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M&A-Induced Shifts in Earnings Management: Evidence from US acquirers

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Abstract

We examine earnings management (EM) following mergers and acquisitions (M&As), focusing on firms' choice between accrual-based earnings management (AEM) and real earnings management (REM). Using a large sample of U.S. public acquirers, we find that firms strategically substitute AEM with REM following M&A completion. This shift is more pronounced among firms facing greater business complexity and analyst scrutiny, consistent with managers favoring less transparent forms of earnings manipulation in the post-merger environment. We further show that managerial and governance characteristics shape post-merger EM strategies. Firms led by highly capable managers exhibit greater use of REM, whereas institutional ownership and female CEO leadership are associated with lower REM. In addition, firms experiencing poorer M&A performance engage more intensively in REM, suggesting that pressure to justify acquisition outcomes influences reporting behavior. Overall, our findings highlight the important role of governance and leadership in shaping post-merger earnings management strategies and constraining opportunistic financial reporting during the integration period.

Keywords: Accrual earnings management; Real earnings management; Mergers & Acquisitions; Business complexity; Analyst scrutiny; Internal governance

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1 Introduction

Earnings management (EM) remains a central concern in financial reporting, as it undermines the transparency of firms’ performance and erodes the credibility of financial statements. A large body of research shows that managers strategically employ EM to shape investor perceptions, meet earnings benchmarks, and enhance personal compensation (Healy and Wahlen, 1999; Dechow et al., 1995; Roychowdhury, 2006). These incentives are often magnified around major corporate events—such as initial public offerings (IPOs), seasoned equity offerings (SEOs), and mergers and acquisitions (M&As)—when scrutiny from capital markets, analysts, and regulators intensifies (Teoh et al., 1998a,b; Erickson and Wang, 1999; Gong et al., 2008). Among these, M&As stand out as especially high-stakes and complex transactions, often viewed as defining moments for managerial legacy, corporate growth trajectories, and firm valuation. The risk of opportunistic reporting becomes particularly salient in this setting, as heightened incentives and increased post-merger complexity may reshape how managers manage earnings—especially in their strategic choice between accrual-based and real earnings management (AEM and REM, respectively). Despite the potential for manipulation during this critical period, relatively little is known about how the post-merger environment influences both the form and extent of EM. This gap motivates the present study.

Indeed, the post-merger environment presents fertile ground for EM, as it creates both strong incentives and ample opportunities for firms to shape financial outcomes. First, M&As often lead to increased firm size, diversification, and operational complexity (Dye, 1988; Trueman and Titman, 1988; Cormier et al., 2013; Jiraporn et al., 2008; Alhadab et al., 2015; Halebian et al., 2009). These changes heighten information asymmetry between managers and external stakeholders, expanding managerial discretion in financial reporting. Second, a substantial body of research finds that M&As frequently fail to deliver value to acquiring firms. When deals underperform, managers face height-

ened exposure to market discipline—including the threat of hostile takeovers and executive turnover (Jensen, 1986; Mitchell and Lehn, 1990; Bergstresser and Philippon, 2006; Lehn and Zhao, 2006; Zhao et al., 2012; Renneboog and Vansteenkiste, 2019)—thereby strengthening incentives to manage earnings in order to justify the transaction and protect managerial positions. Third, the post-merger integration phase is marked by considerable uncertainty and managerial discretion over real operational decisions, such as production levels, discretionary spending, and the timing of cash flows—all of which provide channels for REM (Roychowdhury, 2006). Yet, despite extensive research on earnings manipulation around the time of M&A announcements and deal closures (e.g., Louis, 2004; Botsari and Meeks, 2018; Gong et al., 2008; Higgins, 2013; Huang et al., 2019; Erickson and Wang, 1999), relatively little is known about how firms manage earnings after the deal is completed.

Our paper addresses this critical gap in the literature by examining whether acquiring firms engage in EM following the completion of M&A transactions and, if so, which form of EM predominates. Specifically, we investigate whether firms shift their EM strategy from AEM to REM in the post-merger period. Our argument is grounded in the notion that the increased scrutiny and operational complexity associated with M&As constrain the use of AEM—more easily detected by auditors and regulators—and instead create incentives for REM, which is typically more difficult to detect and can be presented as legitimate managerial discretion over operational activities (Jones, 1991; Dechow et al., 1995; Graham et al., 2005; Gunny, 2005; Roychowdhury, 2006; Tunyi et al., 2024). Several contextual factors further discourage overt accrual manipulation and favor REM. M&A transactions often raise the public profile of the firm, resulting in greater media attention, analyst coverage, and institutional ownership. This increased visibility creates pressure to present credible financials, limiting the scope for AEM while making operational adjustments via REM more feasible.¹ Additionally, regulators and auditors may be

¹Part of the increased analyst attention may reflect target firm analysts shifting coverage to the merged entity. Larger post-merger firms also attract institutional investors due to their greater liquidity and ability to meet portfolio size constraints, thereby enhancing investability and visibility (Bushee and

less likely to scrutinize REM-like activities that resemble strategic decision-making, allowing managers to meet earnings targets while reducing reputational or legal risk (Zang, 2012; Haga et al., 2018; Lennox et al., 2018). Thus, for acquirers, REM may become an appealing strategy to manage earnings in the post-merger period, balancing enhanced visibility with the need to maintain financial credibility.

We develop a comprehensive empirical framework to test whether and how acquirers alter their EM behavior after M&As. We examine this hypothesis using a sample of 23,341 firm-year observations from 3,353 unique firms listed on the NYSE and NASDAQ from 1987 to 2018. AEM is measured using discretionary accruals, estimated via the modified Jones model (Dechow et al., 1995). REM is captured through deviations in cash flows from operations, production costs, and discretionary expenses, as outlined by Roychowdhury (2006). Our research design compares EM behavior over the five years before and after M&A completion to identify systematic shifts attributable to the transaction. We then examine how post-merger EM varies with firm visibility, operational complexity, deal performance, and governance characteristics, including institutional ownership, managerial ability, and CEO gender.

Our results yield three main insights. First, we document a significant increase in REM post-merger, accompanied by a decline in AEM, supporting the notion of a strategic shift in EM strategy following M&As. Second, this shift is more pronounced in firms with higher complexity and analyst coverage, consistent with incentives to avoid accrual manipulation under heightened scrutiny. Third, corporate governance and managerial characteristics strongly influence EM behavior: highly capable managers are more adept at REM, while institutional blockholders and female CEOs appear to constrain it. Importantly, we find that acquirers with poorly received deals, measured by M&A announcement abnormal returns, engage more intensively in REM, suggesting that deal underperformance increases incentives to obscure true operating outcomes. To ensure the robustness of our findings, we conduct multiple robustness tests, including placebo

Noe, 2000).

analysis and the Heckman two-stage correction for selection bias. Across all specifications, the results remain consistent, reinforcing our conclusion that the strategic use of REM increases following M&As.

Our study makes four key contributions to the EM and M&A literature. First, we shift the focus from whether firms engage in EM to how they adjust the composition of EM in the post-merger period. While the literature has extensively examined EM around deal announcements, particularly in stock-financed M&As (e.g., [Botsari and Meeks, 2018](#); [Gong et al., 2008](#); [Higgins, 2013](#); [Farooqi et al., 2014](#); [Huang et al., 2019](#)), relatively few studies explore EM after deal completion. Prior work on post-merger EM tends to concentrate on contractual mechanisms such as performance-contingent arrangements (e.g., [Sun et al., 2024](#), , in China), limiting generalizability. By jointly analyzing AEM and REM, we offer new insight into how acquiring firms adapt their financial reporting behavior as they enter the integration phase.

Second, we provide novel evidence of a strategic substitution from AEM to REM during the post-merger period. Consistent with the argument that firms shift toward REM when AEM becomes more transparent or constrained ([Badertscher, 2011](#); [Cohen and Zarowin, 2010](#)), we find that REM becomes the predominant form of EM as integration complexity increases and external scrutiny intensifies. Unlike most prior studies that treat EM in aggregate, we disentangle the two forms and demonstrate that substitution, not just manipulation, is a defining feature of post-merger reporting.

Third, we show that governance quality, managerial ability, and deal performance significantly shape EM strategy post-merger. For instance, firms with high managerial ability appear better able to execute sophisticated forms of REM, while stronger governance—especially institutional ownership and female CEO leadership—curbs opportunistic behavior. These findings build on and extend prior work on governance and EM in the M&A context ([Anagnostopoulou and Tsekrekos, 2013, 2015](#); [Karim et al., 2016](#); [Lalwani and Jain, 2025](#)), highlighting that internal governance structures continue to play a crucial role even after deals close.

Fourth, we extend the international EM literature by focusing on a U.S. setting free from institutional features like post-merger performance guarantees. This allows us to isolate the effects of integration-related complexity and monitoring. Our findings suggest that EM risks persist well beyond deal execution and increasingly shift toward more opaque, operations-based forms of manipulation. These results carry important implications for investors, auditors, and regulators, who must remain vigilant throughout the integration period, and not just around deal announcements.

The remainder of this study is organized as follows: Section 2 reviews the relevant literature and develops our hypothesis. Section 3 outlines the data, EM measurement models, and research design. Section 4 discusses our empirical results, and Section 5 summarizes and concludes our paper.

2 Related Literature and Hypothesis Development

Firms often engage in EM around critical corporate events, such as IPOs, SEOs, and M&As, to influence market valuations and shape investor perceptions (Healy and Wahlen, 1999). These events attract heightened scrutiny, raise performance expectations, and create strong incentives for managers to manipulate reported earnings, typically with the aim of securing more favorable market conditions or safeguarding personal and corporate reputations. For instance, firms preparing for IPOs frequently manipulate both accruals and real activities to inflate reported performance, thereby attracting investor interest, although this earnings inflation is usually followed by long-term underperformance (Teoh et al., 1998a; DuCharme et al., 2001). EM may also persist beyond the IPO, especially during lock-up periods, when insiders are restricted from selling shares and are therefore motivated to maintain inflated valuations (Premti and Smith, 2020; De Carvalho et al., 2020). A similar pattern occurs around SEOs, where earnings are often manipulated upward before the issuance to improve pricing and investor reception, and again afterward to minimize reversals and facilitate insider divestment (Rangan, 1998; Teoh et al., 1998b).

While IPOs and SEOs are typically one-off events driven by short-term valuation pressures, M&As differ markedly in both scope and duration. M&As initiate complex integration processes that generate prolonged uncertainty and expand managerial discretion well beyond the transaction date. These dynamics create a particularly conducive environment for post-merger EM, as firms face sustained pressure to demonstrate deal success while operating in opaque and evolving conditions. In this context—a high-stakes, transformative phase for the acquiring firm—the role of EM becomes especially pronounced. A well-established body of research documents that acquirers frequently engage in earnings manipulation prior to mergers, particularly in stock-financed deals, to inflate their share prices and thereby reduce the effective acquisition cost (Erickson and Wang, 1999; Louis, 2004; Gong et al., 2008; Botsari and Meeks, 2018; Higgins, 2013; Huang et al., 2019). Such pre-merger EM typically involves upward adjustments to discretionary accruals intended to enhance reported earnings and firm valuations in the short term. For example, Louis (2004) finds that stock acquirers systematically inflate discretionary accruals to boost share prices ahead of deal announcements. Similarly, Botsari and Meeks (2018) report that UK acquirers overstate earnings strategically to strengthen their bargaining position and maximize deal value.

While the incentives for EM leading up to M&A transactions are now well established, much less is known about how these incentives evolve after the deal closes, despite the fact that post-merger conditions may offer even greater scope for earnings manipulation. Following the completion of M&A deals, acquiring firms face a unique set of pressures that can drive post-merger EM. First, the integration process introduces considerable complexity, uncertainty, and opacity, especially in large or cross-border deals, which heightens information asymmetries between managers and external stakeholders (Dye, 1988; Trueman and Titman, 1988; Cormier et al., 2013; Alhadab and Clacher, 2018). Managers must navigate challenges such as the consolidation of reporting systems, alignment of corporate cultures, and realization of promised synergies. Performance metrics become difficult to benchmark against historical norms, and delays in synergy realization can

create short-term underperformance that is difficult to distinguish from strategic investment. In such conditions, managers possess both the motive and the means to manipulate reported results in order to shape investor expectations and preserve narrative control.

Second, M&As are often subject to intense public and market scrutiny. The visibility of acquirers tends to increase following M&A announcements, driven by heightened media coverage, expanded analyst following, and growing institutional investor attention (Baker et al., 1999; Bushee and Miller, 2012; Gavana et al., 2019). This elevated profile may benefit firms seeking legitimacy or broader market recognition, but it also imposes greater external monitoring and raises the reputational stakes for top executives. Managers are therefore under considerable pressure to demonstrate the deal’s success, particularly during the early post-transaction period. Recent studies show that such visibility, especially in the form of media coverage and analyst scrutiny, can induce more conservative financial reporting practices and reduce aggressive AEM (e.g., Oliver et al., 2023; Chen et al., 2021; Cedergren et al., 2025; Bjornsen et al., 2023). However, this same scrutiny may redirect managers toward more subtle forms of manipulation, such as REM, which are embedded in everyday operational decisions and are harder for external observers to detect. This shift toward REM allows managers to meet earnings targets while mitigating detection risk and reputational damage.

Third, the financial and career consequences of post-merger performance are substantial. Empirical research has shown that failed acquisitions can result in significant value destruction, operational inefficiencies, and diminished market trust (Bao and Edmans, 2011; Renneboog and Vansteenkiste, 2019). Underperforming acquirers are more likely to become targets of hostile takeovers (Mitchell and Lehn, 1990; Jensen, 1986) or shareholder activism as markets attempt to reallocate capital away from inefficient management. Moreover, a direct link exists between poor post-deal performance and CEO turnover, as boards and investors increasingly hold executives accountable for M&A outcomes (Lehn and Zhao, 2006; Martin and McConnell, 1991). Executives who fail to deliver on merger-related promises face reputational costs and may even be removed from of-

face ([Jensen and Ruback, 1983](#); [Jensen and Warner, 1988](#)). In response, managers may engage in EM to construct a favorable financial narrative, thereby smoothing earnings volatility or signaling the early success of integration efforts to delay or avoid negative consequences.

Consistent with agency theory, these incentives suggest that managers may engage in post-merger EM to protect compensation, preserve reputational capital, and maximize private benefits ([Levitt, 1998](#)). While AEM is relatively transparent and increasingly subject to regulatory and audit scrutiny, REM represents a more opaque strategy that is embedded in operating decisions such as overproduction, reduced discretionary spending, or timing of cash flows ([Roychowdhury, 2006](#); [Zang, 2012](#)). REM is not only harder to detect but can also be framed as a legitimate business judgment, thus making it an attractive EM tool in the post-merger context—particularly when firms operate under greater scrutiny.

Mergers and acquisitions, therefore, create a strategic environment in which the form, not just the extent, of EM may shift. As firms integrate new operations, face performance uncertainty, and respond to heightened monitoring, REM provides a flexible, low-visibility mechanism for managing earnings. Prior studies suggest that firms substitute away from AEM toward REM when detection risk rises, or operational discretion increases ([Cohen and Zarowin, 2010](#); [Badertscher, 2011](#)). In the post-merger phase, where benchmarking is difficult and synergy realization timelines are uncertain, managers may favor REM to meet earnings expectations while minimizing reputational or regulatory exposure. This theoretical framework implies that post-merger periods are particularly conducive to the strategic substitution of EM methods, and motivates our primary hypothesis.

While prior studies such as [Badertscher \(2011\)](#) and [Cohen and Zarowin \(2010\)](#) provide early evidence that firms shift from AEM to REM in response to increased scrutiny or around major corporate events, these studies do not examine how such shifts play out in the post-merger period, characterized by heightened uncertainty, managerial discretion, and elevated performance pressure. Moreover, existing research has largely overlooked

the role of deal-specific attributes and firm-level governance mechanisms in shaping EM behavior following M&A completion. We address this gap by focusing explicitly on the post-merger phase and examining how business complexity, deal performance, and governance characteristics, including CEO gender, institutional blockholder ownership, and managerial ability, affect acquirers' reliance on REM. In doing so, our study provides new insights into the strategic use of EM in the aftermath of M&As and the institutional and organizational features that moderate such behavior. For conciseness, we formulate our guiding hypothesis as follows:

Hypothesis 1(H1): Acquirers substitute accrual-based earnings management for real earnings management following M&A completion.

3 Sample, Variables and Methodology

3.1 Sample Selection

We test our hypothesis using a sample of U.S. acquiring firms listed on the NYSE or NASDAQ. Financial data are obtained from the Compustat North America database and span the period from January 1, 1987, to December 31, 2018. M&A transaction data are sourced from the Securities Data Corporation (SDC) Platinum database. To construct our sample, we apply the following selection criteria: (1) the acquirer is listed on the NYSE or NASDAQ; (2) the transaction involves the acquisition of 100% of the target's shares; (3) the deal value exceeds \$1 million; (4) the target is either a public or private firm²; (5) the deal is announced between January 1, 1987, and December 31, 2018; and (6) the deal is marked as completed in the SDC database. No restrictions are imposed on the target's geographic location or listing status.

Our empirical design, discussed later, analyzes EM strategies in the five years before and the five years after firms engage in M&As. To avoid confounding effects from

²We do not exclude joint ventures and subsidiaries of public and private firms.

overlapping M&A transactions by the same entity, we retain only the largest completed acquisition per acquirer over a rolling 10-year window. This sampling strategy aims to isolate post-merger EM behavior attributable to the most economically significant transaction in the window, thereby reducing contamination from smaller, potentially less material deals. Our approach is broadly consistent with prior M&A studies that emphasize the dominant deal when evaluating post-event dynamics (e.g., [Harford et al., 2012](#); [Deng et al., 2013](#); [Fauver et al., 2017](#); [Chen et al., 2020](#); [Hu et al., 2020](#); [Danbolt et al., 2016](#); [Tunyi et al., 2019](#)). For robustness, we also test an alternative sampling strategy that retains the largest deal per year per acquirer, thus ignoring potential confounding effects from multiple deals in the same window. Our findings, reported in Appendix C, are consistent with our baseline results, and our conclusions remain robust across both strategies.

Our M&A events are merged with annual firm-level financial data from Compustat using CUSIP codes and fiscal years. Consistent with prior studies ([Fauver et al., 2017](#); [Chen et al., 2020](#); [Hu et al., 2020](#)), our research design uses an 11-year event window, starting five years before and ending five years after the year of deal completion $([-5, +5])$, to capture the evolution of EM behavior surrounding the acquisition. We exclude firms in the financial and utilities sectors (SIC codes 6000-6999 and 4900-4999, respectively) due to their distinct regulatory and reporting environments.³ Observations with insufficient data to estimate the baseline models are also excluded. Our final sample comprises 23,341 firm-year observations from 3,353 unique U.S. public acquirers. To mitigate the influence of extreme values, all continuous variables are winsorized at the 1st and 99th percentiles.

In subsequent analyses, we examine how firm-level attributes influence post-M&A EM. Governance variables (e.g., CEO gender and ownership structure) are obtained from the BoardEx database. Business complexity is measured using the Loughran and McDonald text-based metric ([Loughran and McDonald, 2024](#)), which is publicly available on the

³We use the Fama and French 48 industry classification to define the industry of acquirers in the rest of our analysis.

author’s website.⁴ The data are freely available and can be accessed from the authors’ webpage.⁵ All datasets are merged using aligned CUSIPs and fiscal years.

3.2 Variable description

To measure EM, we employ well-established proxies for both AEM and REM. AEM is captured using the modified Jones model (Dechow et al., 1995), which estimates non-discretionary accruals as a function of changes in revenues and the level of property, plant, and equipment (PPE). The residuals from estimating this model across industry-year subsamples represent discretionary accruals, denoted AEM (MJ), and serve as our baseline proxy for AEM. To improve robustness, we also compute performance-adjusted discretionary accruals using the performance-matched modified Jones model developed by Kothari et al. (2005), hereafter AEM (PA), which controls for firm-specific performance variations. In line with prior literature, we focus on the absolute values of these residuals to capture the magnitude of discretionary accruals regardless of direction. A detailed description of the estimation procedure is provided in Appendix B.

REM is measured following the framework proposed by Roychowdhury (2006), which identifies income-increasing manipulation through deviations in operational decisions. Specifically, we use three proxies: abnormal cash flows from operations (CFO), abnormal production costs (PROD), and abnormal discretionary expenses (DISX). CFO is modeled as a function of contemporaneous and lagged sales growth, while PROD includes cost of goods sold and inventory changes. DISX captures deviations in advertising, research and development (R&D), and selling, general, and administrative (SG&A) expenses. Abnormal levels of each component are derived as residuals from industry-year expectation models. Higher abnormal PROD and lower abnormal CFO and DISX are indicative of upward REM.

To construct aggregate measures of REM, we adopt three widely used indices. Fol-

⁴Specifically, Loughran and McDonald (2024) analyzes the complexity of all 10-K filings from 1996 to 2021 based on the frequency of use of complex words.

⁵<https://sraf.nd.edu/complexity/>.

lowing [Cohen and Zarowin \(2010\)](#) and [Zang \(2012\)](#), REM1 is defined as the sum of abnormal PROD and abnormal DISX, and REM2 as the sum of abnormal CFO and abnormal DISX. Additionally, we compute REM3, following [Cohen et al. \(2008\)](#), which aggregates the positive components of abnormal CFO, PROD, and DISX, thereby providing a conservative estimate of overall REM intensity. These composite indicators offer a comprehensive assessment of REM strategies employed by firms.

Finally, we construct a binary indicator, “Post-M&A”, which takes the value 1 for firm-years following the completion of an M&A transaction and 0 otherwise. This variable allows us to isolate the post-merger period in line with prior studies (e.g., [Fauver et al., 2017](#); [Chen et al., 2020](#)). We fully define all our variables and specify their underlying estimation models in Appendix B.

3.3 Empirical Model

To test our main hypothesis that acquirers shift from AEM to REM following M&A completion, we estimate the following model:

$$EM_{it} = \alpha_i + \beta_0 Post-M\&A_{it} + \sum_{j=1}^k \beta_j Controls_{ijt} + \epsilon_{it} \quad (1)$$

where EM_{it} denotes the EM activity (either AEM or REM) for firm i in year t ; $Post - M\&A_{it}$ is a dummy variable that equals 1 if year t is after the M&A completion year for firm i , and 0 otherwise; $Controls_{it}$ is a vector of k control variables. Each β_j measures the association between control variable j and earnings management. The model also includes fixed effects for firm and year to account for unobserved time-invariant firm characteristics and common temporal shocks. The intercept α_i represents the firm fixed effect, capturing unobserved time-invariant firm characteristics, and ϵ_{it} denotes the idiosyncratic error term. The coefficient β_0 captures the effect of the post-merger period on EM. Consistent with our hypothesis, we expect β_0 to be positive when EM is measured using REM proxies and negative when EM is measured using AEM proxies, indicating a post-merger shift

from AEM to REM

We include a comprehensive set of control variables to effectively isolate the impact of M&A activities from other potential influencing factors. These controls include Return on assets, Leverage, Firm size, Sales growth, Market-to-book, Cash flow, Audit quality, Capital expenditure, Industry concentration, Market share, Tangible assets, Z-score, Firm age, Non-missing items, and Special items. Our control variables are selected for their potential to influence EM decisions, as documented in prior studies (Tunyi et al., 2024; Roychowdhury, 2006; Dechow et al., 1995). Definitions and computation details for each variable are provided in Appendix B.

Each control captures a distinct dimension of firm behavior or environment that may confound the relationship between M&A activity and EM. *Return on assets* reflects operating performance and its effect on accounting choices. *Leverage* captures the pressure to meet debt obligations, which may incentivize EM. *Firm size* is associated with greater public scrutiny and regulatory compliance, influencing reporting behavior. *Sales growth* and *Market-to-book* capture growth opportunities and market valuation pressures, which may prompt EM to align perceived performance with investor expectations. *Cash flow* and *Audit quality* relate to internal financial strength and external monitoring, respectively. *Capital expenditures* and *Industry concentration* account for strategic investment intensity and competitive dynamics. *Market share* and *Tangible assets* reflect the firm’s operational scale and asset base, both of which can influence EM through cost structure and depreciation choices. *Z-score* serves as a proxy for financial distress, while *Firm age* captures lifecycle maturity and historical stability. Finally, *Non-missing items* and *Special items* control for reporting completeness and irregular or one-off accounting entries that may otherwise bias EM detection. By incorporating this rich set of controls, our analysis aims to provide a more accurate estimation of the effect of M&A activity on post-merger EM.

4 Main Results and Discussion

4.1 Sample Distribution and Descriptive Statistics

Table 1 reports descriptive statistics for the full sample over the 11-year event window (i.e., $[-5, +5]$). Panel A presents statistics for our main dependent and independent variables, while Panels B and C provide summary statistics for the control and moderating variables, respectively.⁶

During the M&A event window, the average values of the acquirers' AEM measures, AEM (MJ) and AEM (PA), are 0.099 and 0.098, respectively, while the mean values of REM proxies—REM1, REM2, and REM3—are -0.004, 0.005, and -0.027, respectively. Notably, in the post-M&A period, we observe a decline in AEM and a corresponding increase in REM. The mean post-merger AEM (MJ) value of 0.045 is significantly lower than the full-window mean of 0.099, suggesting reduced reliance on discretionary accruals after M&A completion. Conversely, post-merger values for REM1 (0.017), REM2 (0.024), and REM3 (0.000) exceed their respective full-window averages (-0.004, 0.005, and -0.027, respectively), indicating a marked increase in real earnings manipulation post-transaction.

Panels B and C of Table 1 summarize the control and moderating variables used in the regression analysis. The distribution of these variables aligns closely with prior literature using similar samples (e.g., Tunyi, 2021), suggesting that our data are broadly representative and free of major quality concerns.

Insert Table 1 Here

Table 2 compares firms' EM behavior in the period before and after M&As using univariate Difference of Means and Mann-Whitney U tests. The results reveal a significant shift in EM practices following M&As. Specifically, the mean value of AEM, as measured by

⁶We present the distribution of our data across the year of the deal announcement, the industry of the acquirer, the geographical location of the target, and the public status of the target in Appendix A. The analysis reveals distinct peaks in M&A activity between 1994 and 2007, followed by a notable resurgence from 2014 to 2018. Most transactions target US-based firms, representing 84.17% of cases, with private entities accounting for the largest share (44.21%). High activity levels in sectors such as Business Services and Computers highlight significant industry-specific dynamism within the M&A arena.

the modified Jones model (AEM (MJ)), decreases from 0.115 in the pre-merger period to 0.084 post-merger. A similar decline is observed for the performance-adjusted measure (AEM (PA)), which falls from 0.113 to 0.083. Both reductions are statistically significant at the 1% level, indicating a substantial decline in the reliance on AEM after deal completion. In contrast, all three REM proxies exhibit statistically significant increases post-merger. The mean for REM1 increases from -0.027 pre-merger to 0.019 post-merger, while REM2 rises from -0.016 to 0.025. REM3 shows a shift from -0.056 to 0.003. Each of these changes is significant at the 1% level, reflecting a clear uptick in real activities manipulation following M&A completion.

Collectively, these findings suggest a substitution effect in which acquirers reduce their reliance on accrual-based EM in favor of REM in the post-merger period. This behavior is consistent with our central hypothesis: that acquiring firms strategically shift toward REM to manage earnings in a manner less likely to attract regulatory or market scrutiny while still meeting performance targets in the critical period following M&A execution.

Insert Table 2 Here

4.2 Baseline Results

Table 3 reports the results of our baseline regression analysis examining acquirers' EM behavior following M&A completion. The findings offer strong support for our central hypothesis that acquirers substitute AEM with REM in the post-merger period. Columns (1) and (2) display the results for AEM, measured using both the modified Jones model (AEM (MJ)) and the performance-adjusted variant (AEM (PA)). The coefficients on the Post-M&A indicator are -0.018 and -0.017, respectively, and are statistically significant at the 1% level. These results indicate a meaningful decline in AEM following M&A completion, likely driven by heightened scrutiny from analysts, regulators, and institutional investors in the post-merger environment.

In contrast, columns (3) to (5) present results for the REM proxies (REM1, REM2,

and REM3). The estimated coefficients are 0.041, 0.019, and 0.030, respectively, all significant at the 1% level. These findings indicate a notable increase in REM activity following M&A deals. Appendix D details how these measures reflect strategic real actions such as managing operating cash flows and adjusting production and discretionary expenses to meet earnings targets.⁷ These findings align with prior literature (Mao and Renneboog, 2015; Wang et al., 2018; Haga et al., 2018), which suggests that REM is often preferred over AEM when firms face elevated external scrutiny. The sustained use of REM post-merger reflects a deliberate shift in financial reporting strategy, enabling firms to present favorable performance outcomes while minimizing the risk of detection. This evidence reinforces our argument that acquirers adopt REM as a strategic response to the operational and reputational demands of the post-M&A period.

Insert Table 3 Here

4.3 Channel analysis: Heightened visibility

We have argued that the heightened visibility following M&A activity increases external scrutiny, particularly from analysts and regulators, thereby discouraging the use of AEM and encouraging a shift toward REM. Table 4 evaluates this channel by examining the moderating role of changes in analyst following ($\Delta AnalystFollowing$) on acquirers' post-merger EM behavior. Columns (1) and (2) of Table 4 present the interaction between M&A completion and changes in analyst coverage on AEM proxies. The coefficients for the interaction term are -0.004 in both specifications and are statistically significant at the 1% level. This suggests that the negative association between M&A completion and AEM is more pronounced for firms experiencing an increase in analyst coverage, consistent with the view that greater visibility constrains the use of discretionary accru-

⁷Notably, increases in sales via price discounts or lenient credit terms, alongside heightened production through overproduction tactics, are evidenced by the estimated coefficients of *abnCFO* (0.012) and *abnPROD* (0.011) proxies, which are both positive and statistically significant at the 1% level. Furthermore, the *abnDISX* proxy in Appendix D exhibits a negative coefficient of -0.040, which is statistically significant at the 5% level, indicating that acquirers manage earnings by reducing discretionary spending (e.g., on research and development and selling, general, and administrative expenditures) following M&As.

als. Columns (3) to (5) of Table 4 report results for the REM proxies. The interaction terms between M&A completion and analyst following are positive and significant, with the coefficient in column (5), for example, equal to 0.005 and statistically significant at the 5% level. These results suggest that REM intensifies as analyst coverage increases post-merger.

Taken together, the findings in Table 4 provide support for our hypothesis that M&A-induced visibility influences the choice of EM strategy. As firms face heightened scrutiny following the deal, they reduce reliance on AEM and increasingly turn to REM, an EM approach more deeply embedded in operational decisions and less likely to trigger regulatory red flags. This behavioral shift aligns with prior literature suggesting that firms facing greater visibility and monitoring are more likely to substitute away from accrual manipulation in favor of more opaque, real activity-based strategies (He and Yang, 2014; Zang, 2012). Our results confirm the adaptive nature of EM in response to changes in the information environment, illustrating how firms recalibrate their financial reporting practices to balance performance signaling with reputational and regulatory constraints in the post-M&A context.

Insert Table 4 Here

4.4 Cross-sectional tests: Drivers of post-M&A REM

Our previous findings indicate a clear shift toward REM following M&A activity. In our previous analysis, we provided evidence that M&A induced visibility influences the choice of EM strategy. To further investigate other mechanisms underlying this shift, we explore firm-specific factors that may amplify or constrain the use of REM in the post-merger period. Table 5 presents the results of this analysis, focusing on the role of business complexity, managerial characteristics (CEO ability and gender), and ownership structure.

4.4.1 Business structure: The role of Complexity

M&As lead to an immediate and substantial expansion in firm size, measured by total assets, revenues, number of employees, and product lines, as well as in operational scope, including entry into new industries, markets, and geographic regions. In effect, M&As precipitate a sharp rise in business complexity. This increased complexity may significantly influence the likelihood that acquirers resort to REM in the post-merger period. As firms become more diversified and geographically dispersed, they must navigate more complex operational structures and reporting requirements. This, in turn, exacerbates information asymmetries between management and external stakeholders, creating an environment in which REM becomes not only feasible but also strategically advantageous. This proposition is consistent with the findings of [Moeller et al. \(2004\)](#), who note that larger and more diversified firms face elevated transparency and monitoring challenges. We argue that increased complexity facilitates REM, which is more deeply embedded in operating activities and less easily detectable than accrual-based methods, thereby making it a preferred tool for post-merger earnings manipulation.

To empirically evaluate this relationship, we employ the complexity measure developed by [Loughran and McDonald \(2024\)](#), calculated as the natural logarithm of the number of complex words in a firm’s Form 10-K filings. These words are identified using a dictionary of 374 terms known to reflect linguistic and informational complexity. This measure has proven informative in prior disclosure research (e.g., [Skinner, 2024](#)). In column 1 of Table 5, we test whether business complexity moderates the relationship between M&As and REM. The results indicate a positive, statistically significant interaction effect with a coefficient of 0.261 ($p < 0.01$), supporting our argument. This finding highlights that business complexity intensifies the reliance on REM in the aftermath of M&A activity. It contributes to a growing body of literature linking organizational complexity and diversification to opportunistic financial reporting behaviors (e.g., [Jiraporn et al., 2008](#); [Vasilescu and Millo, 2016](#); [Farooqi et al., 2014](#)). Taken together, these results

reinforce the notion that increased post-merger complexity creates both the incentives and the means for firms to engage in more sophisticated EM strategies.

4.4.2 Leadership attributes: CEO ability

We next investigate the role of CEO ability in shaping the extent of REM following M&As. Given the heightened expectations and scrutiny that typically accompany M&A transactions, CEOs often face substantial pressure to demonstrate the success of the merger in order to retain their positions and safeguard associated compensation and reputational benefits (Bergstresser and Philippon, 2006; Lehn and Zhao, 2006; Zhao et al., 2012). Existing literature suggests that more capable CEOs are better equipped to engage in sophisticated forms of EM. These executives can leverage their expertise in financial reporting and operational control systems to align reported earnings with market expectations, often without compromising perceived earnings quality (DeFond and Park, 1997; Huang and Sun, 2017; Demerjian et al., 2020).

Consistent with this view, the results reported in column 2 of Table 5 show that the interaction between Post-M&A and CEO ability yields a positive and statistically significant coefficient of 0.384 ($p < 0.01$). This finding implies that firms led by more competent CEOs are more likely to increase REM in the post-merger period, potentially meeting or exceeding performance benchmarks. This outcome reinforces prior research suggesting that highly skilled managers can strategically manipulate earnings through operational levers, enhancing perceived performance while maintaining a veneer of reporting credibility (DeFond and Park, 1997; Huang and Sun, 2017; Demerjian et al., 2020). However, while such behavior may signal managerial competence and responsiveness to stakeholder expectations, it also raises important concerns about the interpretability and sustainability of post-M&A performance. By altering real activities to deliver short-term results, capable CEOs may temporarily satisfy external observers, but potentially at the cost of long-term value creation.

Thus, while managerial ability facilitates effective navigation of the post-merger fi-

nancial landscape, it also complicates the assessment of merger outcomes. Analysts, investors, and boards must therefore interpret post-merger financial improvements with caution, recognizing the possibility that such results may reflect EM rather than genuine operational synergies.

4.4.3 The monitoring role of blockholders

The presence of blockholders, defined as investors holding at least 5% of a firm’s outstanding shares, has long been recognized as a critical governance mechanism that mitigates opportunistic managerial behavior, including earnings manipulation (Dou et al., 2018). Because blockholders have significant financial stakes, they are more likely to internalize the negative externalities associated with aggressive EM and to exert pressure on managers to align reporting practices with long-term shareholder interests (Ramalingegowda et al., 2021; Beatty et al., 2013). We therefore expect that firms with higher levels of blockholder ownership engage in less REM following M&A transactions due to increased monitoring. The results, reported in column 3 of Table 5, show a negative and statistically significant interaction coefficient of -0.102 ($p < 0.01$) between Post-M&A status and block ownership. This finding suggests that blockholders play a pivotal role in constraining REM in the post-merger period.

These results highlight the effectiveness of concentrated ownership in monitoring during periods of heightened performance pressure and strategic uncertainty. Post-M&A environments often provide fertile ground for managerial discretion due to increased complexity and heightened expectations for realizing synergies. However, our findings indicate that the presence of blockholders serves as a countervailing force, reducing the likelihood of aggressive REM. This evidence complements and extends prior research (Dou et al., 2018; Ramalingegowda et al., 2021; Beatty et al., 2013) by showing that block ownership serves as embedded oversight, promoting financial discipline and transparency following corporate restructuring. In doing so, blockholders contribute to more reliable financial reporting and help safeguard shareholder value during one of the most critical phases in

a firm’s life cycle.

4.4.4 CEO gender: The governance role of female CEOs

Prior literature underscores the governance implications of CEO gender, emphasizing differences in risk preferences, ethical judgment, and managerial conservatism (Powell and Ansic, 1997; Tunyi et al., 2023; Byrnes et al., 1999). Female CEOs, in particular, are associated with greater risk aversion, heightened ethical standards, and a more conservative leadership style, traits that have been linked to improved earnings quality and reduced engagement in EM (Arun et al., 2015; Peni and Vähämaa, 2010; Liu et al., 2016; Zalata et al., 2019). Building on this, we contend that firms led by female CEOs are less likely to engage in aggressive EM, particularly REM, following M&As. The results presented in column 4 of Table 5 support this proposition. Specifically, we find a negative and statistically significant interaction coefficient (-0.075 , $p < 0.01$) between post-M&A status and a female CEO indicator, suggesting that female CEOs dampen REM in the post-merger period.

This finding is consistent with prior research indicating that firms with female executives tend to adopt more conservative financial reporting strategies, including the use of income-decreasing discretionary accruals (Carter et al., 2003; Adams and Ferreira, 2009). In our setting, female CEOs appear to moderate the aggressive reporting behavior that often characterizes post-M&A financial management, reinforcing their role as a stabilizing governance force during periods of strategic transition.

Overall, our findings not only highlight gender-based heterogeneity in managerial behavior but also underscore the positive governance contribution of female leadership in enhancing earnings quality and curbing opportunistic financial reporting following major corporate restructuring.

Insert Table 5 Here

4.5 M&A Performance and post-M&A earnings management

A central premise of our study is that acquirers resort to EM post-merger to justify their engagement in the transaction and mitigate potential adverse consequences, such as heightened scrutiny and managerial job insecurity (Lasalle et al., 1993; Lehn and Zhao, 2006; Zhao et al., 2012; Mitchell and Lehn, 1990). If this argument holds, one would expect the intensity of post-M&A EM to be more pronounced among firms whose acquisitions are poorly received by the market. Specifically, a negative stock market response to the deal announcement may prompt acquirers to engage in more aggressive EM in the post-merger period to defend the deal’s perceived success.

To examine this mechanism, we investigate the relationship between the cumulative abnormal return (CAR) over the $[-10, +10]$ window surrounding the M&A announcement and the average post-merger EM level. CARs serve as a forward-looking market-based measure of the perceived value created by the deal, with lower CARs indicative of poor M&A performance. Unlike our baseline panel regressions, this test employs a cross-sectional framework in which each acquirer is assigned a single CAR value. We then regress this value against the firm’s average AEM and REM across the five years following the deal, controlling for firm characteristics at the time of the merger and for average pre-merger EM levels over the five years preceding the deal. The results, presented in Table 6, reveal an inverse relationship between CAR and post-merger EM, particularly REM. While the coefficients for AEM in columns (1) and (2) are negative (-0.019 and -0.020), they are not statistically significant. In contrast, the coefficients for REM in columns (3) to (5) are negative and statistically significant: -0.183 for REM1, -0.088 for REM2, and -0.195 for REM3, significant at the 1%, 5%, and 1% levels, respectively. These findings suggest that firms with a more favorable market reaction to their M&A announcement are less likely to engage in REM post-merger, whereas those facing market skepticism are more likely to do so.

These results are consistent with the argument that poor M&A performance in-

creases managerial pressure to demonstrate post-merger success, thus intensifying the use of REM. The findings also contribute to the broader literature on the managerial consequences of M&A outcomes, reinforcing the notion that adverse market reactions can trigger strategic behavior aimed at managing perceptions and preserving managerial tenure.

Insert Table 6 Here

4.6 Robustness checks

While our baseline findings indicate that REM increases and AEM declines following M&A transactions, these associations may be subject to various methodological (including endogeneity) concerns. For example, firms that choose to engage in M&A may already differ systematically from those that do not, in ways that also influence their propensity to manage earnings. To strengthen the validity of our inferences and provide more robust evidence of a causal relationship, we conduct a series of complementary robustness tests.

4.6.1 Timing of Acquirers' earnings management

To further explore the causal link between M&A activity and changes in EM behavior, we investigate the timing of EM around the completion of M&A deals. Given that M&As occur at different points in time across firms, our setting resembles a staggered difference-in-differences framework, albeit with the limitation that M&A decisions are endogenous. If the shifts in EM are indeed driven by M&A activity, we would expect an immediate and concentrated change in EM behavior post-deal, particularly during the early years of integration, followed by a gradual reversion toward pre-merger norms. To test this contention, we examine the pattern of EM in the five years preceding and following M&A completion.

Table 7 presents the results of this temporal analysis, using the fifth year prior to the M&A event (i.e., M&A year -5) as the baseline period. The empirical evidence

reveals a clear and statistically significant shift in EM behavior immediately following the M&A. In the first post-merger year, we observe a marked decline in AEM, as reflected in the negative coefficients for AEM (MJ) and AEM (PA), which are -0.029 and -0.028 , respectively (both significant at the 1% level). This downward trend in AEM persists into the second year, with respective coefficients of -0.016 and -0.015 , again significant at the 1% level. These results suggest that acquiring firms reduce their reliance on AEM in the immediate aftermath of M&As, likely due to increased scrutiny and a preference for less detectable EM mechanisms.

Concurrently, we document a sharp rise in REM in the first two years post-M&A. Specifically, REM1 and REM2 increase by 0.052 and 0.040 , respectively, in year+1, while REM3 rises by 0.047 ; all coefficients are statistically significant at the 1% level. This heightened use of REM continues into the second post-merger year, with REM1, REM2, and REM3 showing coefficients of 0.025 , 0.022 , and 0.026 , respectively—all significant at the 1% level. These patterns suggest that firms strategically shift toward REM as a preferred tool for EM during the early integration phase.

By the third year post-M&A, however, the intensity of REM dissipates, with coefficients becoming statistically insignificant across all REM measures. Nonetheless, the reduction in AEM remains statistically significant in year+3, as indicated by coefficients of -0.011 (AEM (MJ)) and -0.009 (AEM (PA)). This persistent but tapering decline in AEM points to a longer-lasting shift toward more conservative accrual reporting, even as REM activities revert to baseline levels. By year+4, the statistical significance of AEM reductions also fades, indicating a normalization of financial reporting practices over time.

Taken together, these findings suggest that M&A transactions act as a catalyst for a temporary but strategically significant change in EM behavior. The immediate post-M&A period is characterized by a substitution of AEM with REM, reflecting managerial efforts to maintain favorable financial optics amid integration pressures and elevated scrutiny. As integration stabilizes and performance uncertainty declines, the need for

aggressive EM strategies appears to abate, underscoring the temporally bounded nature of this reporting behavior.⁸

To enhance interpretability, we complement Table 7 with Figures 1 and 2, which plot the estimated coefficients and their 95% confidence intervals for AEM and REM across event time. The figures confirm a substitution pattern: AEM declines sharply in the immediate post-M&A period, while REM increases over the same period. This reinforces the evidence that acquiring firms strategically shift from AEM to REM following M&A completion, particularly during the early years of post-merger integration.

Insert Table 7 Here

Insert Figures 1 and 2 Here

4.6.2 Omitted variable bias: Placebo Test

To further validate the causal interpretation of our findings and ensure that the documented shifts in EM are not driven by chance or spurious correlations, we conduct a falsification or placebo test using a Monte Carlo simulation. Specifically, for each firm in our sample, we randomly assign a pseudo (placebo) M&A completion year, drawn from the distribution of M&A years in our dataset. We then re-estimate our baseline models using these placebo years as if they were actual deal completion dates. This procedure is repeated 1,000 times to ensure the robustness of our findings and mitigate concerns that the observed results are artifacts of sample construction or model specification. By comparing the average coefficient estimates on the “Post-M&A” indicator across these simulations with those from our actual analysis, we can assess whether the original find-

⁸We note that some coefficients, particularly for AEM, are statistically significant in the years preceding the M&A event. This is consistent with prior evidence pre-deal EM, especially for stock-financed deals (e.g., [Louis, 2004](#); [Botsari and Meeks, 2018](#); [Gong et al., 2008](#); [Farooqi et al., 2014](#)). Managers may engage in accrual-based manipulation prior to a deal announcement to boost reported earnings, enhance bargaining power, or increase stock valuations used as acquisition currency ([Louis, 2004](#); [Botsari and Meeks, 2018](#)). However, the scale and consistency of these pre-merger effects are relatively smaller than the post-merger patterns observed for REM. This contrast reinforces our core finding that while pre-deal manipulation reflects tactical motivations around deal execution, the strategic substitution from AEM to REM emerges predominantly after deal completion, driven by heightened scrutiny, integration complexity and sustained performance pressures.

ings are statistically distinguishable from noise.

The results, reported in Panel A of Table 8, show that the mean coefficients on the placebo “Post-M&A” dummy are statistically insignificant for all AEM and REM measures. The estimates are effectively zero and statistically insignificant at the 10% level. The absence of any systematic pattern in the placebo tests suggests that the documented effects in our main analyses are not driven by time trends, unobserved firm characteristics, or other external shocks that could coincide with M&A years by chance. These findings strengthen the argument that the observed shifts in EM behavior are causally linked to actual M&A activity rather than to random or confounding factors. The placebo test reinforces the internal validity of our empirical design and lends further credibility to the interpretation that M&As induce a deliberate shift in acquirers’ EM strategies.

4.6.3 Selection bias: Heckman’s two-stage correction

A key endogeneity concern in our analysis relates to selection bias, as M&A activity is not randomly distributed across firms. Companies that pursue acquisitions may exhibit unique observable or unobservable characteristics, such as managerial style, growth opportunities, governance structures, or industry positioning, that also influence their EM behavior (Tunyi, 2021). If these characteristics are correlated with EM and time-variant around M&A events, failing to account for them may lead to biased inferences about the causal impact of M&As on EM practices. To address this concern, we employ Heckman’s two-stage correction procedure.

In the first stage, we estimate the likelihood of a firm engaging in M&A using a probit model. The model includes all baseline control variables and an exclusion restriction: “Delaware”, a dummy variable equal to 1 for firms headquartered in Delaware. Firms incorporated in Delaware enjoy stronger anti-takeover protections, which plausibly influence their propensity to engage in M&A activity but not their EM practices directly. The second stage estimates our EM models on the full sample (acquirers and non-acquirers),

including the inverse Mills ratio from the first-stage probit as a regressor to control for selection bias. Results are reported in Panel B of Table 8.

We find that the post-M&A dummy remains significantly negative for AEM (coefficients of -0.017 for both AEM (MJ) and AEM (PA), significant at the 1% level), and significantly positive for REM (coefficients of 0.041, 0.031, and 0.037 for REM1, REM2, and REM3 respectively, all significant at the 1% level). These results confirm a post-M&A shift in EM behavior. Interestingly, the selection hazard term (inverse Mills ratio) is statistically insignificant in AEM models (columns 1 and 2) but significant and positive in REM models (columns 3 to 5), suggesting that firms self-select into M&A partly based on characteristics that predispose them to engage in REM. This underscores the importance of accounting for selection effects when evaluating post-M&A EM dynamics.

Overall, the Heckman correction strengthens the causal interpretation of our findings and validates that the observed shift in EM behavior is driven by M&A activity rather than by pre-existing firm characteristics or unobserved heterogeneity.

Insert Table 8 Here

4.6.4 Ruling out alternative explanations: Abnormal returns and goodwill

To ensure that our interpretation of post-M&A EM is not confounded by alternative firm-specific dynamics, we conduct additional robustness checks to account for two potential explanations: (i) value-enhancing operational restructuring and (ii) goodwill-related accounting effects.

First, the abnormal patterns in operating cash flows, production costs, and discretionary expenses observed post-M&A may reflect genuine performance improvements, such as cost synergies, integration efficiencies, or other restructuring gains, rather than deliberate manipulation. We address this alternative explanation in two ways. First, we examine the fundamental associations in Appendix D. While a post-merger reduction in discretionary expenses in column 2 of Appendix D (significant at 1%) could arguably be viewed as efficiency-driven cost-cutting, our results also document a concurrent increase

in abnormal production (coefficient of 0.011, significant at 5%). Unlike discretionary expense reductions, overproduction is inherently economically inefficient; it increases inventory holding costs and is a recognized accounting tactic used to artificially lower the cost of sales through fixed-cost absorption (Roychowdhury, 2006). It is difficult to reconcile intentional overproduction with any established theory of post-merger operational synergy. Furthermore, the coefficient of sales growth of 0.173 (column 2 of Appendix D) is positive and significant at 1%. This suggests that cost-cutting behavior is most aggressive when the acquirer faces improved sales performance. If these reductions were driven by efficiency improvements from systematic integration, they would likely occur independently of short-term revenue fluctuations or would be triggered by a decline rather than a growth in sales.

To more directly disentangle these restructuring effects, we control abnormal stock returns over the $[-3, +3]$ M&A announcement window as a proxy for the market’s perception of deal quality and anticipated synergy realization. We present these results in Table 9. If the documented post-deal REM merely captures efficiency gains, we would expect this additional control (i.e., abnormal stock returns) to attenuate our main effects. However, the inclusion of abnormal stock returns in our main model (see Panel A of Table 9) leaves the magnitude and significance of the post-M&A coefficients largely unchanged, suggesting that our results are not simply an artifact of operational improvements.

Second, we examine whether goodwill-related accounting discretion drives our findings. Goodwill, a common accounting outcome of acquisitions, is subject to impairment testing under SFAS No. 142. This creates scope for managerial discretion in the timing and magnitude of impairment charges. Managers may delay impairments to avoid signaling poor performance (Jahmani et al., 2010) or accelerate them as a “big bath” strategy during weak performance periods (Jordan and Clark, 2015; Sevin and Schroeder, 2005). Although recent evidence (Jordan and Clark, 2015) finds that goodwill impairments have become more reflective of persistent performance declines, especially following CEO transitions, in panel B of Table 9, we control for the book value of goodwill to mitigate any

residual bias arising from discretionary impairment behavior.

The evidence in Table 9 confirms that our results remain robust when abnormal stock returns and goodwill are included as additional controls. The post-M&A coefficients for AEM and REM measures remain statistically significant and in the same direction, suggesting that the observed shift from AEM to REM is not driven by either market-perceived deal quality or by goodwill impairment strategies. While we acknowledge that some efficiency-driven restructuring likely occurs, the concurrent rise in inefficient overproduction and the strategic timing of expense cuts suggest that these adjustments are not driven solely by operational improvements. Rather, the evidence indicates that post-merger EM is at least partly shaped by broader pressures related to performance justification, heightened scrutiny, and managerial accountability during the integration process.

Insert Table 9 Here

4.6.5 Do Acquirer and Deal Characteristics Matter?

To further assess the robustness of our findings, we examine whether post-M&A EM behavior varies across key deal characteristics and structural features. Specifically, we test whether the documented substitution from AEM to REM is sensitive to alternative deal attributes. For brevity, these additional results are reported in the Online Appendix.

First, we consider the method of payment. Prior research suggests that stock-financed acquisitions create stronger reporting incentives due to valuation concerns and heightened equity market scrutiny (Karim et al., 2016). We therefore examine whether the substitution pattern differs between stock and cash-financed transactions. The results indicate that the direction and significance of the effect remain consistent across both subsamples (Online Appendix A1). This evidence suggests that our findings are not driven by the method of payment.

Second, we examine whether the results differ between serial and occasional acquirers. Serial acquirers typically possess greater acquisition experience, more established integration processes, and more highly developed internal reporting systems, which may

influence post-acquisition reporting choices and the ability to implement different EM strategies. Despite these differences, the substitution pattern remains qualitatively similar across both groups (Online Appendix [A2](#)).

Third, we explore whether the findings vary between cross-border and domestic acquisitions. Cross-border deals often involve higher informational frictions, institutional differences, and greater integration challenges, all of which may alter managerial incentives and constraints surrounding post-acquisition reporting behavior. Nevertheless, our results remain consistent across both deal types (Online Appendix [A3](#)).

Finally, we augment our baseline specification by including a comprehensive set of acquirer- and deal-level control variables. These include relative deal size, industry-level M&A activity, a cross-border deal indicator, payment composition dummies, and a public target indicator. The inclusion of these controls (Online Appendix [A5](#)) does not materially alter the magnitude or statistical significance of the Post-M&A coefficients. This evidence suggests that our baseline results are unlikely to be driven by observable deal-level heterogeneity.

4.6.6 Does the target’s institutional environment matter?

We next examine whether the institutional environment of the target country influences post-acquisition EM behavior. Institutional quality, regulatory enforcement, and financial reporting regimes differ substantially across countries, particularly between developed and developing economies. These differences may affect managerial incentives and constraints in choosing between AEM and REM. For instance, weaker enforcement environments may allow greater discretion in accrual manipulation, while stronger monitoring may limit AEM and increase reliance on operational actions.

To assess this possibility, we first partition the sample based on whether the target firm is located in a developed or developing country. If institutional quality shapes post-acquisition reporting incentives, the substitution between AEM and REM may differ across these settings. However, the results remain qualitatively similar across both

subsamples, indicating that the documented shift from AEM to REM is not confined to a particular institutional context (Online Appendix A4).

We further examine whether cross-country differences between acquirers and targets influence the results. Cross-border acquisitions often involve institutional, cultural, and geographic differences that increase information frictions and integration complexity. These factors could affect the feasibility or incentives associated with different EM strategies. Accordingly, we test whether the post-M&A shift from AEM to REM varies with geographic distance and broader measures of cultural, geographic, and economic distance between the acquirer and target countries (Online Appendix A6).

Across all specifications, the qualitative shift from AEM to REM remains robust. These results suggest that the substitution effect reflects a systematic post-acquisition reporting response rather than a consequence of specific institutional environments or cross-border deal characteristics.

4.6.7 Excluding the financial crisis period

Given the length of our sample period, a potential concern is that the observed EM behavior may be driven by extreme macroeconomic shocks rather than post-merger integration dynamics. Periods of severe economic distress, such as the global financial crisis, may induce atypical reporting behavior due to heightened survival pressures and tighter financing constraints.

To address this concern, we re-estimate our baseline models after excluding the crisis years of 2008 and 2009. The baseline results remain unchanged (Online Appendix A7). The coefficient on *Post-M&A* remains negative and statistically significant for both AEM measures (AEM (MJ) and AEM (PA)), and positive and highly significant for all three REM proxies (REM1, REM2, and REM3). These results indicate that the documented substitution from AEM to REM following acquisitions is robust to the exclusion of crisis years and is unlikely to be driven by crisis-period reporting distortions.

5 Conclusion

This study examines whether acquiring firms manage earnings following mergers and acquisitions and, more importantly, whether they alter the form of EM used in the post-merger period. We argue that the post-merger environment, characterized by increased operational complexity, heightened visibility, and intensified market discipline, constrains the use of AEM and instead encourages firms to rely more heavily on REM.

Using a large sample of 3,353 U.S. public acquirers from 1987 to 2018, comprising 23,341 firm-year observations over an extended event window surrounding M&A transactions, we document a clear shift in reporting behavior after deal completion. Specifically, we find that acquirers significantly increase REM while reducing AEM in the post-merger period. This substitution effect is robust across a range of alternative specifications and identification tests.

We further show that the shift toward REM is not uniform across firms but is shaped by post-merger monitoring, managerial characteristics, and deal outcomes. The increase in REM is more pronounced in firms with greater operational complexity and higher CEO ability, suggesting that capable managers are better able to exploit the expanded operational discretion created by integration. In contrast, stronger governance, particularly the presence of institutional blockholders and female CEOs, mitigates the tendency to increase REM following acquisitions. In addition, reliance on REM is greater when acquisitions receive weaker market reactions, indicating that pressures to justify prior M&A decisions partly drive post-merger reporting strategies.

Our findings contribute to the literature in several ways. First, we extend the EM literature by shifting the focus from whether firms manage earnings around M&A announcements (Botsari and Meeks, 2018; Tunyi et al., 2024; Higgins, 2013; Huang et al., 2019; Louis, 2004) to how firms adjust the composition of EM after the transaction is completed. While prior studies largely examine pre-deal reporting incentives, we show that the integration phase creates distinct incentives that reshape firms' reporting strategies.

Second, we provide evidence of a systematic substitution from AEM to REM in the post-merger period. By jointly examining both forms of EM, we demonstrate that changes in reporting behavior reflect a strategic reallocation across manipulation channels rather than simply an increase in overall manipulation.

Third, we show that governance structures, managerial ability, and deal performance play an important role in shaping post-merger reporting behavior. These findings highlight the continued relevance of internal monitoring mechanisms after deals close and demonstrate that managerial characteristics influence how firms respond to post-acquisition pressures.

Finally, our results carry important implications for investors, auditors, and regulators. Although REM is often less visible than accrual manipulation, it can distort firms' operational decisions and impose significant long-term costs by reducing innovation, weakening future performance, and increasing firm-specific risk (e.g., [Graham et al., 2005](#); [Roychowdhury, 2006](#); [Cohen and Zarowin, 2010](#); [Gunny, 2005](#); [Francis et al., 2016](#)). The evidence presented here suggests that EM risks persist well beyond deal completion and increasingly take the form of operational adjustments that are harder to detect. Consequently, monitoring efforts should extend beyond the announcement and completion stages of M&A transactions to the post-merger integration period, when incentives to shape reported performance remain strong.

References

- Adams, R. B. and Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of financial economics*, 94(2):291–309.
- Alhadab, M. and Clacher, I. (2018). The impact of audit quality on real and accrual earnings management around ipos. *The British Accounting Review*, 50(4):442–461.
- Alhadab, M., Clacher, I., and Keasey, K. (2015). Real and accrual earnings management and ipo failure risk. *Accounting and Business research*, 45(1):55–92.
- Anagnostopoulou, S. C. and Tsekrekos, A. E. (2013). Do firms that wish to be acquired manage their earnings? evidence from major european countries. *International Review of Financial Analysis*, 30:57–68.
- Anagnostopoulou, S. C. and Tsekrekos, A. E. (2015). Earnings management in firms seeking to be acquired. *The British Accounting Review*, 47(4):351–375.
- Arun, T. G., Almahrog, Y. E., and Aribi, Z. A. (2015). Female directors and earnings management: Evidence from uk companies. *International Review of Financial Analysis*, 39:137–146.
- Badertscher, B. A. (2011). Overvaluation and the choice of alternative earnings management mechanisms. *The Accounting Review*, 86(5):1491–1518.
- Baker, H. K., Powell, G. E., and Weaver, D. G. (1999). Does nyse listing affect firm visibility? *Financial Management*, pages 46–54.
- Bao, J. and Edmans, A. (2011). Do investment banks matter for m&a returns? *The Review of Financial Studies*, 24(7):2286–2315.
- Beatty, A., Liao, S., and Yu, J. J. (2013). The spillover effect of fraudulent financial reporting on peer firms’ investments. *Journal of Accounting and Economics*, 55(2-3):183–205.
- Bergstresser, D. and Philippon, T. (2006). Ceo incentives and earnings management. *Journal of financial economics*, 80(3):511–529.
- Bjornsen, M., Brockbank, B. G., and Prentice, J. D. (2023). The effect of analyst conservatism on meeting the consensus via earnings management. *Accounting Horizons*, 37(2):1–17.
- Botsari, A. and Meeks, G. (2018). Acquirers’ earnings management ahead of stock-for-stock bids in ‘hot’ and ‘cold’ markets. *Journal of Accounting and Public Policy*, 37(5):355–375.
- Bushee, B. J. and Miller, G. S. (2012). Investor relations, firm visibility, and investor following. *The Accounting Review*, 87(3):867–897.

- Bushee, B. J. and Noe, C. F. (2000). Corporate disclosure practices, institutional investors, and stock return volatility. *Journal of accounting research*, pages 171–202.
- Byrnes, J. P., Miller, D. C., and Schafer, W. D. (1999). Gender differences in risk taking: A meta-analysis. *Psychological bulletin*, 125(3):367.
- Carter, D. A., Simkins, B. J., and Simpson, W. G. (2003). Corporate governance, board diversity, and firm value. *Financial review*, 38(1):33–53.
- Cedergren, M., Luo, T., Xiao, X., and Yu, J. (2025). Pressures from media coverage: evidence on managing earnings toward earnings guidance. *Journal of Accounting, Auditing & Finance*, 40(2):311–336.
- Chen, R. R., Guedhami, O., Yang, Y., and Zaynutdinova, G. R. (2020). Corporate governance and cash holdings: Evidence from worldwide board reforms. *Journal of Corporate Finance*, 65:101771.
- Chen, Y., Cheng, C. A., Li, S., and Zhao, J. (2021). The monitoring role of the media: Evidence from earnings management. *Journal of Business Finance & Accounting*, 48(3-4):533–563.
- Cohen, D. A., Dey, A., and Lys, T. Z. (2008). Real and accrual-based earnings management in the pre-and post-sarbanes-oxley periods. *The accounting review*, 83(3):757–787.
- Cohen, D. A. and Zarowin, P. (2010). Accrual-based and real earnings management activities around seasoned equity offerings. *Journal of Accounting and Economics*, 50(1):2–19.
- Cormier, D., Houle, S., and Ledoux, M.-J. (2013). The incidence of earnings management on information asymmetry in an uncertain environment: Some canadian evidence. *Journal of International Accounting, Auditing and Taxation*, 22(1):26–38.
- Danbolt, J., Siganos, A., and Tunyi, A. (2016). Abnormal returns from takeover prediction modelling: challenges and suggested investment strategies. *Journal of Business Finance & Accounting*, 43(1-2):66–97.
- De Carvalho, A. G., Pinheiro, R. B., and Sampaio, J. O. (2020). The dynamics of earnings management in ipos and the role of venture capital. *Research in International Business and Finance*, 51:101084.
- Dechow, P. M., Sloan, R. G., and Sweeney, A. P. (1995). Detecting earnings management. *Accounting review*, pages 193–225.
- DeFond, M. L. and Park, C. W. (1997). Smoothing income in anticipation of future earnings. *Journal of accounting and economics*, 23(2):115–139.
- Demerjian, P., Lev, B., and McVay, S. (2012). Quantifying managerial ability: A new measure and validity tests. *Management science*, 58(7):1229–1248.

- Demerjian, P., Lewis-Western, M., and McVay, S. (2020). How does intentional earnings smoothing vary with managerial ability? *Journal of Accounting, Auditing & Finance*, 35(2):406–437.
- Deng, X., Kang, J.-k., and Low, B. S. (2013). Corporate social responsibility and stakeholder value maximization: Evidence from mergers. *Journal of financial Economics*, 110(1):87–109.
- Dou, Y., Hope, O.-K., Thomas, W. B., and Zou, Y. (2018). Blockholder exit threats and financial reporting quality. *Contemporary Accounting Research*, 35(2):1004–1028.
- DuCharme, L. L., Malatesta, P. H., and Sefcik, S. E. (2001). Earnings management: Ipo valuation and subsequent performance. *Journal of Accounting, Auditing & Finance*, 16(4):369–396.
- Dye, R. A. (1988). Earnings management in an overlapping generations model. *Journal of Accounting research*, pages 195–235.
- Erickson, M. and Wang, S.-w. (1999). Earnings management by acquiring firms in stock for stock mergers. *Journal of Accounting and Economics*, 27(2):149–176.
- Farooqi, J., Harris, O., and Ngo, T. (2014). Corporate diversification, real activities manipulation, and firm value. *Journal of Multinational Financial Management*, 27:130–151.
- Fauver, L., Hung, M., Li, X., and Taboada, A. G. (2017). Board reforms and firm value: Worldwide evidence. *Journal of Financial Economics*, 125(1):120–142.
- Francis, B., Hasan, I., and Li, L. (2016). Abnormal real operations, real earnings management, and subsequent crashes in stock prices. *Review of Quantitative Finance and Accounting*, 46(2):217–260.
- Gavana, G., Gottardo, P., and Moisello, A. M. (2019). What form of visibility affects earnings management? evidence from italian family and non-family firms. *Administrative Sciences*, 9(1):20.
- Gong, G., Louis, H., and Sun, A. X. (2008). Earnings management and firm performance following open-market repurchases. *The Journal of Finance*, 63(2):947–986.
- Graham, J. R., Harvey, C. R., and Rajgopal, S. (2005). The economic implications of corporate financial reporting. *Journal of accounting and Economics*, 40(1-3):3–73.
- Gunny, K. A. (2005). *What are the consequences of real earnings management?* University of California, Berkeley.
- Haga, J., Höglund, H., and Sundvik, D. (2018). Stock market listing status and real earnings management. *Journal of Accounting and Public Policy*, 37(5):420–435.
- Haleblian, J., Devers, C. E., McNamara, G., Carpenter, M. A., and Davison, R. B. (2009). Taking stock of what we know about mergers and acquisitions: A review and research agenda. *Journal of management*, 35(3):469–502.

- Harford, J., Humphery-Jenner, M., and Powell, R. (2012). The sources of value destruction in acquisitions by entrenched managers. *Journal of financial economics*, 106(2):247–261.
- He, L. and Yang, R. (2014). Does industry regulation matter? new evidence on audit committees and earnings management. *Journal of Business Ethics*, 123:573–589.
- Healy, P. M. and Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting horizons*, 13(4):365–383.
- Higgins, H. N. (2013). Do stock-for-stock merger acquirers manage earnings? evidence from japan. *Journal of Accounting and Public Policy*, 32(1):44–70.
- Hu, J., Li, S., Taboada, A. G., and Zhang, F. (2020). Corporate board reforms around the world and stock price crash risk. *Journal of Corporate Finance*, 62:101557.
- Huang, W., Goodell, J. W., and Zhang, H. (2019). Pre-merger management in developing markets: The role of earnings glamour. *International Review of Financial Analysis*, 65:101375.
- Huang, X. S. and Sun, L. (2017). Managerial ability and real earnings management. *Advances in accounting*, 39:91–104.
- Jahmani, Y., Dowling, W. A., Torres, P. D., et al. (2010). Goodwill impairment: A new window for earnings management? *Journal of Business & Economics Research (JBER)*, 8(2).
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2):323–329.
- Jensen, M. C. and Ruback, R. S. (1983). The market for corporate control: The scientific evidence. *Journal of Financial economics*, 11(1-4):5–50.
- Jensen, M. C. and Warner, J. B. (1988). The distribution of power among corporate managers, shareholders, and directors. *Journal of Financial Economics*, 20:3–24.
- Jiraporn, P., Kim, Y. S., and Mathur, I. (2008). Does corporate diversification exacerbate or mitigate earnings management?: An empirical analysis. *International review of financial analysis*, 17(5):1087–1109.
- Jones, J. J. (1991). Earnings management during import relief investigations. *Journal of accounting research*, 29(2):193–228.
- Jordan, C. E. and Clark, S. J. (2015). Do new ceos practice big bath earnings management via goodwill impairments? *Journal of Accounting & Finance (2158-3625)*, 15(7).
- Karim, M. A., Sarkar, S., and Zhang, S. (2016). Earnings management surrounding m&a: Role of economic development and investor protection. *Advances in accounting*, 35:207–215.

- Kothari, S. P., Leone, A. J., and Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39(1):163–197.
- Lalwani, D. and Jain, S. (2025). Do m&as incentivize acquirers to engage in earnings management? evidence from an emerging economy. *Journal of Accounting Literature*.
- Lasalle, R. E., Jones, S. K., and Jain, R. (1993). The association between executive succession and discretionary accounting changes: Earnings management or different perspectives? *Journal of Business Finance & Accounting*, 20(5):653–671.
- Lehn, K. M. and Zhao, M. (2006). Ceo turnover after acquisitions: Are bad bidders fired? *The Journal of Finance*, 61(4):1759–1811.
- Lennox, C., Wang, Z.-T., and Wu, X. (2018). Earnings management, audit adjustments, and the financing of corporate acquisitions: Evidence from china. *Journal of Accounting and Economics*, 65:21–40.
- Levitt, A. (1998). The importance of high quality accounting standards. *Accounting horizons*, 12(1):79.
- Liu, Y., Wei, Z., and Xie, F. (2016). Cfo gender and earnings management: Evidence from china. *Review of Quantitative Finance and Accounting*, 46:881–905.
- Loughran, T. and McDonald, B. (2024). Measuring firm complexity. *Journal of Financial and Quantitative Analysis*, 59(6):2487–2514.
- Louis, H. (2004). Earnings management and the market performance of acquiring firms. *Journal of Financial Economics*, 74:121–148.
- Mao, Y. and Renneboog, L. (2015). Do managers manipulate earnings prior to management buyouts? *Journal of Corporate Finance*, 35:43–61.
- Martin, K. J. and McConnell, J. J. (1991). Corporate performance, corporate takeovers, and management turnover. *The Journal of Finance*, 46(2):671–687.
- Mitchell, M. L. and Lehn, K. (1990). Do bad bidders become good targets? *Journal of Political Economy*, 98:372–398.
- Moeller, S. B., Schlingemann, F. P., and Stulz, R. M. (2004). Firm size and the gains from acquisitions. *Journal of Financial Economics*, 73:201–228.
- Oliver, A. G., Campbell, R., Graffin, S., and Bundy, J. (2023). Media coverage of earnings announcements: How newsworthiness shapes media volume and tone. *Journal of Management*, 49(4):1213–1245.
- Peni, E. and Vähämaa, S. (2010). Female executives and earnings management. *Managerial finance*, 36(7):629–645.
- Powell, M. and Ansic, D. (1997). Gender differences in risk behaviour in financial decision-making: An experimental analysis. *Journal of economic psychology*, 18(6):605–628.

- Premti, A. and Smith, G. (2020). Earnings management in the pre-ipo process: Biases and predictors. *Research in International Business and Finance*, 52:101120.
- Ramalingegowda, S., Utke, S., and Yu, Y. (2021). Common institutional ownership and earnings management. *Contemporary Accounting Research*, 38(1):208–241.
- Rangan, S. (1998). Earnings management and the performance of seasoned equity offerings. *Journal of Financial Economics*, 50:101–122.
- Renneboog, L. and Vansteenkiste, C. (2019). Failure and success in mergers and acquisitions. *Journal of Corporate Finance*, 58:650–699.
- Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics*, 42:335–370.
- Sevin, S. and Schroeder, R. (2005). Earnings management: evidence from sfas no. 142 reporting. *Managerial Auditing Journal*, 20(1):47–54.
- Skinner, A. N. (2024). Subject matter complexity and disclosure channel richness. *The Accounting Review*, pages 1–33.
- Sun, Z., Kong, N., Wu, L., and Bao, Y. (2024). Does contingent payment in m&as induce acquirers’ earnings management? evidence from performance commitment. *Research in International Business and Finance*, 69:102257.
- Teoh, S. H., Welch, I., and Wong, T. J. (1998a). Earnings management and the long-run market performance of initial public offerings. *Journal of Finance*, 53:1935–1974.
- Teoh, S. H., Welch, I., and Wong, T. J. (1998b). Earnings management and the under-performance of seasoned equity offerings. *Journal of Financial Economics*, 50:63–99.
- Trueman, B. and Titman, S. (1988). An explanation for accounting income smoothing. *Journal of Accounting Research*, 26:127–139.
- Tunyi, A. A. (2021). Revisiting acquirer returns: Evidence from unanticipated deals. *Journal of Corporate Finance*, 66:101789.
- Tunyi, A. A., Areneke, G., Tob-Ogu, A., and Khalid, S. (2023). Doing more with more: Women on the board and firm employment. *Journal of Business Research*, 154:113385.
- Tunyi, A. A., Ntim, C. G., and Danbolt, J. (2019). Decoupling management inefficiency: Myopia, hyperopia and takeover likelihood. *International Review of Financial Analysis*, 62:1–20.
- Tunyi, A. A., Yang, J., Agyei-Boapeah, H., and Machokoto, M. (2024). Takeover vulnerability and pre-emptive earnings management. *European Accounting Review*, 33(2):677–711.
- Vasilescu, C. and Millo, Y. (2016). Do industrial and geographic diversifications have different effects on earnings management? evidence from uk mergers and acquisitions. *International Review of Financial Analysis*, 46:33–45.

- Wang, T.-S., Lin, Y.-M., Werner, E. M., and Chang, H. (2018). The relationship between external financing activities and earnings management: Evidence from enterprise risk management. *International Review of Economics and Finance*, 58:312–329.
- Zalata, A. M., Ntim, C., Aboud, A., and Gyapong, E. (2019). Female ceos and core earnings quality: New evidence on the ethics versus risk-aversion puzzle. *Journal of Business Ethics*, 160:515–534.
- Zang, A. Y. (2012). Evidence on the trade-off between real activities manipulation and accrual-based earnings management. *Accounting Review*, 87:675–703.
- Zhao, Y., Chen, K. H., Zhang, Y., and Davis, M. (2012). Takeover protection and managerial myopia: Evidence from real earnings management. *Journal of Accounting and Public Policy*, 31:109–135.

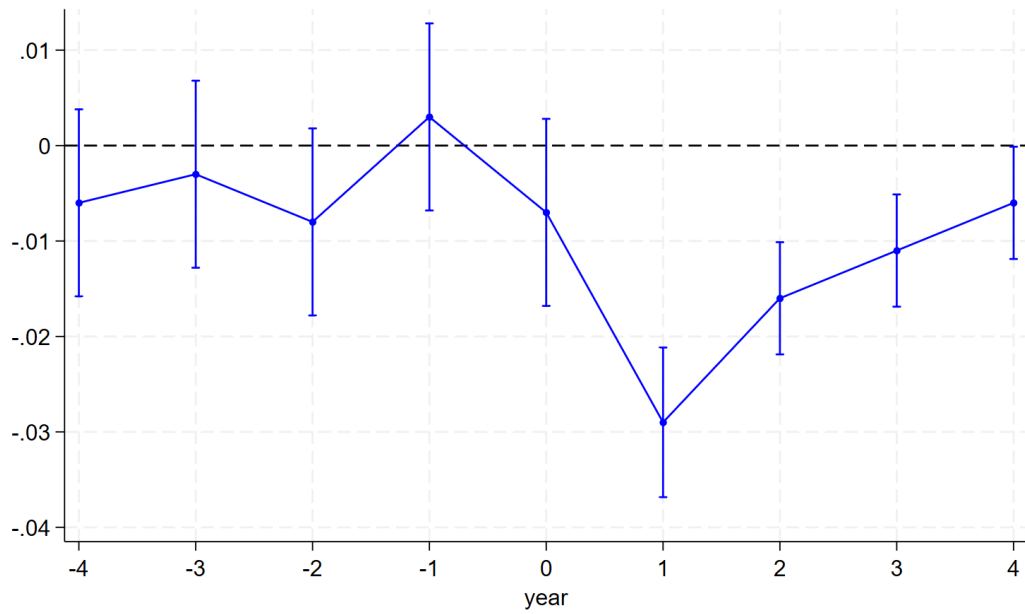


Figure 1 Accrual earnings management

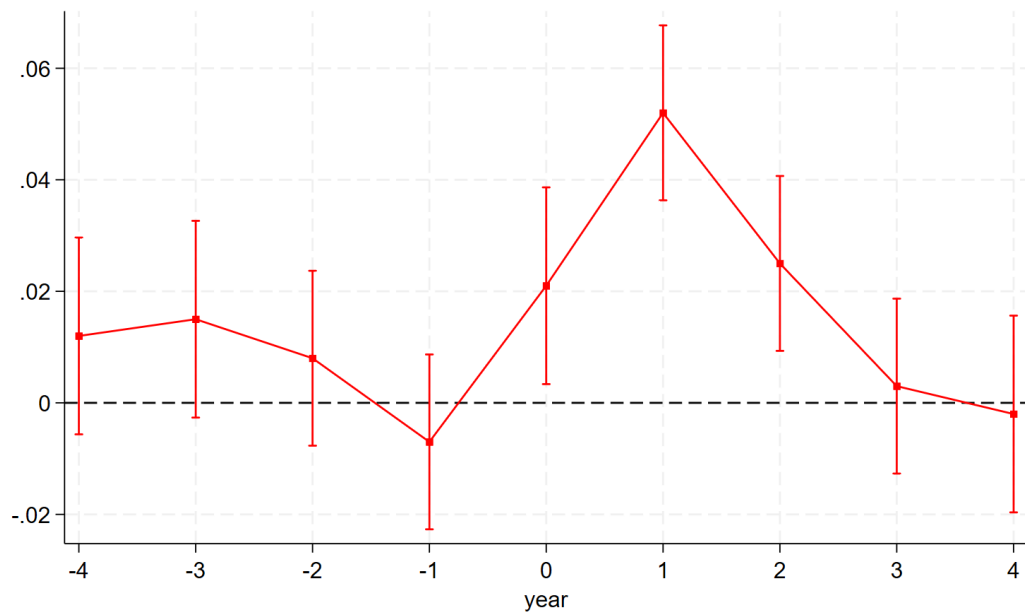


Figure 2 Real earnings management

Note: This figure visualizes the coefficient estimates from Table 7 for event-time indicators measuring accrual-based (Panel A) and real (Panel B) earnings management around M&A completion. Year 0 indicates the completion year, and coefficients are estimated relative to year -5. Vertical bars denote 95% confidence intervals. Full regression details are reported in Table 7. Source: Authors' own work.

Table 1
Descriptive statistics

	N	Mean	SD	P1	P25	Median	P75	P99
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Dependent and independent variables								
AEM (MJ)	23,341	0.099	0.186	0.001	0.021	0.051	0.112	0.715
AEM (PA)	23,341	0.098	0.180	0.001	0.021	0.050	0.110	0.727
REM1	23,341	-0.004	0.509	-1.486	-0.206	0.015	0.218	1.275
REM2	23,341	0.005	0.326	-0.958	-0.120	0.020	0.151	0.783
REM3	23,341	-0.027	0.504	-1.504	-0.248	-0.004	0.211	1.277
Post-M&A AEM (MJ) (mean)	11,749	0.045	0.079	0.000	0.010	0.024	0.053	0.297
Post-M&A AEM (PA) (mean)	11,749	0.044	0.078	0.000	0.010	0.023	0.052	0.302
Post-M&A REM1 (mean)	11,749	0.017	0.421	-1.179	-0.172	0.019	0.203	1.107
Post-M&A REM2 (mean)	11,749	0.024	0.253	-0.676	-0.094	0.020	0.138	0.686
Post-M&A REM3 (mean)	11,749	0.000	0.420	-1.140	-0.197	0.003	0.188	1.152
Post-M&A	23,341	0.503	0.500	0.000	0.000	1.000	1.000	1.000
CAR(-10, +10)	14,169	0.009	0.151	-0.430	-0.075	0.006	0.090	0.427
Panel B: Control variables								
Return on assets	23,341	0.004	0.171	-0.721	-0.010	0.040	0.080	0.242
Leverage	23,341	1.422	2.454	0.073	0.383	0.818	1.540	14.063
Firm size	23,341	6.226	1.914	2.242	4.875	6.189	7.503	11.046
Sales growth	23,341	0.220	0.572	-0.448	0.004	0.108	0.272	2.508
Market to book	23,341	1.007	0.182	0.592	1.000	1.000	1.000	1.734
Cash flow	23,341	0.071	0.118	-0.419	0.035	0.084	0.133	0.308
Audit quality	23,341	0.766	0.423	0.000	1.000	1.000	1.000	1.000
Capital expenditure	23,341	0.053	0.057	0.002	0.019	0.035	0.064	0.305
Concentration	23,341	0.084	0.062	0.026	0.045	0.064	0.095	0.333
Market share	23,341	0.017	0.044	0.000	0.001	0.002	0.011	0.257
Tangible assets	23,341	0.449	0.359	0.025	0.176	0.346	0.636	1.619
Z-score	23,341	10.531	17.210	-39.381	3.075	8.599	16.626	66.410
Firm age	23,341	20.053	9.065	6.000	12.000	19.000	28.000	35.000
Non-missing items	23,341	5.907	0.148	5.631	5.771	5.943	6.033	6.155
Special items	23,341	-0.024	0.128	-0.383	-0.016	-0.002	0.000	0.063
Panel C: Moderating and other variables								
Analyst following	20,268	0.382	2.512	-7.000	-1.000	0.000	1.000	9.000
Complexity	13,462	0.225	0.052	0.112	0.190	0.222	0.257	0.356
Managerial ability	21,704	0.011	0.131	-0.210	-0.068	-0.015	0.053	0.514
Block ownership	22,423	0.188	0.143	0.000	0.080	0.167	0.274	0.589
Female CEO	23,341	0.012	0.110	0.000	0.000	0.000	0.000	1.000
Pre-M&A AEM (PA) (mean)	22,629	0.027	0.264	-0.364	-0.034	-0.003	0.032	0.958
Pre-M&A REM3 (mean)	22,506	-0.112	0.691	-2.283	-0.346	-0.032	0.188	1.341
Delaware incorporation	23,341	0.666	0.471	0.000	0.000	1.000	1.000	1.000
Goodwill	20,822	0.135	0.150	0.000	0.000	0.087	0.218	0.589
Abnormal return	14,158	0.016	0.108	-0.274	-0.041	0.013	0.068	0.364

The table presents descriptive statistics for key variables in the study. The sample spans 11 years centered on the M&A completion year, [-5, +5]. “N” indicates the number of observations. “SD” indicates standard deviation. “Pn” indicates the nth percentile. All variables are fully defined in Appendix B. The following abbreviations have been used: AEM (Accrual earnings management), REM (real earnings management), CAR (cumulative abnormal returns), MJ (Modified-Jones), and PA (Performance-adjusted or Performance-matched).

Table 2
Univariate Analysis

Variables	Difference of means test				Mann-Whitney U test	
	Pre-M&A Mean	Post-M&A Mean	Difference	T Statistic	Z Statistic	P-value
	(1)	(2)	(3)	(4)	(5)	(6)
AEM (MJ)	0.115	0.084	0.031***	12.572	8.900***	0.000
AEM (PA)	0.113	0.083	0.030***	12.830	9.650***	0.000
REM1	-0.027	0.019	-0.046***	-6.830	-5.378***	0.000
REM2	-0.016	0.025	-0.041***	-9.677	-8.036***	0.000
REM3	-0.056	0.003	-0.059***	-8.937	-8.626***	0.000
Observations	11,592	11,749	23,341	23,341	23,341	23,341

This table provides a comparative analysis of earnings management variables before and after M&As. Columns (1) and (2) show the mean values for the variables pre- and post-M&A, respectively. Column (3) presents the differences in means, tested for significance using t-tests (Column 4). The non-parametric Mann-Whitney U test results are shown in Columns (5) and (6) for comparison. All variables are fully defined in Appendix B. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 3

Acquirers' earnings management behavior following M&As

Variables	AEM (MJ) (1)	AEM (PA) (2)	REM1 (3)	REM2 (4)	REM3 (5)
Post-M&A	-0.018*** (0.004)	-0.017*** (0.004)	0.041*** (0.008)	0.019*** (0.006)	0.030*** (0.007)
Return on assets	-0.151*** (0.027)	-0.141*** (0.026)	0.145*** (0.050)	0.195*** (0.036)	0.229*** (0.046)
Leverage	0.002*** (0.000)	0.002*** (0.000)	0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
Firm size	0.016*** (0.003)	0.017*** (0.003)	0.003 (0.007)	-0.009** (0.005)	-0.004 (0.006)
Sales growth	0.076*** (0.008)	0.074*** (0.007)	-0.125*** (0.013)	-0.129*** (0.010)	-0.107*** (0.011)
Market to book	-0.002 (0.009)	0.001 (0.009)	-0.032** (0.016)	-0.020* (0.011)	-0.020 (0.015)
Cash flow	-0.081*** (0.025)	-0.084*** (0.024)	-0.141*** (0.046)	-0.795*** (0.033)	-1.094*** (0.044)
Audit quality	-0.002 (0.005)	-0.001 (0.005)	-0.048*** (0.012)	-0.028*** (0.008)	-0.048*** (0.011)
Capital expenditure	-0.186*** (0.046)	-0.183*** (0.042)	0.122* (0.071)	0.058 (0.048)	0.044 (0.064)
Concentration	0.160** (0.063)	0.183*** (0.061)	-0.748*** (0.111)	-0.550*** (0.075)	-0.673*** (0.107)
Market share	-0.204*** (0.058)	-0.225*** (0.053)	0.170 (0.149)	0.090 (0.091)	0.184 (0.147)
Tangible assets	-0.040*** (0.010)	-0.037*** (0.010)	-0.122*** (0.021)	-0.050*** (0.014)	-0.101*** (0.020)
Z-score	0.003*** (0.000)	0.002*** (0.000)	-0.002*** (0.000)	-0.001** (0.000)	-0.002*** (0.000)
Firm age	0.068 (0.054)	0.077 (0.057)	0.216 (0.148)	0.241** (0.110)	0.089 (0.121)
Non-missing items	-0.001 (0.032)	-0.004 (0.031)	0.116* (0.065)	0.020 (0.044)	0.052 (0.058)
Special items	-0.001 (0.024)	0.003 (0.024)	-0.141*** (0.054)	-0.135*** (0.039)	-0.133*** (0.050)
Constant	-1.377 (1.096)	-1.550 (1.158)	-4.839 (2.982)	-4.703** (2.222)	-1.840 (2.446)
Observations	23,341	23,341	23,341	23,341	23,341
Adj. R-squared	0.351	0.359	0.674	0.629	0.722
Firm fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Firms	3,353	3,353	3,353	3,353	3,353
Years	32	32	32	32	32

This table presents the results of our baseline regression model, described in Eq. 1, which examines the earnings management practices of acquirers following M&A completion. AEM (columns 1 and 2) captures accrual earnings management, while REM (columns 3–5) captures real earnings management. All regressions are estimated using panel fixed effects models with firm and year fixed effects. Standard errors, reported in parentheses, are heteroskedasticity-robust. All variables are fully defined in Appendix B. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 4
M&A-induced visibility and acquirers' post-M&A EM Behavior

Variables	AEM (MJ) (1)	AEM (PA) (2)	REM1 (3)	REM2 (4)	REM3 (5)
Post-M&A $\times$ Delta analyst following	-0.004*** (0.002)	-0.004*** (0.002)	0.005* (0.003)	0.004* (0.002)	0.005** (0.002)
Delta analyst following	0.077 (0.063)	0.063 (0.069)	0.243 (0.224)	0.141 (0.164)	0.186 (0.224)
Post-M&A	-0.020*** (0.004)	-0.019*** (0.004)	0.040*** (0.009)	0.021*** (0.006)	0.029*** (0.008)
Constant	-2.113 (1.544)	-1.582 (1.539)	-3.048 (3.577)	-3.413 (2.813)	-0.697 (2.653)
Observations	20,268	20,268	20,268	20,268	20,268
Adj. R-squared	0.345	0.350	0.684	0.639	0.729
Control variables	Included	Included	Included	Included	Included
Firm fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Firms	2,837	2,837	2,837	2,837	2,837

This table presents the results of the relationship between M&A-induced visibility, captured by the change in the number of analysts following the firm, and earnings management around takeovers. AEM captures accrual earnings management, while REM captures real earnings management. The models control for firm-level characteristics, including return on assets, leverage, firm size, sales growth, market-to-book, cash flow, audit quality, capital expenditure, industry concentration, market share, tangible assets, Z-score, firm age, non-missing items, and special items. The coefficients of control variables are suppressed for brevity. All regressions are estimated using panel fixed effects models with firm and year fixed effects. Standard errors, reported in parentheses, are heteroskedasticity-robust. Full variable definitions are available in Appendix B. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 5

Firm attributes and post-M&A real earnings management

Variables	REM3			
	(1)	(2)	(3)	(4)
Post-M&A	-0.062*** (0.019)	0.022*** (0.008)	0.049*** (0.011)	0.031*** (0.007)
Complexity	-0.044 (0.074)			
Post-M&A $\times$ Complexity	0.261*** (0.076)			
Managerial ability		-0.554*** (0.048)		
Post-M&A $\times$ Managerial ability		0.384*** (0.046)		
Block ownership			0.136*** (0.032)	
Post-M&A $\times$ Block ownership			-0.102*** (0.033)	
Female CEO				0.043** (0.021)
Post-M&A $\times$ Female CEO				-0.075*** (0.024)
Constant	0.319 (2.329)	-2.138 (2.439)	-1.757 (2.575)	-1.830 (2.446)
Observations	13,319	21,662	22,393	23,341
Adj. R-squared	0.814	0.726	0.729	0.722
Control variables	Included	Included	Included	Included
Firm fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Years	18	30	32	32
Firms	2,202	3,261	3,303	3,353

This table examines the moderating effect of various firm attributes on the post-M&A earnings management (REM) nexus. Column (1) examines the moderating role of business complexity. Column (2) explores the moderating effect of managerial ability. Column (3) assesses the moderating effect of block ownership. Column (4) explores the moderating effect of CEO gender. The models control for firm-level characteristics, including return on assets, leverage, firm size, sales growth, market-to-book, cash flow, audit quality, capital expenditure, industry concentration, market share, tangible assets, Z-score, firm age, non-missing items, and special items. The coefficients of control variables are suppressed for brevity. All regressions are estimated using panel fixed effects models with firm and year fixed effects. Standard errors, reported in parentheses, are heteroskedasticity-robust. Full variable definitions are available in Appendix B. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 6

M&A performance and post-M&A earnings management behavior

Variables	Post-M&A AEM (mean)		Post-M&A REM (mean)		
	AEM (MJ) (1)	AEM (PA) (2)	REM1 (3)	REM2 (4)	REM3 (5)
CAR(-10, +10)	-0.019 (0.025)	-0.020 (0.024)	-0.183*** (0.064)	-0.088** (0.041)	-0.195*** (0.061)
Pre-M&A AEM	-0.025 (0.020)	-0.022 (0.020)	0.187** (0.073)	0.118*** (0.043)	0.183** (0.073)
Pre-M&A REM	-0.007 (0.005)	-0.009* (0.005)	0.381*** (0.031)	0.214*** (0.018)	0.393*** (0.032)
Constant	0.865** (0.382)	0.868** (0.377)	0.203 (1.057)	-0.215 (0.644)	-0.138 (1.060)
Observations	1,749	1,749	1,749	1,749	1,749
Adj. R-squared	0.192	0.193	0.480	0.438	0.502
Control variables	Included	Included	Included	Included	Included
Industry fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Firms	1,749	1,749	1,749	1,749	1,749

This table explores the impact of acquirers' M&A performance on post-M&A earnings management behavior. The dependent variables are the average post-M&A AEM and REM measures, as indicated at the top of each column. The models control for firm-level characteristics, including return on assets, leverage, firm size, sales growth, market-to-book, cash flow, audit quality, capital expenditure, industry concentration, market share, tangible assets, Z-score, firm age, non-missing items, and special items. The coefficients of control variables are suppressed for brevity. Industry and year fixed effects are included as indicated. Standard errors, reported in parentheses, are heteroskedasticity-robust. Full variable definitions are available in Appendix B. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 7

Timing of acquirers' earnings management around M&As

Variables	AEM (MJ) (1)	AEM (PA) (2)	REM1 (3)	REM2 (4)	REM3 (5)
M&A year + 4	-0.006* (0.003)	-0.005 (0.003)	-0.002 (0.009)	0.005 (0.006)	0.001 (0.008)
M&A year + 3	-0.011*** (0.003)	-0.009*** (0.003)	0.003 (0.008)	0.008 (0.005)	0.007 (0.007)
M&A year + 2	-0.016*** (0.003)	-0.015*** (0.003)	0.025*** (0.008)	0.022*** (0.005)	0.026*** (0.007)
M&A year + 1	-0.029*** (0.004)	-0.028*** (0.003)	0.052*** (0.008)	0.040*** (0.005)	0.047*** (0.007)
M&A year	-0.007 (0.005)	-0.006 (0.004)	0.021** (0.009)	-0.006 (0.006)	0.008 (0.008)
M&A year - 1	0.003 (0.005)	0.003 (0.004)	-0.007 (0.008)	-0.009 (0.006)	-0.007 (0.008)
M&A year - 2	-0.008* (0.005)	-0.008* (0.004)	0.008 (0.008)	0.007 (0.005)	0.009 (0.008)
M&A year - 3	-0.003 (0.005)	-0.004 (0.005)	0.015* (0.009)	0.003 (0.006)	0.011 (0.008)
M&A year - 4	-0.006 (0.005)	-0.007 (0.005)	0.012 (0.009)	0.010 (0.006)	0.011 (0.009)
Constant	-1.318 (1.089)	-1.491 (1.153)	-4.866 (2.978)	-4.868** (2.236)	-1.936 (2.443)
Observations	23,341	23,341	23,341	23,341	23,341
Adj. R-squared	0.352	0.360	0.675	0.631	0.722
Control variables	Included	Included	Included	Included	Included
Firm fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes

This table tracks accrual-based earnings management (columns 1 and 2) and real earnings management (columns 3–5) in the years before and after M&As. The models control for firm-level characteristics, including return on assets, leverage, firm size, sales growth, market-to-book, cash flow, audit quality, capital expenditure, industry concentration, market share, tangible assets, Z-score, firm age, non-missing items, and special items. The coefficients of control variables are suppressed for brevity. All regressions are estimated using panel fixed effects models with firm and year fixed effects. Standard errors, reported in parentheses, are heteroskedasticity-robust. Full variable definitions are available in Appendix B. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 8
Addressing endogeneity: Sample selection bias

Variables	AEM (MJ) (1)	AEM (PA) (2)	REM1 (3)	REM2 (4)	REM3 (5)
Panel A: Falsification Test					
Post-M&A (Placebo)	-0.001 (0.003)	-0.002 (0.003)	0.008 (0.005)	0.004 (0.004)	0.006 (0.005)
Constant	-4.912 (4.183)	-5.381 (5.397)	1.165 (1.717)	-5.514 (5.855)	2.966 (2.426)
Observations	18,269	18,247	17,348	17,364	17,348
Adj. R-squared	0.310	0.319	0.631	0.586	0.678
Control variables	Included	Included	Included	Included	Included
Firm fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Panel B: Heckman Two-Stage Analysis					
Post-M&A	-0.017*** (0.002)	-0.017*** (0.002)	0.041*** (0.007)	0.031*** (0.004)	0.037*** (0.007)
Non-selection hazard	-0.007 (0.006)	-0.008 (0.006)	0.090*** (0.020)	0.036*** (0.012)	0.077*** (0.019)
Constant	0.655*** (0.103)	0.706*** (0.098)	-0.499 (0.314)	-0.172 (0.191)	-0.294 (0.303)
Observations	34,906	34,877	35,723	35,729	35,723
Adj. R-squared	0.243	0.249	0.088	0.139	0.130
Control variables	Included	Included	Included	Included	Included
Industry fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes

This table addresses endogeneity and sample selection biases using two robustness tests. Panel A reports the falsification placebo test, in which M&A completion dates are randomly allocated. Panel B reports the Heckman two-stage analysis used to address potential non-random selection into M&A involvement. The models control for firm-level characteristics, including return on assets, leverage, firm size, sales growth, market-to-book, cash flow, audit quality, capital expenditure, industry concentration, market share, tangible assets, Z-score, firm age, non-missing items, and special items. The coefficients of control variables are suppressed for brevity. Panel A is estimated using panel fixed effects models with firm and year fixed effects. Panel B is estimated using OLS regressions with industry and year fixed effects. Standard errors, reported in parentheses, are heteroskedasticity-robust. Full variable definitions are available in Appendix B. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 9

Ruling Out Alternative Explanations: Abnormal Returns and Goodwill

Variables	AEM (MJ) (1)	AEM (PA) (2)	REM1 (3)	REM2 (4)	REM3 (5)
Panel A: Controlling for Abnormal Returns					
Post-M&A	-0.015*** (0.005)	-0.013*** (0.005)	0.043*** (0.010)	0.019*** (0.007)	0.029*** (0.009)
Abnormal stock returns	0.484 (0.826)	0.621 (0.801)	-1.533 (2.635)	1.193 (1.467)	-1.077 (2.648)
Constant	-0.824 (1.099)	-0.899 (1.204)	-10.472** (5.187)	-4.978 (3.333)	-6.509 (4.150)
Observations	14,158	14,158	14,158	14,158	14,158
Adj. R-squared	0.371	0.696	0.648	0.739	0.722
Control variables	Included	Included	Included	Included	Included
Firm fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Panel B: Controlling for Goodwill					
Post-M&A	-0.007* (0.004)	-0.007* (0.004)	0.022*** (0.008)	0.009* (0.005)	0.014** (0.007)
Goodwill	-0.145*** (0.022)	-0.145*** (0.022)	0.294*** (0.064)	0.183*** (0.046)	0.279*** (0.055)
Constant	-1.509 (1.214)	-1.852 (1.286)	-6.021* (3.195)	-6.647*** (2.417)	-3.017 (2.718)
Observations	20,743	20,743	20,743	20,743	20,743
Adj. R-squared	0.340	0.347	0.694	0.656	0.737
Control variables	Included	Included	Included	Included	Included
Industry fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes

This table presents robustness analyses of post-M&A earnings management, addressing two alternative explanations. Panel A includes abnormal stock returns, measured over the 7-day M&A announcement window $[-3, +3]$, as a proxy for deal quality. Panel B includes goodwill as a control to capture incentives for impairment-related earnings management. The columns report results for accrual-based earnings management (AEM) and real earnings management measures (REM1, REM2, and REM3). The models control for firm-level characteristics, including return on assets, leverage, firm size, sales growth, market-to-book ratio, cash flow, audit quality, capital expenditure, industry concentration, market share, tangible assets, Z-score, firm age, non-missing items, and special items. The coefficients of control variables are suppressed for brevity. Firm and year fixed effects are included as indicated. Standard errors, reported in parentheses, are heteroskedasticity-robust. Full variable definitions are available in Appendix B. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Appendix A

Panel A: Sample distribution - By Year

Announcement year (1)	Frequency (2)	Percentage (3)
1987	21	0.09
1988	136	0.58
1989	258	1.11
1990	316	1.35
1991	385	1.65
1992	497	2.13
1993	599	2.57
1994	689	2.95
1995	780	3.34
1996	879	3.77
1997	911	3.90
1998	872	3.74
1999	863	3.70
2000	909	3.89
2001	941	4.03
2002	1,003	4.30
2003	980	4.20
2004	949	4.07
2005	873	3.74
2006	806	3.45
2007	796	3.41
2008	775	3.32
2009	808	3.46
2010	822	3.52
2011	825	3.53
2012	833	3.57
2013	868	3.72
2014	931	3.99
2015	879	3.77
2016	800	3.43
2017	735	3.15
2018	602	2.58
Total	23,341	100

Appendix A

Panel B: Sample distribution - By Industry

Fama-French 48 industry (1)	Frequency (2)	Percentage (3)
Agriculture	124	0.53
Food Products	479	2.05
Candy & Soda	35	0.15
Beer & Liquor	75	0.32
Tobacco Products	7	0.03
Recreation	165	0.71
Entertainment	346	1.48
Printing and Publishing	211	0.90
Consumer Goods	324	1.39
Apparel	326	1.40
Healthcare	574	2.46
Medical Equipment	1,239	5.31
Pharmaceutical Products	947	4.06
Chemicals	655	2.81
Rubber and Plastic Products	238	1.02
Textiles	132	0.57
Construction Materials	543	2.33
Construction	179	0.77
Steel Works Etc	422	1.81
Fabricated Products	70	0.30
Machinery	1,146	4.91
Electrical Equipment	441	1.89
Automobiles and Trucks	386	1.65
Aircraft	125	0.54
Shipbuilding, Railroad Equipment	45	0.19
Defense	30	0.13
Precious Metals	78	0.33
Non-Metallic and Industrial Metal Mining	124	0.53
Coal	26	0.11
Petroleum and Natural Gas	1,236	5.30
Personal Services	311	1.33
Business Services	4,422	18.95
Computers	1,429	6.12
Electronic Equipment	2,182	9.35
Measuring and Control Equipment	814	3.49
Business Supplies	325	1.39
Shipping Containers	89	0.38
Transportation	77	0.33
Wholesale	1,031	4.42
Retail	1,275	5.46
Restaurants, Hotels, Motels	409	1.75
Real Estate	24	0.10
Trading	147	0.63
Other	78	0.33
Total	23,341	100

Appendix A

Panel C: Sample distribution - By Target Nation

Target Nation (1)	Frequency (2)	Percentage (3)
Argentina	13	0.06
Australia	142	0.61
Austria	41	0.18
Belgium	80	0.34
Bermuda	13	0.06
Brazil	35	0.15
British Virgin Islands	23	0.10
Canada	762	3.27
China (Mainland)	71	0.30
Costa Rica	11	0.05
Czech Republic	9	0.04
Denmark	73	0.31
Egypt	9	0.04
Finland	10	0.04
France	223	0.96
Germany	377	1.62
Hong Kong	25	0.11
India	6	0.03
Indonesia	9	0.04
Ireland	36	0.15
Israel	93	0.40
Italy	107	0.46
Japan	62	0.27
Lithuania	3	0.01
Luxembourg	44	0.19
Mexico	77	0.33
Netherlands	176	0.75
New Zealand	3	0.01
Norway	48	0.21
Pakistan	9	0.04
Poland	11	0.05
Portugal	2	0.01
Puerto Rico	7	0.03
Russia	17	0.07
Singapore	37	0.16
South Africa	6	0.03
South Korea	40	0.17
Spain	39	0.17
Sweden	119	0.51
Switzerland	90	0.39
Taiwan	41	0.18
United Kingdom	679	2.91
United States	19,640	84.17
Venezuela	15	0.06
Total	23,341	100

Appendix A

Panel D: Sample distribution - By Target Public Status

Target Public Status (1)	Frequency (2)	Percentage (3)
Joint Venture	269	1.15
Private	10,320	44.21
Public	5,018	21.50
Subsidiary	7,734	33.13
Total	23,341	100

This table summarizes the sample of acquisitions spanning January 1987 to December 2018. The sample firms were selected based on the following criteria: (1) the acquirer is listed on the NYSE or NASDAQ, (2) the acquirer attains 100% ownership of the target's shares post-M&A, (3) the acquisition deal value exceeds \$1 million, and (4) the acquisition is the largest deal executed by the acquirer within the sample period. Panel A illustrates the distribution of acquisitions by announcement year, offering insights into temporal trends in M&A activity over the study period. Panel B categorizes the sample firms according to the Fama and French 48 industry classification, highlighting the industry composition of acquirers and providing a lens into sectoral dynamics in M&A. Panel C depicts the geographical distribution of acquisitions by the target's regional location, shedding light on the extent of cross-border transactions and their regional focus. Panel D breaks down the distribution of targets by public status, distinguishing between private firms, public firms, subsidiaries, and other classifications to provide a detailed view of target firm characteristics.

Appendix B Variable definitions

Variables	Definition
Panel A: Dependent and independent variables	
AEM (MJ)	We employ the modified-Jones model (Dechow et al., 1995) to estimate discretionary accruals. This model expresses total accruals as a function of property, plant, and equipment (PPE), and the difference between changes in sales and changes in receivables. AEM (MJ) is determined as the absolute value of the residual from industry-year cross-sectional regressions of the following form: $\frac{\text{Accruals}_{it}}{\text{Assets}_{i(t-1)}} = \beta_0 + \beta_1 \frac{1}{\text{Assets}_{i(t-1)}} + \beta_2 \frac{\delta \text{Sales}_{it} - \delta \text{Receivables}_{it}}{\text{Assets}_{i(t-1)}} + \beta_3 \frac{\text{PPE}_{it}}{\text{Assets}_{i(t-1)}} + \epsilon_{it}$
AEM (PA)	The variable AEM (PA) represents an alternative proxy we use to measure accrual-based earnings management (AEM), calculated using the performance-matched Jones model, as suggested by Kothari et al. (2005) . This model adjusts for variations in firm performance to ensure greater accuracy in the measurement of discretionary accruals. Specifically, AEM (PA) is determined as the absolute value of the residual from industry-year cross-sectional regressions of the following form: $\frac{\text{Accruals}_{it}}{\text{Assets}_{i(t-1)}} = \beta_0 + \beta_1 \frac{1}{\text{Assets}_{i(t-1)}} + \beta_2 \frac{\delta \text{Sales}_{it} - \delta \text{Receivables}_{it}}{\text{Assets}_{i(t-1)}} + \beta_3 \frac{\text{PPE}_{it}}{\text{Assets}_{i(t-1)}} + \beta_4 \text{ROA}_{it-1} + \epsilon_{it}$
abnCFO	Following Roychowdhury (2006) , we model normal CFO as a function of sales and changes in sales. abnCFO is obtained as the residual from the industry-year cross-sectional regressions of the following form (multiplied by negative one): $\frac{\text{CFO}_{it}}{A_{i(t-1)}} = \beta_0 + \beta_1 \left(\frac{1}{\text{Assets}_{i(t-1)}} \right) + \beta_2 \left(\frac{\text{Sales}_{it}}{\text{Assets}_{i(t-1)}} \right) + \beta_3 \left(\frac{\delta \text{Sales}_{it}}{\text{Assets}_{i(t-1)}} \right) + \epsilon_{it}$
abnPROD	Following Roychowdhury (2006) , we model total production costs as a function of sales, changes in sales, and the lagged changes in sales. The abnormal portion of production costs (abnPROD) is captured as the residual from industry-year cross-sectional regressions of the following form: $\begin{aligned} \frac{\text{PROD}_{it}}{\text{Assets}_{i(t-1)}} = & \beta_0 + \beta_1 \left(\frac{1}{\text{Assets}_{i(t-1)}} \right) + \beta_2 \left(\frac{\text{Sales}_{it}}{\text{Assets}_{i(t-1)}} \right) \\ & + \beta_3 \left(\frac{\delta \text{Sales}_{it}}{\text{Assets}_{i(t-1)}} \right) + \beta_4 \left(\frac{\delta \text{Sales}_{i(t-1)}}{\text{Assets}_{i(t-1)}} \right) + \epsilon_{it} \end{aligned}$
abnDISX	Based on Roychowdhury (2006) , we model total discretionary expenses, which include R&D expenditures and selling, general, and administrative (SG&A) costs, as a function of sales. RM DISX is calculated as the residual from industry-year cross-sectional regressions of the following form (multiplied by negative one): $\frac{\text{DISX}_{it}}{\text{Assets}_{i(t-1)}} = \beta_0 + \beta_1 \left(\frac{1}{\text{Assets}_{i(t-1)}} \right) + \beta_2 \left(\frac{\text{Sales}_{i(t-1)}}{\text{Assets}_{i(t-1)}} \right) + \epsilon_{it}$
REM1	The sum of abnPROD and abnDISX. Source: Zang (2012) and Cohen and Zarowin (2010) .
REM2	The sum of abnCFO and abnDISX. Source: Zang (2012) and Cohen and Zarowin (2010) .
REM3	The sum of abnPROD, abnDISX and abnCFO. Denotes the aggregated measure of REM. Source: Cohen et al. (2008) .
Post-M&A	Dummy variable, which takes a value of zero in the years leading up to M&A completion ([-5,-1]) and a value of one from the year of M&A completion ([0,+5]).
CAR	Denotes the cumulative abnormal returns over the 21-day event window [-10, +10] using the market model to indicate the M&A performance. Source: Moeller et al. (2004) .

Appendix B Variable definitions

Variables	Definition
Panel B: Control variables	
Return on assets	The ratio of operating profit to total assets.
Leverage	Firm leverage is calculated as the ratio of the end-of-year total liabilities to end-of-year total equity.
Firm size	The natural log of the market value of equity in millions as of the end of the year.
Sales growth	Firm growth are calculated as the ratio of changes in sales to lagged sales.
Market-to-book	Market to Book Ratio, which is the market value of common equity divided by the book value of common equity.
Cash flow	Operating cash flow, calculated as the annual net cash flow from operating activities, and scaled by end-of-year total assets.
Audit quality	The dummy variable equals 1 if a firm is audited by a big-four auditor, and 0 otherwise.
Capital Expenditure	Represents the total amount a company spends on acquiring or maintaining physical assets such as property, plants, and equipment. The ratio of capital expenditure to total assets.
Concentration	The Herfindahl-Hirschman Index measures market concentration and is calculated as the sum of the squares of the market shares of all firms within the industry. Captures competition within a firm's industry.
Market share	The ratio of a firm's revenue to the industry total revenue in each year. Captures market power.
Tangible assets	The ratio of tangible assets (property, plant and equipment) to total assets. Captures a firm's investment in physical assets.
Z-score	Taffler's Z-score measure of bankruptcy risk, a predictive model for the likelihood of insolvency. The score is estimated as follows: $ZScore = 3.20 + 12.18X_1 + 2.50X_2 - 10.68X_3 + 0.029X_4$ Where X1 is the ratio of profit before tax (PBT) to current liabilities, X2 is the ratio of current assets to total liabilities, X3 is the ratio of current liabilities to total assets, X4 is the ratio of quick assets minus current liabilities to daily operating expenses (DOE). DOE is computed as sales minus PBT minus depreciation divided by 365.
Firm age	Number of years since listing on the stock exchange.
Non-missing items	Natural log of the number of items in Compustat with non-missing values.
Special items	the amount of special items divided by total assets.
Panel C: Moderating variables	
Delta analysts following	Change in the number of analysts following the firm after the merger.
Complexity	The logarithm of the number of words in the complexity word list by Loughran and McDonald (2024) . Source: authors' webpage (Loughran and McDonald, 2024).
Managerial ability	The Demerjian et al. (2012) measure of managerial ability. Source: The authors' webpage.
Block ownership	The proportion of shares held by block holders. Source: Boardex.
Female CEO	An indicator variable for the gender of the CEO. It takes a value of 1 if the CEO is female and a value of 0, otherwise.
Industry	Fama and French 48 industry classification scheme used for cross-industry EM calculation.
Abnormal Return	Indicates cumulative abnormal returns over the 7-day window [-3, +3] using the market model to measure M&A performance. Source: Moeller et al. (2004)
Goodwill	The ratio of goodwill to total assets. Source: Jordan and Clark (2015)

Appendix C

Alternative deal selection strategy

Variables	AEM (MJ) (1)	AEM (PA) (2)	REM1 (3)	REM2 (4)	REM3 (5)
Post-M&A	-0.015*** (0.002)	-0.015*** (0.002)	0.024*** (0.005)	0.016*** (0.003)	0.023*** (0.004)
Constant	-1.790* (0.977)	-1.825* (1.041)	-2.645 (2.746)	-3.327 (2.025)	0.014 (2.254)
Observations	23,779	23,779	23,779	23,779	23,779
Adj. R-squared	0.438	0.446	0.708	0.674	0.751
Control variables	Included	Included	Included	Included	Included
Firm fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Number of firms	3,372	3,372	3,372	3,372	3,372
Number of years	32	32	32	32	32

This table reports robustness tests in which the sample is restricted to the largest M&A deal undertaken by each acquirer in a given year. The empirical specification follows Eq. (1). Columns 1 and 2 present results for accrual earnings management, AEM, while columns 3 to 5 report results for real earnings management, REM1, REM2, and REM3. All regressions include the full set of control variables used in the baseline model, firm fixed effects, and year fixed effects. Control variable coefficients are suppressed for brevity. Standard errors, reported in parentheses, are heteroskedasticity-robust. Variable definitions are provided in Appendix B. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Appendix D

Post-M&A real earnings management strategies

Variables	abnCFO (1)	abnDISX (2)	abnPROD (3)
Post-M&A	0.012*** (0.004)	-0.040*** (0.009)	0.011** (0.005)
Sales growth	-0.030*** (0.008)	0.173*** (0.018)	0.032*** (0.008)
Constant	-2.606*** (0.918)	8.211*** (2.785)	3.267 (2.336)
Observations	23,341	23,341	23,341
Adj. R-squared	0.593	0.522	0.623
Control variables	Included	Included	Included
Firm fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Years	32	32	32
Firms	3353	3353	3353

This table explores the REM strategies used by acquirers following M&A completion, captured by the Post-M&A indicator. Abnormal cash flow from operations (abnCFO) in column 1 captures REM through changes in operating cash flows. Abnormal discretionary expenses (abnDISX) in column 2 captures REM through reductions in discretionary expenses, such as R&D and SG&A. Abnormal production costs (abnPROD) in column 3 captures REM through overproduction. The models include the control variables reported in the table, and the coefficients of control variables are suppressed for brevity. All regressions are estimated using panel fixed effects models with firm and year fixed effects. Standard errors, reported in parentheses, are heteroskedasticity-robust. All variables are fully defined in Appendix B. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Online Appendices

Appendix A1

Stock payment deals

Variables	AEM (MJ) (1)	AEM (PA) (2)	REM1 (3)	REM2 (4)	REM3 (5)
Post-M&A $\times$ Stock payment	-0.051*** (0.013)	-0.050*** (0.013)	0.075*** (0.022)	0.053*** (0.016)	0.056*** (0.019)
Stock payment	0.041*** (0.013)	0.042*** (0.012)	-0.088*** (0.022)	-0.061*** (0.016)	-0.080*** (0.019)
Post-M&A	-0.011*** (0.002)	-0.011*** (0.002)	0.019*** (0.004)	0.013*** (0.003)	0.020*** (0.004)
Constant	-1.761* (0.972)	-1.799* (1.037)	-2.633 (2.739)	-3.322* (2.007)	0.051 (2.245)
Observations	23,779	23,779	23,779	23,779	23,779
Adj. R-squared	0.346	0.355	0.660	0.620	0.710
Control variables	Included	Included	Included	Included	Included
Firm fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Firms	3,372	3,372	3,372	3,372	3,372
Years	32	32	32	32	32

This table reports robustness tests examining whether post-M&A earnings management differs in stock-financed deals. The variable “Stock payment” is an indicator equal to one if the acquisition is primarily financed with equity, and zero otherwise. The interaction term “Post-M&A $\times$ Stock payment” captures the incremental effect of stock financing on post-acquisition earnings management. Columns 1 and 2 report results for accrual earnings management (AEM), while columns 3 to 5 report results for real earnings management measures (REM1, REM2, and REM3). All regressions follow Eq. (1) and include the full set of control variables used in the baseline model, along with firm and year fixed effects. Control variable coefficients are suppressed for brevity. Standard errors, reported in parentheses, are heteroskedasticity-robust. Variable definitions are provided in Appendix B. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Appendix A2

Post-M&A Earnings Management: Occasional versus serial acquirers

Variables	AEM (MJ) (1)	AEM (PA) (2)	REM1 (3)	REM2 (4)	REM3 (5)
Panel A: Occasional (Non-serial) acquirers					
Post-M&A	-0.029*** (0.014)	-0.031*** (0.013)	0.101*** (0.024)	0.059*** (0.017)	0.073*** (0.020)
Constant	-5.908 (1.771)	-6.018 (1.838)	-1.481** (4.342)	-4.071 (3.213)	0.211 (3.139)
Observations	3,173	3,173	3,173	3,173	3,173
Adj. R-squared	0.404	0.418	0.640	0.603	0.708
Control variables	Included	Included	Included	Included	Included
Firm fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Panel B: Serial acquirers					
Post-M&A	-0.015* (0.004)	-0.013* (0.004)	0.030*** (0.009)	0.011* (0.006)	0.022** (0.008)
Constant	1.542** (0.774)	1.395 (0.937)	-5.274* (3.277)	-3.508*** (2.448)	(-2.567) (3.148)
Observations	20,168	20,168	20,168	20,168	20,168
Adj. R-squared	0.327	0.334	0.678	0.632	0.723
Control variables	Included	Included	Included	Included	Included
Industry fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes

This table re-estimates the baseline regression model in Eq. (1) separately for occasional acquirers (Panel A) and serial acquirers (Panel B). Columns (1)–(2) report results for accrual-based earnings management measures, AEM (MJ) and AEM (PA), while columns (3)–(5) report results for real earnings management measures, REM1–REM3. The models include the full set of baseline control variables, including return on assets, leverage, firm size, sales growth, market-to-book ratio, cash flow, audit quality, capital expenditure, industry concentration, market share, tangible assets, Z-score, firm age, non-missing items, and special items. Coefficients on control variables are suppressed for brevity. Fixed effects are included as indicated in the table. Standard errors, reported in parentheses, are heteroskedasticity-robust. Full variable definitions are provided in Appendix B. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Appendix A3

Cross-border versus domestic

Variables	AEM (MJ) (1)	AEM (PA) (2)	REM1 (3)	REM2 (4)	REM3 (5)
Panel A: Cross-border deals					
Post-M&A	-0.015*** (0.006)	-0.016*** (0.006)	0.014 (0.010)	0.017** (0.007)	0.009 (0.010)
Constant	2.396** (1.103)	2.874* (1.570)	2.703 (2.033)	6.695*** (2.163)	4.880* (2.728)
Observations	4,070	4,070	4,070	4,070	4,070
Adj. R-squared	0.523	0.526	0.789	0.742	0.811
Control variables	Included	Included	Included	Included	Included
Firm fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Firms	3,070	3,070	3,070	3,070	3,070
Years	32	32	32	32	32
Panel B: Domestic deals					
Post-M&A	-0.017*** (0.003)	-0.016*** (0.003)	0.026*** (0.005)	0.017*** (0.004)	0.025*** (0.005)
Constant	-2.261** (1.030)	-2.362** (1.094)	-3.477 (3.083)	-4.526** (2.190)	-0.625 (2.509)
Observations	19,480	19,480	19,480	19,480	19,480
Adj. R-squared	0.450	0.459	0.709	0.677	0.753
Control variables	Included	Included	Included	Included	Included
Industry fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Firms	3,070	3,070	3,070	3,070	3,070
Years	32	32	32	32	32

This table reports robustness tests that distinguish between cross-border and domestic acquisitions. Panel A presents results for cross-border deals, while Panel B reports results for domestic deals. The empirical specification follows Eq. (1). Columns 1 and 2 report results for accrual earnings management (AEM), while columns 3 to 5 report results for real earnings management measures (REM1, REM2, and REM3). All regressions include the full set of control variables used in the baseline model. Fixed effects are included as indicated in the table. Control variable coefficients are suppressed for brevity. Standard errors, reported in parentheses, are heteroskedasticity-robust. Variable definitions are provided in Appendix B. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Appendix A4

Targets in developed versus developing economies

Variables	AEM (MJ) (1)	AEM (PA) (2)	REM1 (3)	REM2 (4)	REM3 (5)
Panel A: Targets in developed economies					
Post-M&A	-0.016*** (0.002)	-0.015*** (0.002)	0.023*** (0.005)	0.016*** (0.003)	0.023*** (0.004)
Constant	-1.763* (0.965)	-1.798* (1.031)	-2.660 (2.747)	-3.311 (2.031)	-0.001 (2.253)
Observations	23,240	23,240	23,240	23,240	23,240
Adj. R-squared	0.440	0.448	0.708	0.675	0.752
Control variables	Included	Included	Included	Included	Included
Firm fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Firms	3,336	3,336	3,336	3,336	3,336
Years	32	32	32	32	32
Panel B: Targets in developing economies					
Post-M&A	-0.012 (0.021)	-0.014 (0.021)	0.085*** (0.037)	0.049* (0.028)	0.055 (0.036)
Constant	1.065 (1.029)	1.116 (1.012)	-1.518 (1.916)	-1.056 (1.275)	-1.595 (1.879)
Observations	492	492	492	492	492
Adj. R-squared	0.558	0.559	0.819	0.769	0.849
Control variables	Included	Included	Included	Included	Included
Industry fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Firms	120	120	120	120	120
Years	28	28	28	28	28

This table reports robustness tests that distinguish between acquisitions of targets located in developed and developing economies. Panel A presents results for targets in developed economies, while Panel B reports results for targets in developing economies. The economic development of the target country is captured by a dummy variable that equals one if the target is in a developing economy and zero otherwise. Developed countries are classified as those defined as high-income in 1995 by the World Bank, including all OECD countries, while all other countries are classified as developing. The empirical specification follows Eq. (1). Columns 1 and 2 report results for accrual earnings management (AEM), while columns 3 to 5 report results for real earnings management measures (REM1, REM2, and REM3). All regressions include the full set of control variables used in the baseline model. Fixed effects are included as indicated in the table. Control variable coefficients are suppressed for brevity. Standard errors, reported in parentheses, are heteroskedasticity-robust. Variable definitions are provided in Appendix B. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Appendix A5

Additional controls for deal characteristics

Variables	AEM (MJ) (1)	AEM (PA) (2)	REM1 (3)	REM2 (4)	REM3 (5)
Post-M&A	-0.014*** (0.002)	-0.014*** (0.002)	0.019*** (0.004)	0.014*** (0.003)	0.019*** (0.004)
Relative deal size	0.000 (0.001)	0.000 (0.001)	-0.002 (0.002)	-0.001 (0.001)	-0.002 (0.002)
Industry-level M&A	-0.021 (0.024)	-0.021 (0.023)	-0.162*** (0.037)	-0.079*** (0.023)	-0.059* (0.033)
Cross-border deal	-0.001 (0.004)	-0.000 (0.004)	0.005 (0.007)	0.002 (0.005)	0.005 (0.007)
All cash deal	0.002 (0.003)	0.003 (0.003)	-0.011* (0.006)	-0.003 (0.004)	-0.009 (0.006)
Stock deal	0.013 (0.008)	0.013* (0.008)	-0.042*** (0.014)	-0.027*** (0.010)	-0.045*** (0.013)
Public target	-0.006 (0.004)	-0.005 (0.004)	0.010 (0.008)	0.010* (0.006)	0.010 (0.008)
Constant	-1.388** (0.652)	-1.087* (0.633)	0.139 (2.665)	-0.401 (1.477)	2.545 (2.095)
Observations	23,423	23,423	23,423	23,423	23,423
Adj. R-squared	0.340	0.349	0.678	0.637	0.721
Control variables	Included	Included	Included	Included	Included
Firm fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Number of firms	3,332	3,332	3,332	3,332	3,332
Number of years	32	32	32	32	32

This table reports robustness tests in which the baseline regression specification in Eq. (1) is augmented with additional controls for deal characteristics. The deal-level control variables are defined as follows: Relative deal size is the transaction value scaled by the acquirer's total assets; Industry-level M&A captures the value of all corporate control transactions in a given industry-year divided by the total book value of assets of all firms in the same industry and year; Cross-border deal is an indicator equal to one if the acquirer and target are domiciled in different countries; All cash deal is a dummy equal to one if the transaction is financed entirely with cash; Stock deal equals one if the deal is at least partially financed with stock; and Public target is an indicator equal to one if the target firm was publicly listed prior to the acquisition. Columns (1)–(2) report results for accrual-based earnings management measures, AEM (MJ) and AEM (PA), while columns (3)–(5) report results for real earnings management measures, REM1–REM3. All models include the full set of baseline firm-level controls, including ROA, leverage, firm size, sales growth, market-to-book ratio, cash flow, audit quality, capital expenditure, industry concentration, market share, tangible assets, Z-score, firm age, non-missing items, and special items, as defined in Appendix B. Firm and year fixed effects are included as indicated in the table. Standard errors, reported in parentheses, are heteroskedasticity-robust. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Appendix A6

The effect of cultural, geographic, and economic distance

Variables	AEM (MJ) (1)	AEM (PA) (2)	REM1 (3)	REM2 (4)	REM3 (5)
Panel A: Cultural distance					
Post-M&A × Cultural distance	-0.001** (0.000)	-0.001** (0.000)	-0.001* (0.001)	-0.000 (0.000)	-0.001** (0.001)
Cultural distance	0.000* (0.000)	0.001* (0.000)	0.001** (0.001)	0.001 (0.000)	0.001*** (0.000)
Post-M&A	-0.016*** (0.003)	-0.015*** (0.002)	0.024*** (0.005)	0.016*** (0.003)	0.024*** (0.005)
Constant	-1.896* (1.003)	-1.935* (1.075)	-3.002 (2.875)	-3.644* (2.105)	-0.188 (2.365)
Observations	21,872	21,872	21,872	21,872	21,872
Adj. R-squared	0.340	0.349	0.655	0.613	0.708
Control variables	Included	Included	Included	Included	Included
Firm fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Firms	3,261	3,261	3,261	3,261	3,261
Panel B: Geographic distance					
Post-M&A × Geographic distance	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Geographic distance	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Post-M&A	-0.016*** (0.002)	-0.015*** (0.002)	0.024*** (0.005)	0.016*** (0.003)	0.024*** (0.005)
Constant	-1.770* (0.965)	-1.808* (1.032)	-2.659 (2.747)	-3.324 (2.032)	0.009 (2.253)
Observations	23,520	23,520	23,520	23,520	23,520
Adj. R-squared	0.344	0.353	0.659	0.620	0.710
Control variables	Included	Included	Included	Included	Included
Firm fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Firms	3,354	3,354	3,354	3,354	3,354
Panel C: Economic distance					
Post-M&A × Economic distance	0.000 (0.001)	0.000 (0.001)	-0.000 (0.002)	0.001 (0.001)	0.001 (0.002)
Economic distance	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.001)	-0.001 (0.001)	-0.000 (0.001)
Post-M&A	-0.016*** (0.002)	-0.016*** (0.002)	0.023*** (0.005)	0.015*** (0.003)	0.022*** (0.004)
Constant	-1.764* (0.965)	-1.803* (1.032)	-2.653 (2.747)	-3.313 (2.033)	0.019 (2.254)
Observations	23,516	23,516	23,516	23,516	23,516
Adj. R-squared	0.344	0.353	0.659	0.620	0.710
Control variables	Included	Included	Included	Included	Included
Firm fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Firms	3,354	3,354	3,354	3,354	3,354

This table reports robustness tests examining whether the post-M&A effect varies with cross-country distance measures. Panel A introduces cultural distance and its interaction with Post-M&A. Panel B examines geographic distance and its interaction with Post-M&A. Panel C examines economic distance and its interaction with Post-M&A. In each panel, the interaction term captures whether post-acquisition earnings management differs with the respective distance measure. The empirical specification follows Eq. (1). Columns 1 and 2 report results for accrual earnings management (AEM), while columns 3 to 5 report results for real earnings management measures (REM1, REM2, and REM3). All regressions include the full set of baseline control variables. Fixed effects are included as indicated in the table. Control variable coefficients are suppressed for brevity. Standard errors, reported in parentheses, are heteroskedasticity-robust. Variable definitions are provided in Appendix B. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Appendix A7

Post-M&A Earnings Management Excluding Financial Crisis Years (2008-2009)

Variables	AEM (MJ) (1)	AEM (PA) (2)	REM1 (3)	REM2 (4)	REM3 (5)
Post-M&A	-0.019*** (0.005)	-0.017*** (0.004)	0.043*** (0.009)	0.020*** (0.006)	0.031*** (0.008)
Constant	-1.446 (1.130)	-1.598 (1.192)	-5.024* (3.042)	-4.794** (2.247)	-1.944 (2.501)
Observations	21747	21747	21747	21747	21747
Adj. R-squared	0.351	0.359	0.674	0.629	0.722
Firm fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Firms	3341	3341	3341	3341	3341
Years	30	30	30	30	30

This table re-estimates the baseline regression model in Eq. (1) after excluding the financial crisis years 2008 and 2009. Columns (1)–(2) report results for accrual-based earnings management measures, AEM (MJ) and AEM (PA), while columns (3)–(5) report results for real earnings management measures, REM1–REM3. All regressions include the full set of baseline control variables, including return on assets, leverage, firm size, sales growth, market-to-book ratio, cash flow, audit quality, capital expenditure, industry concentration, market share, tangible assets, Z-score, firm age, non-missing items, and special items. Coefficients on control variables are suppressed for brevity. Fixed effects are included as indicated in the table. Standard errors, reported in parentheses, are heteroskedasticity-robust. Full variable definitions are provided in Appendix B. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.