Corporate Governance and M&A in the Banking Industry

LE GOUVERNEMENT DE CORPORATION ET LE M&A

DANS L'INDUSTRIE DE LA BANQUE

Song Limeng[1]

Abstract: Financial economists have long recognized that the widespread separation of ownership and control in large corporations creates the potential for costly agency conflicts. This paper exploits the banking industry's recent M&As to explore what corporate governance characteristics are associated with managers acting in shareholders' best interests. Using the sample of publicly traded banks at year-end 2000 in different countries and a variety of empirical methods, in contrast to existing research on industrial firms, we examine the relation between corporate governance, particularly board ownership, and M&A in the banking industry between 2001 and 2003. We find that board structure does not help determine which sample banks sell. Neither the fraction of outsiders on a bank's board nor having an outside-dominated board differentiates the target banks in our sample. Instead, outside directors/shareholders and blockholders appear to be primarily responsible for encouraging bank managers to accept an attractive merger offer. We also find a greater frequency of outside blockholders in the banks that become targets, suggesting that large non-director shareholders can also encourage banks to act in shareholders' best interests.
Key Words: Corporate governance, M&A

Résumé : Les économistes financiers ont longtemps identifié que la séparation répandue de la propriété et de la commande à de grandes sociétés crée le potentiel pour des conflits coûteux d'agence. Cet article exploite le M&A récent du secteur bancaire pour explorer quelles caractéristiques de gouvernement de corporation sont associées aux directeurs pour réaliser les meilleurs intérêts des actionnaires. En utilisant l'échantillon de banques publiquement commercées à la fin d'année 2000 dans les pays différents et une variété de méthodes empiriques, contrairement à la recherche existante sur les sociétés industrielles, nous examinons la relation entre le gouvernement de corporation, en particulier la propriété de conseil, et le M&A dans le secteur bancaire entre 2001 et 2003. Nous constatons que la structure de conseil n'aide pas à déterminer en quelle mode les banques se vendent. Ni la fraction des étrangers sur le conseil d'une banque ni avoir un conseil extérieur-dominé ne différencient les banques de cible dans notre échantillon. Au lieu de cela, les directeurs/actionnaires et les blockholders extérieurs semblent être principalement responsables d'encourager des directeurs d'agence de banque à accepter une offre attrayante de fusion. Nous trouvons également une plus grande fréquence des blockholders extérieurs aux banques qui deviennent des cibles, proposant que les grands actionnaires de non-directeur puissent également encourager des banques à réaliser les meilleurs intérêts des actionnaires.
Mots-clés : Gouvernement de corporation, M&A

1. INTRODUCTION

Financial economists have long recognized that the widespread separation of ownership and control in large corporations creates the potential for costly agency conflicts. Dispersed shareholders' limited incentive to monitor the behavior and performance of the agents hired to run their firm can give managers substantial freedom to pursue their own interests at the expense of shareholder wealth. Absent mechanisms to control managerial behavior, usually called "corporate governance structures", wealth maximization will not

exclusively motivate corporate decision-making. The banking industry's ongoing consolidation offers an excellent experimental setting for examining board effectiveness.

This paper exploits the banking industry's recent M&As to explore what corporate governance characteristics are associated with managers acting in shareholders' best interests. Banks provide a useful experiment because the burst of recent merger activity in this historically fragmented industry allows us to study a reasonably large sample of very homogeneous firms. Additionally, because the need for regulatory approval makes hostile bank takeovers particularly difficult, the target bank's cooperation is generally a prerequisite for a bank M&A. Therefore, governance structures that amplify an institution's concern for shareholder wealth may play a greater role in determining the targets of bank acquisitions than the targets of industrial takeovers.

The rest of the paper is organized as follows. The first section reviews the relevant existing literature. The second presents our sample and data. The third explores

the differences between the sample banks that do and do not become targets. The fourth section concludes.

The potential for agency conflicts inherent in the separation of ownership and control makes it important that publicly traded corporations have effective corporate governance systems. The most immediate governance mechanism is the firm's board of directors. The power to hire, fire, and compensate top managers gives well-functioning boards the ability to greatly reduce any incentive conflicts between managers and shareholders.

To date, most results involving outside directors has emphasized the importance of their presence, but not their ownership stake in the firm. Byrd and Hickman (1992)[2] and Cotter et al. (1997)[3] explicitly test for the impact of outside director ownership on bidder and target returns, respectively, during takeover contests. However, neither paper finds a significant effect.

In this paper we examine the relation between corporate governance, particularly board ownership, and M&A in the banking industry between 2001 and 2003. The substantial number of mergers in this large, historically fragmented industry allows us to compare a relatively large sample of banks that become targets over a short period of time to all of the remaining institutions in the industry. Doing so avoids the need to mix takeovers from many disparate industries over a

long time period in our analysis of corporate governance efficacy.

Because target bank shareholders receive a substantial premium in a bank merger while target managers risk losing their jobs, manager and shareholder incentives tend to diverge on the question of whether to sell. Shareholders generally prefer their bank become a target while managers prefer their bank be one of the survivors. Which banks sell could well reveal which corporate governance mechanisms most effectively tilt corporate decision-making toward shareholder interests. This is not to say that economic factors have no influence on which banks buy and which banks sell, only that the board's concern for shareholder wealth should have an impact at the margin.

Our study is closely related to Brook et al. (2000)[4] who compare 321 banks acquired between 1994 and 1996 to a sample of carefully matched control banks. These authors find that banks with substantial inside ownership (both director and affiliated blockholder) are less likely to be acquired. In particular, these banks are less likely to be acquired and see their top management fail to remain employed by the buying bank.

Our study differs from Brook et al. (2000) in two important ways. First, our period of study (2001–2003) comes during a time when takeover restrictions have been dramatically relaxed, making virtually all banks potential targets. Second, using the sample of public banks in different countries from ZEPHYR (a database provided by Bureau van Dijk Electronic Publishing, http://www.zephyr.bvdep.com/ip)may give truer estimates of the relation between governance and whether a bank sells (the regression coefficients) than are possible using a matched-sample approach.

2. SAMPLE AND DATA

2.1 Sample

Our sample comes from ZEPHYR. ZEPHYR is an information solution containing M&A, IPO and venture capital deals with links to detailed financial company information. ZEPHYR now contains information on over 350,000 transactions (Jan 2006). Up to 100,000 new deals are added per year. ZEPHYR has five years of global coverage and includes deals involving European or American companies going back to 1997. we choice a sample of 300 publicly traded banks that entered 2001 as potential takeover targets at random from 1356 M&As in the world banking.

[2] Byrd, J., Hickman, K., Do outside directors monitor managers? Evidence from tender offer bids, Journal of Financial Economics 1992, 32, pp.195–222.

[3] Cotter, J., Shivdasani, A. and Zenner, M., Do independent directors enhance target shareholder wealth during tender offers?, Journal of Financial Economics 1997,43, pp. 195–218.

[4] Brook, Y., Hendershott, R., Lee, D., Corporate governance and recent consolidation in the banking industry, Journal of Corporate Finance 2000, 6, pp.141–164

ZEPHYR provides all of the financial data for our tests. A bank's market value of equity is calculated using ZEPHYR data as the number of shares outstanding times the closing stock price at year-end 2000. Data on corporate governance structures (ownership and board structures) are compiled from 2000 proxy statements. Because our study focuses on corporate governance characteristics, only the 254 banks with an appropriate proxy available are included in our final sample.

2.2 Governance variables

From the proxy statements, we identify equity ownership of all officers and directors as a fraction of total shares outstanding. Directors are then classified as insiders, outsiders, or gray and the different categories' aggregate fractional ownership are recorded. For our purposes, investment bankers are always classified as gray directors while other professionals (lawyers, accountants, consultants, etc.) are classified as gray only if they are reported as having a business relationship with the bank. Affiliated block ownership is included in our measures of director ownership. Undistributed ESOP shares and trust shares (when the bank is trustee) are assigned to the bank's CEO, unless the proxy indicates control belongs elsewhere. If an individual director controls another entity that is reported as owning shares of the bank, the individual

director is assigned ownership of those shares.

We define a board as "outside-dominated" if the fraction of outside directors exceeds 0.5. We also calculate aggregate outside block ownership (unaffiliated owners reported as holding more than 5% of the bank's shares) as a fraction of total shares outstanding. Our expectation is that greater director ownership and having an outside-dominated board will improve the board's ability and incentives to monitor and discipline managers. If so, banks with these governance characteristics should be more likely, at the margin, to accept an attractive merger offer. Similarly, we expect that banks with substantial outside block ownership will be more apt to become targets.

2.3 Control variables

Research showing that acquiring firms tend to be larger than target firms (Stevens (1973), among others) suggests it may be important to control for bank size in our tests. We measure size using the bank's total assets. We also control for banks' average branch size (total assets/number of branches). Branch size is intended to capture two effects. Banks with many small offices may make attractive targets because eliminating redundant branches offers greater consolidation benefits. Banks with many small branches may also be attractive targets because they allow an acquirer to enter a new market quickly.

Tab.1 Sample banks' summary statistics

	Mean	Median	Standard deviation
Total assets($ millions)	7526	1203	3699
Return on assets	0.011	0.015	0.018
q-ratio	1.038	1.047	0.524
Number of branches	54	36	45
Average branch size ($ millions)	154	138	189
Percent outside directors on board	0.620	0.540	0.243
Ownership by all directors and officers	0.089	0.075	0.101
Ownership by inside directors	0.023	0.017	0.126
Ownership by outside directors	0.035	0.029	0.138
Ownership by outside blockholders	0.017	0.011	0.098

Finally, we control for banks' past performance. Hasbrouck (1985) [5] finds lower q-ratios in 86 non-financial takeover targets than in either size- or industry-matched control firms. Craig and Dos Santos (1996)[6] show that banks actively acquiring other banks typically have performed better than the banks they acquire. Controlling for performance is important to reduce omitted variable biases. Because board members

will generally have exceptional information about a bank's future profitability, board ownership may vary with performance. When prospects are good (bad), board members have an incentive to accumulate more (less) stock. Therefore, failing to control for prior performance could lead to a spurious correlation between director ownership and the likelihood of a merger.

We use two measures of banks' prior performance, a q-ratio and return on assets (ROA). q is the ratio of the market value to the replacement cost of a firm's assets. Because banks' tangible assets are primarily loans and liquid financial assets, market values and replacement costs are identical in many cases. However, if q is interpreted as the ratio of the bank's value as an ongoing

---

[5] Hasbrouck, J., The characteristics of takeover targets. Journal of Banking and Finance 1985, 9, pp.351–362.

[6] Craig, B., Dos Santos, J., Performance and asset management effects of bank acquisitions, Federal Reserve Bank of Cleveland working paper, 1996.

concern to its liquidation value, q = (total assets + market value of equity−book value of equity)/(total assets + market value of investment securities − book value of investment securities).ROA is calculated as the ratio of 2000 net income to book value of total assets. Tab.1 provides our sample's summary statistics as of year-end 2000.

3. WHICH BANKS SELL?

The optimal time period over which to categorize targets is not obvious. One extreme would be to require that a bank be acquired in 2001. However, the volume of M&A activity in the banking industry (over 45% of our sample banks were bought within 2 years) makes it unlikely that all willing targets could have sold themselves for an attractive price in 2001. If so, a 1 year window would miss many banks that should be classified as targets because they were about to be acquired, because misclassifying targets will reduce our tests' power, we believe it appropriate to categorize target banks based on a longer horizon. However, extending the window indefinitely does not make sense — agreeing to a M&A is supposed to indicate the bank's willingness to sell as of year-end 2000.

Admittedly, our requirement that targets be acquired in a M&A both announced and completed between 1/1/2001 and 12/31/2003 is somewhat ad-hoc. Later in the paper we show that our results are not specific to this particular window. ZEPHYR allows us to identify all sample banks that were acquired in 2001, 2002 or 2003.

3.1 A univariate comparison

Tab.2 provides a univariate comparison of the sample banks that were acquired and the rest of the sample. The only highly significant difference is that target banks' outside directors' equity ownership is almost double that in the other banks: targets' outside directors own an average (median) of 5.3% (4.9%) of their bank's stock while other banks' outside directors own an average (median) of 2.2% (2.1%). Targets also have slightly lower median q-ratios and slightly higher median unaffiliated block ownership.

Tab.3 documents the percent of sample banks that have (1) an outside-dominated board, (2) at least one outside blockholder, or (3) outside director ownership that exceeds inside director ownership. Outside blockholders are more common in targets than in other banks (59% of the targets have an outside blockholder versus 38% of the other banks, p=0.04).

Tab.2 Univariate comparison of target banks to other banks

	Targets (75)	Other banks (175)	t-statistic	z-statistic
Total assets($ millions)	3865 (876)	8564 (1120)	1.3663	0.752
Return on assets	0.008 (0.010)	0.010 (0.013)	0.189	1.235
q-ratio	1.029 (1.019)	1.048 (1.039)	1.238	2.013
Number of branches	35 (23)	68 (56)	0.752	0.638
Average branch size ($ millions)	158 (49)	145 (63)	0.366	0.083
Percent outside directors on board	0.632 (0.452)	0.654 (0.523)	0.599	0.314
Ownership by all directors and officers	0.083 (0.075)	0.092 (0.082)	1.112	1.536
Ownership by inside directors	0.025 (0.019)	0.023 (0.024)	0.512	0.594
Ownership by outside directors	0.053 (0.049)	0.022 (0.021)	4.112	2.517
Ownership by outside blockholders	0.014 (0.015)	0.012 (0.012)	1.152	1.836

It is also more common for a target bank's outside directors to own more equity than the bank's inside directors (in 68% of the target banks outside directors own more than inside directors versus 45% of the other banks, p=0.01). There is not, however, a significantly greater frequency of outside-dominated boards in target banks (78% of the targets have an outside-dominated board versus 75% of the other targets, p=0.60).

3.2 A matched sample comparison

The univariate comparison's value is limited by the possibility that the takeover sample is biased toward a particular type of institution, creating a spurious correlation between becoming a target and a particular corporate governance characteristic. For example, directors' percentage equity ownership tends to vary

inversely with size. Therefore, if targets tended to be relatively small institutions, size differences could account for greater director ownership in target banks. Similarly, sample biases could mask important relations between other corporate governance structures and becoming a target.

To control for size and geographic differences across banks we match each target bank to the non-target bank in the same country that is closest in size (as measured by total assets). Tab.4 compares targets to their

Tab.3 The relative frequencies of corporate governance characteristics

	Frequency in		
	Targets	Other banks	x^2
Outside-dominated board	78%	75%	0.330
Outside blockholder	59%	38%	5.321
Outside director ownership> insider director ownership	68%	45%	6.881

matches. Consistent with the univariate tests, target banks have greater outside director ownership than control banks — the median difference and the statistical significance both increase slightly. Additionally, target banks' median *q*-ratio is somewhat lower than the control banks'. This suggests that the targets' greater outside director ownership cannot be explained by director incentives. If anything, targets' relatively poor historical performance suggests directors have had an incentive to buy *less* stock.

Additional matching criteria produce similar results (results not reported in a Table). In two performance/region-matched comparisons, using banks' *q*-ratios and ROA to measure performance, each target bank is matched to the non-target bank in the same country that has the closest *q* (ROA). Consistent with the size/region match, target banks have consistently higher outside director ownership than the performance/region-matched sample.

Two performance/size-matched comparisons provide an additional robustness check. Non-target banks are divided into four quartiles based on *q* (ROA) and each target bank is matched to the non-target bank in the same performance quartile that is closest in size. Again, targets' outside director ownership is significantly higher than outside director ownership in the control sample.

3.3 A multivariate comparison

Tab.5 presents a series of logistic regression models in which the dependent variable is a dummy indicating whether the bank was acquired. Using a logistic regression allows us to estimate the marginal impact of various corporate governance attributes on the likelihood that a bank becomes a target while controlling for other bank characteristics. Specifically, we control for bank size, prior performance, and the bank's average branch size. In the regressions, bank and average branch size are measured as ln(total assets) and ln(total Assets/ number of branches), respectively. Although we only report regressions controlling for prior performance using *q*, our findings are similar using ROA ,except that ROA is not significant in the regressions.

The second logistic regression model shows that higher D&O ownership is associated with a bank becoming a target (coefficient=2.258, *p*=0.065). However, when we replace total D&O ownership with outside director ownership and inside director ownership, only outside director ownership receives a significant coefficient (the coefficients range from 5.423 to 7.362 in the various regression models, with *p*-values between 0.005 and 0.0002). Inside director ownership receives an insignificant coefficient in all of the regression models.

Based on the third logistic model, the implied probability of a bank becoming a takeover target is $e^{z_i}/(1+e^{z_i})$, where z_i=18.312+0.162 ln(Total assets$_i$)−12.37q_i−0.962 ln(Average branch size$_i$)−0.423 Outside board dummy$_i$+0.632 Outside blockholder dummy$_i$+0.723 Inside director ownership$_i$+9.517 Outside director ownership.This suggests that a bank with median characteristics (as reported in Tab.1)has a 0.087 probability of becoming a target. Raising outside director ownership to 10% (from the median level of 2.9%) increases the implied probability to 0.181.

Outside director ownership being strongly related to becoming a target is consistent with substantial equity ownership giving outside directors an incentive to carefully monitor managers. It is also consistent with substantial equity ownership giving outside directors the ability to insist that corporate decision-making maximize shareholder wealth. These two effects are related, because there is little incentive for outside directors to monitor managers if they lack the power to discipline, but are also distinct. Whether outside directors' financial incentives or "clout" is more important has implications for what corporate governance characteristics are optimal.

Regression model (5) in Tab.5 reports the results including both the level of outside director equity ownership and the clout dummy. Both receive coefficients that are significant at the 0.10 level, although the clout dummy barely meets this threshold

(coefficient=0.789, *p*=0.097). The coefficient received by outside director ownership falls slightly when the clout variable is included, and continues to be significant at better than the 0.01 level. This is in contrast to the clout variable's coefficient (*p*-value) falling from 2.321 (0.005) to 0.789 (0.097) when the outside director ownership variable is included (regression with clout dummy alone not reported). We interpret this as evidence that outside directors' direct financial stake in the firm plays the dominant role.

It is somewhat surprising that higher inside director ownership is not associated with a bank becoming a target. Although it is unlikely manager and shareholder interests can be perfectly aligned, because insider ownership makes managers shareholders, it should have some impact on managerial incentives. To see whether the lack of a relation between insider ownership and a bank's willingness to sell is sensitive to how insider ownership is measured, we repeat the logistic regression models using a variety of alternative metrics. However, insider ownership's unimportance is unchanged if we replace inside director ownership with (1) top officer ownership (D&O ownership minus outside and grey director ownership), (2) top officer ownership plus grey director ownership (D&O ownership minus outside director ownership), or (3) CEO ownership (regressions not reported but available upon request).

It is possible that managerial ownership's importance is not captured by our linear regression specification. Morck et al. (1988) [7] propose that managerial ownership has two effects. Because it makes managers bear part of the costs (and reap part of the benefits) of their decisions, ownership gives managers an incentive to maximize value. However, greater ownership also gives managers more direct control over the firm, increasing their ability to resist external discipline. This entrenchment could allow managers to take value-destroying actions without risking replacement. The net impact of these two effects is unclear. Both Morck et al. (1988) and McConnell and Servaes (1990)[8] provide empirical evidence suggesting that the marginal effect of increased managerial ownership depends on the current level. Similarly, Rosenstein and Wyatt (1997)[9] show that how investors react to inside board member appointments depend on the level of insider ownership.

4. CONCLUSION

Using a variety of empirical methods, we document a strong and consistent link between outside director equity ownership and banks becoming takeover targets. Because agreeing to a merger systematically benefits target shareholders, outside director ownership appears to focus decision-making on shareholder wealth maximization. We also find a greater frequency of outside blockholders in the banks that become targets, suggesting that large non-director shareholders can also encourage banks to act in shareholders' best interests.

Our results provide an interesting contrast to the existing literature. Although outside ownership is associated with banks being acquired, neither insider ownership nor outside-dominated boards are consistently associated with banks becoming targets. Although past research has had limited success predicting successful takeovers using ownership variables, the bulk of the evidence suggests that substantial insider ownership impedes takeovers. In our sample, inside ownership inhibits takeovers only when insider director ownership exceeds outside director ownership.

Past research using industrial firms tends to find that having an outside-dominated board improves corporate decision-making, but little evidence that greater outside director ownership is associated with shareholder wealth maximization. We find the reverse in our sample of bank mergers. This divergence of results suggests that outside ownership and presence of outside directors may play discrete roles — outside ownership helps put the firm "in play" while outside directors make sure shareholders receive the largest premium possible once merger negotiations begin. Future studies will need to explore these potentially different roles more carefully.

---

[7] Morck, R., Shleifer, A., Vishny, R., Management ownership and market valuation: an empirical analysis, Journal of Financial Economics ,1988, 20, pp.293–316.
[8] McConnell, J., Servaes, H., Additional evidence on equity ownership and corporate value,
Journal of Financial Economics, 1990,27, pp.595–612.
[9] Rosenstein, S., Wyatt, J., Outside directors, board independence, and shareholder wealth, Journal of Financial Economics, 1990,26, pp.175–192.

Tab.4 Matched sample univariate comparison of target banks to other banks

	Targets	Matched sample	*t*-statistic	*z*-statistic
Return on assets	0.008 (0.010)	0.008 (0.010)	0.854	0.652
q-ratio	1.029 (1.019)	1.048 (1.039)	1.438	1.658
Number of branches	35 (23)	68 (56)	0.912	0.713
Average branch size($ millions)	158 (49)	145 (63)	0.254	1.438
Percent outside directors on board	0.632 (0.452)	0.61 (0.55)	0.356	0.188
Ownership by all directors and officers	0.083 (0.075)	0.08 (0.07)	0.912	1.538
Ownership by inside directors	0.025 (0.019)	0.032 (0.025)	0.225	0.00
Ownership by outside directors	0.053 (0.049)	0.031 (0.017)	3.132	2.872
Ownership by outside blockholders	0.014 (0.015)	0.015 (0.011)	0.212	0.724

Tab.5 Logistic regressions explaining which banks become targets within 3 years

	Model 1	Model 2	Model 3	Model 4	Model 5
Ln(total assets)	0.054 (0.458)	0.162 (0.152)	0.412 (0.113)	_	0.362 (0.119)
q-ratio	-11.23 (0.117)	-14.02 (0.192)	-12.37 (0.215)	_	-14.213 (0.097)
Ln(average branch size)	-0.557 (0.095)	-0.852 (0.015)	-0.962 (0.025)	_	-0.924 (0.135)
outside board dummy	_	0.372 (0.919)	-0.423 (0.117)	-0.123 (0.747)	-0.854 (0.055)
Blockholder dummy	_	0.772 (0.049)	0.632 (0.065)	0.787 (0.045)	0.923 (0.047)
Ownership by all directors and officers	_	2.258 (0.065)	_	_	_
Ownership by inside directors	_	_	0.723 (0.717)	-2.230 (0.425)	0.823 (0.817)
Ownership by outside directors	_	_	9.517 (0.005)	9.557 (0.000)	9.552 (0.005)
Outside director ownership> insider director ownership	_	_	_	_	0.789 (0.097)
Pseudo-R^2	5.4%	6.8%	12.1%	5.8%	11.7%

THE AUTHOR

Song Limeng, School of Accounting, Zhongnan University of Economics and Law, Wuhan 430072, P. R. China.