

Does Corporate Governance Affect Target IPO Bank Returns Surrounding M&A Announcements

Su-Jane Chen and Juan M. Dempere

Abstract—This study examines the relationship between corporate governance and cumulative abnormal returns (CARs) associated with target IPO banks surrounding M&A announcements. Several sets of regressions are performed for the investigation. Empirical evidence suggests that a majority of the sample banks benefit from M&A announcements. It further shows that the CARs are significantly, negatively related to board size. Furthermore, the CARs demonstrate persistent, positive connection to D&O insurance coverage, board independence, and D&O ownership. No exception is documented. However, none of the positive relationship is significant at the conventional levels. In contrast, bank size, the control variable, repetitively shows its significant, negative relationship with respect to target bank stock performance around M&A announcements. Thus, target banks with small board and size benefit more from merger and acquisition announcements than their large counterparts.

Index Terms—bank size, corporate governance, M&A announcements, target IPO bank returns.

I. INTRODUCTION

Reference [12] investigates the mechanism of corporate control in commercial banks. It finds that regulatory intervention is the most important mechanism followed by supervision of the board of directors. It further asserts that board supervision of banking firms is much less assertive than that of nonfinancial companies. The latter should not come as a surprise, though, given the flawed, dual insurance mechanism embedded in the banking sector. The mechanism's deficiency is manifested implicitly through numerous precedents of bank bailouts by central banks of national governments to protect their economies and explicitly through the Federal Deposit Insurance Corporation (FDIC). As a result, managers are inclined to take on risky investments while depositors lack incentive to monitor bank governance, the culmination of which preceded the 2008 financial meltdown and the aftermath since then. The inevitable catastrophe calls for a close examination of corporate governance and its pivotal role in remedying potential conflict of interests between managers and shareholders in the banking sector.

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Ample research shows that the board of directors is critical to the determination of firm value. For example, [16] and [1] document significant link between board size and firm performance; [7] shows that when a majority of outside directors are busy, firm underperforms in terms of its market-to-book ratio. Reference [15] further states that board size reduction and board independence enhancement are two of the most common and tested recommendations for board reform. Thus, corporate governance structure needs to be carefully studied in order to better align manager and shareholder interests. Surprisingly, though, as noted in [8], very little finance literature has been devoted to the influence of corporate governance on the outcome of bank mergers and acquisitions. This study attempts to fill in the void and provide more insight into this paradigm by investigating the relationship between corporate governance and cross-sectional variation of cumulative abnormal returns (CARs hereafter) of target banks surrounding M&A announcements. We focus the event study on target banks that have recently gone through IPOs. This sample heterogeneity allows the research to increase its statistical power and avoid enlisting prohibitively expensive but necessary procedure to account for industry and temporal specification errors when sufficiently large data are pulled from all industries spanned over time.

The rest of this paper is organized as follows: Section II reviews relevant literature and synthesizes the proposed hypotheses; Section III covers data, including some descriptive statistics, and methodology; Section IV reports empirical findings; Section V concludes this study.

II. LITERATURE REVIEW AND HYPOTHESIS SYNTHESIS

Extensive research has been devoted to the examination of banking industry M&As and abnormal returns associated with the event. Reference [6] studies the stock market reactions to the public announcements of 152 interstate bank merger proposals launched prior to 1986. It finds that both the bidder and the target experience significantly positive abnormal returns during a time period around the announcement date. In contrast, [3] performs an event study on the Italian market and concludes that while the target receives a favorable response, the buyer receives an unfavorable one.

Reference [4] shows that firms with high litigation risk tend to purchase insurance coverage for their directors and officers (D&Os hereafter) and carry high insurance limits and

deductibles. This high level of risk can be reduced once the target goes through M&A and realizes the benefit of diversification. Consequently, a positive relationship is expected between the mention of D&O insurance coverage in the prospectus of the target and the CARs for the target. Thus, the following hypothesis can be formulated:

H₁ D&O insurance coverage is positively related to the CARs for the target.

Reference [17] documents a negative association between the log of board size and Tobin's Q. Furthermore, [5] reveals that CEO pays are positively related to board size. Underperforming businesses are normally easy M&A targets. Once the M&A goes through, the board size most likely will get even bigger, which will further enlarge CEO pays and dampen bank performance. Therefore, the following prediction can be established:

H₂ Board size is negatively related to the CARs for the target.

Reference [14] illustrates negative stock market reaction to the announcement of inside director appointments; [11] documents a negative relationship between returns surrounding M&A announcements and lack of board independence. In contrast, [13] demonstrates positive stock price reaction to the selection of outside directors; [2] attributes high target gains to boards dominated by outside directors and argues that the dominance empowers and motivates the board to effectively govern the management group. The documented benefit of independent directors as objective supervisors of the firm's managerial performance may enhance the probability for investors in the market to treat M&A announcements as positive news. In turn, the following hypothesis pertaining to board independence proxied by the proportion of outside directors on the board in relation to the CARs for the target can be proposed:

H₃ Board independence is positively related to the CARs for the target.

Reference [11] links negative returns surrounding M&A announcements to low D&O ownership as well as lack of board independence. Reference [2] claims that significant board director ownership and board dominance by outside directors increase the board's ability and incentives to monitor and discipline managers. This enhancement should help align interests between managers and shareholders and motivate banks to pursue only mergers and acquisitions that can further increase stockholder wealth. If so, a positive relationship should exist between D&O ownership and the CARs. In essence, the hypothesis can be framed as:

H₄ D&O ownership is positively related to the CARs for the target.

Reference [10] documents that abnormal returns resulting from acquisition announcements for small firms are approximately 2.24 percent higher than those for large firms. Once acquired/merged, small target banks should benefit from cost reduction, economy of scale, and competitiveness enhancement. Large target banks, on the other hand, may suffer from cultural clash with their M&A counterparts after M&A activities are finalized and reality sink in. Therefore, a negative relationship is expected between bank size and the CARs. As a result, hypothesis listed next can be synthesized.

H₅ Bank size is negatively related to the CARs for the target.

III. DATA AND METHODOLOGY

A. Data and Descriptive Statistics

The sample consists of 50 bank holding companies (BHC hereafter) that had stock price data available from the Center for Research in Security Prices (CRSP), launched their IPOs between 1996 and 2004, and became M&A targets within two years after going public. This period of time is selected because the archive of historical documents retrieved from the Electronic Data Gathering, Analysis, and Retrieval System (EDGAR) of the Securities and Exchange Commission (SEC) at the onset of this research contains initial prospectus and proxy statements of BHCs from 1996 through 2004. Information specific to corporate governance such as board size and independence, and D&O ownership is obtained from SEC filings, notably the registration statements and prospectus. Other sample information is obtained from Securities Data Corporation's (SDC) Global New Issues database. Accounting data are obtained from Standard and Poor's Research Insight.

Table 1 reports number of BHCs with M&A activities on an annual basis. A majority of the M&As, 76%, are concentrated in years 2001-2004. Table 2 lists descriptive statistics for the sample banks. According to the table, 46% of the target banks carry D&O insurance; board size varies from as small as 5 directors to as large as 17 directors with an average of 9.06 directors; outside directors make up as little as 13% of their board or as much as 93% of their board with an average of 72.51%; D&O ownership ranges between 1% and 93% with an average of 16.12%; target bank size captured by total assets shows a minimum of \$1.18 million, a maximum of \$11.27 billion, and an average of \$765.60 million. Also reported in Table 2 are the respective medians for the same five variables.

B. Methodology

A standard event study approach is adopted in this study. The abnormal return, A_{it} , for the common stock of the it target bank on event date t is defined as:

TABLE I. ANNUAL LIST OF SAMPLE M&A ACTIVITIES

Year	# of M&As	%
1998	1	2
1999	3	6
2000	5	10
2001	10	20
2002	8	16
2003	9	18
2004	11	22
2005	3	6
Total	50	100

$$A_{it} = R_{it} - E(R_{it}), \quad (1)$$

where R_{it} is the stock return of the it target bank on day t ;

TABLE II. DESCRIPTIVE STATISTICS

Variables	Min.	Max.	Mean	Median
D&O Insurance ($D\&OINS_i$; dummy: 1 or 0)	0	1	0.46	0
Board Size ($B\&S\&I\&Z\&E_{it}$)	5	17	9.06	9
% of Outside Directors ($D\&I\&N\&D_{it}$)	13%	93%	72.51%	75%
D&O % of Ownership ($D\&O\&O\&W\&N_{it}$)	1%	93%	16.12%	6%
Assets (mm)	\$1.18	\$11,267	\$765.60	\$259.86

$E(R_{it})$ is its expected return on the same day. This research follows the norm of a 21-day study period adopted by event studies, covering ten days prior to until ten days after the M&A announcement. For each day t during the event study period, the expected return for each target bank is calculated using the Scholes-Williams Market Model and the Capital Asset Pricing Model (CAPM). In specific, the market model expressed in (2) is executed first for every target bank. In the model, the stock returns for each sample bank are regressed on concurrent market returns over a 120-day estimation period that ends ten days before the M&A announcement date.

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}, \quad (2)$$

where R_{it} is the stock return of the i th target bank on day t over the estimation period; α_i is the intercept term for the bank, β_i is the bank's market beta capturing its market risk, and R_{mt} is the concurrent market return proxied by the equally weighted common stock index from CRSP; ε_{it} is the residual term for the bank on the same day t . Upon the derivation of the intercept term and beta, CAPM in (3) is enlisted for the calculation of bank i 's expected return for each of the 21 event days.

$$E(R_{it}) = \alpha_i + \beta_i R_{mt}, \quad (3)$$

Following (1), the expected return, $E(R_{it})$, is then subtracted from the raw return, R_{it} , to derive the abnormal return, A_{it} .

We further define the cumulative abnormal return, CAR_i , for target bank i as:

$$CAR_{T_{1i}, T_{2i}} = \sum_{t=T_{1i}}^{T_{2i}} A_{it},$$

where T_{1i} and T_{2i} are the two days pertaining to target bank i for the test time window $[T_{1i}, T_{2i}]$. Upon the derivation of $CARs$ for all sample banks, two regression procedures, simple regressions and multiple regressions, are performed. For the procedure of simple regressions, cross-sectional regressions of $CARs$ associated with the 50 sample target banks over each of the four time windows on the four corporate governance characteristics and the control variable, one at a time, are performed. Therefore, a total of 20 regressions are operated. For the multiple regressions, return data are fitted into (4).

$$CAR_i = a + b_1 D\&OINS_i + b_2 B\&S\&I\&Z\&E_i + b_3 D\&I\&N\&D_i + b_4 D\&O\&O\&W\&N_i + b_5 LnAssets_i + e_i, \quad (4)$$

where a is the intercept term; $D\&OINS_i$ is a dummy variable that takes the value of one if D&Os of target bank i have insurance coverage at the time of the M&A announcement

TABLE III. INITIAL M&A ANNOUNCEMENTS

Days	N	Mean CARs	Positive vs. Negative	Positive Response (%)	Patell Z-Score
(-1,0)	50	11.84%	36:14	72	33.031***
(0,0)	50	10.58%	36:14	72	41.131***
(-1,+1)	50	16.26%	43:7	86	37.572***
(-10,+10)	50	17.75%	40:10	80	15.178***

Note: *** denotes statistical significance at the 1% significance level, using a two-tail test.

and zero otherwise; $B\&S\&I\&Z\&E_i$ is the board size measured by the number of directors on the board; $D\&I\&N\&D_i$ is the degree of board independence captured by the proportion of outside directors on the board; $D\&O\&O\&W\&N_i$ is the percentage of shares of stock owned by D&Os; $LnAssets_i$, the natural logarithm of total assets, captures bank size; e_i is the error term.

IV. EMPIRICAL RESULTS

The $CARs$ for the four time windows around the M&A announcement date, $(-1, 0)$, $(0, 0)$, $(-1, +1)$, and $(-10, +10)$, are calculated, respectively. Test results conducted on the $CARs$ are reported in Tables 3. As shown in the table, the respective mean $CARs$ for the four time windows, 11.84%, 10.58%, 16.26%, and 17.75%, are all significant at the 1% significance level. Furthermore, at least 72% of the 50 sample banks benefited from M&A announcements. This is consistent with empirical finance literature that target firm stockholders earn significant abnormal returns around the M&A announcement period [9].

Table 4 covers test results derived from performing 20 simple regressions. $CARs$ for the four time windows, one window at a time, are regressed cross-sectionally on each of the five independent variables in (4). The regression intercepts, not reported in the table, are significantly positively different from zero for 16 of the 20 cases. None of the 16 significant intercepts has a p value greater than 5%. The overwhelmingly significant regression intercepts further support the finding in Table 3 that M&A announcements yield positive abnormal returns for target banks. As revealed in the table, board size ($B\&S\&I\&Z\&E$) is the only corporate governance characteristic that shows significant, negative relationship with the $CARs$. The coefficient's negative significance in time windows $(-1, +1)$ and $(-10, 10)$, along with its negative insignificance for the other two time windows, $(-1, 0)$ and $(0, 0)$, supports H_2 that board size is negatively related to the $CARs$ for the target. The other three characteristics—the mention of D&O insurance coverage in the prospectus of the target ($D\&OINS$), board independence ($D\&I\&N\&D$), and D&O ownership ($D\&O\&O\&W\&N$)—do not exhibit any significant association with the sample target banks' $CARs$. However, the fact that for all four time windows, coefficients reported in the table are consistently positive, without any exception, for the D&O insurance coverage, board independence, and D&O ownership provide supporting evidence, albeit their statistical insignificance, for H_1 , H_3 , and H_4 . Thus, banks with the mention of D&O insurance coverage in their prospectus, with more independent board, and with higher percentage of ownership by their directors and officers are more likely to benefit from M&A announcements than their target peers. In contrast, the table reveals that the bank size ($LnAssets$) is significantly

negatively related to the *CARs* for all four time windows. This lends strong support for H_5 . Therefore, small target

TABLE IV. CROSS-SECTIONAL ANALYSIS OF *CARs* (Simple Regressions)

Variable	Model #1 <i>CARs</i> (-1, 0)	Model #2 <i>CARs</i> (0, 0)	Model #3 <i>CARs</i> (-1, +1)	Model #4 <i>CARs</i> (-10, +10)
<i>D&OINS</i>	0.0143 (0.32)	0.0059 (0.14)	0.0260 (0.52)	0.0437 (0.79)
<i>BSIZE</i>	-0.0066 (-0.87)	-0.0092 (-1.45)	-0.0209 (-2.27)**	-0.0201 (-1.77)*
<i>DIND</i>	0.0684 (0.10)	0.0642 (0.7323)	0.1207 (1.10)	0.0565 (0.45)
<i>D&OOWN</i>	0.0938 (0.77)	0.0824 (0.73)	0.0311 (0.26)	0.1097 (0.71)
<i>LnAssets</i>	-0.0286 (-2.61)**	-0.0257 (-2.13)**	-0.0427 (-2.74)**	-0.0400 (-3.09)**

Notes: The 20 coefficients reported in the table are derived from the operation of 20 cross-sectional simple regressions where *CARs* associated with the 50 sample target banks over each of the four time windows are the dependent variable and the four corporate governance characteristics and the control variable, one at a time, are the independent variable. The associated t-statistic reported inside parentheses is used for the significance measure. *, ** and *** denote statistical significance at the 10%, 5% and 1% significance levels, respectively, using a two-tail test.

banks gain more than large ones from M&A announcements.

It is well documented in empirical literature that multicollinearity may cause invalid results about individual predictor in a multiple regression or mask predictors that are redundant with respect to others in the regression. Thus, correlation for each pair of the five independent variables in (4) is calculated before proceeding to the procedure of multiple regressions to investigate if the four corporate governance characteristics and the size of sample target banks are jointly significantly related to their *CARs* surrounding M&A announcements. Table 5 lists the correlation coefficients for the paired variables. As the table shows, the only two variables with a significant correlation, 0.2678, are board independence and assets size. They are significantly positively correlated with each other at the 10% significance level. This can be attributed to several plausible factors. First, large banks with great resources can afford to recruit more outsiders for the board than small banks. Second, large banks presumably with a better structured corporate governance mechanism would intentionally enhance its board independence. Third, the prestige of large banks allows them to attract high-caliber outsiders to serve on the board. Nonetheless, multicollinearity does not appear to pose a serious concern since none of the other correlation coefficients exhibits any significance.

Table 6 covers the cross-sectional regression results derived from (4) for the variation of the *CARs* associated with M&A announcements. Consistent with the Patell Z-Score reported in Table 3 and regression intercepts derived from

TABLE V. CORRELATION COEFFICIENT MATRIX

Variable	<i>D&OINS</i>	<i>BSIZE</i>	<i>DIND</i>	<i>D&OOWN</i>	<i>LnAssets</i>
<i>D&OINS</i>	1	0.0256	0.0442	-0.1843	-0.1091
<i>BSIZE</i>		1	-0.1534	-0.0695	0.0454
<i>DIND</i>			1	-0.0237	0.2678*
<i>D&OOWN</i>				1	-0.1465
<i>LnAssets</i>					1

Notes: The t-statistic, not reported in the table is used for the significance measure. * denote statistical significance at the 10% significance level, using a two-tail test.

the performance of simple regressions earlier, the significantly positive multiple-regression intercept across all four time windows clearly indicates that M&A announcements benefit target banks. The table shows that

TABLE VI. CROSS-SECTIONAL ANALYSIS OF *CARs* (Multiple Regressions with All Five Independent Variables)

Variable	Model #1 <i>CARs</i> (-1, 0)	Model #2 <i>CARs</i> (0, 0)	Model #3 <i>CARs</i> (-1, +1)	Model #4 <i>CARs</i> (-10, +10)
Intercept	0.2298 (2.33)**	0.2407 (2.62)**	0.4417 (3.50)**	0.4547 (2.84)**
<i>D&OINS</i>	0.0185 (0.43)	0.0108 (0.26)	0.0219 (0.46)	0.0587 (1.14)
<i>BSIZE</i>	-0.0071 (-0.99)	-0.0098 (-1.51)	-0.0197 (-2.52)**	-0.0226 (-2.33)**
<i>DIND</i>	0.1244 (1.44)	0.1070 (1.43)	0.1768 (1.53)	0.0907 (0.71)
<i>D&OOWN</i>	0.1074 (0.82)	0.1002 (0.81)	0.0714 (0.54)	0.1853 (1.16)
<i>LnAssets</i>	-0.0288 (-2.80)**	-0.0256 (-2.62)**	-0.0442 (-3.73)**	-0.0344 (-2.66)**
Adjusted R^2	0.0078	0.0077	0.1351	0.0908
F-Statistic	1.08	1.08	2.53**	1.98*

Notes: Heteroscedasticity-consistent t-statistic [16] is used to measure significance of parameter estimates and is reported inside parentheses. Adjusted R^2 and F-Statistics are used to determine if each regression as a whole has statistically significant predictive power. *, ** and *** denote statistical significance at the 10%, 5% and 1% significance levels, respectively. For the t-statistic, a two-tail test is used.

board size (*BSIZE*) registers its negative significance in time windows (-1, +1) and (-10, +10). For the other two time windows, the regression coefficient, albeit its statistical insignificance, is also consistently negative. These results, essentially the same as those covered in Table 4, serve as further evidence in support of H_2 . That is, board size is negatively related to the *CARs* surrounding the M&A announcement for the target. This significantly negative relationship may be a reflection on the negative connection between the log of board size and Tobin's Q documented in [17], takeover-ensuring underperformance, and the positive relationship between CEO pays and board size revealed in [5]. Once the M&A of an underperforming target goes through, the board size most likely will get even bigger, which will further enlarge CEO pays and dampen bank performance. Consequently, target bank performance surrounding M&A announcements is linked negatively to board size. In contrast, Table 6 shows that regression coefficients associated with the mention of D&O insurance coverage in the prospectus of the target (*D&OINS*), board independence (*DIND*), and D&O ownership (*D&OOWN*) are persistently positive across the four time windows. Despite statistical insignificance of the coefficients, the persistently positive sign provides supporting evidence, however weak it is, for H_1 , H_3 , and H_4 . Thus, D&O insurance coverage, board independence, and D&O ownership are positively related to target bank returns surrounding M&A announcements. Finally, the target bank size (*LnAssets*) demonstrates a significant, negative relationship with respect to the *CARs* in all four time windows, suggesting the existence of size effect. Therefore, small target banks benefit more from M&A announcements than their large counterparts. One plausible explanation for this is that small banks are more likely than large banks to capitalize on cost reduction, economy of scale, and/or competitiveness enhancement after mergers and acquisitions. Large target banks, on the other hand, may suffer from the fallout of cultural clash with their M&A counterparts. Therefore, a negative relationship is expected between bank size and the *CARs*. Nonetheless, test results presented so far in Table 6 for the five independent variables are virtually invariant to those revealed in Table 4. Also reported in Table

6 are the adjusted R^2 , F-statistic, and significance level for the four multiple regressions. Based on the numbers, the five independent variables, *D&OINS*, *BFSIZE*, *DIND*, *D&OOWN*, and *LnAssets*, demonstrate joint explanatory capacity to the variation of target bank *CARs* for time windows (-1, +1) and (-10, +10). The adjusted R^2 s of 0.1351 and 0.0908 indicate that the variables jointly account for 13.51% and 9.08% of the cross-sectional variability observed in the *CARs* for the two time windows, respectively. The associate F-statistics are significant at the 5% and 10% significance levels, respectively.

In consideration of the fact that both Tables 4 and 6 illustrate board size (*BFSIZE*) and bank size (*LnAssets*) as the only two significant variables to the explanation of variation of *CARs* surrounding M&A announcements, we perform a robustness check by running another set of cross-sectional regression. The other three independent variables in (4)—*D&OINS*, *DIND*, and *D&OOWN*—due to their statistical insignificance, are dropped in this phase from further regression analysis. Resulting regression statistics are reported in Table 7. Except for generally enhanced significance levels, empirical results contained in Table 7 are strikingly similar to those exhibited in both Tables 4 and 6. All four regression intercepts are statistically significantly positive at the 1% significance level, further confirming that M&A announcements can raise stock returns substantially for target banks. The *CARs* are persistently negatively associated with both board size (*BFSIZE*) and bank size (*LnAssets*). With the exception of *BFSIZE* over the first two time windows, the noted negative relationship is all significant. For the two latter time windows, (-1, +1) and (-10, +10), *BFSIZE* is significant at the 5% and 10% significance levels, respectively. For *LnAssets*, the significance level is 1% for all time windows except (0, 0) where the significance level is 5%. Based on the listed adjusted R^2 s, the two variables jointly account for 15.53% and 9.81% of the cross-sectional variation of the *CARs* over (-1, +1) and (-10, +10), respectively. The F-statistics associated with the same two time windows, 5.51 and 3.66 with respective significance levels of 1% and 5%, provide assuring empirical evidence that the model represents a good fit for the concurrent *CARs*. The noted consistency across Tables 4, 6, and 7 further illustrates that multicollinearity does not pose serious threat to the statistical power of the test results presented in the tables.

V. CONCLUSIONS

The study finds that a majority of the sample target IPO banks benefit from M&A announcements with an average gain of more than 10%. To examine the connection between corporate governance characteristics and target bank *CARs* surrounding M&A announcements, three sets of cross-sectional regressions are performed. The results consistently show that value enhancement surrounding M&A announcements for target banks is linked statistically negatively to their board size (*BFSIZE*). Thus, target banks with smaller board fare better around the announcement period than those with bigger board. The variable is

significant in two of the four time windows studied, (-1, +1) and (-10, +10). This significantly negative relationship may be ascribed to the negative association documented in finance

TABLE VII. CROSS-SECTIONAL ANALYSIS OF *CARs*
(Multiple Regressions with Two Independent Variables)

Variable	Model #1 <i>CARs</i> (-1, 0)	Model #2 <i>CARs</i> (0, 0)	Model #2 <i>CARs</i> (-1, +1)	Model #4 <i>CARs</i> (-10, +10)
Intercept	0.3317 (3.32)***	0.3259 (3.43)***	0.5753 (5.26)***	0.5689 (4.49)***
<i>BFSIZE</i>	-0.0060 (-0.82)	-0.0086 (-1.36)	-0.0199 (-2.32)**	-0.0192 (-1.86)*
<i>LnAssets</i>	-0.0281 (-2.83)***	-0.0250 (-2.45)**	-0.0410 (-3.82)***	-0.0384 (-3.6)***
Adjusted R^2	0.0332	0.0380	0.1553	0.0981
F-statistic	1.84	1.97	5.51***	3.66**

Notes: Heteroscedasticity-consistent t-statistic [16] is used to measure significance of parameter estimates and is reported inside parentheses. Adjusted R^2 and F-Statistics are used to determine if each regression as a whole has statistically significant predictive power. *, ** and *** denote statistical significance at the 10%, 5% and 1% significance levels, respectively. For the t-statistic, a two-tail test is used.

literature between the log of board size and Tobin's Q, takeover-ensuring underperformance, and the positive link evidenced in prior empirical work between CEO pays and board size. Once the M&A of an underperforming target goes through, the board size most likely will become even bigger, which, in turn, will further enlarge CEO pays and dampen bank performance. Consequently, target bank performance surrounding M&A announcements is negatively related to board size. Investigation of this plausibility warrants future research. In contrast, empirical results reveal a persistently positive relationship between *CARs* and the other three corporate governance characteristics—*D&O* insurance coverage (*D&OINS*), board independence (*DIND*), and *D&O* ownership (*D&OOWN*). No exception is observed in Table 4 or 6. While none of these documented positive relationships is statistically significant, some are marginally significant. This marginal insignificance may be a reflection on the study's relatively small sample size. Follow-up investigation with a large sample size presents another future research avenue. As with board size, bank size (*LnAssets*) illustrates a significantly negative relationship with respect to the *CARs*, suggesting that small banks gain more than large banks around the M&A announcement period. This evidenced size effect may be attributed to two factors. First, small-size target banks may benefit from the realization of cost reduction, economy of scale, and competitiveness enhancement once M&As are completed successfully. Second, large target banks may suffer from the fallout of cultural clash with their M&A counterparts once M&As are finalized and reality sets in. Further examination of this plausible causality is justified. Future research should also be devoted to the investigation of potential impact of other corporate governance characteristics, such as *D&O* compensation plan and reputation, and other control variables, such as bank age and geographical presence, on target bank returns surrounding M&A announcements.

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