A COMPARISON OF EARNINGS MANAGEMENT BETWEEN DOMESTIC AND CROSS-BORDER MERGERS

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Abstract

This study examines how U.S. acquiring firms managed their earnings by means of discretionary accruals prior to the announcement of stock-for-stock domestic and cross-border mergers during the period 1980 to 2002. The objective of this study is to determine whether earnings management is exacerbated in cross-border mergers according to the informational asymmetry hypothesis. The results show that that acquiring firms tend to manage earnings upward prior to stock swap domestic takeovers. In addition, the results reveal some evidence of earnings management prior to stock swap cross-border takeovers. However, the empirical results exhibit no significant distinction in earnings management between the domestic and cross-border mergers. Despite the possible existence of asymmetric information associated with cross-border takeover activities, the international mergers and acquisitions do not facilitate managers to engage in more aggressive earnings management. The findings suggest that the higher degree of information asymmetry in cross-border mergers does not contribute to a higher degree of earnings management.

Keywords: Earnings Management; Mergers and Acquisitions; Takeovers; Asymmetric Information

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1. Introduction

Previous studies [Erickson and Wang (1999) and Louis (2004)] have examined the earning management of acquiring firms prior to a stock swap and cash purchase merger. The tendency of corporate managers to actively manage earnings has been also documented around a variety of corporate events such as IPOs [Teoh, Welch, and Wong (1998a), and Aharony, Lin, and Loeb (1993)], SEOs [Teoh, Welch, and Wong (1998b), Rangon (1998), and Shivakumar (2002)] and management buyouts [DeAngelo (1986), Perry and Williams (1994), and Wu (1997)]. Given the fact that cross-border mergers and acquisitions have increased dramatically across industries over the last two decades, earnings management associated with cross-border mergers is necessary to be investigated. However, prior empirical evidence has not explicitly addressed the difference of earnings management conducted by U.S. acquiring firms between domestic and cross-border mergers. According to the informational asymmetry hypothesis [Jiraporn, Kim, and Mathur (1998)], this study investigates the distinction in earnings management conducted by U.S. acquiring firms between stock swap domestic and international mergers. Furthermore, this study examines the post-merger stock underperformance anomaly for domestic and cross-border mergers and the relation between the extent of earnings management prior to the event and the level of subsequent underperformance.

Generally Accepted Accounting Principles (GAAP) give managers a great deal of latitude in determining the actual earnings reported in any given period, affording them discretion in recognizing both the timing and amounts of revenues and expenses. For instance, managers can improve current earnings by increasing current accruals by advancing recognition of sales revenue through credit sales or delaying recognition of losses by waiting to establish loss reserves. Managers can also increase income through managing long-term accruals by decelerating depreciation or realizing unusual gains. When managers have discretion over accrual adjustments, it becomes difficult for investors to assess whether reported earnings in a given period are appropriate or whether they are misleading due to the informational asymmetry created in accrual items between investors and managers of issuing firms. The objective of earnings management is to either mislead some shareholders about underlying economic performance of the company or to influence contractual outcomes that depend on financial reports.

A number of studies provide evidence that acquiring firms overstate their earnings prior to the announcement of a stock swap merger and experience poor long-term stock performance following a merger announcement. Erickson and Wang (1999) show that stock for stock acquirers manage earnings upward before merger announcements since the target firms expect it and in turn adjust for the expected earnings management during the negotiation of the purchase

price. Louis (2004) also argues that earnings management is more aggressive for stock for stock acquiring firms than cash acquiring firms. In addition, their results provide the evidence of post-merger poor stock performance that attributes to the reversal of the price effects of pre-merger earnings management conducted by stock-for-stock acquiring firms. Likewise, Botsari and Meeks (2008) provide evidences that acquiring firms manage earnings upward before share-financed mergers and acquisitions performed by UK publicly traded firms. However, Heron and Lie (2002) find no evidence that acquiring firms manage earnings upward prior to acquisitions based on different payment types. In the model of Shleifer and Vishny (2003), they find that the target firm is willing to accept a stock merger even though they know that the acquiring firm is overvalued. By examining the relation between corporate diversification and the degree of information asymmetry, Thomas (2002) argues that corporate diversification is not strictly related to an increase in informational asymmetry.

In addition to prior research that examines the earnings management by acquiring firms, some influential studies show that IPO and SEO firms tend to be preceded by substantial increases in operating performance [Loughran and Ritter (1997)] and in abnormal accruals [Teoh, Welch, and Wong (1998a, 1998b), Rangan (1998), Shivakumar (2002)]. Teoh, Welch, and Wong (1998a, 1998b) and Rangan (1998) present evidence that reported earnings that are managed upwards prior to stock offerings are related to poor earnings and stock price performance. The earnings management hypothesis suggests that firms that are more aggressive in the use of discretionary accruals tend to have the worst subsequent performance. Thus, the earnings management hypothesis predicts that issuers have high abnormal accruals prior to offerings and poor earnings and stock return performance following offerings.

Teoh, Welch, and Wong (1998a, 1998b) conclude that aggressive earnings management through income-increasing accounting adjustments leads investors to be overly optimistic about the firms' performance. Likewise, they argue that investors may be misled by high earnings reported at the time of the offering, and therefore overvalue the new issues. As a result of the overoptimism and overvaluation hypotheses [Myers and Majluf (1984)], Loughran and Ritter (1995) and Spiess and Afflect-Graves (1995) show that firms issuing SEOs underperform the stock market in the five years following the offerings. The result of long-term underperformance suggests that firms announce SEOs when their stock is substantially overvalued. Moreover, Loughran and Ritter (1997) document that seasoned offerings are followed by significant earnings declines. They conclude that investors are overly optimistic and firms are overvalued.

This study applies the same methodology of earnings management used by Teoh, Welch, and Wong (1998a, 1998b). The sample of this study contains 1,081 domestic mergers and 141 cross-border mergers in stock-for-stock transactions during the period 1980-2002. The results provide evidence of earnings management behavior in both stock swap domestic and cross-border mergers. Information sharing is believed to be an important element between an acquirer and a target. The degree of information asymmetry between managers and outsiders may differ for domestic versus cross-border mergers may differ. According to the informational asymmetry hypothesis [Jiraporn, Kim, and Mathur (1998)], this study presumes that the degree of informational asymmetry is more acute in cross-border mergers than in domestic mergers. The main contribution of this paper is to shed a light on whether firms conducting the cross-border mergers tend to manage their earnings upward more aggressively prior to the mergers than those firms conducting the domestic mergers. This study shows that there is no significant distinction in earnings management between domestic and cross-border mergers.

The remainder of this study is organized as follows. Section 2 describes the sample selection. Section 3 describes the measurement and methodology of earnings management and long-term stock performance. Section 4 presents and interprets the empirical results. Section 5 concludes the study.

2. Sample Selection and Description

The initial sample is retrieved from the Securities Data Corporation Platinum (SDC) database and consists of 2,278 domestic mergers and 247 cross-border mergers during the period 1980 through 2002. The data obtained from SDC meet the following selection criteria:

(1) The merger was successfully completed.

(2) The transaction is a pure stock swap purchase.

(3) The acquiring firms are excluded in the industries of regulated utilities (SIC codes 4910 – 4949) or financial institutions (SIC codes 6000-6999) since these industries are subject to regulations and their financial information is incomparable to that in other industries.

(4) The acquiring firms must have data present on the Center for Research in Security Prices (CRSP) to compute abnormal return and on COMPUSTAT Research Insight database to compute accruals.

For inclusion in the final sample, I require available stock returns data available on CRSP and sufficient data available on COMPUSTAT to compute accounting accruals three years before and after the mergers. To avoid survivorship bias, I do not require that firms have accruals data for the entire period of three years before to three years after the issue year. Thus, the actual sample size varies depending on the test procedures and accruals measures used. Availability of CRSP and COMPUSTAT data reduces the sample of domestic and cross-border mergers to 1,081 and 141 acquirers,

respectively. The announcement date (t = 0) used by this study is the earlier day between the announcement date and effective date. I exclude multiple observations of mergers on the same firm that occur within 5 years of the initial observation.

Table 1 presents the distribution of U.S. acquiring firms conducting the domestic and cross-border mergers by year in Panel A, by exchange listing in Panel B, by industry in Panel C, and by region in Panel D. Both domestic and cross-border mergers are more common among NASDAQ firms (65.4%; 66.7%) than those on the NYSE (26.4%; 24.1%) or AMEX (2.9%; 3.6%). The industry distribution generally shows the high concentration of mergers made by the industries of manufacturing (44.4%; 38.8%) and services (36.4%; 46.8%) in both domestic and cross-border mergers. The most common region represented is Europe (59.6%)

Table 2 summarizes the selected characteristics of U.S. acquiring firms conducting stock for stock mergers in terms of the total market value, total assets, book to market ratio, total debt ratio, return on assets (ROA), and operating cash flows obtained from Compustat and measured at the fiscal year end prior to the mergers. The firms undertaking stock for stock domestic mergers tend to have higher book to market ratio and leverage ratios than cross-border mergers. However, the firms undertaking stock for stock domestic mergers tend to have lower operating cash flow and total cash flow than cross-border mergers. The total assets of target firms in domestic mergers are higher than that in cross-border mergers. In the subsequent analysis of the relationship between pre-merger accruals and post-merger long-term performance, I use the firm size (market capitalization), and book-to-market ratio as control variables.

3. Methodologies

3.1 Measurement of Earnings Management

To identify whether managers use discretionary accruals to opportunistically manipulate earnings or smooth earnings, this study estimates accruals to measure earnings management based on the balance-sheet approach used by Teoh, Welch, and Wong (1998a, 1998b) and constructs the discretionary accrual estimates based on the modified Jones (1991) model. The discretionary current accruals (*DCA*) are regarded as the superior proxy for earning management, and discretionary total accruals (*DTAC*) are proxies for manipulated earnings determined at the discretion of management.[3] To mitigate the effects of outliers and errors in the data, all accrual items are winsorized at the top and bottom one-percentiles.

Following Teoh, Welch, and Wong (1998a, 1998b), we compute current accruals (*CA*) as follows[4]: *CA = Δ[Current Receivables* (#2) + *Inventory* (#3) + *Other Current Assets* (#68)*] – Δ[Accounts Payable* (#70) + *Tax Payable* (#71) + *Other Current Liabilities* (#72)*]* (1)

For each firm undertaking a merger, the expected level of current accruals (*CA*) is obtained by running the following cross-sectional OLS regression on an estimation sample that includes all other firms (excluding sample firms) with the same two-digit SIC codes as the acquiring sample firms[5].

$$\frac{CA_{j,t}}{TA_{j,t-1}} = \alpha_0 + \alpha_1\left(\frac{1}{TA_{j,t-1}}\right) + \alpha_2\left(\frac{\Delta Sales_{j,t}}{TA_{j,t-1}}\right) + \varepsilon_{j,t} \quad (2)$$

where $TA_{j,t-1}$ is total assets (#6) for firm *j* in year *t-1*, and $\Delta Sales_{j,t}$ is the change in sales (#12) for firm *j* in year *t*. As in previous studies, all variables in the cross-sectional regression are scaled by beginning-of-year total assets to mitigate heteroskedasticity in residuals. In order to obtain meaningful parameter estimates, I require the estimation sample to have at least ten observations. Following Kothari, Leone and Wasley (2005), I include a constant term in the estimation models for the accruals in order to alleviate additional heteroskedasticity and misspecification.

I use the estimated coefficients from the cross-sectional industry regression model in Equation (2) to compute nondiscretionary current accruals scaled by assets (*NDCA*) as:

$$NDCA_{i,t} = \hat{\alpha}_0 + \hat{\alpha}_1\left(\frac{1}{TA_{i,t-1}}\right) + \hat{\alpha}_2\left(\frac{\Delta Sales_{i,t} - \Delta TR_{i,t}}{TA_{i,t-1}}\right) \quad (3)$$

where $\Delta TR_{j,t}$ is the change in trade receivables (#151) for firm *i* in year *t*. To account for the possibility of credit sales manipulation, I subtract the increase in accounts receivable from sales growth.

The level of asset-scaled discretionary current accruals (*DCA*) is used as a proxy for earnings management. $DCA_{i,t,}$ discretionary current accruals scaled by assets from the balance sheet for the acquiring firm *i* for year *t*, are calculated as follows:

$$DCA_{it} = \frac{CA_{i,t}}{TA_{i,t\ 1}} - NDCA_{it} \quad (4)$$

Additionally, net income could be partitioned into two components including cash flow from

[3] Accruals could be decomposed into four categories based on the associated time horizon (current and long-term) and level of managerial control (discretionary and nondiscretionary). Discretionary accruals can be influenced or manipulated by managers, whereas nondiscretionary accruals are largely free of such manipulation. Generally, managers have more discretion over short-term accruals than over long-term accruals. Thus, the two discretionary accrual measures are proxies for earnings management, and the two nondiscretionary accrual measures are proxies for accrual recognition outside the control of management.

[4] Numbers in parentheses are Compustat item numbers.

[5] Following Kothari, Leone and Wasley (2005), we exclude the observations that are likely to be subject to recording errors from the estimation sample if the absolute value of current accruals scaled by total assets is greater than one.

operations and total accruals. Thus, total accruals (*TAC*) are estimated as follows:

TAC = Net Income (#172) *– Cash Flow from Operations* (#308) [6] (5)

I use a similar procedure to estimate total discretionary accruals as I use for discretionary current accruals. I include property, plant, and equipment as an additional regressor since long-term accruals are affected by the amount of long-term assets. In the following cross-sectional OLS regression, the expected level of total accruals (*TAC*) is obtained as follows:

$$\frac{TAC_{j,t}}{TA_{j,t-1}} = \beta_0 + \beta_1\left(\frac{1}{TA_{j,t-1}}\right) + \beta_2\left(\frac{\Delta Sales_{j,t}}{TA_{j,t-1}}\right) + \beta_3\left(\frac{PPE_{j,t}}{TA_{j,t-1}}\right) + \varepsilon_{j,t}, \quad (6)$$

where $PPE_{j,t}$ is gross property, plant, and equipment (#7) for firm *j* in year *t*. Again, I use an estimation sample that includes all firms with the same two-digit SIC codes as the acquiring firms, but exclude the acquiring sample firms.

Using the estimated coefficients from Equation (6), I calculate the nondiscretionary total accruals scaled by assets (*NDTAC*) for each acquiring firm as follows:

$$NDTAC_{i,t} = \hat{\beta}_0 + \hat{\beta}_1\left(\frac{1}{TA_{i,t-1}}\right) + \hat{\beta}_2\left(\frac{\Delta Sales_{i,t} - \Delta TR_{i,t}}{TA_{i,t-1}}\right) + \hat{\beta}_3\left(\frac{PPE_{i,t}}{TA_{i,t-1}}\right) \quad (7)$$

The discretionary total accruals scaled by assets (*DTAC*) from the balance sheet for firm *i* in year *t* are calculated as:

$$DTAC_{it} = \frac{TCA_{i,t}}{TA_{i,t-1}} - NDTCA_{it} \quad (8)$$

3.2 Measurement of Long-Term Performance

I measure post-event long-term stock performance starting 21 days after the merger over the subsequent period of one to three years. I use the methodology of Barber and Lyon (1997) to measure the buy-and-hold abnormal return (*BHAR*) relative to a benchmark for each acquiring firm over a period of *T* trading days as follows:

$$BHAR_i = \prod_{t=1}^{T}(1+R_{i,t}) - \prod_{t=1}^{T}(1+R_{b,t}), \quad (9)$$

where $R_{i,t}$ is the rate of return of firm *i* on date *t*, and $R_{b,t}$ is the rate of return of the benchmark on date *t*. The abnormal return is the difference in buy-and-hold returns of an acquiring firm and its matched firm. $BHAR_i$ are measured by considering four different matching benchmarks: a size-and-industry-matched portfolio, a size-and-book-to-market-ratio-matched portfolio, the CRSP value-weighted portfolio, and the CRSP equally-weighted portfolio.

To construct the benchmark matched by size and industry, for each firm in the sample I choose a non-acquiring firm closest in equity market capitalization among the firms in the same two-digit SIC code. Firm size defined as the total market value of equity is matched one month before the announcement of pure stock for stock mergers. For the benchmark matched by size and book-to-market ratio, I determine the book-to-market ratio at the fiscal year-end prior to the stock for stock mergers following Lyon, Barber and Tsai (1999). I then identify non-acquiring firms with a market value of equity between 70 percent and 130 percent of the market value of equity of the sample firm. From this set of firms, I choose the firm with the book-to-market ratio closest to that of the sample firm.

4. Empirical Results

4.1 Earnings Management around the Year of Domestic and Cross-border Mergers

Table 3 reports the key measures of earnings management, discretionary current accruals and performance-matched discretionary current accruals as percentage of total assets, surrounding the year of stock for stock mergers. The results show that discretionary current accruals are significantly positive in Year 0 of the domestic and cross-border mergers. However, the results provide no evidence of difference in the level of discretionary current accruals between domestic and cross-border mergers. Thus, the informational asymmetry hypothesis fails to predict the earnings management behavior since the informational asymmetry problem may not be severe in international mergers and acquisitions.

4.2 Long-Term Stock Performance after Domestic and Cross-border Mergers

Table 4 reports buy-and-hold long-term abnormal returns (*BHARs*) three years after mergers. In Table 4, the buy-and-hold long-term abnormal returns are constructed by using four benchmarks: size and industry matched portfolios, size and book-to-market matched portfolios, the CRSP value-weighted portfolio, and the CRSP equally-weighted portfolio. Consistent with prior studies, I find both the mean and median *BHARs* are significantly negative for three years following domestic and cross-border merger. The results show significant underperformance after stock for stock mergers over one-, two- and three-year horizons.

4.3 Univariate Analysis of Earnings Management and Long-Term Stock Performance

To study the relation between pre-merger accruals and post-merger long-term stock performance on the univariate basis, I also examine differences in post-merger *BHARs* among lowest and highest quartiles

6 According to the Compustat 1994 manual, cash flow from operations is not available as item (#308) prior to 1987, so it is then calculated as the fund flow from operations (#110) minus current accruals.

grouped by levels of pre-merger discretionary current accruals. Tables 5, 6, 7, and 8 find no systematically significant evidence of difference in the long-term stock underperformance among different types of mergers (domestic versus cross-border mergers) and different levels of accruals (conservative versus aggressive earnings management). In sum, the results suggest the lack of a relation between earnings management and long-term performance in both of domestic and cross-border mergers.

4.4 Multivariate Analysis of Earnings Management and Long-Term Stock Performance

To further examine the incremental influence of pre-merger discretionary accruals on post-merger long-term stock underperformance in a multivariate context, I run the following regressions based on balance-sheet approach:

$$BHAR = \delta_0 + \delta_1 DCA_{t-1} + \delta_2 DTAC_{t-1} + \delta_3 Ln(MV) + \delta_4 Ln(BV/MV) + \varepsilon \quad (10)$$

where the dependent variable is the buy-and-hold abnormal return starting 21 days after domestic and cross-border mergers over one-, two- and three-year horizons. The abnormal return is measured using the four different benchmarks described above. The regressions include two key measures of earnings management, discretionary current accruals (DCA_{t-1}) and discretionary total accruals ($DTAC_{t-1}$) in Year -1. In addition, two control variables, *Ln(MV)* and *Ln(BV/MV)*, are the natural log of equity market capitalization and the book-to-market ratio measured at the fiscal year end before mergers.

The multivariate results in Tables 9 and 10 are robust and consistent with the univariate results in Tables 5, 6, 7, and 8. The estimated coefficients on discretionary current accruals and discretionary total accruals in Year -1 are statistically insignificant across every model specification, indicating no relation between the level of earnings management and subsequent stock price performance for mergers.

5. Summary and Conclusions

This study investigates the earnings management behavior prior to 1,081 domestic mergers and 141 cross-border mergers in stock-for-stock transactions during the period 1980-2002. Consistent with Erickson and Wang (1999) and Louis (2004), the results show that acquiring firms manage earnings upward prior to the announcement of stock-for-stock domestic mergers. There is also some evidence of earnings management prior to the announcement of stock-for-stock international mergers. However, the results show no significant distinction in earnings management between the domestic and cross-border mergers.

The results of this study shed a light on the association between earnings management and informational asymmetry. Despite the fact that the asymmetric information problem is greater in cross-border takeovers, the findings indicate that the international mergers and acquisitions do not provide more opportunities for managers to manage earnings substantially. In general, earnings management does not occur to a greater extent in U.S. acquiring firms involved in cross-border merger activities since the informational asymmetry involved in cross-border mergers may not be severe.

References

1. Aharony, Joseph, Chan-Jane Lin and Martin P. Loeb, 1993, "Initial Public Offerings, Accounting Choices, and Earnings Management," *Contemporary Accounting Research* 10(1), 61-81.
2. Aw, M. S. B. and R. A. Chatterjee, 2004, "The Performance of UK Firms Acquiring Large Cross-Border and Domestic Takeover Targets," *Applied Financial Economics* 14(5), 337-349.
3. Barber, Brad M. and John D. Lyon, 1997, "Detecting Long-Run Abnormal Stock Returns: The Empirical Power and Specification of Test Statistics," *Journal of Financial Economics* 43(3), 341-372.
4. Botsari, A. and Meeks, G., 2008, "Do Acquirers Overstate Earnings Prior to a Share for Share Bid?" *Journal of Business Finance and Accounting* 35(5/6), 633-670.
5. Chen, Chao and Robert Su, 1997, "Do Cross-Border Acquisitions of U.S. Targets Differ from U.S. Domestic Takeover Targets," *Global Finance Journal* 8(1), 71-82.
6. DeAngelo, Linda Elizabeth, 1986, "Accounting Numbers as Market Valuation Substitutes: A Study," *Accounting Review* 61(3), 400-420.
7. Dewenter, Kathryn L., 1995, "Does the Market React Differently to Domestic and Foreign Takeover Announcements? Evidence from The U.S. Chemical and Retail Industries," *Journal of Financial Economics* 37(3), 421-441.
8. Erickson, Merle and Shiing-Wu Wang, 1999, "Earnings Management by Acquiring Firms in Stock for Stock Mergers," *Journal of Accounting and Economics* 27, 149-176.
9. Fama, Eugene F. and Kenneth R. French, 1995, "Size and Book-to-Market Factors in Earnings and Returns," *Journal of Finance* 50(1), 131-155.
10. Heron, Randall and Erik Lie, 2002, "Operating Performance and the Method of Payment in Takeovers," *Journal of Financial and Quantitative Analysis* 37(1), 137-155.
11. Jiraporn, Pornsit, Young S. Kim, and Ike Mathur, 2008, "Does Corporate Diversification Exacerbate or Mitigate Earnings Management? An Empirical Analysis," *International Review of Financial Analysis*, 17(5), 1087-1109.
12. Jones, Jennifer J., 1991, "Earnings Management during Import Relief Investigations," *Journal of Accounting Research* 29(2), 193-228.
13. Kiymaz, Halil, 2004, "Cross-Border Acquisitions of US Financial Institutions: Impact of Macroeconomic

Factors," *Journal of Banking and Finance* 28(6), 1413-1439.
14. Kothari, S.P., Andrew J. Leone, Charles E. Wasley, 2005, "Performance Matched Discretionary Accrual Measures," *Journal of Accounting and Economics* 39, 163-197.
15. Loughran, Tim and Jay R. Ritter, 1995, "The New Issues Puzzle," *Journal of Finance* 50(1), 23-51.
16. Loughran, Tim and Jay R. Ritter, 1997, "The Operating Performance of Firms Conducting Seasoned Equity Offerings," *Journal of Finance* 52(5), 1823-1850.
17. Louis, Henock, 2004, "Earnings Management And The Market Performance of Acquiring Firms," *Journal of Financial Economics* 74(1), 121-147.
18. Lyon, John D., Brad M. Barber and Chih-Ling Tsai, 1999, "Improved Methods for Tests of Long-Run Abnormal Stock Returns," *Journal of Finance* 54(1), 165-201.
19. Moeller, Sara B. and Frederik P. Schlingemann, 2005, "Global Diversification and Bidder Gains: A Comparison between Cross-Border and Domestic Acquisitions," *Journal of Banking and Finance* 29(3), 533-564.
20. Myers, S.C. and N.S. Majluf, 1984, "Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have," *Journal of Financial Economics* 13, 187-221.
21. Perry, Susan E. and Thomas H. Williams, 1994, "Earnings Management Preceding Management Buyout Offers," *Journal of Accounting and Economics* 18(2), 157-179.
22. Rangan, Srinivasan, 1998, "Earnings Management and the Performance of Seasoned Equity Offerings," *Journal of Financial Economics* 50(1), 101-122.
23. Rossi, Stefano and Paolo F. Volpin, 2004, "Cross-Country Determinants of Mergers and Acquisitions," *Journal of Financial Economics* 74(2), 277-304.
24. Shivakumar, Lakshmanan, 2002, "Do Firms Mislead Investors by Overstating Earnings before Seasoned Equity Offerings," *Journal of Accounting and Economics* 29(3), 339-371.
25. Shleifer, Andrei and Robert W. Vishny, 2003, "Stock Market Driven Acquisitions," *Journal of Financial Economics* 70 (3), 295-311.
26. Spiess, D. Katherine and John Affleck-Graves, 1995, "Underperformance in Long-Run Stock Returns Following Seasoned Equity Offerings," *Journal of Financial Economics* 38(3), 243-267.
27. Teoh, Siew H., Ivo Welch and T. J. Wong, 1998a, "Earnings Management and the Long-Run Market Performance of Initial Public Offerings," *Journal of Finance* 53(6), 1935-1974.
28. Teoh, Siew H., Ivo Wlech and T.J. Wong, 1998b, "Earnings Management and the Underperformance of Seasoned Equity Offerings," *Journal of Financial Economics* 50(1), 63-99.
29. Thomas, Shawn, 2002, "Firm Diversification and Asymmetric Information: Evidence from Analysts' Forecasts and Earnings Announcements," *Journal of Financial Economics* 64(3), 373-396.
30. Wu, Y. Woody, 1997, "Management Buyouts and Earnings Management," *Journal of Accounting, Auditing and Finance* 12(4, Fall), 373-389.

Appendices

Table 1. Sample Distribution of Domestic and Cross-border Mergers by Pure Stock Swap

The sample consists of 1,081 pure stock swap domestic mergers and 141 pure stock swap cross-border mergers announced and completed during the period 1980-2002. The initial sample is retrieved from the Securities Data Corporation Platinum (SDC) database.

Panel A. Time Distribution

	Domestic Mergers		Cross-border Mergers	
Merger Year	Number of Mergers	% of Sample	Number of Mergers	% of Sample
1980	1	0.1	0	0.0
1981	3	0.3	0	0.0
1982	0	0.0	0	0.0
1983	0	0.0	0	0.0
1984	4	0.4	0	0.0
1985	17	1.6	1	0.7
1986	22	2.0	0	0.0
1987	25	2.3	0	0.0
1988	10	0.9	1	0.7
1989	18	1.7	3	2.1
1990	17	1.6	2	1.4
1991	29	2.7	4	2.8
1992	44	4.1	1	0.7

1993	46	4.3	5	3.6
1994	44	4.1	5	3.6
1995	89	8.2	11	7.8
1996	102	9.4	13	9.2
1997	112	10.4	10	7.1
1998	121	11.2	15	10.6
1999	139	12.9	25	17.7
2000	151	14.0	26	18.4
2001	59	5.5	15	10.6
2002	28	2.6	4	2.8
Total	1,081	100.0	141	100.0

Panel B: Exchange Listing Distribution

	Domestic Mergers		**Cross-border Mergers**	
Exchange	Number of Mergers	% of Sample	Number of Mergers	% of Sample
NYSE	285	26.4	34	24.1
Nasdaq	707	65.4	94	66.7
AMEX	31	2.9	5	3.6
Other	58	5.4	8	5.7
Total	1,081	100.0	141	100.0

Panel C. Industry Distribution

Industry	SIC Codes	Domestic Mergers		Cross-border Mergers	
		Number of Mergers	% of Sample	Number of Mergers	% of Sample
Agriculture, Forestry, and Fishing	0000 – 0999	6	0.6	0	0.0
Mining	1000 – 1499	30	2.8	10	7.1
Construction	1500 – 1999	10	0.9	0	0.0
Manufacturing	2000 – 3999	480	44.4	54	38.3
Transportation and Public Utility	4000 – 4999	73	6.8	5	3.6
Wholesale Trade	5000 – 5199	34	3.2	2	1.4
Retail Trade	5200 – 5999	50	4.6	2	1.4
Finance, Insurance, and Real Estate	6000 – 6999	0	0.0	0	0.0
Services	7000 – 8999	393	36.4	66	46.8
Public Administration	9000 – 9899	0	0.0	0	0.0
Nonclassifiable Establishment	9900 – 9999	5	0.5	2	1.4
Total		1,081	100.0	141	100.0

Panel D. Region Distribution of Cross-border Mergers

Region	Number of Mergers	% of Sample
America	39	27.7
Asia	9	6.4
Europe	84	59.6
Other	9	6.4
Total	141	100.0

Table 2. Characteristics of US Acquiring Firms in Domestic and Cross-border Mergers

Market value of equity, total assets, book to market ratio, leverage ratios, return on assets, operating cash flows and total cash flows are obtained from Compustat and measured at the fiscal year end prior to the mergers. Total assets of target and transaction value are obtained from SDC database. Book to market ratio is measured as book value of equity divided by market value. Total Debt/Market value is leverage and measured as total debt divided total market value. Total Debt/Total Assets is total debt ratio and measured as total debt divided total assets. ROA is return on assets and measured as net income divided by total assets. OCF/Total Assets is operating cash flows divided by total assets. TCF/Total Assets is total cash flows divided by total assets.

	Domestic Mergers				Cross-border Mergers			
	Mean	Std. Dev.	Median	N	Mean	Std. Dev.	Median	N
Market Value ($ Millions)	383.42	746.80	239.03	673	376.03	271.15	306.48	80
Total Asset ($ Millions)	280.78	1,005.67	107.65	901	213.17	212.04	144.58	117
Book to Market Ratio	0.36	0.34	0.28	953	0.33	0.46	0.20	130
Total Debt/Market Value	0.23	0.47	0.03	668	0.13	0.39	0.01	80
Total Debt/Total Assets	0.16	0.21	0.07	896	0.09	0.17	0.01	117
ROA (%)	-8.69	40.42	3.77	891	-4.99	27.30	2.34	116
OCF/Total Assets (%)	-2.49	30.35	3.69	820	1.03	19.87	3.98	115
TCF/Total Assets (%)	10.21	27.57	4.42	818	13.09	23.42	7.77	115
Total Assets of Target	284.57	1,264.68	38.80	539	194.97	691.61	28.80	52
Transaction Value	299.93	2,787.36	48.61	1,081	207.95	592.63	50.60	141

Table 3. Discretionary Accruals around the Year of Domestic and Cross-border Mergers

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This table presents the levels of discretionary current accruals of firms undertaking mergers from three years before to three years after the event. Accruals measures are scaled by beginning-of-period total assets and reported as a percentage of total assets. For performance-matched discretionary current accruals, we match firms industry (two-digit SIC code) and ROA in period *t-1*. The measurement of earnings management is based on balance-sheet approach. All accruals are winsorized at the top and bottom one-percentiles. The fiscal year in which the merger is announced is defined as Year 0. The t-test is used for testing the mean discretionary accruals and the Wilcoxon signed rank test is used for testing the median discretionary accruals. The t-statistics and Wilcoxon signed rank statistics are reported in parentheses.

	Domestic Mergers					**Cross-border Mergers**					**Diff: Accruals (Domestic)-Accruals (Cross-border)**	
Fiscal Year	Mean	t-stat	Median	Wilcoxon Signed Rank stat	N	Mean	t-stat	Median	Wilcoxon Signed Rank stat	N	Unpaired t-stat	Wilcoxon Rank Sum z-stat
Discretionary Current Accruals												
-3	0.233	(0.22)	0.556	(1.26)	519	0.409	(0.24)	0.952	(0.48)	69	(-0.09)	(0.01)
-2	-2.619	(-2.60)***	-0.317	(-0.26)	644	-1.083	(-0.61)	-0.405	(-0.33)	97	(-0.75)	(-0.10)
-1	-2.768	(-1.87)*	0.596	(0.84)	805	0.511	(0.39)	1.923	(1.17)	106	(-1.67)*	(0.82)
0	2.455	(2.92)***	1.280	(3.03)***	778	0.197	(0.12)	0.888	(1.16)	99	(1.24)	(-0.09)
1	2.472	(4.73)***	1.341	(4.56)***	629	1.051	(0.83)	0.682	(0.58)	85	(1.24)	(-1.14)
2	-0.414	(-0.94)	0.140	(-0.24)	515	2.122	(2.04)**	2.414	(2.09)**	68	(1.24)**	(2.01)**
3	0.472	(1.05)	0.469	(1.28)	451	-1.991	(-2.11)**	-0.582	(-1.52)	65	(1.24)**	(-1.86)*
Performance-matched Discretionary Current Accruals												
-3	1.273	(1.75)*	0.227	(0.49)	445	-0.293	(-0.21)	-1.395	(-0.50)	45	(0.98)	(-0.72)
-2	1.149	(1.45)	0.381	(1.40)	509	3.634	(2.00)**	-0.470	(0.96)	56	(-1.26)	(0.48)
-1	2.294	(2.16)**	-0.324	(1.03)	578	-3.034	(-1.42)	0.174	(-0.48)	72	(2.24)**	(-0.69)
0	3.293	(2.87)***	0.225	(1.18)	664	2.795	(1.78)*	2.421	(1.37)	88	(0.26)	(0.94)
1	1.531	(1.98)**	1.062	(2.19)**	638	3.287	(2.59)**	1.938	(1.98)**	89	(-1.18)	(1.15)
2	0.137	(0.20)	0.560	(0.94)	570	0.076	(0.06)	0.480	(0.20)	80	(0.04)	(-0.14)
3	2.097	(2.46)**	1.020	(2.51)**	509	0.264	(0.24)	0.536	(0.43)	79	(1.32)	(-0.43)

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 4. Long-term Stock Performance following Domestic and Cross-border Mergers

Post-merger long-term stock performance is measured starting 21 days after mergers over subsequent one, two and three years. Buy-and-hold returns (*BHARs*) are measured by considering four different benchmarks including a size-and-industry-market-matched portfolio, a size-and-book-to-market-ratio-matched portfolio, the CRSP value-weighted (VW) portfolio, and the CRSP equally weighted (EW) portfolio, respectively. Mean and median *BHARs* are reported in percent. The t-test is used for testing the mean *BHARs* and the Wilcoxon signed rank test is used for testing the median *BHARs*. The t-statistics and Wilcoxon signed rank statistics are reported in parentheses.

	Domestic Mergers					**Cross-border Mergers**					**Diff: BHARs (Domestic)-BHARs (Cross-border)**	
Holding Period	Mean	t-stat	Median	Wilcoxon Signed Rank stat	N	Mean	t-stat	Median	Wilcoxon Signed Rank stat	N	Unpaired t-stat	Wilcoxon Rank Sum z-stat
BHARs – Size/Industry Matched Benchmark												
1	3.740	(1.05)	-1.610	(0.81)	980	0.890	(0.07)	-10.520	(1.51)*	133	(0.23)	(-1.20)
2	5.200	(0.83)	-4.660	(2.11)**	980	-5.770	(-0.37)	-23.530	(3.73)***	133	(0.61)	(-2.71)***
3	3.780	(0.53)	-9.570	(2.85)***	980	-25.160	(-2.46)**	-24.990	(3.32)***	133	(2.32)**	(-2.01)**
BHARs – Size/Book-to-Market Ratio Matched Benchmark												
1	-4.350	(-1.16)	-7.950	(3.57)***	861	-23.370	(-2.14)**	-31.340	(4.71)***	112	(1.71)*	(-3.57)***
2	-1.200	(-0.17)	-12.220	(3.94)***	861	-53.150	(-3.48)***	-57.050	(5.43)***	112	(3.09)***	(-4.38)***
3	-7.300	(-0.77)	-13.760	(3.81)***	861	-70.100	(-5.36)***	-57.150	(5.77)***	112	(3.89)***	(-4.30)***
BHARs – Value-Weighted Benchmark												
1	-3.620	(-1.25)	-19.100	(8.41)***	1080	-1.540	(-0.15)	-24.930	(4.09)***	141	(-0.19)	(-1.44)
2	-6.860	(-1.27)	-39.230	(11.89)***	1080	-12.990	(-0.93)	-49.330	(6.03)***	141	(0.39)	(-1.93)*
3	-14.270	(-2.45)**	-48.180	(12.71)***	1081	-34.510	(-4.17)***	-52.030	(6.05)***	141	(2.00)**	(-1.17)
BHARs – Equally Weighted Benchmark												
1	-19.890	(-6.87)***	-35.970	(14.27)***	1080	-19.130	(-1.85)*	-42.350	(5.82)***	141	(-0.07)	(-1.60)
2	-44.610	(-8.17)***	-80.070	(19.11)***	1080	-53.210	(-3.75)***	-92.380	(7.43)***	141	(0.54)	(-2.04)**
3	-78.890	(-13.28)***	-111.110	(22.01)***	1081	-104.010	(-11.32)***	-129.550	(8.58)***	141	(2.30)**	(-2.10)**

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 5. Long-term Stock Performance following Domestic Mergers for the Discretionary Current Accruals Quartiles

The sample is sorted by the asset-scaled level of discretionary current accruals into four quartiles, with the first and fourth quartiles representing the most conservative and aggressive level of earnings management. Mean and median buy-and-hold returns (BHARs) are reported in percent and are computed using four different benchmarks including a size-and-industry-market-matched portfolio, a size-and-book-to-market-ratio-matched portfolio, the CRSP value-weighted (VW) portfolio, and the CRSP equally weighted (EW) portfolio. The unpaired t-test is used for testing the difference in mean BHARs and the Wilcoxon rank sum test is used for testing the difference in median BHARs between the first and fourth quartiles. The t-statistics and Wilcoxon statistics are reported in parentheses.

	DCA 1st Quartile (Conservative)					DCA 4th Quartile (Aggressive)					Difference: BHARs (Q1)-BHARs (Q4)	
Holding Period	Mean	t-stat	Median	Wilcoxon Signed Rank stat	N	Mean	t-stat	Median	Wilcoxon Signed Rank stat	N	Unpaired t-stat	Wilcoxon Rank Sum z-stat
BHARs – Size/Industry Matched Benchmark												
1	3.610	(0.45)	-3.330	(0.31)	167	-11.640	(-1.80)*	-10.380	(2.33)***	185	(1.49)	(1.11)
2	13.040	(0.66)	-6.700	(1.56)*	167	-19.150	(-1.80)*	-22.400	(4.03)***	185	(1.43)	(1.46)
3	6.810	(0.26)	-8.380	(1.89)**	167	-14.830	(-0.96)	-19.150	(3.43)***	185	(0.70)	(1.09)
BHARs – Size/Book-to-Market Ratio Matched Benchmark												
1	-0.090	(-0.01)	-4.680	(0.62)	136	-20.040	(-2.82)***	-18.410	(3.06)***	153	(1.80)*	(1.33)
2	22.920	(1.07)	-19.780	(1.24)	136	-39.220	(-3.02)***	-33.660	(4.61)***	153	(2.48)**	(2.54)**
3	14.990	(0.49)	-22.080	(1.81)**	136	-37.350	(-1.96)*	-32.040	(4.01)***	153	(1.46)	(1.75)*
BHARs – Value-Weighted Benchmark												
1	-11.830	(-2.11)**	-32.260	(4.29)***	195	-18.590	(-3.76)***	-35.760	(5.57)***	198	(0.91)	(0.57)
2	-4.500	(-0.29)	-54.760	(6.49)***	195	-29.320	(-3.74)***	-58.620	(7.04)***	198	(1.43)	(1.65)*
3	-15.400	(-0.73)	-59.640	(7.11)***	195	-28.950	(-2.14)**	-60.760	(7.16)***	198	(0.54)	(0.99)
BHARs – Equally Weighted Benchmark												
1	-27.360	(-4.86)***	-44.430	(6.36)***	195	-34.650	(-6.93)***	-51.780	(7.50)***	198	(0.97)	(0.83)
2	-40.240	(-2.58)**	-93.280	(8.58)***	195	-67.220	(-8.37)***	-99.430	(8.88)***	198	(1.54)	(1.88)*
3	-75.190	(-3.53)***	-119.300	(10.42)***	195	-90.220	(-6.57)***	-113.750	(9.74)***	198	(0.59)	(0.79)

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 6. Long-term Stock Performance following Cross-border Mergers for the Discretionary Current Accruals Quartiles

The sample is sorted by the asset-scaled level of discretionary current accruals into four quartiles, with the first and fourth quartiles representing the most conservative and aggressive level of earnings management. Mean and median buy-and-hold returns (BHARs) are reported in percent and are computed using four different benchmarks including a size-and-industry-market-matched portfolio, a size-and-book-to-market-ratio-matched portfolio, the CRSP value-weighted (VW) portfolio, and the CRSP equally weighted (EW) portfolio. The unpaired t-test is used for testing the difference in mean BHARs and the Wilcoxon rank sum test is used for testing the difference in median BHARs between the first and fourth quartiles. The t-statistics and Wilcoxon statistics are reported in parentheses.

	DCA 1st Quartile (Conservative)					DCA 4th Quartile (Aggressive)					Diff: BHARs (Q1)-BHARs (Q4)	
Holding Period	Mean	t-stat	Median	Wilcoxon Signed Rank stat	N	Mean	t-stat	Median	Wilcoxon Signed Rank stat	N	Unpaired t-stat	Wilcoxon Rank Sum z-stat
BHARs – Size/Industry Matched Benchmark												
1	38.500	(1.72)*	12.130	(1.22)	25	-62.820	(-2.71)**	-36.230	(2.89)***	24	(3.15)***	(-2.67)***
2	-30.460	(-0.41)	-16.580	(1.30)*	25	2.830	(0.05)	-58.380	(2.11)**	24	(-0.35)	(-1.41)
3	-0.920	(-0.06)	-5.880	(0.50)	25	-83.730	(-3.35)***	-77.490	(2.86)***	24	(2.83)***	(-2.47)**
BHARs – Size/Book-to-Market Ratio Matched Benchmark												
1	-15.280	(-0.73)	-18.620	(1.13)	23	-50.120	(-4.81)***	-52.860	(3.24)***	18	(1.50)	(-1.27)
2	-38.100	(-1.01)	-56.230	(2.22)**	23	-42.170	(-0.96)	-64.350	(2.77)***	18	(0.07)	(-0.38)
3	-65.740	(-2.59)**	-61.700	(2.59)***	23	-69.210	(-3.20)***	-57.670	(2.63)***	18	(0.10)	(-0.04)
BHARs – Value-Weighted Benchmark												
1	19.200	(0.90)	-16.720	(0.24)	26	-50.900	(-7.62)***	-48.150	(4.20)***	24	(3.13)***	(-2.42)**
2	-4.250	(-0.10)	-50.160	(3.11)***	26	-1.900	(-0.03)	-59.360	(2.94)***	24	(-0.03)	(-2.19)**
3	-36.600	(-2.74)**	-50.980	(3.01)***	26	-68.000	(-4.72)***	-78.110	(3.23)***	24	(1.60)	(-2.09)**
BHARs – Equally Weighted Benchmark												
1	-0.580	(-0.03)	-42.330	(0.88)	26	-66.580	(-7.54)***	-62.240	(4.23)***	24	(2.82)***	(-1.95)*
2	-46.600	(-1.10)	-94.620	(3.44)***	26	-37.770	(-0.67)	-108.060	(2.94)***	24	(-0.13)	(-1.02)
3	-110.570	(-7.08)***	-124.790	(3.92)***	26	-131.280	(-7.17)***	-152.040	(4.03)***	24	(0.86)	(-0.83)

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 7. Long-term Stock Performance following Domestic and Cross-border Mergers with the Most Conservative Earnings Management

This table presents the long-term stock performance of domestic and cross-border mergers with the most conservative earnings management over subsequent one, two and three years. The sample is sorted by the asset-scaled level of discretionary current accruals into four quartiles, with the first and fourth quartiles representing the most conservative and aggressive level of earnings management. Mean and median buy-and-hold returns (BHARs) are reported in percent and are computed using four different benchmarks including a size-and-industry-market-matched portfolio, a size-and-book-to-market-ratio-matched portfolio, the CRSP value-weighted (VW) portfolio, and the CRSP equally weighted (EW) portfolio. The unpaired t-test is used for testing the difference in mean BHARs and the Wilcoxon rank sum test is used for testing the difference in median BHARs between the first and fourth quartiles. The t-statistics and Wilcoxon statistics are reported in parentheses.

	Domestic Mergers					**Cross-border Mergers**					**Diff: BHARs (Domestic)-BHARs (Cross-border)**	
Holding Period	Mean	t-stat	Median	Wilcoxon Signed Rank stat	N	Mean	t-stat	Median	Wilcoxon Signed Rank stat	N	Unpaired t-stat	Wilcoxon Rank Sum z-stat
BHARs – Size/Industry Matched Benchmark												
1	3.610	(0.45)	-3.330	(0.31)	167	38.500	(1.72)*	12.130	(1.22)	25	(-1.56)	(1.27)
2	13.040	(0.66)	-6.700	(1.56)*	167	-30.460	(-0.41)	-16.580	(1.30)*	25	(0.57)	(-0.30)
3	6.810	(0.26)	-8.380	(1.89)**	167	-0.920	(-0.06)	-5.880	(0.50)	25	(0.25)	(0.43)
BHARs – Size/Book-to-Market Ratio Matched Benchmark												
1	-0.090	(-0.01)	-4.680	(0.62)	136	-15.280	(-0.73)	-18.620	(1.13)	23	(0.67)	(-0.85)
2	22.920	(1.07)	-19.780	(1.24)	136	-38.100	(-1.01)	-56.230	(2.22)**	23	(1.41)	(-1.90)*
3	14.990	(0.49)	-22.080	(1.81)**	136	-65.740	(-2.59)**	-61.700	(2.59)***	23	(2.04)**	(-1.93)*
BHARs – Value-Weighted Benchmark												
1	-11.830	(-2.11)**	-32.260	(4.29)***	195	19.200	(0.90)	-16.720	(0.24)	26	(-1.40)	(1.19)
2	-4.500	(-0.29)	-54.760	(6.49)***	195	-4.250	(-0.10)	-50.160	(3.11)***	26	(-0.01)	(0.00)
3	-15.400	(-0.73)	-59.640	(7.11)***	195	-36.600	(-2.74)**	-50.980	(3.01)***	26	(0.85)	(0.74)
BHARs – Equally Weighted Benchmark												
1	-27.360	(-4.86)***	-44.430	(6.36)***	195	-0.580	(-0.03)	-42.330	(0.88)	26	(-1.20)	(0.73)
2	-40.240	(-2.58)**	-93.280	(8.58)***	195	-46.600	(-1.10)	-94.620	(3.44)***	26	(0.14)	(-0.59)
3	-75.190	(-3.53)***	-119.300	(10.42)***	195	-110.570	(-7.08)***	-124.790	(3.92)***	26	(1.34)	(-0.68)

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 8. Long-term Stock Performance following Domestic and Cross-border Mergers with the Most Aggressive Earnings Management

This table presents the long-term stock performance of domestic and cross-border mergers with the most aggressive earnings management over subsequent one, two and three years. The sample is sorted by the asset-scaled level of discretionary current accruals into four quartiles, with the first and fourth quartiles representing the most conservative and aggressive level of earnings management. Mean and median buy-and-hold returns (BHARs) are reported in percent and are computed using four different benchmarks including a size-and-industry-market-matched portfolio, a size-and-book-to-market-ratio-matched portfolio, the CRSP value-weighted (VW) portfolio, and the CRSP equally weighted (EW) portfolio. The unpaired t-test is used for testing the difference in mean BHARs and the Wilcoxon rank sum test is used for testing the difference in median BHARs between the first and fourth quartiles. The t-statistics and Wilcoxon statistics are reported in parentheses.

	Domestic Mergers					Cross-border Mergers					Diff: BHARs (Domestic)-BHARs (Cross-border)	
Holding Period	Mean	t-stat	Median	Wilcoxon Signed Rank stat	N	Mean	t-stat	Median	Wilcoxon Signed Rank stat	N	Unpaired t-stat	Wilcoxon Rank Sum z-stat
BHARs – Size/Industry Matched Benchmark												
1	-11.640	(-1.80)*	-10.380	(2.33)***	185	-62.820	(-2.71)**	-36.230	(2.89)***	24	(2.13)**	(-2.13)**
2	-19.150	(-1.80)*	-22.400	(4.03)***	185	2.830	(0.05)	-58.380	(2.11)**	24	(-0.37)	(-1.29)
3	-14.830	(-0.96)	-19.150	(3.43)***	185	-83.730	(-3.35)***	-77.490	(2.86)***	24	(2.34)**	(-1.99)**
BHARs – Size/Book-to-Market Ratio Matched Benchmark												
1	-20.040	(-2.82)***	-18.410	(3.06)***	153	-50.120	(-4.81)***	-52.860	(3.24)***	18	(2.39)**	(-2.41)**
2	-39.220	(-3.02)***	-33.660	(4.61)***	153	-42.170	(-0.96)	-64.350	(2.77)***	18	(0.07)	(-1.09)
3	-37.350	(-1.96)*	-32.040	(4.01)***	153	-69.210	(-3.20)***	-57.670	(2.63)***	18	(1.11)	(-0.98)
BHARs – Value-Weighted Benchmark												
1	-18.590	(-3.76)***	-35.760	(5.57)***	198	-50.900	(-7.62)***	-48.150	(4.20)***	24	(3.89)***	(-1.97)**
2	-29.320	(-3.74)***	-58.620	(7.04)***	198	-1.900	(-0.03)	-59.360	(2.94)***	24	(-0.50)	(-1.42)
3	-28.950	(-2.14)**	-60.760	(7.16)***	198	-68.000	(-4.72)***	-78.110	(3.23)***	24	(1.98)*	(-1.30)
BHARs – Equally Weighted Benchmark												
1	-34.650	(-6.93)***	-51.780	(7.50)***	198	-66.580	(-7.54)***	-62.240	(4.23)***	24	(3.15)***	(-1.81)*
2	-67.220	(-8.37)***	-99.430	(8.88)***	198	-37.770	(-0.67)	-108.060	(2.94)***	24	(-0.52)	(-0.84)
3	-90.220	(-6.57)***	-113.750	(9.74)***	198	-131.280	(-7.17)***	-152.040	(4.03)***	24	(1.79)*	(-1.13)

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 9. Cross-sectional Regressions of Post-domestic-merger Performance on Pre-domestic-merger Discretionary Accruals

The dependent variable is the post-merger return calculated starting 21 days after a merger over the subsequent one-, two-, and three-year periods. The dependent variable is measured by buy-and-hold returns *(BHARs*) using a size-and-industry-market-matched portfolio, a size-and-book-to-market-ratio-matched portfolio, the CRSP value-weighted (VW) portfolio, and the CRSP equally weighted (EW) portfolio, respectively. DCA_{t-1} and $DTAC_{t-1}$ are discretionary current accruals and discretionary total accrual from balance sheet in Year -1, respectively. $DCACF_{t-1}$ and $DTACF_{t-1}$ are discretionary current accruals and discretionary total accrual from cash flow statement in Year -1, respectively. Ln(MV) and Ln(BV/MV) are the natural log of the market value and book-to-market ratio measured at the fiscal year end before the stock for stock mergers. T-statistics are reported in parentheses.

	Independent Variables					N	F
	Constant	DCA(-1)	DTAC(-1)	Ln(MV-1)	Ln(BV/MV-1)		
Dependent Variable: 1-year BHARs							
BHARs – Size/Industry	0.183	-0.176	-0.035	-0.011	0.031	561	0.72
	(0.80)	(-0.96)	(-0.61)	(-0.24)	(0.45)		
BHARs – Size/Book-to-Market Ratio	0.156	-0.281	0.014	-0.016	0.058	492	0.72
	(0.60)	(-1.20)	(0.15)	(-0.31)	(0.75)		
BHARs – VW	0.000	-0.184	0.025	0.002	0.019	568	0.39
	(0.00)	(-1.19)	(0.52)	(0.04)	(0.33)		
BHARs – EW	-0.233	-0.188	0.032	0.014	0.009	568	0.44
	(-1.21)	(-1.22)	(0.66)	(0.37)	(0.15)		
Dependent Variable: 2-year BHARs							
BHARs – Size/Industry	0.155	-0.698	-0.013	-0.022	-0.068	561	1.45
	(0.34)	(-1.94) *	(-0.12)	(-0.25)	(-0.50)		
BHARs – Size/Book-to-Market Ratio	0.209	-1.012	-0.055	-0.049	-0.104	492	2.38 *
	(0.40)	(-2.13)	(-0.29)	(-0.48)	(-0.67)		
BHARs – VW	-0.126	-0.674	0.049	0.007	-0.046	568	1.34
	(-0.32)	(-2.12) **	(0.49)	(0.09)	(-0.38)		
BHARs – EW	-0.646	-0.673	0.058	0.034	-0.055	568	1.43
	(-1.61)	(-2.09) **	(0.57)	(0.43)	(-0.45)		
Dependent Variable: 3-year BHARs							
BHARs – Size/Industry	-0.237	-0.512	-0.021	0.028	-0.167	561	1.01
	(-0.44)	(-1.19)	(-0.15)	(0.27)	(-1.02)		
BHARs – Size/Book-to-Market Ratio	-0.4785	-0.9338	-0.0137	0.0775	-0.1047	492	1.40
	(-0.71)	(-1.54)	(-0.06)	(0.59)	(-0.53)		
BHARs – VW	-0.797	-0.643	0.065	0.101	-0.173	568	1.93
	(-1.67) *	(-1.68) *	(0.54)	(1.06)	(-1.19)		
BHARs – EW	-1.579	-0.634	0.063	0.129	-0.189	568	2.31 *
	(-3.27) ***	(-1.64)	(0.52)	(1.34)	(-1.29)		

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 10. Cross-sectional Regressions of Post-cross-border-merger Performance on Pre-cross-border-merger Discretionary Accruals

The dependent variable is the post-merger return calculated starting 21 days after a merger over the subsequent one-, two-, and three-year periods. The dependent variable is measured by buy-and-hold returns *(BHARs*) using a size-and-industry-market-matched portfolio, a size-and-book-to-market-ratio-matched portfolio, the CRSP value-weighted (VW) portfolio, and the CRSP equally weighted (EW) portfolio, respectively. DCA_{t-1} and $DTAC_{t-1}$ are discretionary current accruals and discretionary total accrual from balance sheet in Year -1, respectively. $DCACF_{t-1}$ and $DTACF_{t-1}$ are discretionary current accruals and discretionary total accrual from cash flow statement in Year -1, respectively. Ln(MV) and Ln(BV/MV) are the natural log of the market value and book-to-market ratio measured at the fiscal year end before the stock for stock mergers. T-statistics are reported in parentheses.

	Independent Variables					N	F
	Constant	DCA(-1)	DTAC(-1)	Ln(MV-1)	Ln(BV/MV-1)		
Dependent Variable: 1-year BHARs							
BHAR – Size/Industry	-0.174	-2.334	0.494	0.102	0.061	69	0.490
	(-0.15)	(-1.29)	(0.52)	(0.46)	(0.18)		
BHAR – Size/Book-to-Market Ratio	-0.896	-0.832	0.796	0.238	0.372	60	0.69
	(-0.85)	(-0.50)	(0.94)	(1.08)	(1.10)		
BHAR – VW	-0.314	-1.951	0.613	0.083	-0.048	69	0.41
	(-0.30)	(-1.15)	(0.69)	(0.40)	(-0.16)		
BHAR – EW	-0.590	-1.873	0.663	0.096	-0.067	69	0.43
	(-0.57)	(-1.12)	(0.76)	(0.47)	(-0.22)		
Dependent Variable: 2-year BHARs							
BHAR – Size/Industry	0.374	-0.693	0.386	-0.037	0.135	69	0.17
	(0.35)	(-0.40)	(0.42)	(-0.17)	(0.42)		
BHAR – Size/Book-to-Market Ratio	-1.039	0.925	0.079	0.256	0.645	60	0.71
	(-0.78)	(0.44)	(0.07)	(0.92)	(1.51)		
BHAR – VW	-0.150	-0.576	0.694	0.007	-0.006	69	0.20
	(-0.16)	(-0.38)	(0.86)	(0.04)	(-0.02)		
BHAR – EW	-0.622	-0.333	0.664	0.027	0.028	69	0.20
	(-0.63)	(-0.21)	(0.80)	(0.14)	(0.10)		
Dependent Variable: 3-year BHARs							
BHAR – Size/Industry	-0.782	-1.793	0.562	0.148	0.188	69	0.61
	(-0.89)	(-1.26)	(0.75)	(0.84)	(0.72)		
BHAR – Size/Book-to-Market Ratio	-1.5850	-0.1980	0.5626	0.3452	0.7140	60	1.55
	(-1.55)	(-0.12)	(0.68)	(1.61)	(2.17) **		
BHAR – VW	-0.728	-1.228	0.559	0.086	0.049	69	0.37
	(-0.89)	(-1.02)	(0.89)	(0.58)	(0.22)		
BHAR – EW	-1.598	-1.202	0.848	0.143	0.145	69	0.63
	(-2.00) *	(-0.93)	(1.25)	(0.90)	(0.61)		

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.