lending intensity variable is significantly higher in cases of completed unsolicited events as compared to non-completed unsolicited events. Indeed, for this sample it is the only statistically significant variable that on a univariate basis distinguishes completed from non-completed unsolicited takeover bids in our sample.

These univariate tests support hypothesis H4, i.e., that bank lending intensity is additionally important in unsolicited takeovers, not only by making a firm a more likely target but also by impacting the completion probability rate of the bid.³⁵ Moreover, the results from a logit regression to predict the probability of completion given an unsolicited attempt produced similar results.³⁶

4. Market Reaction

The results discussed above in Section 3 for H1 to H4 suggest that banks not only act as financial intermediaries in effecting fund flows but also as information intermediaries. This supports the claims made by some firms that their lenders have

a significant fraction of the takeovers witness a lending bank common to the acquirer and the target but cannot explain the importance of the bank's 'lending intensity'.

³⁵ It is also notable that even if an acquirer appears from outside the bank's client base, banks can play a role in completion rates after the announcement date.

³⁶ Results available on request.

transferred private information to a potential acquirer. However, as discussed earlier, whether there exist “conflicts of interest” and thus costs to target stockholders is far from clear. In this section we investigate the impact of a bank’s information intermediary role on a target and acquirers shareholders. In particular, we investigate whether the potential transfer of information by a bank regarding a target client to another client harms the target’s investors. We also investigate whether the transfer benefits acquirer investors. We first divide the Compustat unsolicited takeover sample based on whether or not the acquirer and the target shared a lending relationship with the same bank. The two sub-samples of takeovers have respectively 79 and 322 firms in them. We then investigate if there are any differences in shareholder reaction to these two classes of takeovers around announcement dates.

Table 7 presents the abnormal returns, for both classes of takeovers, for two event windows around the announcement dates: -1 to +1 and +2 to +10, where date 0 is the bid announcement date. Using a standard event study we find that the abnormal returns to the target shareholders to be more positive around bid announcement dates for those 79 targets that share a bank relationship with the acquirer (Bank Link = 1) compared to those 322 that don’t (Bank Link = 0). Specifically, shareholder reaction is 20.37% during the event window [-1, +1], when the target and the acquirer share a lending relationship with the same bank, compared to 16.4% when there is no shared relationship. This difference of 4.23% is significant at the 10% level. For the event window [+2,+10], the shareholder reaction is 0.63% higher for unsolicited takeover bids with bank involvement compared to when the target and the acquirer have no common bank (this difference is insignificant).

We also analyzed the impact on acquirer investors of linked and non-linked takeovers. As can be seen both are insignificantly different from zero although for the event window [+2, +10] the shareholder reaction is 0.69% higher for bidders with bank involvement compared to when the target and the acquirer have no common bank. Consequently, given the weak positive effect of bank linked takeover bids on target returns and the zero impact on acquirer returns, the results are consistent with no efficiency loss resulting from banks role in takeovers. That is, not only do target investors enjoy a small net gain as a result of a banks relationship with outside firms there also appears to be a “value-added” gain overall.

5. Bank Motives

In addition to market announcement effects, we also attempt to shed more light on the bank’s motives in order to verify whether the bank’s interests are in conflict with those of the target firm’s shareholders. In particular, the bank might transmit information about one client to another so as to increase the probability of transferring loans from an ex-ante bad borrower to an ex-ante good borrower. To check this we focus on cases where both the acquirer and the target had a lending relationship with the same bank and compare their accounting performance and market to book ratios. Consistent with the notion that acquirers tend to be better “performers” than targets we find that they have higher return on assets, return on equity, net profit margins and market to book ratios than targets (see Table 8, Panel

A). This suggests that debt does get transferred from an ex-ante bad debtor to a relatively good debtor.

However, since targets of unsolicited takeovers tend to be poor performers in general, the finding above does not shed light on the bank's positive role in the takeover mechanism. It is thus interesting to see whether banks improve the efficiency of the takeover mechanism by detecting poor performance *before* it is manifested in the accounting measures. If banks do indeed detect problems in the firm early, then we would expect to find performance differences between targets that are acquired by their bank's client and targets that are acquired by a firm without a lending relationship with the borrower's bank. We compare performance differences between these two categories of targets and find some evidence consistent with the notion that relationship banks might detect performance declines early. Specifically, we find that although all targets perform poorly, targets acquired by their bank's clients are relatively better performers, i.e., have better ROA, ROE and profit margins than targets without any bank involvement. That is, relationship banks appear to intervene earlier to protect their loan exposures via the takeover mechanism.

To the extent that banks do transfer debt from bad debtors to good debtors, the bank's role in the takeover channel might benefit shareholders. However, there are other potential motives that might hurt a target's shareholders. These would arise if either a bank (1) transfers information to the acquirer because it benefits from the financing of the takeover and/or (2) bank transfers information to the acquirer because it benefits from the fees for an advisory role in the transaction. Since both

motives are independent of the target's condition or quality, they are more likely to hurt target shareholders.

To examine the potentially adverse impact of the financing motive among cases where the acquirer and the target had a lending relationship with the same bank, we first collect data on whether the acquirer received a new loan from the bank in the same year as an unsolicited bid was announced. Among the 88 cases for which we were able to obtain these data, there were 23 such cases. We further checked the purpose of each loan and found that in only 11 cases was a loan issued for the purpose of financing a takeover. While this suggests that financing may not be a predominant motive, we checked to see whether there were differences in target performance based on whether the acquirer received a loan to finance the takeover or not. We find that targets who receive a takeover bid from an acquirer that received a loan from the target's bank, performed no differently, than other targets. (see Table 9, Panel A).³⁷

With respect to the second alternative motive, advisory fees, we find no evidence that advisory fees are an important motive. Table 9, panel B, compares the target performance for those cases where the target's bank acted as the advisor to the bidder and those where it did not. Overall, there is significant difference between these two categories. However, this general insignificance might be due to the small number of observations detected. Specifically in only 148 cases in our sample the name of the advisor was reported. Among these cases, there were only 13 cases where a bank with a lending relationship with the target acted as an advisor to the acquirer. One possible reason for this low number might be a concern by banks that an explicit

³⁷ Differences reflect rounding to 2 decimal places.

advisory role, alongside a lending role, might make it more likely that they would be involved in litigation based on a conflicts of interest argument.

6. Conclusion

This paper is the first to establish the role of a private debt or a bank lending channel in corporate governance via the takeover channel. We show that: (1) bank lending intensity has a significant and positive effect on the probability of a firm becoming an unsolicited target, (2) the number of same industry client firms that a bank deals with is positively and significantly related to the takeover probability of a borrower firm, (3) the importance of bank lending intensity in predicting an unsolicited takeover is higher for those takeovers where the acquirer and the target shared a lending relationship with the same bank, and (4) unsolicited takeover completion rates are positively related to bank lending intensity. In addition, we find that unsolicited target shareholders react more positively when the target and the acquirer share a lending relationship with the same bank compared to those unsolicited takeovers where the target and the acquirer do not have a common banking relationship.

These results are consistent with a role for banks in effecting the probability of unsolicited takeovers via a lending-related information channel. In addition the equity channel – operating primarily through blockholder stakes -- is also found to impact the probability of unsolicited takeovers. Although the blockholder impact appears more important, the bank lending channel effects are robust to the inclusion of equity blockholders.

From a policy perspective the growing penetration of banks into the merger advisory and investment banking arena in the U.S. since the passage of the Financial Services Modernization Act of 1999, along with a recent surge in takeovers, implies that the disciplining (or governance) role of banks is likely to become even more prominent and controversial in the future.

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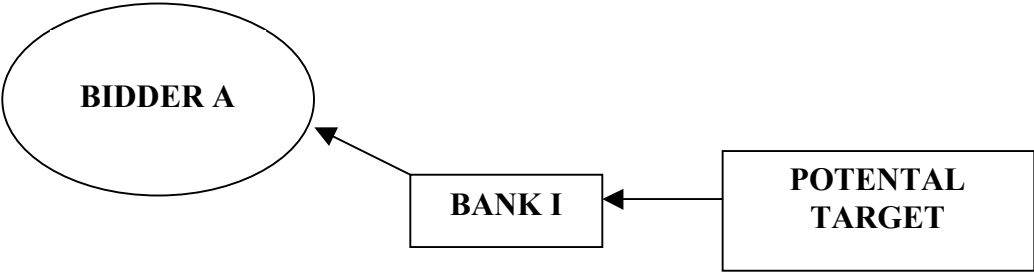
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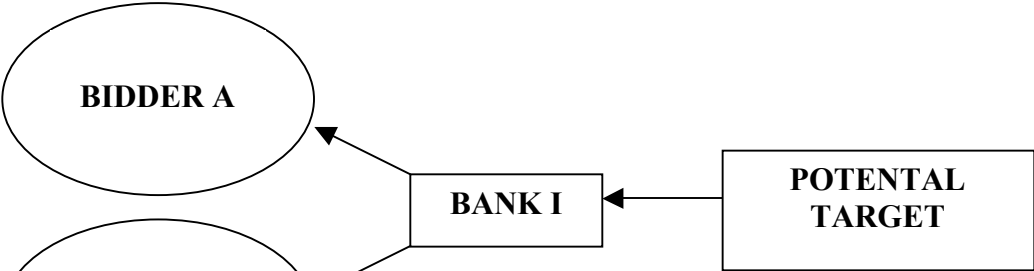
FIGURE 1
BANKS AS INFORMATION INTERMEDIARIES

Panel A

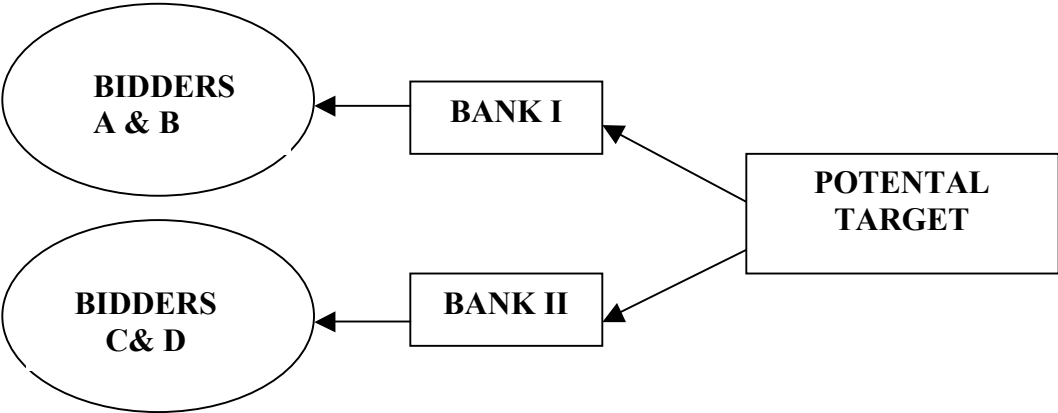


Panel B

I



II



DATA APPENDIX

Table A1: Variable Description

| Variable | Source | Description |
|----------------------------------|---|--|
| <i>ROA</i> | Compustat | EBITD /Total Assets: Data18 / Data6 |
| <i>Sales growth</i> | Compustat | Δ Sales / Sales: Δ Data12 / Data12 |
| <i>Leverage</i> | Compustat | Book Debt/Total Assets: [Data6 - (Data60 + Data74)]/Data6 |
| <i>Cash</i> | Compustat | Cash and Short-Term Investments /Total Assets: Data1/ Data6 |
| <i>Ln(Equity)</i> | Compustat | Ln (Market Equity) : Ln (Data25 * Data199) |
| <i>Market/Book Assets</i> | Compustat | Market Assets/Book Assets: [Data6 -(Data60+Data74) + Data25*Data199]/Data6 |
| <i>Asset Structure (PPE)</i> | Compustat | Property, Plant and Equipment / Total Assets: Data7/ Data6 |
| <i>Institutional Blockholder</i> | Spectrum Institutional (13f) Holdings | Indicator equal to 1 if there is an institution holding over 5% of the company's shares. |
| <i>Insider Entrenchment</i> | S&P ExecuComp | Percentage of shares held by reported executives. |
| <i>Takeover Exposure</i> | A. Metrick website Governance Index Data | (24-G), where G is the governance index as defined by Gompers, Ishii and Metrick (2003). |
| <i>Loan Intensity</i> | LPC: Dealscan | Total amount of loans issued to the company over the 3-year window previous to the event (t-4 through t-1) standardized by the total assets (t-1). |
| <i>Loan Intensity (N)</i> | LPC: Dealscan | Total number of loans issued to the company over the 3-year window previous to the event (t-4 through t-1) standardized by the total assets (t-1). |
| <i>Bank Link</i> | LPC: Dealscan | Indicator equal to 1 if target and bidder had a lending relationship with the same bank over the 3-year window previous to the event at any tier level. We look at the banks present in the original loan syndicate. |
| <i>Bank Size</i> | LPC: Dealscan | Number of different clients that borrow from the bank over 3-year window. (See Table A2) |
| <i>Bank Net</i> | LPC: Dealscan | Proxy for number of potential bidders that a company is exposed to through its lending relationships. It is defined as the sum of <i>Bank Size</i> across all the different banks that a company interacts with over 3-year window scaled by the total amount of loans received. (See Table A3) |
| <i>Industry Bank Net</i> | LPC: Dealscan | Proxy for number of the potential bidders in the same 2-digit SIC code that a company is exposed to through its lending relationships. It is defined as the sum of industry specific <i>Bank Size</i> across all the different banks that a company interacts with over 3-year window scaled by the total amount of loans received. (See Table A3) |

TABLE A2: SIZE OF THE BANK'S CLIENT NETWORK

This table looks at the size of the bank's client network defined as the number of different clients that received a loan over the past 3 years. We say that the bank granted a loan if it was member of the lending syndicate at any tier level. These numbers are based on all information available in DealScan thus including not only commercial and investment banks but also all institutions that participate in the primary syndicated loan market. Calculation of the size of the bank's client net is the first step in computing *Bank Net* variable.

| Year | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Mean | 17.5 | 16.9 | 19 | 23.9 | 29.9 | 33.2 | 35.8 | 34 | 31.5 | 29.9 | 29.6 | 28 |
| Median | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Max | 1099 | 1303 | 1654 | 2129 | 2535 | 2962 | 3484 | 3853 | 3890 | 3662 | 3369 | 3117 |
| Top 1% | 356 | 408 | 488 | 651 | 822 | 855 | 978 | 945 | 838 | 802 | 774 | 742 |
| Number of Banks | 1153 | 1385 | 1643 | 1868 | 1984 | 2307 | 2664 | 2963 | 3257 | 3224 | 3403 | 3584 |

TABLE A3: BANK NET DESCRIPTIVE STATISTICS

This table presents descriptive statistics for the *Bank Net* variable. *Bank Net* is calculated for each company and measures the number of different companies that interact with the same banks. It is computed by adding the size of the bank's client network (as defined in the Table A2), across the different banks with which a company had a lending relationship over the past 3 years. While *Bank Net* presents the general number of different clients *Bank Net Industry* only counts companies that are in the same 2-digit SIC code as the company for which the variable is computed. These numbers are based on the sub-sample of the firms that were target of hostile takeover and the control sample with valid accounting information available in Compustat and that have at least one loan identified in DealScan in the respective 3-year window.

| Year | Bank Net | | | Bank Net Industry (2-digit SIC Code) | | | Number of Banks in the Net | |
|------|----------|--------|-------|---|--------|------|-------------------------------|--------|
| | Mean | Median | Max | Mean | Median | Max | Mean | Median |
| 1991 | 2114 | 1340 | 12642 | 70 | 29 | 882 | 6.4 | 3 |
| 1992 | 2385 | 1404 | 14845 | 73 | 32 | 990 | 6.2 | 3 |
| 1993 | 3132 | 1799 | 21781 | 87 | 39 | 1061 | 6.2 | 3 |
| 1994 | 4471 | 2680 | 30206 | 111 | 50 | 1252 | 6.4 | 3 |
| 1995 | 6119 | 3646 | 39996 | 140 | 66.5 | 1556 | 6.9 | 4 |
| 1996 | 7771 | 4478 | 49429 | 167 | 81 | 1924 | 7.1 | 4 |
| 1997 | 9619 | 5515 | 57845 | 194 | 92 | 2329 | 7.6 | 4 |
| 1998 | 10285 | 6297 | 64341 | 211 | 106 | 2494 | 7.8 | 4 |
| 1999 | 10577 | 7082 | 62425 | 234 | 116 | 2809 | 8.3 | 4 |
| 2000 | 9608 | 6450 | 58071 | 228 | 102 | 2901 | 8.3 | 4 |
| 2001 | 9908 | 6512 | 63421 | 238 | 105 | 2824 | 8.8 | 5 |
| 2002 | 9602 | 6680 | 60157 | 220 | 106 | 2561 | 8.7 | 5 |

TABLE A4: DESCRIPTIVE STATISTICS

This table presents descriptive statistics for the all Compustat based sample 1992-2003. *Industry dummy* is equal one if there was an unsolicited takeover in a firm's 4-digit SIC industry in the year prior to the year of observation. *ROA (Adjusted)* is industry median adjusted return on assets. *Sales growth (Adjusted)* is industry median adjusted annual rate of change in the firm's net sales. *Leverage* is book debt to asset ratio. *Cash* is cash and short-term investments to assets ratio. Firm size is proxied by *Ln(Equity)*, the natural logarithm of the market equity. *Market/Book Assets (Adjusted)* is the industry median adjusted ratio of market to book value of assets, where market assets are defined as total assets plus market value of common stock minus book common equity and differed taxes. *PPE* is property, plant and equipment to assets ratio. *Institutional Blockholder* is a dummy variable assigned the value one if at least one institutional investor holds more than 5% of the companies stock and zero otherwise. *Loan Intensity* is a cumulative credit line issued during the 3 years previous to the year of the analysis scaled by the total assets. *Loan intensity (N)* is the total number of loans issued to the firm in the past 3 years. *Bank Net* is total size of the banks that have relationship with the company as measured by the number of different clients in the same industry. *Bank Net* is measured over past 3 years and scaled by the cumulative credit line. Compustat sample includes all the firms that were target of unsolicited takeover and firms with the same 4-digit SIC code as the target and valid accounting information in the same event year. Regulated industries include industries identified with 1-digit SIC categories 4 and 6.

Panel A: Sample Characteristics

| Variable | Compustat sample (N= 15,889) | | | Excluding regulated industries (N=10,606) | | |
|--------------------------------------|---------------------------------|-----------|--------|--|-----------|--------|
| | Mean | Std. Dev. | Median | Mean | Std. Dev. | Median |
| <i>Industry dummy</i> | 0.37 | 0.48 | 0 | 0.41 | 0.49 | 0 |
| <i>ROA (Adjusted)</i> | -0.05 | 0.44 | 0.00 | -0.07 | 0.51 | 0.02 |
| <i>Sales growth (Adjusted)</i> | 0.18 | 0.81 | 0.00 | 0.22 | 0.93 | 0.01 |
| <i>Leverage</i> | 0.54 | 0.29 | 0.53 | 0.41 | 0.24 | 0.39 |
| <i>Cash</i> | 0.20 | 0.23 | 0.09 | 0.26 | 0.26 | 0.17 |
| <i>Ln (Equity)</i> | 4.74 | 2.18 | 4.54 | 4.59 | 2.20 | 4.46 |
| <i>Market/Book Assets (Adjusted)</i> | 0.43 | 3.00 | -0.01 | 0.60 | 3.54 | -0.08 |
| <i>Asset Structure (PPE)</i> | 0.22 | 0.26 | 0.10 | 0.27 | 0.26 | 0.16 |
| <i>Institutional Blockholder</i> | 0.43 | 0.50 | 0 | 0.46 | 0.50 | 0 |
| <i>Loan intensity</i> | 0.11 | 0.69 | 0 | 0.14 | 0.82 | 0 |
| <i>Loan intensity (N)</i> | 0.39 | 1.10 | 0 | 0.46 | 1.19 | 0 |
| <i>Bank Net</i> | 11.12 | 142.39 | 0 | 14.48 | 172.85 | 0 |
| <i>Industry Bank Net</i> | 0.29 | 4.09 | 0 | 0.37 | 4.96 | 0 |

Panel B: Correlation Coefficients

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 1 <i>Industry dummy</i> | | | | | | | | | | | | |
| 2 <i>ROA (Adjusted)</i> | -0.046 ^a | | | | | | | | | | | |
| 3 <i>Sales growth (Adjusted)</i> | -0.011 | -0.054 ^a | | | | | | | | | | |
| 4 <i>Leverage</i> | -0.082 ^a | -0.029 ^a | -0.127 ^a | | | | | | | | | |
| 5 <i>Cash</i> | 0.089 ^a | -0.079 ^a | 0.145 ^a | -0.542 ^a | | | | | | | | |
| 6 <i>Ln (Equity)</i> | -0.108 ^a | 0.195 ^a | 0.073 ^a | -0.008 | -0.020 ^b | | | | | | | |
| 7 <i>Market/Book Assets (Adjusted)</i> | -0.003 | -0.051 ^a | 0.152 ^a | -0.115 ^a | 0.185 ^a | 0.161 ^a | | | | | | |
| 8 <i>Asset Structure (PPE)</i> | -0.013 ^c | -0.001 | -0.007 | -0.169 ^a | -0.254 ^a | 0.064 ^a | -0.029 ^a | | | | | |
| 9 <i>Institutional Blockholder</i> | 0.039 ^a | 0.094 ^a | -0.003 | -0.086 ^a | 0.060 ^a | 0.208 ^a | -0.018 ^b | -0.002 | | | | |
| 10 <i>Loan intensity</i> | -0.008 | 0.016 ^b | -0.001 | -0.002 | -0.064 ^a | 0.009 | -0.019 ^b | 0.090 ^a | 0.058 ^a | | | |
| 11 <i>Loan intensity (N)</i> | -0.032 ^a | 0.059 ^a | -0.008 | 0.039 ^a | -0.161 ^a | 0.232 ^a | -0.031 ^a | 0.193 ^a | 0.182 ^a | 0.387 ^a | | |
| 12 <i>Bank Net</i> | 0.006 | 0.013 | -0.008 | -0.008 | -0.014 ^c | 0.015 ^c | -0.008 | 0.031 ^a | 0.028 ^a | 0.024 ^a | 0.076 ^a | |
| 13 <i>Industry Bank Net</i> | 0.009 | 0.009 | -0.003 | -0.009 | -0.002 | 0.013 ^c | -0.006 | 0.019 ^b | 0.023 ^a | 0.020 ^b | 0.066 ^a | 0.980 ^a |

^{a, b} and c stand for significance at the 1%, 5% and 10% levels.

TABLE 1

LIKELIHOOD OF FACING AN UNSOLICITED BID (H1)

This table presents results of the maximum likelihood estimates of the logit model for the Compustat based sample for the sample period 1992-2003. The dependent variable is a dummy (*Target*) equal to one if the company is target of an attempted unsolicited takeover. Key explanatory variable is *Loan Intensity* defined as cumulative credit line issued during the 3 years previous to the year of the analysis scaled by the total assets. *Industry dummy* is equal one if there was an unsolicited takeover in a firm's 4-digit SIC industry in the year prior to the year of observation. *ROA (Adjusted)* is industry median adjusted return on assets. *Sales growth (Adjusted)* is industry median adjusted annual rate of change in the firm's net sales. *Leverage* is book debt to asset ratio. *Cash* is cash and short-term investments to assets ratio. Firm size is proxied by *Ln(Equity)*, the natural logarithm of the market equity. *Market/Book Assets (Adjusted)* is the industry median adjusted ratio of market to book value of assets, where market assets are defined as total assets plus market value of common stock minus book common equity and deferred taxes. *PPE* is property, plant and equipment to assets ratio. All independent variables are measure at the end of the fiscal year previous to the takeover event. Compustat sample includes all the firms that were target of unsolicited takeover and firms with the same 4-digit SIC code as the target and valid accounting information in the same event year. Regulated industries include industries identified with 1-digit SIC categories 4 and 6. The point estimates and Wald chi-square statistics for the year effects are not reported though they are included in the regression and they are all significant at 1% level.

| Variable | Whole Compustat Sample | | | | Excluding Regulated Industries | | | | | | | |
|--------------------------------------|------------------------|--------|-----|-------|--------------------------------|-----|-------|--------|-----|-------|------|-----|
| | Coeff | Wald | | Coeff | Wald | | Coeff | Wald | | | | |
| <i>Industry dummy</i> | -0.68 | 24.7 | *** | -0.68 | 24.6 | *** | -0.87 | 28.2 | *** | -0.87 | 28.1 | *** |
| <i>ROA (Adjusted)</i> | 0.22 | 1.9 | | 0.21 | 1.9 | | 0.49 | 3.1 | * | 0.50 | 3.1 | * |
| <i>Sales growth (Adjusted)</i> | -0.15 | 2.3 | | -0.16 | 2.3 | | -0.16 | 2.2 | | -0.17 | 2.3 | |
| <i>Leverage</i> | -0.66 | 7.9 | *** | -0.65 | 7.8 | *** | 0.36 | 1.4 | | 0.35 | 1.3 | |
| <i>Cash</i> | -1.17 | 10.4 | *** | -1.16 | 10.2 | *** | -1.46 | 13.4 | *** | -1.45 | 13.1 | *** |
| <i>Ln (Equity)</i> | 0.01 | 0.1 | | 0.01 | 0.2 | | 0.04 | 2.0 | | 0.04 | 2.0 | |
| <i>Market/Book Assets (Adjusted)</i> | -0.22 | 15.9 | *** | -0.22 | 15.8 | *** | -0.19 | 12.4 | *** | -0.19 | 12.4 | *** |
| <i>Asset Structure (PPE)</i> | 0.46 | 4.5 | ** | 0.44 | 4.3 | ** | -0.12 | 0.2 | | -0.12 | 0.2 | |
| <i>Loan intensity</i> | ---- | ---- | | 0.08 | 5.5 | ** | ---- | ---- | | 0.07 | 3.5 | * |
| Observations | | 15,889 | | | | | | 10,606 | | | | |
| Targets | | 359 | | | | | | 273 | | | | |

*** Indicates *p* value of 1%
** Indicates *p* value of 5%
* Indicates *p* value of 10%

TABLE 2A
LIKELIHOOD OF FACING AN UNSOLICITED BID WITH ADDITIONAL CORPORATE
GOVERNANCE VARIABLES (H1)

This table analyses robustness of the results in Table 1 to *Insider Entrenchment*, *Institutional Blockholder* and *Takeover Exposure*. It presents results of the maximum likelihood estimates of the logit model for the Compustat based sample for the sample period 1992-2003. The dependent variable is a dummy (*Target*) equal to one if the company is target of an attempted unsolicited takeover. *Insider Entrenchment* is defined as percent of company's shares held by executives. *Institutional Blockholder* is a dummy variable assigned the value one if at least one institutional investor holds more than 5% of the companies stock and zero otherwise. Takeover Exposure is (24-G), where G is governance index as defined by Gompers, Ishii and Metrick (2001). The key variable is *Loan Intensity* defined as cumulative credit line issued during the 3 years previous to the year of the analysis scaled by the total assets. The number of total observations available for each of these measures varies considerably as does the number of unsolicited takeover bids. The first three logit models consider each of the three corporate governance variables separately. The final logit model (column 4) includes all three together. The rest of the variables are the same as in Table 1 Sample includes all the firms that were target of unsolicited takeover and the control sample with valid accounting information in the same event year available in Compustat. The point estimates and Wald chi-square statistics for the year effects are not reported through they are included in the regression.

| Model | 1 | | 2 | | 3 | | 4 | |
|--------------------------------------|-------|--------|-------|----------|-------|--------|-------|----------|
| Variable | Coeff | Wald | Coeff | Wald | Coeff | Wald | Coeff | Wald |
| <i>Industry dummy</i> | -0.92 | 6.0 ** | -0.72 | 28.2 *** | -0.52 | 1.7 | -0.71 | 2.2 |
| <i>ROA (Adjusted)</i> | -0.22 | 0.2 | 0.20 | 1.3 | 0.22 | 0.1 | -0.79 | 0.7 |
| <i>Sales growth (Adjusted)</i> | -0.48 | 1.5 | -0.14 | 1.8 | -0.60 | 1.2 | -0.53 | 0.9 |
| <i>Leverage</i> | 0.14 | 0.0 | -0.50 | 4.4 ** | -1.10 | 2.9 * | -0.57 | 0.5 |
| <i>Cash</i> | -1.37 | 1.8 | -1.17 | 10.1 *** | -1.55 | 1.9 | -0.64 | 0.2 |
| <i>Ln (Equity)</i> | -0.09 | 1.5 | -0.04 | 2.0 | -0.15 | 3.7 * | -0.15 | 2.0 |
| <i>Market/Book Assets (Adjusted)</i> | -0.23 | 2.3 | -0.20 | 12.8 *** | -0.27 | 2.2 | -0.20 | 0.9 |
| <i>Asset Structure (PPE)</i> | 0.42 | 0.7 | 0.48 | 4.9 ** | 0.13 | 0.1 | 0.66 | 1.0 |
| <i>Insiders entrenchment</i> | -0.05 | 1.3 | ---- | ---- | ---- | ---- | -0.05 | 1.0 |
| <i>Institutional Blockholder</i> | ---- | ---- | 0.99 | 71.2 *** | ---- | ---- | 1.60 | 12.8 *** |
| <i>Takeover Exposure</i> | ---- | ---- | ---- | ---- | -0.09 | 3.9 ** | -0.06 | 1.2 |
| <i>Loan intensity</i> | 0.37 | 3.3 ** | 0.06 | 3.3 * | 0.29 | 2.3 | 0.14 | 0.4 |
| Observations | | 1,190 | | 15,889 | | 924 | | 647 |
| Targets | | 95 | | 359 | | 87 | | 71 |

*** Indicates *p* value of 1%

** Indicates *p* value of 5%

* Indicates *p* value of 10%

TABLE 2B

ROBUSTNESS CHECK, 1999-2003 (H1)

This table analyses robustness of the results in Table 2A to accuracy of DealScan reporting. To examine the robustness of this result we also analyzed the basic model (including the blockholder variable) over a recent sub-period 1999-2003. Since the DealScan database has been built up over time and has encompassed an increasing number of banks it is important to examine the robustness of our results over different sub-samples. Control sample is constructed as in Table 2A. As before, the dependent variable is a dummy (*Target*) equal to one if the company is target of an attempt unsolicited takeover. The key variable is *Loan Intensity* defined as cumulative credit line issued during the 3 years previous to the year of the analysis scaled by the total assets. The rest of the variables are the same as in Table 2A. Sample includes all the firms that were target of unsolicited takeover and the control sample with valid accounting information in the same event year available in Compustat. The point estimates and Wald chi-square statistics for the year effects are not reported through they are included in the regression.

| Model | 1 | | 2 | |
|--------------------------------------|-------|----------|-------|----------|
| Variable | Coeff | Wald | Coeff | Wald |
| <i>Industry dummy</i> | -0.77 | 16.6 *** | -0.78 | 17.4 *** |
| <i>ROA (Adjusted)</i> | 0.17 | 1.0 | 0.17 | 0.9 |
| <i>Sales growth (Adjusted)</i> | -0.13 | 0.9 | -0.11 | 0.7 |
| <i>Leverage</i> | -0.73 | 4.0 ** | -0.61 | 2.8 * |
| <i>Cash</i> | -0.89 | 3.0 * | -0.90 | 3.0 * |
| <i>Ln (Equity)</i> | -0.03 | 0.6 | -0.07 | 3.0 * |
| <i>Market/Book Assets (Adjusted)</i> | -0.12 | 3.4 * | -0.11 | 2.5 |
| <i>Asset Structure (PPE)</i> | 0.93 | 7.6 *** | 0.93 | 7.6 *** |
| <i>Institutional Blockholder</i> | ---- | ---- | 0.75 | 18.1 *** |
| <i>Loan intensity</i> | 0.15 | 7.7 *** | 0.16 | 8.0 *** |
| Observations | | 8,380 | | 8,380 |
| Targets | | 158 | | 158 |

*** Indicates *p* value of 1%
 ** Indicates *p* value of 5%
 * Indicates *p* value of 10%

TABLE 3

THE IMPACT OF A BANK’S CLIENT NETWORK (H2)

This table presents results of the maximum likelihood estimates of the logit model for the Compustat based sample for the sample period 1992-2003. Of specific interest is *Bank Net* variable. *Bank Net* is total size of the banks that have relationship with the company as measured by the number of different clients in the same industry. *Bank Net* is measured in a 3-year window and at any tier of syndication. Because larger loans tend to have larger number of banks in the syndicate *Bank Net* is scaled by the total amount of loans issued to the company. *Loan Intensity* is a cumulative credit line issued during the 3 years previous to the year of the analysis scaled by the total assets. The dependent variable is a dummy (*Target*) equal to one if the company is target of an attempted unsolicited takeover. *Industry dummy* is equal one if there was an unsolicited takeover in a firm’s 4-digit SIC industry in the year prior to the year of observation. *ROA (Adjusted)* is industry median adjusted return on assets. *Sales growth (Adjusted)* is industry median adjusted annual rate of change in the firm’s net sales. *Leverage* is book debt to asset ratio. *Cash* is cash and short-term investments to assets ratio. Firm size is proxied by *Ln(Equity)*, the natural logarithm of the market equity. *Market/Book Assets (Adjusted)* is the industry median adjusted ratio of market to book value of assets, where market assets are defined as total assets plus market value of common stock minus book common equity and differed taxes. *PPE* is property, plant and equipment to assets ratio. All independent variables are measure at the end of the fiscal year previous to the takeover event. Sample includes all the firms that were target of unsolicited takeover and the control sample with valid accounting information in the same event year available in Compustat. The point estimates and Wald chi-square statistics for the year effects are not reported through they are included in the regression. .

| Variable | Coeff. | Wald | |
|--------------------------------------|--------|--------|-----|
| <i>Industry dummy</i> | -0.68 | 24.8 | *** |
| <i>ROA (Adjusted)</i> | 0.21 | 1.9 | |
| <i>Sales growth (Adjusted)</i> | -0.15 | 2.3 | |
| <i>Leverage</i> | -0.65 | 7.8 | *** |
| <i>Cash</i> | -1.16 | 10.2 | *** |
| <i>Ln (Equity)</i> | 0.01 | 0.1 | |
| <i>Market/Book Assets (Adjusted)</i> | -0.22 | 15.8 | *** |
| <i>Asset Structure (PPE)</i> | 0.44 | 4.2 | ** |
| <i>Loan intensity</i> | 0.08 | 5.5 | ** |
| <i>Bank Net</i> | 0.01 | 3.1 | * |
| Observations | | 15,889 | |
| Targets | | 359 | |

*** Indicates *p* value of 1%
 ** Indicates *p* value of 5%
 * Indicates *p* value of 10%

TABLE 4

ROBUSTNESS TEST, USING BARBER AND LYONS' (1996) TO MATCH WITHIN 10% OF ROA OF 10% LN(EQUITY) (H2)

This table analyses robustness of the results in Table 3 to a different sample construction method. Control sample (companies that were not target of unsolicited takeover) is constructed using Barber and Lyon (1996) case control matching methodology. Controls are matched to the cases with the same 2-digit SIC, with ROA within 10% range of the case and assets within 30%. Because sample is matched based on ROA and size these two variables are not included in the regression. As before, the dependent variable is a dummy (*Target*) equal to one if the company is target of an attempted unsolicited takeover. The key variable is *Loan Intensity* defined as cumulative credit line issued during the 3 years previous to the year of the analysis scaled by the total assets. The rest of the variables are the same as in Table 2. Sample includes all the firms that were target of unsolicited takeover and the control sample with valid accounting information in the same event year available in Compustat. The point estimates and Wald chi-square statistics for the year effects are not reported through they are included in the regression.

| Model | <i>1</i> | | <i>2</i> | | <i>3</i> | | <i>4</i> | |
|--------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Variable | Coeff. | Wald | Coeff. | Wald | Coeff | Wald | Coeff. | Wald |
| <i>Industry dummy</i> | 0.13 | 1.0 | 0.12 | 0.8 | 0.14 | 1.0 | 0.13 | 0.8 |
| <i>Sales growth (Adjusted)</i> | -0.07 | 0.2 | -0.05 | 0.1 | -0.07 | 0.2 | -0.05 | 0.1 |
| <i>Leverage</i> | -0.55 | 4.1 ** | -0.29 | 1.1 | -0.49 | 3.2 * | -0.23 | 0.7 |
| <i>Cash</i> | 0.52 | 1.5 | 0.64 | 2.3 | 0.56 | 1.8 | 0.68 | 2.6 |
| <i>Market/Book Assets (Adjusted)</i> | -0.34 | 26.6 *** | -0.35 | 27.5 *** | -0.33 | 26.0 *** | -0.34 | 26.9 *** |
| <i>Asset Structure (PPE)</i> | 1.76 | 48.8 *** | 1.86 | 53.3 *** | 1.76 | 48.4 *** | 1.86 | 52.6 *** |
| <i>Institutional Blockholder</i> | ---- | ---- | 0.74 | 38.0 *** | ---- | ---- | 0.74 | 37.6 *** |
| <i>Loan intensity</i> | 0.10 | 5.7 ** | 0.10 | 5.2 ** | 0.10 | 5.4 ** | 0.10 | 4.8 ** |
| <i>Bank Net</i> | ---- | ---- | ---- | ---- | 0.06 | 10.7 *** | 0.06 | 11.4 *** |
| Observations | | 15,852 | | 15,852 | | 15,852 | | 15,852 |
| Targets | | 328 | | 328 | | 328 | | 328 |

*** Indicates *p* value of 1%
 ** Indicates *p* value of 5%
 * Indicates *p* value of 10%

TABLE 5
BANKS AS INFORMATION INTERMEDIARIES (H3)

This table presents results of the maximum likelihood estimates of the logit model for the Compustat based sample 1992-2003. For the 359 unsolicited takeovers in the Compustat sample, we identified the acquirer in each and checked if the acquirer had a lending relationship with the target's bank and found 71 such cases. The dependent variable is a dummy (*Bank Link*) assigned the value one if the company was a subject of an attempted unsolicited takeover by raider who is a client of the same bank. We consider a company to be a client of a particular bank if they had a lending relationship in the previous three years. Key explanatory variable is *Loan Intensity* defined as cumulative credit line issued during the 3 years previous to the year of the analysis scaled by the total assets. *Bank Net* is total size of the banks that have relationship with the company as measured by the number of different clients in the same industry. *Bank Net* is measured in a 3-year window and at any tier of syndication. Because larger loans tend to have larger number of banks in the syndicate *Bank Net* is scaled by the total amount of loans issued to the company. *Industry dummy* is equal one if there was an unsolicited takeover in a firm's 4-digit SIC industry in the year prior to the year of observation. *ROA (Adjusted)* is industry median adjusted return on assets. *Sales growth (Adjusted)* is industry median adjusted annual rate of change in the firm's net sales. *Leverage* is book debt to asset ratio. *Cash* is cash and short-term investments to assets ratio. Firm size is proxied by *Ln(Equity)*, the natural logarithm of the market equity. *Market/Book Assets (Adjusted)* is the industry median adjusted ratio of market to book value of assets, where market assets are defined as total assets plus market value of common stock minus book common equity and deferred taxes. *PPE* is property, plant and equipment to assets ratio. All independent variables are measure at the end of the fiscal year previous to the takeover event. Sample includes all the firms that were target of unsolicited takeover and the control sample with valid accounting information in the same event year available in Compustat. The point estimates and Wald chi-square statistics for the year effects are not reported through they are included in the regression.

| Model | 1 | | 2 | | 3 | | 4 | |
|--------------------------------------|--------|----------|--------|----------|--------|----------|--------|----------|
| Variable | Coeff. | Wald | Coeff. | Wald | Coeff. | Wald | Coeff. | Wald |
| <i>Industry dummy</i> | -0.07 | 0.0 | -0.24 | 0.3 | -0.05 | 0.0 | -0.22 | 0.2 |
| <i>ROA (Adjusted)</i> | 0.51 | 0.4 | 0.33 | 0.1 | 0.34 | 0.2 | 0.18 | 0.0 |
| <i>Sales growth (Adjusted)</i> | -0.54 | 2.4 | -0.59 | 2.4 | -0.55 | 2.6 | -0.60 | 2.5 |
| <i>Leverage</i> | 1.35 | 4.3 * | 1.45 | 4.5 ** | 1.30 | 4.1 ** | 1.44 | 4.5 ** |
| <i>Cash</i> | -3.71 | 7.3 *** | -3.44 | 6.1 ** | -3.74 | 7.3 *** | -3.38 | 5.9 ** |
| <i>Ln (Equity)</i> | 0.24 | 16.7 *** | 0.24 | 12.2 *** | 0.25 | 18.0 *** | 0.25 | 13.4 *** |
| <i>Market/Book Assets (Adjusted)</i> | -0.41 | 5.9 ** | -0.50 | 6.5 *** | -0.41 | 6.0 ** | -0.52 | 6.9 *** |
| <i>Asset Structure (PPE)</i> | -0.43 | 0.7 | -0.20 | 0.1 | -0.43 | 0.7 | -0.18 | 0.1 |
| <i>Institutional Blockholder</i> | ---- | ---- | 1.79 | 30.7 *** | ---- | ---- | 1.79 | 30.7 *** |
| <i>Loan intensity</i> | 0.33 | 8.0 *** | 0.26 | 4.0 ** | 0.32 | 7.7 *** | 0.26 | 3.9 ** |
| <i>Bank Net</i> | ---- | ---- | ---- | ---- | 0.09 | 3.4 * | 0.10 | 3.8 * |
| Observations | | 2,659 | | 2,659 | | 2,659 | | 2,659 |
| Targets | | 71 | | 71 | | 71 | | 71 |

*** Indicates *p* value of 1%

** Indicates *p* value of 5%

* Indicates *p* value of 10%

TABLE 6

PROBABILITY OF COMPLETION OF AN UNSOLICITED BID (H4)

This table presents results of the univariate analysis of the probability of completion of an unsolicited bid in the sample of 404 unsolicited targets identified in Comopustat between 1992-2003. The sample is divided into completed and incomplete bids. Among the 404 events that we detected in our sample, we find that 152 unsolicited attempts were completed and 252 attempts were not completed (withdrawn). Analyzed variables are: *Industry dummy* is equal one if there was an unsolicited takeover in a firm's 4-digit SIC industry in the year prior to the year of observation. *ROA (Adjusted)* is industry median adjusted return on assets. *Sales growth (Adjusted)* is industry median adjusted annual rate of change in the firm's net sales. *Leverage* is book debt to asset ratio. *Cash* is cash and short-term investments to assets ratio. Firm size is proxied by *Ln(Equity)*, the natural logarithm of the market equity. *Market/Book Assets (Adjusted)* is the industry median adjusted ratio of market to book value of assets, where market assets are defined as total assets plus market value of common stock minus book common equity and differed taxes. *PPE* is property, plant and equipment to assets ratio. *Institutional Blockholder* is a dummy variable assigned the value one if at least one institutional investor holds more than 5% of the companies stock and zero otherwise. *Loan Intensity* is a cumulative credit line issued during the 3 years previous to the year of the analysis scaled by the total assets. *Bank Net* is measured over past 3 years and scaled by the cumulative credit line. *Bank Link* assigned the value one if the company was a subject of an attempted unsolicited takeover by raider who is a client of the same bank. We consider a company to be a client of a particular bank if they had a lending relationship in the previous three years. All variables are measure at the end of the year previous to the takeover event. Sample includes all the firms that were target of unsolicited takeover and the control sample with valid accounting information in the same event year available in Compustat.

| Variable | Completed | Withdrawn | Diff. | T-ratio |
|--------------------------------------|-----------|-----------|-------|---------|
| | Mean | Mean | | |
| <i>Industry dummy</i> | 0.28 | 0.22 | 0.05 | 1.23 |
| <i>ROA (Adjusted)</i> | 0.00 | -0.01 | 0.00 | 0.37 |
| <i>Sales growth (Adjusted)</i> | 0.10 | 0.05 | 0.05 | 1.02 |
| <i>Leverage</i> | 0.52 | 0.54 | -0.02 | -0.67 |
| <i>Cash</i> | 0.14 | 0.14 | 0.01 | 0.30 |
| <i>Ln (Equity)</i> | 4.77 | 4.71 | 0.07 | 0.35 |
| <i>Market/Book Assets (Adjusted)</i> | -0.18 | -0.07 | -0.11 | -1.11 |
| <i>Asset Structure (PPE)</i> | 0.26 | 0.28 | -0.02 | -0.91 |
| <i>Institutional Blockholder</i> | 0.66 | 0.64 | 0.03 | 0.52 |
| <i>Loan intensity</i> | 0.30 | 0.17 | 0.13 | 2.46 |
| <i>Bank Net</i> | 0.80 | 0.60 | 0.20 | 0.91 |
| <i>Bank Link</i> | 0.22 | 0.18 | 0.04 | 0.95 |
| Observations | 152 | 252 | | |

*** Indicates *p* value of 1%
 ** Indicates *p* value of 5%
 * Indicates *p* value of 10%

TABLE 7

MARKET REACTION TO BANK INVOLVEMENT IN TAKEOVERS

This table presents mean cumulative abnormal return for two sets of unsolicited takeovers identified using Compustat between 1992-2003: (1) unsolicited takeovers where target and acquirer are clients of the same bank (BNKLINK=1) and (2) unsolicited takeovers where target and acquirer don't interact with a common bank (BNKLINK=0), where BNKLINK is a dummy variable assigned the value one if the company was a subject of an attempted unsolicited takeover by raider who is client of the same bank. A company is said to be a client of a particular bank if in the previous three years it had loans issued by this bank. Event study is conducted using value weighted market model.

| Event Window | <i>BNKLINK=1</i> | | <i>BNKLINK=0</i> | | Diff. | T-ratio |
|---|------------------|----------|------------------|-----------|-------|---------|
| | Mean CAR | T ratio | Mean CAR | T ratio | | |
| <i>Panel A: Target's stock reaction</i> | | | | | | |
| [-1; +1] | 20.37% | 8.32 *** | 16.14% | 13.66 *** | 4.23% | 1.56 * |
| [+2; +10] | 0.55% | 0.67 | -0.08% | -0.13 | 0.63% | 0.61 |
| Observations | | 79 | | 322 | | |
| <i>Panel B: Acquirer's stock reaction</i> | | | | | | |
| [-1; +1] | -0.68% | -0.88 | -0.83% | -1.47 * | 0.15% | 0.15 |
| [+2; +10] | -0.16% | -0.19 | -0.86% | -1.08 | 0.69% | 0.59 |
| Observations | | 69 | | 125 | | |

*** Indicates *p* value of 1%
 ** Indicates *p* value of 5%
 * Indicates *p* value of 10%

TABLE 8

BANK 'S MOTIVES, ACQUIRER AND TARGET PERFORMANCE

This table analyses bank's motives for transmission of information by looking at the differences in performance. Panel A presents differences in performance between target and bidder in the sub-sample where BNKLINK =1, that is where the company was a subject of an attempted unsolicited takeover by raider who is client of the same bank. Panel B presents differences in target performance for those cases where the company was a subject of an attempted unsolicited takeover by raider who is client of the same bank and for those cases where raider and target were not clients of the same bank. A company is said to be a client of a particular bank if in the previous three years it had loans issued by this bank. *ROA (Adj.)* and *ROE (Adj.)* are the industry median adjusted return on assets and equity respectively. *Net Profit Margin (Adj.)* is the industry median adjusted ratio of income before extraordinary items to sales. *Market/Book (Adj.)* is the industry median adjusted ratio of market to book value of assets, where market assets are defined as total assets plus market value of common stock minus book common equity and differed taxes.

PANEL A: BNKLNK=1

| | <i>TARGET</i> | | <i>ACQUIRER</i> | | Diff. | T-ratio |
|---------------------------------|---------------|---------|-----------------|---------|-------|----------|
| | Mean | T-ratio | Mean | T-ratio | | |
| <i>ROA (Adj.)</i> | 0.01 | 1.05 | 0.04 | 3.77** | -0.03 | -2.08** |
| <i>ROE (Adj.)</i> | -0.02 | -0.53 | 0.06 | 2.94*** | -0.08 | -1.86** |
| <i>Net Profit Margin (Adj.)</i> | -0.01 | -0.30 | 0.05 | 3.72*** | -0.06 | -2.55*** |
| <i>Market / Book (Adj.)</i> | -0.15 | -1.72** | 0.28 | 1.72** | -0.43 | -2.33** |

PANEL B: PERFORMANCE OF TARGETS

| | <i>BNKLINK=1</i> | | <i>BNKLINK=0</i> | | Diff. | T-ratio |
|---------------------------------|------------------|---------|------------------|----------|-------|---------|
| | Mean | T-ratio | Mean | T-ratio | | |
| <i>ROA (Adj.)</i> | 0.01 | 1.05 | -0.01 | -1.74** | 0.02 | 1.85* |
| <i>ROE (Adj.)</i> | -0.02 | -0.53 | -0.16 | -3.98*** | 0.14 | 2.47** |
| <i>Net Profit Margin (Adj.)</i> | -0.01 | -0.30 | -0.14 | -3.10*** | 0.13 | 2.77*** |
| <i>Market / Book (Adj.)</i> | -0.15 | -1.72** | -0.10 | -1.71** | -0.05 | -0.45 |

*** Indicates *p* value of 1%
 ** Indicates *p* value of 5%
 * Indicates *p* value of 10%

TABLE 9

BANK 'S MOTIVES

This table analyses bank's motives for transmission of information by looking at the differences in the target performance. Panel A looks at the sub-sample where BNKLINK =1, that is where the company was a subject of an attempted unsolicited takeover by raider who is client of the same bank and presents target performance for those cases where there was takeover loan issued the bidder (*LOAN*=1) and cases without financing. We look at the loans that are issued to back the unsolicited bid by the bank that had relationship with both target and bidder. Panel B looks at all the attempted unsolicited takeovers and presents differences in target performance for those cases where bank had relationship with the target was advisor to the bidder (*ADVISOR*=1) and those cases where non of the banks that had relationship with the target advised the bidder. A company is said to have a relationship with a particular bank if in the previous three years it had loans issued by this bank. *ROA (Adj.)* and *ROE (Adj.)* are the industry median adjusted return on assets and equity respectively. *Net Profit Margin (Adj.)* is the industry median adjusted ratio of income before extraordinary items to sales. *Market/Book (Adj.)* is the industry median adjusted ratio of market to book value of assets, where market assets are defined as total assets plus market value of common stock minus book common equity and differed taxes.

PANEL A: THE IMPACT OF TAKEOVER FINANCING

| | <i>LOAN=1</i> | | <i>LOAN=0</i> | | Diff. | T-ratio |
|---------------------------------|-------------------|---------|-------------------|---------|-------|---------|
| | Observations = 11 | | Observations = 67 | | | |
| | Mean | T-ratio | Mean | T-ratio | | |
| <i>ROA (Adj.)</i> | 0.01 | 0.38 | 0.01 | 0.98 | 0.00 | 0.13 |
| <i>ROE (Adj.)</i> | -0.04 | -1.04 | -0.02 | -0.37 | -0.02 | -0.41 |
| <i>Net Profit Margin (Adj.)</i> | 0.01 | 0.39 | -0.01 | -0.34 | 0.02 | 0.52 |
| <i>Market /Book (Adj.)</i> | -0.48 | -1.13 | -0.09 | -1.33 * | -0.39 | -0.91 |

PANEL B: THE IMPACT OF ADVISING

| | <i>ADVISOR=1</i> | | <i>ADVISOR=0</i> | | Diff. | T-ratio |
|----------------------------------|-------------------|----------|--------------------|----------|-------|----------|
| | Observations = 13 | | Observations = 135 | | | |
| | Mean | T-ratio | Mean | T-ratio | | |
| <i>ROA (Adj.)</i> | -0.03 | -1.31 | 0.02 | 2.06 ** | -0.05 | -2.04 ** |
| <i>ROE (Adj.)</i> | -0.07 | -1.56 * | -0.05 | -1.66 ** | -0.02 | -0.24 |
| <i>Net Profit Margin (Adj.)</i> | -0.04 | -2.01 ** | -0.03 | -0.58 | 0.01 | -0.07 |
| <i>Market/Book Assets (Adj.)</i> | -0.39 | -1.02 | -0.01 | -0.13 | -0.38 | -0.95 |

*** Indicates *p* value of 1%
 ** Indicates *p* value of 5%
 * Indicates *p* value of 10%

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