

## Article

# Accrual-Based Earnings Management in Cross-Border Mergers and Acquisitions: The Role of Institutional Differences and Geographic Distance

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**Abstract:** This study investigates how target firms' accrual-based earnings management affects the likelihood of cross-border mergers and acquisitions completion failure, emphasizing the roles of corruption, legal efficiency, and geographic distance. Using a sample of 496 European target firms involved in cross-border mergers and acquisitions, the analysis reveals a positive association between earnings management and deal withdrawal. While corruption and legal-system efficiency differences alone show no direct impact, their interaction with earnings management increases the likelihood of deal failure, particularly when target firms operate in more corrupt and less legally efficient countries than their acquirers. Geographic distance demonstrates weak evidence of a negative effect on deal completion when combined with increased earnings management levels. These findings underscore the critical role of earnings management in cross-border mergers and acquisitions outcomes, especially under high information asymmetry stemming from institutional differences.

**Keywords:** accrual earnings management; cross-border mergers and acquisitions; mergers and acquisitions completion failure; corruption; legal differences



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## 1. Introduction

Mergers and acquisitions (hereafter M&As) constitute crucial and intricate business development events (Wiedemann et al., 2024), often requiring prolonged negotiations and comprehensive experience, especially under unfamiliar conditions, such as in cases of cross-border deals. These transactions, which are pivotal for business growth and global expansion, are characterized by complexity stemming from regulatory differences, cultural barriers, and variations in governance structures (Dikova et al., 2010). The decision-making process of the target and the acquiring firms, during the period of due diligence, is critical for the procedures' progress and the successful transaction completion. A notable milestone within this period is the initial public announcement of a deal, which summarizes the participants' agreement and the possible terms. However, the pre-announcement phase relies heavily on publicly available information, as the exchange of confidential information remains limited, increasing the potential for information asymmetry (Wangerin, 2019).

A strand of the literature has underlined the importance of information asymmetry between the participants in various situations, including cross-border deals. Dikova et al. (2010) and Zhou et al. (2016) found that institutional differences between the involved firms increase the due diligence duration and the likelihood of a deal withdrawal. Similarly, Chakrabarti and Mitchell (2016) demonstrated that geographic distance is also adversely related to the completion of M&As.

Given that the ideal outcomes are sensitive to publicly disclosed information, the quality of financial reporting plays a central role in this process. Accrual-based earnings management refers to firms' intentional adjustment of accruals to influence reported profitability, significantly impacting the quality of financial reporting. This practice involves the discretion that executives may exercise concerning accounting procedures to achieve specific goals, enabling legal manipulation of recognition and measurement within the flexibility of accounting standards and legislation. Many studies have confirmed the presence of intensive earnings management around the announcement of M&As, shedding light on the motivations that lead managers to adopt such practices (Campa & Hajbaba, 2016; Mughal et al., 2021; Christopoulos et al., 2023). Expanding this literature, Skaife and Wangerin (2013), Marquardt and Zur (2015), and Martin and Shalev (2017) revealed that accrual-based earnings management is associated with a higher likelihood of a deal withdrawal. In other words, acquirers can perceive low-quality accounting information and incorporate this knowledge in their evaluation process of the target firms, reacting even by terminating the negotiations.

Building on the past literature, this study aims to investigate the effect of accrual-based earnings management of target firms on completion failure in cross-border M&As. The employed sample consists of 496 listed European target firms that participated in cross-border completed or withdrawn deals announced from 2006–2023. We applied a logistic regression approach using the level of discretionary accruals preceding the deal announcement as key independent variables and three alternative country-level variables representing the difference in corruption level, legal efficiency, and geographic distance between the target firms' and acquirers' nations. The preliminary results revealed no significant difference in the intensity of earnings manipulation between cross-border and domestic M&As, nor between target firms operating in more corrupt or less efficient legal systems compared to those in more transparent nations. The main results demonstrated the critical role of the financial reporting quality on the likelihood of an M&A withdrawal, suggesting that the acquirers have the ability and mechanisms to assess effectively the real financial status of target firms, even under situations of higher information asymmetry. Furthermore, the positive relationship between earnings management and deal completion failure becomes more pronounced in environments characterized by high corruption and low legal efficiency, but only when the target firm is located in a more corrupt country with a less efficient legal system than the acquirer's country. Geographic distance shows weak evidence of a negative effect on deal completion, particularly when combined with higher levels of earnings management.

Three key arguments can highlight the contribution of this study. Firstly, it expands the existing literature (Skaife & Wangerin, 2013; Marquardt & Zur, 2015; Martin & Shalev, 2017) on the impact of accrual-based earnings management on deal completion failure by addressing the role of information asymmetry, particularly in cross-border M&As. By focusing on these complicated and diversified deals, the analysis offers new insights that build on and expand the existing knowledge, confirming established findings while adapting them within a unique and unexplored field. Secondly, the research not only focuses on cross-border deals to adapt and extend the insights from existing literature but also delves into the specific institutional and geographic country-level differences between target firms and acquirers by employing interaction terms and subsample analyses. This nuanced approach enables a deeper understanding of the earnings management behavior of target firms and the acquirers' ability to detect such practices while emphasizing the unique complexities and dynamics of cross-border M&As. Thirdly, using a European sample enriches the prior literature, primarily focusing on US target firms. Although the US M&A market is the largest worldwide, the European market is also significant for the international

business world (Kellner, 2024). Also, the US and European deals differ in payment methods, attitude, and firm-level characteristics like ownership structure, rendering it an interesting geographic location for further research (Moschieri & Campa, 2014).

The structure of this paper is deployed as follows. Section 2 presents a review of the related literature separated into the different theoretical contexts leading to the development of the research queries. Section 3 describes the sample selection process and the adopted methodological approach. Section 4 reports the main results and the relevant robustness tests, Section 5 presents the research implications and Section 6 concludes the study by discussing the key findings, limitations and suggestions for future research.

## 2. Literature Review and Research Queries

### 2.1. Earnings Management Behavior of Target Firms

Earnings management is a key aspect of financial reporting quality that target firms may strategically engage to influence deal outcomes by attracting acquirers or maximizing their own benefits (Campa & Hajbaba, 2016; Vasilescu & Millo, 2016; Mughal et al., 2021; Christopoulos et al., 2023). Prior research has extensively examined the determinants of the intensity and direction of earnings management and the selection of the employed manipulation practices. For instance, managers of target firms participating in friendly deals or companies seeking to be acquired can benefit by adopting income-decreasing manipulation practices in an attempt to make their firm more attractive, facilitating the completion of a deal (Ben-Amar & Missonier-Piera, 2008; Anagnostopoulou & Tsekrekos, 2015; Missonier-Piera & Spadetti, 2023). Campa and Hajbaba (2016) and Mughal et al. (2021) underscored the payment method's critical role in shaping earnings management incentives. Campa and Hajbaba (2016) argued that cash-payment deals provide managers with more significant incentives to engage in earnings management than stock-swap deals, as the latter are subject to heightened scrutiny, increasing the risk of public exposure for distorted financial statements. Conversely, Mughal et al. (2021) suggested that managers in stock-for-stock deals are motivated to inflate profits and their firm's value to acquire shares from the counterparty at a lower cost, thereby enhancing their gains in the transaction. Recently, Tunyi et al. (2024) demonstrated that firms susceptible to takeovers proactively get involved in earnings management to prevent a takeover or maximize their benefits from the transaction. Similarly, Davis and Khadivar (2024) provided evidence that spreading M&A rumors can trigger accounting manipulations for target firms. The above literature exhibits that prior studies have documented the engagement of target firms in accounting manipulations to achieve specific outcomes after the deal closing. Furthermore, the related research demonstrates that the level and direction (income increasing or decreasing) may be affected by various factors that shape the final manipulation strategy that optimizes the post-deal completion benefits for the stakeholders.

### 2.2. Mergers and Acquisitions Completion Failure and Country-Level Differences in Cross-Border Deals

The announcement of an imminent M&A does not always secure the successful completion of the deal. Existing literature has identified numerous factors that may lead one or more parties to withdraw from negotiations and terminate the process. Key factors include prior experience with M&A procedures (Ahmad et al., 2023), market reactions to deal announcements (Becher et al., 2015), and the value of the bid premium (Gerritsen & Weitzel, 2017). Furthermore, elements such as the payment method (Huang et al., 2016), ownership structure (Li et al., 2019), the quality of the board of directors (Cao et al., 2019; Waqar, 2020), and the size of the acquirer and target firms (Attah-Boakye et al., 2021) have also been exhibited to influence the likelihood of deal completion significantly.

Among the most significant determinants of the completion failure are country-level differences. [Dikova et al. \(2010\)](#) shifted the focus from traditional finance and legal-oriented literature to institutional differences between the target firm and the acquirer's nation, demonstrating that significant institutional disparities are associated with a lower likelihood of deal completion. They also highlighted that prior experience in successful cross-border deals can moderate this negative relationship. Similarly, [Zhou et al. \(2016\)](#) examined the effects of political, trade, and legal discrepancies in cases where target firms and acquirers operate in developed and emerging nations. Their findings suggest that country-level differences significantly hinder deal completion, particularly when the target firm is located in an emerging nation and the acquirer is based in a developed country.

[Chakrabarti and Mitchell \(2016\)](#) reported that the geographic distance between the participants in cross-border M&As decreases the likelihood of a deal being completed. [Lawrence et al. \(2021\)](#) found that institutional and cultural differences negatively influence only the initiation of a deal but not the duration and the completion of a transaction. This relation is attributed to hiring top-tier M&A advisors that can restrict the information asymmetry that acquirers encounter in cross-border deals. A recent study by [Zhou et al. \(2023\)](#) revealed that prior failure experience decreases the probability of emerging market firms completing subsequent cross-border M&As. However, prior success and a high degree of internationalization can mitigate this negative effect. Notably, the adverse impact is more pronounced when the target firms operate in institutionally distant or more developed markets.

### *2.3. The Quality of Financial Reporting as a Determinant of Mergers and Acquisitions Outcomes*

Beyond these general factors, the role of financial reporting quality, including earnings management practices, has garnered limited attention in the literature, though it can potentially influence transaction outcomes. [Skaife and Wangerin \(2013\)](#) first investigate the association between target firms' earnings management and deal completion failure. Their findings support that accrual-based earnings management increases the likelihood of an M&A termination, implying that acquirers can assess the real financial status of target firms and react accordingly. Similarly, [Marquardt and Zur \(2015\)](#) verified the adverse relationship between accounting manipulation and M&A completion, providing additional evidence for the impact of earnings management on the duration of due diligence. Aligning with the prior literature, [Martin and Shalev \(2017\)](#) found that firms' transparency, including financial reporting transparency, leads to more possibilities for accomplishing an M&A and improves post-deal performance and success. Although a limited number of studies explicitly examine the impact of earnings management on completion failure, additional research underscores the importance of financial reporting quality, highlighting the critical role of audit quality. Specifically, collaboration with prestigious audit firms enhances the attractiveness of target firms, as it reflects the acquirers' demand for accounting transparency ([Xie et al., 2013](#)). [Chahine et al. \(2018\)](#) also concluded that auditors with extensive M&A experience contribute to shorter negotiation periods and reduced transaction costs. [Chircop et al. \(2018\)](#) further demonstrated that market reactions to an imminent M&A are more favorable when the target firm and the acquirer engage the same audit firm, cultivating trust and mitigating information asymmetry in the transaction.

### *2.4. Research Queries Development*

Cross-border deals often exacerbate information asymmetry between participants due to cultural, institutional, and regulatory discrepancies in the nations in which they operate. These deals are inherently more complex and riskier, necessitating rigorous scrutiny from acquirers ([Dikova et al., 2010](#); [Zhou et al., 2016](#)). While prior literature acknowledged the

influence of institutional and cultural differences on M&A outcomes, limited attention has been given to their interaction with earnings management practices in cross-border contexts. Institutional disparities, such as corruption levels, legal inefficiencies, and geographic distance, can affect the incentives and the intensity of earnings management of target firms, especially in cases where the target firm operates in a nation with a weaker institutional framework. Conversely, acquirers operating in countries with intense regulatory and instructional environments are probably forced to exercise strict scrutiny practices to preserve the financial reporting transparency of the target firms, preserving the future efficiency of the endeavor.

The role of earnings management as a determinant of M&A outcomes has been recognized in the literature, with prior studies connecting accrual-based earnings management to deal completion failure (Skaife & Wangerin, 2013; Marquardt & Zur, 2015; Martin & Shalev, 2017). These studies highlight how acquirers detect financial misrepresentations during due diligence and emphasize the importance of financial transparency for successful deal completion. However, most of this research has focused on M&A conditions without delving into cross-border cases. Cross-border M&As create additional complexities, information asymmetry, institutional differences, and intensified scrutiny, which can enhance the effects of earnings management on deal outcomes. In these settings, stricter due diligence amplifies acquirers' sensitivity to irregularities. Target firms involved in accrual-based earnings management jeopardize losing the trust of acquirers, particularly in cross-border transactions where stricter due diligence processes amplify acquirers' sensitivity to potential financial irregularities. These considerations lead to the first critical research question:

**RQ1:** How does accrual-based earnings management impact the likelihood of a cross-border M&A completion failure?

Except for financial reporting practices, prior research has emphasized the role of country-level differences in shaping M&A outcomes. Studies such as Dikova et al. (2010) and Zhou et al. (2016) have reported the impact of cross-border differences on M&A outcomes. Dikova et al. (2010) demonstrated that institutional and cultural differences between countries exacerbate the risks of deal withdrawal by increasing information asymmetry and transaction costs. Similarly, Zhou et al. (2016) highlighted how legal and regulatory discrepancies can prolong negotiations or lead to deal abandonment, particularly in transactions involving high-risk institutional environments. These findings emphasize that institutional disparities influence transaction dynamics and shape the acquirer's ability to effectively evaluate target firms' financial health.

Building on the aforementioned literature, this study explores how specific country-level differences interact with earnings management to influence deal outcomes. Institutional weaknesses, such as high corruption levels, inefficient legal systems, and geographic separation, may amplify the adverse effects of financial misrepresentation by target firms. Conversely, acquirers in more robust institutional environments may have a greater capacity to detect and address these irregularities, thus mitigating the risks of such disparities.

To examine these relationships, this research considers three key dimensions of institutional differences. First, corruption disparities can undermine trust and transparency in cross-border M&As, potentially heightening the likelihood of deal withdrawal when combined with earnings manipulation. Second, differences in legal-system efficiency affect the enforceability of contracts and acquirers' confidence in the transaction's legal safeguards, influencing their tolerance for financial reporting irregularities. Finally, geographic distance can exacerbate information asymmetry, further complicating the acquirer's ability to assess the target firm's financial status. These considerations lead to the following research queries:



**RQ2:** What is the role of corruption differences between the target and acquirer countries in moderating the relationship between earnings management and deal completion failure?

**RQ3:** What is the role of legal-system efficiency differences between the target and acquirer countries in moderating the relationship between earnings management and deal completion failure?

**RQ4:** What is the role of the geographic distance between the target and acquirer countries in moderating the relationship between earnings management and deal completion failure?

### 3. Methodology

#### 3.1. Sample Selection

The sample consists of 496 European target firms involved in completed or withdrawn cross-border M&As, as the Refinitiv Eikon database reported. We focus on a European sample to complement prior research, which predominantly centers on US target firms. While the US M&A market is the largest globally, the European market is also significant and exhibits distinct differences in deal characteristics and firm-level factors (Kellner, 2024; Moschieri & Campa, 2014). The transactions in our sample were announced between 2006 and 2023, a period chosen to reflect advancements in regulatory harmonization, particularly through the adoption and implementation of IFRS across European countries, which enhances the comparability of accounting figures. The M&As were categorized as either “friendly” or “hostile”<sup>1</sup>, and the payment methods used were stock swaps or cash. We set a minimum deal value of five million euros to ensure the analysis focuses on economically significant transactions that are more likely to undergo rigorous due diligence and public scrutiny. Additionally, the stocks of the target firms are publicly traded on European stock exchanges. The yearly financial data for the target firms, including their accounting information, were obtained from the Refinitiv Eikon database. All firms included in the sample belong to industrial and commercial sectors, with financial and real estate firms excluded due to their distinct accounting practices and discretionary accrual estimation challenges (Davis & Khadivar, 2024; Alghemary et al., 2024).

Table 1 provides information about the distribution of the dataset according to various characteristics of the M&A transactions. Panel A highlights the distribution of target firms across different nations, with the United Kingdom (13.91%) and France (8.67%) being the dominant nations where target firms operate. Panel B outlines the announcement years, showing a steady distribution over time, with 2014 (10.69%) and 2016 (9.27%) having the highest concentration. Panel C categorizes target firms by the selected non-financial industries, and Panel D indicates that most deals were friendly (97.58%), while hostile takeovers represent only 2.42% of transactions. Finally, Panel E reveals that most transactions were accomplished with cash payment (93.75%), with a significantly smaller proportion being stock-for-stock deals (6.25%).

#### 3.2. Earnings Management Estimation

The first stage of the methodological approach is the estimation of earnings management level, which is achieved using Model (1) suggested by Dechow et al. (1995), which is still selected by classic and recent studies (Vasilescu & Millo, 2016; Christopoulos et al., 2023; Missonier-Piera & Spadetti, 2023; Tunyi et al., 2024; Afzali et al., 2024). This regression model (Equation (1)) is designed to isolate discretionary accruals from total accruals (Dokas et al., 2021). Specifically, Model (1) expresses total accruals as a function

of non-discretionary components. The residuals generated from this regression approach represent the discretionary accruals, which serve as the proxy for earnings management.

$$\frac{TA_{it}}{A_{it-1}} = a_1 \left( \frac{1}{A_{it-1}} \right) + a_2 \left( \frac{\Delta REV_{it} - \Delta REC_{it}}{A_{it-1}} \right) + a_3 \left( \frac{PPE_{it}}{A_{it-1}} \right) + \varepsilon_{it} \quad (1)$$

**Table 1.** Distribution of the sample.

Nation	Freq.	Percent	Cum.	Year	Freq.	Percent	Cum.
Panel A. Nations of target firms				Panel B. Announcement years of the M&As			
Austria	10	2.02	2.02	2006	31	6.25	6.25
Belgium	16	3.23	5.24	2007	42	8.47	14.72
Bulgaria	3	0.60	5.85	2008	34	6.85	21.57
Croatia	4	0.81	6.65	2009	27	5.44	27.02
Cyprus	5	1.01	7.66	2010	38	7.66	34.68
Czech Republic	6	1.21	8.87	2011	33	6.65	41.33
Denmark	19	3.83	12.70	2012	37	7.46	48.79
Finland	19	3.83	16.53	2013	34	6.85	55.65
France	43	8.67	25.20	2014	53	10.69	66.33
Germany	43	8.67	33.87	2015	37	7.46	73.79
Greece	20	4.03	37.90	2016	46	9.27	83.06
Hungary	2	0.40	38.31	2017	33	6.65	89.72
Iceland	2	0.40	38.71	2018	5	1.01	90.73
Ireland	11	2.22	40.93	2019	9	1.81	92.54
Italy	21	4.23	45.16	2020	3	0.60	93.15
Lithuania	2	0.40	45.56	2021	14	2.82	95.97
Luxembourg	4	0.81	46.37	2022	12	2.42	98.39
Malta	2	0.40	46.77	2023	8	1.61	100.00
Netherlands	20	4.03	50.81	Total	496	100.00	
Norway	22	4.44	55.24	Panel C. Industries of target firms			
Poland	36	7.26	62.50	Consumer Products	49	9.88	9.88
Portugal	6	1.21	63.71	Consumer Staples	46	9.27	19.15
Romania	2	0.40	64.11	Energy and Power	29	5.84	25.00
Russia	19	3.83	67.94	Healthcare	41	8.27	33.27
Slovenia	3	0.60	68.55	High Technology	72	14.52	47.78
Spain	17	3.43	71.98	Industrials	114	22.98	70.77
Sweden	30	6.05	78.02	Materials	61	12.30	83.06
Switzerland	24	4.84	82.86	Media and Entertainment	30	6.05	89.11
Turkey	16	3.23	86.09	Retail	38	7.66	96.77
United Kingdom	69	13.91	100.00	Telecommunications	16	3.23	100.00
Total	496	100.00		Total	496	100.00	
Panel D. Friendly and hostile M&As				Panel E. Stock-for-stock and cash M&As			
Friendly	484	97.58	97.58	Cash	465	93.75	93.75
Hostile	12	2.42	100.00	Stock-for-Stock	31	6.25	100.00
Total	496	100.00		Total	496	100.00	

We implement regression Model (1) cross-sectionally by industry and year. The industry classification employed in this analysis is based on the “macro-industry” categorization provided by Refinitiv Eikon’s M&A Screener. To ensure robustness, we require a minimum of seven observations in each industry-year and at least seven sequential firm-year observations for inclusion in the analysis. The dependent variable is total accruals ( $TA_{i,t}$ ), calculated as the earnings before extraordinary items, subtracting the cash flows from operations, as many researchers recently adopted (Gerged et al., 2023; Afzali et al., 2024; Gounopoulos et al., 2024). The independent variables, which are assumed as non-discretionary accruals,

are the difference between the change in the revenues ( $\Delta REV_{it}$ ) and the change in account receivables ( $\Delta REC_{it}$ ) and the gross property, plant, and equipment ( $PPE_{it}$ ). All terms are scaled by lagged total assets ( $A_{it-1}$ ) to mitigate potential issues of heteroscedasticity.

### 3.3. Logistic Regression Models and Variable Selection

The main research queries are investigated using a logistic regression approach. The following Equation (2) outlines the implemented baseline model, including the independent variables utilized in the analysis.

$$Deal\_withdraw_{i,t} = a_0 + a_1 * DACC_{i,t-1} + a_2 * CountryDifference_{i,t} + a_3 * Industry_{i,t} + a_4 * Seek_{i,t} + a_5 * Experience_{i,t} + a_6 * D\_size_{i,t} + a_7 * Stock_{i,t} + a_8 * Hostile_{i,t} + \epsilon_{i,t} \quad (2)$$

The dependent variable *Deal\_withdraw* is a dummy variable that equals 1 when the examined deal has been withdrawn after the deal's announcement; otherwise, in completed deals, the variable takes the value 0. The independent variable  $DACC_{i,t-1}$  represents the discretionary accruals of the examined target firms in the period preceding an M&A announcement generated as the residuals of regression Model (1). Discretionary accruals represent the portion of total accruals that managers can manipulate to achieve specific profitability objectives. These values may be positive, reflecting income-increasing practices, or negative, indicating income-decreasing strategies. In the context of M&As, the sign of discretionary accruals often arises from various deal-specific circumstances, such as differing negotiation dynamics or strategic considerations linked to the anticipated benefits of transaction completion. In this study, earnings management serves as a proxy for financial reporting quality, irrespective of whether the manipulations aim for income-increasing or income-decreasing outcomes. Following a strand of the literature (Christopoulos et al., 2023; Dokas, 2023), we use the absolute value of discretionary accruals as our proxy for earnings management. This approach abstracts from the direction of earnings management, focusing instead on its intensity, aligning with the study's objective to assess the broader implications of financial reporting quality on deal completion. Prior studies have captured the positive impact of earnings management on completion failure (Skaife & Wangerin, 2013; Marquardt & Zur, 2015; Martin & Shalev, 2017).

The independent variable  $CountryDifference_{i,t}$  represents one of the three alternative country-level differences between the nations where the acquirer and the target operate. Notably, the first alternative is the difference between the corruption levels of the involved nations. Corruption is measured by the Corruption Perceptions Index (CPI), published by Transparency International. This index value spans from 0 for highly corrupt countries to 100 for transparent countries. For this research, following Transparency International, a "corrupt" country presents a high prevalence of unethical practices, misuse of public power, and weak enforcement of anti-corruption laws. The variable *CORR\_dif* is calculated as the absolute value of the difference between the CPI of the acquirers and the target firms' nation. The second alternative variable, *CE\_dif*, represents the difference in the national legislation system's efficiency through the contract enforcement score, published by the "Doing Business" archive from the World Bank Group. This index considers the time, cost, and quality of judicial processes for resolving a commercial case in courts, taking values from 0 to 100 (100 represents the best performance). For this research, a "legally efficient country" is defined as one with a high contract enforcement score, indicating robust legal systems, effective dispute resolution mechanisms, and low contract enforcement costs. The third alternative dimension of the country-level difference is the geographic distance (*Distance*), measured in km between the country of the target firms and the acquirer's geographic position. Our prediction for the impact of these variables on the likelihood of withdrawal aligns with the prior literature, which indicated that country-level differences are associated



with higher levels of risk and additional complexities, increasing the possibilities of a deal withdrawal (Dikova et al., 2010; Zhou et al., 2016).

Model (2) also includes a set of other deal-related control variables. The variable  $Industry_{i,t}$  represents the level of industry relatedness between the target and acquirer in an M&A deal. It is assigned a value of 0 if the two participants are entirely unrelated in terms of industry, 1 if they operate within the same “macro-industry” category, and 2 if they belong to the same “mid-industry” category. The classifications of “macro-industry” and “mid-industry” are based on the sector categorization provided by the Refinitiv Eikon M&A Screener. These categories indicate a broader and more specific industry alignment between the involved firms. According to Lim and Lee (2016) and Neyland and Shekhar (2018), industry relatedness facilitates acquiring firms in assessing the real value of the target firms and the potential synergies since they are familiar with sector-specific conditions. The variable  $Seek_{i,t}$  is the percentage of shares that initially the acquirer seeks to acquire from the stockholders. The proportion of a target’s shareholdings pursued by an acquirer may impact stakeholders’ and regulators’ approval decisions (Lim & Lee, 2016).  $Experience_{i,t}$  is the number of times a target firm is involved in M&A procedures in the fifteen years preceding the examined deal. The literature has provided conflicting results on the impact of prior experience on completion failure. Studies such as Dikova et al. (2010) and Li et al. (2019) emphasize the significance of knowledge gained from past experiences, whereas research like Zhou et al. (2023) suggests that prior experience with withdrawn deals increases the likelihood of failure in future transactions. The deal size ( $D\_size$ ) is included in the model as the natural logarithm of the deal’s value. Larger deals are often associated with regulatory and negotiation complexities that can pose significant obstacles to the successful completion of an M&A (Ten Brug & Sahib, 2018; Attah-Boakye et al., 2021). Also, the model incorporates two more dummy variables: an indicator for the stock-for-stock deals ( $Stock_{i,t}$ ) and an indicator for hostile M&As ( $Hostile_{i,t}$ ). Attah-Boakye et al. (2021) argued that stock-swap deals entail greater risk, particularly when involving public firms, as their valuation is highly sensitive to stock price volatility. Furthermore, hostile takeovers are more likely to fail due to firms’ defensive strategies to resist such offers (Renneboog & Zhao, 2014; Ngo & Susnjara, 2016).

$$Deal\_withdraw_{i,t} = a_0 + a_1DACC_{i,t-1} + a_2CountryDifference_{i,t} + a_3CountryDifference_{i,t} * DACC_{i,t-1} + a_4Industry_{i,t} + a_5Seek_{i,t} + a_6Experience_{i,t} + a_7D\_size_{i,t} + a_8Stock_{i,t} + a_9Hostile_{i,t} + \varepsilon_{i,t} \quad (3)$$

In the second stage of the analysis, the research methodology extends Model (2) by incorporating interaction terms between discretionary accruals and three alternative country-level differences, resulting in Model (3). Keeping the same control variables, this approach allows for capturing the impact of earnings management under varying forms of information asymmetry between the two parties involved in the deal. Models (2) and (3) include country, year, and industry fixed effects, with robust standard errors applied to ensure the reliability of the results.

## 4. Results

### 4.1. Descriptive Statistics

Table 2 provides descriptive statistics for the variables used in the analysis based on a sample of 496 target firms involved in cross-border M&As. On average, target firms have total assets of EUR 6830 million, with significant variability and a wide range, from EUR 2.72 million to EUR 682,000 million. Revenue shows a similarly large variation, averaging EUR 5110 million, with a maximum value of EUR 548.2 billion. Net income before extraordinary items averages EUR 560 million but varies widely, with negative values indicating financial losses for some firms. On average, 77.26% of shares are sought

to be acquired, ranging from 6.33% to 100%. The target firms operate in countries with an average CPI of 70.54, compared to 76.10 for acquirer countries, resulting in a mean CPI difference of 15.88, ranging up to 71. Contract enforcement scores average 67.47 for target countries and 67.22 for acquirer countries, with an average difference of 8.44. The geographic distance between targets and acquirers averages 1516 km, with a maximum of 10,852 km. Earnings management, proxied by discretionary accruals, shows a mean signed value of  $-0.032$ , implying that target firms engage in income-decreasing policies in the period preceding the deal’s announcement.

**Table 2.** Descriptive statistics.

Variable	N	Mean	Std. Dev.	Min	Max
Total assets (million euros)	496	6830.000	38,400.000	2.723	682,000.000
Revenue (million euros)	496	5110.000	30,900.000	0.000	548,200
Net income before extraordinary items (million euros)	496	560.000	5230.000	-0.767	99,500.000
Shares seeking to acquire (%)	496	77.258	33.504	6.331	100.000
CPI (target)	496	70.537	18.190	21.000	96.000
CPI (acquirer)	496	76.102	13.855	21.000	97.000
CPI difference between target and acquirer	496	15.877	14.565	0.000	71.000
Contract enforcement (target)	496	67.471	7.521	48.100	81.300
Contract enforcement (acquirer)	496	67.219	7.707	41.200	84.000
Contract enforcement difference between target and acquirer	496	8.437	6.757	0.100	32.900
Distance between target and acquirer in kilometers	496	1515.997	1773.274	82.244	10,852.378
Absolute value of discretionary accruals (DACC, see Appendix A)	496	0.079	0.120	0.000	1.304

The analysis employs a propensity-score-matching approach to construct a control sample of domestic M&As, enabling a comparison of earnings management levels between domestic and cross-border deals. As shown in Panel A of Table 3, the propensity score matching uses firm size, return on assets, and leverage ratio as variables to create comparable groups. The results indicate no significant differences in the means and medians of these variables across the two groups, as the *t*-test and Wilcoxon test fail to reject the null hypothesis of equality. Regarding discretionary accruals, the mean for target firms in cross-border deals is slightly higher than that of domestic deals; however, this difference is not statistically significant. Similarly, the difference in medians and the results of the non-parametric Wilcoxon test also fail to show significance.

**Table 3.** Differences in the level of earnings management.

Panel A. <i>t</i> -Test and Wilcoxon test for discretionary accruals for target firms of domestic and cross-border M&As										
Variables	Domestic (N = 496)		Cross-border (N = 496)		Dif	St Err	<i>t</i> -test		Wilcoxon	
	Mean	Median	Mean	Median			<i>t</i> -value	<i>p</i> -value	z-value	<i>p</i> -value
Firm size	20.195	20.102	20.239	20.136	-0.044	0.117	-0.400	0.707	-0.383	0.702
Return on assets	0.019	0.027	0.018	0.028	0.003	0.006	0.400	0.687	-0.164	0.870
Leverage ratio	0.237	0.216	0.242	0.220	-0.005	0.011	-0.450	0.646	-0.504	0.614
Absolute value of discretionary accruals (DACC, see Appendix A)	0.072	0.047	0.094	0.046	-0.022	0.024	-0.950	0.350	-0.055	0.956

**Table 3.** *Cont.*

Panel B. <i>t</i> -Test and Wilcoxon test for discretionary accruals when target firms operate in a more corrupt country than acquirers										
Variables	Target < Acquirer Corruption (N = 142)		Target > Acquirer Corruption (N = 142)		Dif	St Err	<i>t</i> -test		Wilcoxon	
	Mean	Median	Mean	Median			<i>t</i> -value	<i>p</i> -value	z-value	<i>p</i> -value
Firm size	20.287	20.170	20.242	20.145	0.045	0.206	0.200	0.827	0.235	0.814
Return on assets	0.023	0.032	0.033	0.038	−0.011	0.008	−1.300	0.202	−1.295	0.196
Leverage ratio	0.230	0.227	0.226	0.216	0.004	0.018	0.200	0.846	0.195	0.846
Absolute value of discretionary accruals (DACC, see Appendix A)	0.056	0.042	0.058	0.044	−0.002	0.007	−0.250	0.794	−0.759	0.449

  

Panel C. <i>t</i> -Test and Wilcoxon test for discretionary accruals when target firms operate in a country with a lower index of contract enforcement										
Variables	Target < Acquirer (N = 147)		Target > Acquirer (N = 147)		Dif	St Err	<i>t</i> -test		Wilcoxon	
	Mean	Median	Mean	Median			<i>t</i> -value	<i>p</i> -value	z-value	<i>p</i> -value
Firm size	20.21	20.200	20.192	20.150	0.018	0.201	0.100	0.928	0.098	0.922
Return on assets	0.035	0.037	0.030	0.036	0.005	0.007	0.600	0.543	0.201	0.840
Leverage ratio	0.225	0.209	0.229	0.218	−0.004	0.019	−0.200	0.837	−0.156	0.876
Absolute value of discretionary accruals (DACC, see Appendix A)	0.070	0.054	0.059	0.038	0.011	0.008	1.350	0.179	2.389	0.017

Note: Panel A compares the level of earnings management for target firms involved in domestic M&As to those involved in cross-border M&As. Panel B examines the difference in earnings management among target firms in cross-border M&As when the target operates in a more corrupt country compared to the acquirer versus when it operates in a less corrupt country. Panel C investigates the difference in earnings management among target firms in cross-border M&As when the target operates in a country with a lower contract enforcement index compared to the acquirer versus when it operates in a country with a higher contract enforcement index. In all three cases, the groups were constructed using a propensity-score-matching approach to ensure comparability by aligning the means of firm size, return on assets, and leverage ratio across the groups.

Using the propensity-score-matching approach, Panel B examines earnings management differences when the target firm operates in a more corrupt country compared to the acquirer versus when it operates in a less corrupt country. The findings reveal no statistically significant differences in discretionary accruals between the two groups in both tests. Panel C investigates differences in earnings management based on contract enforcement indices, comparing cases where target firms operate in countries with weaker versus stronger contract enforcement than the acquirer. In this case, the results show no significant differences for most variables, except for discretionary accruals, where the Wilcoxon test indicates a statistically significant difference, highlighting the role of contract enforcement in shaping earnings management practices.

In Appendix A (Table A2), we present the results of the normality test (Shapiro–Wilk), which indicate that the variable of the absolute value of discretionary accruals (DACC) is not normally distributed ( $p < 0.05$ ). Despite this, we report both the parametric *t*-test and the non-parametric Wilcoxon rank-sum test in our analysis. The inclusion of both tests serves to provide a robust evaluation of the data, with the Wilcoxon test addressing the violation of normality assumptions and the *t*-test included as a supplementary method, in line with prior research (Ben-Amar & Missonier-Piera, 2008; Gong et al., 2008; Anagnostopoulou & Tsekrekos, 2015).

#### 4.2. Pairwise Correlation

The correlation matrix (Table 4) highlights key relationships between the included variables in Model (2). Notably, the discretionary accruals (DACC) are positively related (0.025) to Deal\_withdraw but not at an accepted significance level. This positive effect indicates that the accounting manipulations of target firms may impede the completion of a deal. Moreover, no significant association is observed between the deal withdrawal and

the country-level differences. In essence, the difference in corruption level (CORR\_dif) and the geographic distance (Distance) are both positively related to Deal\_withdraw, while the coefficient of the law-efficiency index (CE\_dif) is positive. These results cannot demonstrate some secure insights for the analysis since the coefficients of the key independent variables are statistically weak. The remaining variables representing deal characteristics exhibit positive and statistically significant relationships with Deal\_withdraw, indicating that these factors play a meaningful role in increasing the likelihood of deal withdrawal. In other words, variables such as Hostile, Stock, Seek, and D\_size suggest that deal-specific dynamics, such as financing methods, takeover type, and firm size, significantly influence M&A outcomes.

**Table 4.** Correlation matrix.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Deal_withdraw	1.000										
(2) DACC	0.025	1.000									
(3) CORR_dif	−0.055	−0.023	1.000								
(4) CE_dif	0.011	0.149 *	0.187 *	1.000							
(5) Distance	−0.060	−0.006	0.161 *	0.121 *	1.000						
(6) Industry	0.148 *	0.021	0.039	−0.027	−0.027	1.000					
(7) Seek	0.166 *	−0.020	−0.135 *	−0.041	−0.055	0.220 *	1.000				
(8) Experience	0.146 *	−0.096 *	0.008	0.060	0.065	0.044	−0.039	1.000			
(9) D_size	0.191 *	−0.153 *	−0.105 *	−0.026	0.062	0.204 *	0.278 *	0.283 *	1.000		
(10) Stock	0.224 *	−0.015	−0.070	0.011	−0.042	0.166 *	0.130 *	0.085	0.207 *	1.000	
(11) Hostile	0.358 *	−0.032	−0.084	−0.051	−0.017	0.078	0.086	0.150 *	0.234 *	0.068	1.000

Note: Asterisks (\*) indicate statistical significance at the 5% level or lower. Appendix A provides detailed definitions and descriptions of all employed variables.

Another reason for including the correlation matrix is to assess potential multicollinearity issues. All of the correlation coefficients are within the commonly accepted threshold of 0.8, indicating that the proposed Model (2) does not suffer from significant multicollinearity problems that could compromise its stability or the reliability of its estimates.

#### 4.3. Logistic Regression Analysis

Table 5 presents the logistic regression results derived from the implementation of Model (2). Column (1) reports the baseline results of Model (2), excluding the effects of the three country-level differences. Columns (2) to (4) individually examine the impact of the key country-level difference variables: corruption differences (Column (2)), contract enforcement differences (Column (3)), and geographic distance (Column (4)). Finally, Column (5) simultaneously incorporates all three country-level difference variables to evaluate their combined influence on M&A deal withdrawal. This finding underlines the crucial role of earnings management as a determinant of deal completion, aligning with previous research (Skaife & Wangerin, 2013; Marquardt & Zur, 2015; Martin & Shalev, 2017), which highlights acquirers’ ability to detect accrual-based earnings management during the evaluation of target firms. This insight supports the study’s objective (RQ1) of demonstrating that financial reporting quality is a major factor in acquirers’ decision making, even under higher information asymmetry of cross-border transactions. By identifying low-quality financial reporting, acquirers mitigate potential risks, often leading to the termination of announced deals.

**Table 5.** Baseline logistic regression model results (Equation (2)).

Dependent Variable: Deal_withdraw	No Country-Level Difference	Corruption Difference	Difference in Contract Enforcement	Geographic Distance	Combined Country-Level Differences
	(1)	(2)	(3)	(4)	(5)
DACC	2.332 ** (1.039)	2.482 ** (1.087)	2.571 ** (1.156)	2.798 *** (1.068)	2.950 ** (1.222)
CORR_dif		−0.014 (0.017)			−0.006 (0.018)
CE_dif			−0.020 (0.047)		−0.010 (0.048)
Distance				−0.004 * (0.002)	−0.003 * (0.002)
Industry	0.058 (0.256)	0.076 (0.259)	0.057 (0.256)	0.075 (0.261)	0.081 (0.261)
Seek	2.041 ** (1.006)	2.019 ** (1.003)	2.032 ** (0.997)	1.973 ** (0.982)	1.969 ** (0.978)
Experience	0.206 *** (0.075)	0.209 *** (0.080)	0.209 *** (0.076)	0.204 ** (0.080)	0.207 ** (0.083)
D_size	0.198 (0.149)	0.207 (0.151)	0.193 (0.150)	0.237 (0.149)	0.237 (0.15)
Stock	2.037 *** (0.663)	1.981 *** (0.660)	2.053 *** (0.678)	2.157 *** (0.670)	2.143 *** (0.682)
Hostile	32.907 *** (1.476)	30.921 *** (1.466)	30.440 *** (1.480)	33.996 *** (1.696)	33.464 *** (1.688)
_cons	−14.425 *** (5.260)	−14.213 *** (5.213)	−14.439 *** (5.237)	−13.997 *** (4.962)	−13.977 *** (4.955)
Observations	496	496	496	496	496
Pseudo R <sup>2</sup>	0.411	0.413	0.412	0.423	0.423

Note: The table presents the results of the logistic regression analyses described in Equation (2). The dependent variable equals 1 for withdrawn M&As and 0 for completed deals. Column (1) reports the results of the model specified in Equation (2), which includes a set of deal-related independent variables, while maintaining the same control variables used in Column (1). Specifically, Column (2) examines the effect of differences in corruption levels, Column (3) the difference in the contract enforcement index, Column (4) the geographic distance, and Column (5) a combination of the aforementioned country-level difference variables. All models include year, industry, and country fixed effects, and robust standard errors are reported in parentheses. Significance at 10%, 5%, and 1% is denoted by \*, \*\*, \*\*\*, respectively. Appendix A provides detailed definitions and descriptions of all employed variables.

Among the three alternative country-level differences, corruption differences (CORR\_dif) and contract enforcement differences (CE\_dif) show adverse but statistically insignificant effects, suggesting that these factors may not play a critical role in determining deal withdrawal. This result provides partial insight into the research query discussing whether institutional differences between target and acquirer countries affect M&A outcomes. While these institutional factors do not directly influence the likelihood of deal withdrawal, their relevance becomes evident when investigated with earnings management, as addressed in subsequent analyses. This approach is in line with the study's primary objective of investigating the moderating role of institutional differences in shaping the relationship between financial reporting quality and deal outcomes. These findings also corroborate prior literature, such as Lawrence et al. (2021), which found no direct effect of institutional and cultural differences on M&A completion. Geographic distance exhibits a negative but weak significant ( $p$ -value < 10%) effect in Model (4) and the combined Model (5), implying that greater physical distance slightly decreases the likelihood of withdrawal, reflecting more substantial incentives to complete cross-border transactions despite the challenges by which they are accompanied.

The aforementioned findings can be attributed to the moderating effect of M&A advisors on mitigating information asymmetry. Advisors, particularly in large firms, facilitate



deal integration by collecting and processing the required information, thus supporting acquirers in overcoming the challenges posed by cross-border transactions (Lawrence et al., 2021; Kumar et al., 2023; Jandik et al., 2024). These insights contribute to understanding how acquirers leverage mechanisms like advisory services to preserve an efficient target firm valuation process, even under complex institutional and geographic conditions.

Regarding the control variables, the payment method (Stock) and a hostile nature of the deal (Hostile) are reported as significant predictors of withdrawal. Consistent with Attah-Boakye et al. (2021), stock-for-stock deals show a robust positive association with deal failure, as reflected by significant coefficients across all models, highlighting the risks associated with stock price volatility in such transactions. Hostile takeovers exhibit exceptionally high positive coefficients and are highly significant in all models, confirming the role of hostile takeover resistance from target firms, supported by Renneboog and Zhao (2014) and Ngo and Susnjara (2016). Acquirer experience (Experience) exhibits a consistent and significant positive effect, indicating that experienced acquirers are more skilled at identifying and avoiding non-viable deals or those offering limited benefits (Lim & Lee, 2016; Loyeung, 2019). On the contrary, industry relatedness (Industry) and deal size (D\_size) have positive but not statistically significant coefficients, indicating a weaker relationship with deal outcomes. The percentage of shares sought (Seek) is significant across all models, showing that deals involving larger stakes are more likely to face withdrawal, possibly due to additional complexities and regulatory or stakeholder pressures (Lim & Lee, 2016).

Table 6 presents the results from implementing Model (3), which incorporates interaction terms between discretionary accruals (DACC) and three alternative country-level differences. The analysis is conducted on the full sample and subsamples where the target firm operates in a more corrupt country with lower legal efficiency than the acquirer’s nation. These findings directly address research queries 4, 5, and 6 regarding whether institutional differences between target and acquirer countries moderate the relationship between earnings management and M&A outcomes. For corruption differences, the interaction term (CORR\_dif \* DACC) is positive and highly significant ( $p$ -value < 1%) when the target operates in a more corrupt country than the acquirer (Column (2)). This result supports the hypothesis that heightened corruption levels intensify acquirers’ mistrust in financial reporting quality, increasing the likelihood of deal withdrawal. It underscores the critical role of institutional disparities in amplifying the risks associated with earnings management, aligning with the study’s objective of exploring the interplay between financial reporting quality and corruption differences (RQ2). The results regarding the total sample follow the same direction but without presenting an accepted significance level.

**Table 6.** Logistic regression results (Equation (3)).

Dependent Variable: Deal_withdraw	Corruption Difference		Difference in Contract Enforcement		Geographic Distance
	Full Sample	Target Higher Corruption Than the Acquirer	Full Sample	Target Lower Contract Enforcement Index Than the Acquirer	
	(1)	(2)	(3)	(4)	
DACC	0.093 (1.891)	−10.924 (9.422)	−0.708 (2.424)	−70.794 *** (23.437)	−0.089 (2.075)
CORR_dif	−0.027 (0.017)	−0.0150 *** (0.051)			
CORR_dif × DACC	0.125 (0.080)	1.118 *** (0.403)			
CE_dif			−0.045 (0.055)	−0.496 ** (0.250)	

Table 6. Cont.

Dependent Variable: Deal_withdraw	Corruption Difference		Difference in Contract Enforcement		Geographic Distance
	Full Sample	Target Higher Corruption Than the Acquirer	Full Sample	Target Lower Contract Enforcement Index Than the Acquirer	
	(1)	(2)	(3)	(4)	
CE_dif × DACC			0.170 (0.116)	4.587 *** (1.658)	
Distance					−0.005 ** (0.002)
Distance × DACC					0.015 * (0.009)
Industry	0.071 (0.255)	−0.724 (0.637)	0.044 (0.251)	−1.301 * (0.754)	0.063 (0.257)
Seek	2.114 ** (1.051)	3.990 * (2.066)	2.085 ** (1.049)	5.652 *** (2.168)	2.038 ** (1.014)
Experience	0.204 *** (0.077)	0.299 ** (0.131)	0.210 *** (0.073)	0.762 *** (0.213)	0.199 *** (0.076)
D_size	0.213 (0.151)	0.465 (0.538)	0.179 (0.153)	1.122 *** (0.399)	0.237 (0.149)
Stock	2.062 *** (0.659)	10.073 *** (2.698)	2.148 *** (0.675)	15.629 *** (3.841)	2.284 *** (0.672)
Hostile	32.453 *** (1.563)	37.136 *** (3.198)	31.042 *** (1.519)		32.673 *** (1.713)
_cons	−14.822 *** (5.526)	−10.862 (8.197)	−14.516 *** (5.511)	−46.283 *** (15.501)	−14.434 *** (5.176)
Observations	496	277	496	254	496
Pseudo R <sup>2</sup>	0.418	0.607	0.416	0.602	0.428

Note: The table presents the results of logistic regression analyses as specified in Equation (3). The dependent variable is binary, taking 1 for withdrawn M&As and 0 for completed deals. Columns (1) and (2) report the model's results, incorporating the interaction term between discretionary accruals and the difference in corruption. Column (1) uses the entire sample, while Column (2) focuses on cases where target firms operate in more corrupt countries than the acquirers. Columns (3) and (4) present the model results with the interaction term between discretionary accruals and the difference in contract enforcement. Column (3) uses the entire sample, while Column (4) examines cases where target firms operate in countries with lower contract enforcement scores than the acquirers. Column (5) reports the model results incorporating the interaction term between discretionary accruals and the geographic distance between the targets' and acquirers' countries. All models include year, industry, and country fixed effects, with robust standard errors reported in parentheses. Statistical significance is denoted by \*, \*\*, and \*\*\*, corresponding to the 10%, 5%, and 1% levels, respectively. Appendix A provides detailed definitions and descriptions of all employed variables.

A similar pattern is observed for contract enforcement differences, where the interaction term (CE\_dif × DACC) becomes highly significant when the target operates in a country with weaker contract enforcement than the acquirer (Column (4)). This finding emphasizes that lower institutional quality in the target country exacerbates the acquirer's sensitivity to financial manipulation, reinforcing the importance of robust legal systems in mitigating M&A risks. This insight facilitates the understanding of how institutional asymmetries condition the impact of earnings management on deal withdrawal, which constitutes another significant research objective (RQ3). For geographic distance, the interaction term (Distance × DACC) is significant at 10% (Column (5)), indicating a weak amplifying effect of earnings management on deal withdrawal risk in geographically distant deals. This result suggests that geographic separation may exacerbate information asymmetry concerns, particularly when combined with earnings manipulation. Such findings highlight the strategic importance of due diligence processes in geographically distant M&As, where physical distance may pose additional challenges to obtaining reliable financial information (RQ4). The findings underscore that earnings management practices are more likely to result in deal failure when combined with corruption disparities or weaker contract enforcement in the target country. These results are in line with the study's broader

objective of examining how institutional asymmetries influence acquirers’ sensitivity to financial reporting quality in cross-border M&As. Moreover, the amplified effects observed in these subsamples suggest that addressing information asymmetry through strict due diligence and transparency mechanisms is essential for mitigating the risks associated with cross-border transactions.

Regarding control variables, stock-for-stock deals and hostile takeovers consistently show a significant positive impact on the likelihood of deal withdrawal across all model implementations, with the effects being particularly pronounced in cases with higher corruption or weaker contract enforcement. Acquirer experience (Experience) and the percentage of shares sought (Seek) also remain significant, supporting their prominence in explaining deal outcomes. Compared to the baseline model without interaction terms, including country-level differences and their interactions with DACC, it offers additional explanatory power, as reflected in the higher pseudo-R-squared values for the subset models. This underscores the importance of considering institutional and geographic factors when examining the relationship between earnings management and M&A outcomes.

Table 7 presents some key metrics for the assessment of the classification accuracy of Models (2) (Table 5) and (3) (Table 6). The accuracy metrics underline the improved predictive performance of the logistic regression models when interaction terms and subsample analyses are included. Type I errors remain low across all models. The metric of Table 6 demonstrates a notable reduction in Type II errors, particularly in subsamples where institutional asymmetries are considered. The high level of Type II errors constitutes a common characteristic in completion failure studies that employ logistic regression approaches, attributed to the use of an imbalanced sample (Lee et al., 2020). Correct classification rates are consistently high in both tables, presenting an improvement in the model of Table 6 using the subsample. F1-score is at a moderate level, which is significantly enhanced in the cases of using interaction terms (Table 6) and especially in the implementation in the smaller subsample. Additionally, the area under the ROC curve (AUC) values is consistently high, with Table 6 reaching the highest performance in subsample analyses, reaching 96.18%. These results highlight the importance of incorporating country-level differences and interaction terms to better capture the dynamics influencing M&A deal withdrawal, especially in cross-border contexts.

**Table 7.** Classification accuracy metrics.

Metrics	Table 5					Table 6				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Type I error	1.85%	1.85%	1.54%	1.85%	2.15%	2.15%	1.33%	1.54%	2.83%	2.15%
Type II error	56.36%	54.55%	54.55%	56.36%	54.55%	52.73%	37.93%	54.55%	23.81%	54.55%
Correctly classified	90.26%	90.53%	90.79%	90.26%	90.26%	90.53%	92.74%	90.79%	93.70%	90.26%
F1-score	56.50%	58.00%	58.90%	56.50%	57.20%	59.20%	73.70%	58.80%	80.00%	57.50%
AUC	90.87%	90.97%	90.77%	91.10%	91.05%	90.93%	95.93%	90.76	96.18%	91.20%

Note: This table presents the accuracy metrics for the logistic regression models reported in Tables 5 and 6. The metrics include: Type I and II errors, the portion of correctly classified observations, F1-score and the area under the ROC-curve (AUC).

#### 4.4. Robustness Tests

To further assess the reliability of our results, we replicate Models (2) and (3) using alternative measurements for the key independent variables. First, we replace the level of discretionary accruals with two alternative proxies generated by the model proposed by Kothari et al. (2005) (DACC\_roa) and the non-linear approach suggested by Ball and Shivakumar (2006) (DACC\_NL). The Kothari et al. model constitutes a version of the Dechow et al. (1995) model that includes return on assets as an additional independent

variable to control for the profitability of the examined entities (Tables 8 and 9). The second proxy, proposed by Ball and Shivakumar (2006), modifies the classic Jones (1991) model to incorporate asymmetry in gain and loss recognition. It includes additional independent variables: the difference in cash flows from operations as a proxy for gains and losses, a dummy variable indicating fiscal years with negative cash flow differences, and an interaction term between these two variables (Tables 10 and 11).

**Table 8.** Robustness test of the baseline model (Equation (2)) estimating discretionary accruals with Kothari et al. (2005) model.

Dependent Variable: Deal_withdraw	No Country-Level Difference	Corruption Difference	Difference in Contract Enforcement	Geographic Distance	Combined Country-Level Differences
	(1)	(2)	(3)	(4)	(5)
DACC_roa	2.801 ** (1.161)	2.605 ** (1.150)	2.765 ** (1.202)	3.322 *** (1.206)	3.063 *** (1.157)
CONTR_CORR_dif		0.273 (0.432)			1.548 (1.614)
RULE_dif			0.062 (0.460)		−1.353 (1.921)
Distance				−0.004 * (0.002)	−0.005 ** (0.002)
Industry	0.062 (0.258)	0.063 (0.259)	0.063 (0.259)	0.078 (0.264)	0.034 (0.27)
Seek	2.051 ** (1.018)	2.096 ** (1.064)	2.054 ** (1.012)	1.986 ** (1.002)	2.120 * (1.209)
Experience	0.208 *** (0.076)	0.204 *** (0.072)	0.207 *** (0.076)	0.207 ** (0.082)	0.195 *** (0.071)
D_size	0.206 (0.150)	0.202 (0.150)	0.205 (0.152)	0.247 * (0.147)	0.259 * (0.152)
Stock	2.025 *** (0.664)	2.067 *** (0.669)	2.027 *** (0.665)	2.142 *** (0.672)	2.372 *** (0.703)
Hostile	30.846 *** (1.460)	32.915 *** (1.466)	30.39 *** (1.468)	33.470 *** (1.709)	34.351 *** (1.729)
_cons	−14.617 *** (5.355)	−14.900 *** (5.617)	−14.667 *** (5.258)	−14.235 *** (5.090)	−14.933 *** (6.111)
Observations	496	496	496	496	496
Pseudo R <sup>2</sup>	0.414	0.415	0.414	0.426	0.432

Note: The table presents the results of the logistic regression analyses described in Equations (2) and (3), using discretionary accruals generated by the Kothari et al. (2005) model. The dependent variable equals 1 for withdrawn M&As and 0 for completed deals. Column (1) reports the results of the model specified in Equation (2), which includes a set of deal-related independent variables, while maintaining the same control variables used in Column (1). Specifically, Column (2) examines the effect of the difference in control of corruption levels, Column (3) the difference in the rule of law index, Column (4) the geographic distance, and Column (5) a combination of the aforementioned country-level difference variables. All models include year, industry, and country fixed effects, and robust standard errors are reported in parentheses. Significance at 10%, 5%, and 1% is denoted by \*, \*\*, \*\*\*, respectively. Appendix A provides detailed definitions and descriptions of all employed variables.

**Table 9.** Robustness test with interactions (Equation (3)) estimating discretionary accruals with Kothari et al. (2005) model.

Dependent Variable: Deal_withdraw	Corruption Difference		Difference in Contract Enforcement		Geographic Distance
	Full Sample	Target Higher Corruption Than the Acquirer	Full Sample	Target Lower Contract Enforcement Index Than the Acquirer	
	(1)	(2)	(3)	(4)	
DACC_roa	0.118 (2.269)	−14.937 (9.866)	−0.229 (2.311)	−0.461 (6.179)	−0.379 (2.115)
CONTR_CORR_dif	−0.048 (0.474)	−0.143 ** (0.056)			

Table 9. Cont.

Dependent Variable: Deal_withdraw	Corruption Difference		Difference in Contract Enforcement		Geographic Distance
	Full Sample	Target Higher Corruption Than the Acquirer	Full Sample	Target Lower Contract Enforcement Index Than the Acquirer	
	(1)	(2)	(3)	(4)	
CONTR_CORR_dif × DACC	2.252 (1.599)	1.081 ** (0.458)			
RULE_dif			−0.378 (0.542)	0.580 (1.330)	
RULE_dif × DACC			3.861 (2.533)	5.103 (6.650)	
Distance					−0.006 *** (0.002)
Distance × DACC					0.021 ** (0.010)
Industry	0.074 (0.252)	−0.636 (0.628)	0.059 (0.253)	0.249 (0.655)	0.065 (0.259)
Seek	2.189 * (1.150)	3.841 * (2.042)	2.152 * (1.113)	2.999 (1.886)	2.076 ** (1.048)
Experience	0.200 *** (0.07)	0.275 ** (0.125)	0.201 *** (0.072)	0.123 (0.105)	0.201 *** (0.076)
D_size	0.209 (0.151)	0.424 (0.521)	0.212 (0.153)	0.291 (0.388)	0.256 * (0.148)
Stock	2.145 *** (0.671)	9.273 *** (2.514)	2.120 *** (0.663)	3.112 ** (1.283)	2.321 *** (0.677)
Hostile	30.871 *** (1.471)	36.167 *** (2.355)	31.447 *** (1.535)		33.22 *** (1.765)
_cons	−15.348 ** (6.067)	−10.429 (8.487)	−15.264 *** (5.836)	−19.625 ** (9.691)	−14.911 *** (5.410)
Observations	496	288	496	286	496
Pseudo R <sup>2</sup>	0.420	0.603	0.420	0.439	0.435

Note: The table presents the results of logistic regression analyses as specified in Equation (3). The dependent variable is binary, taking 1 for withdrawn M&As and 0 for completed deals. Columns (1) and (2) report the model’s results, incorporating the interaction term between discretionary accruals and the difference in corruption. Column (1) uses the entire sample, while Column (2) focuses on cases where target firms operate in more corrupt countries than the acquirers. Columns (3) and (4) present the model results with the interaction term between discretionary accruals and the difference in contract enforcement. Column (3) uses the entire sample, while Column (4) examines cases where target firms operate in countries with lower contract enforcement scores than the acquirers. Column (5) reports the model results incorporating the interaction term between discretionary accruals and the geographic distance between the target and acquirer countries. All models include year, industry, and country fixed effects, with robust standard errors reported in parentheses. Statistical significance is denoted by \*, \*\*, and \*\*\*, corresponding to the 10%, 5%, and 1% levels, respectively. Appendix A provides detailed definitions and descriptions of all employed variables.

Table 10. Robustness test of baseline model (Equation (2)) estimating discretionary accruals with Ball and Shivakumar (2006) model.

Dependent Variable: Deal_withdraw	No Country-Level Difference	Corruption Difference	Difference in Contract Enforcement	Geographic Distance	Combined Country-Level Differences
	(1)	(2)	(3)	(4)	(5)
DACC_NL	2.792 ** (1.27)	2.575 ** (1.271)	2.765 ** (1.352)	3.315 *** (1.257)	3.008 ** (1.279)
CONTR_CORR_dif		0.247 (0.429)			1.499 (1.603)
RULE_dif			0.039 (0.453)		−1.359 (1.884)



Table 10. Cont.

Dependent Variable: Deal_withdraw	No Country-Level Difference	Corruption Difference	Difference in Contract Enforcement	Geographic Distance	Combined Country-Level Differences
	(1)	(2)	(3)	(4)	(5)
Distance				−0.004 * (0.002)	−0.004 ** (0.002)
Industry	0.085 (0.258)	0.083 (0.258)	0.085 (0.259)	0.106 (0.265)	0.057 (0.269)
Seek	2.121 ** (1.074)	2.17 * (1.124)	2.125 ** (1.062)	2.065 ** (1.032)	2.187 * (1.213)
Experience	0.206 *** (0.073)	0.202 *** (0.070)	0.205 *** (0.073)	0.205 *** (0.078)	0.194 *** (0.069)
D_size	0.213 (0.148)	0.209 (0.148)	0.212 (0.149)	0.255 * (0.143)	0.264 * (0.147)
Stock	2.005 *** (0.652)	2.039 *** (0.656)	2.005 *** (0.653)	2.122 *** (0.658)	2.333 *** (0.682)
Hostile	32.869 *** (1.467)	32.916 *** (1.465)	30.894 *** (1.455)	32.273 *** (1.723)	31.059 *** (1.733)
_cons	−15.167 *** (5.725)	−15.442 ** (6.014)	−15.205 *** (5.616)	−14.82 *** (5.276)	−15.421 ** (6.18)
Observations	496	496	496	496	496
Pseudo R <sup>2</sup>	0.413	0.414	0.413	0.425	0.431

Note: The table presents the results of the logistic regression analyses described in Equations (2) and (3), using discretionary accruals generated by the non-linear model proposed by Ball and Shivakumar (2006). The dependent variable equals 1 for withdrawn M&As and 0 for completed deals. Column (1) reports the results of the model specified in Equation (2), which includes a set of deal-related independent variables, while maintaining the same control variables used in Column (1). Specifically, Column (2) examines the effect of the difference in control of corruption levels, Column (3) the difference in the rule of law index, Column (4) the geographic distance, and Column (5) a combination of the aforementioned country-level difference variables. All models include year, industry, and country fixed effects, and robust standard errors are reported in parentheses. Significance at 10%, 5%, and 1% is denoted by \*, \*\*, \*\*\*, respectively. Appendix A provides detailed definitions and descriptions of all employed variables.

Table 11. Robustness test with interactions (Equation (3)) estimating discretionary accruals with Ball and Shivakumar (2006) model.

Dependent Variable: Deal_withdraw	Corruption Difference		Difference in Contract Enforcement		Geographic Distance
	Full Sample	Target Higher Corruption Than the Acquirer	Full Sample	Target Lower Contract Enforcement Index Than the Acquirer	
		(2)		(4)	
	(1)	(2)	(3)	(4)	(5)
DACC_NL	0.998 (2.080)	−15.283 (17.325)	1.984 (1.623)	0.778 (9.575)	−1.052 (2.581)
CONTR_CORR_dif	0.074 (0.468)	−0.178 ** (0.089)			
CONTR_CORR_dif × DACC_NL	1.182 (1.137)	2.204 * (1.282)			
RULE_dif			−0.100 (0.528)	1.531 (1.762)	
RULE_dif × DACC_NL			0.887 (1.249)	−7.106 (15.489)	
Distance					−0.006 *** (0.002)
Distance × DACC_NL					0.021 ** (0.010)
Industry	0.070 (0.256)	−0.417 (0.618)	0.074 (0.259)	0.246 (0.648)	0.064 (0.260)

Table 11. Cont.

Dependent Variable: Deal_withdraw	Corruption Difference		Difference in Contract Enforcement		Geographic Distance
	Full Sample	Target Higher Corruption Than the Acquirer	Full Sample	Target Lower Contract Enforcement Index Than the Acquirer	
	(1)	(2)	(3)	(4)	
Seek	2.274 * (1.185)	4.351 * (2.378)	2.199 * (1.139)	3.300 * (1.780)	2.062 * (1.053)
Experience	0.199 *** (0.07)	0.317 * (0.174)	0.203 *** (0.073)	0.142 (0.114)	0.197 *** (0.075)
D_size	0.211 (0.148)	0.290 (0.419)	0.216 (0.151)	0.223 (0.411)	0.248 * (0.146)
Stock	2.099 *** (0.660)	7.669 *** (2.478)	2.034 *** (0.652)	3.444 *** (1.322)	2.357 *** (0.680)
Hostile	30.857 *** (1.446)	45.106 *** (7.577)	30.412 *** (1.453)		33.788 *** (1.735)
_cons	−15.758 ** (6.298)	−11.29 (8.211)	−15.491 *** (5.970)	−21.246 ** (9.111)	−15.002 *** (5.533)
Observations	496	288	496	286	496
Pseudo R <sup>2</sup>	0.416	0.630	0.414	0.438	0.433

Note: The table presents the results of logistic regression analyses as specified in Equation (3), using discretionary accruals generated by the non-linear model proposed by Ball and Shivakumar (2006). The dependent variable is binary, taking 1 for withdrawn M&As and 0 for completed deals. Columns (1) and (2) report the model’s results, incorporating the interaction term between discretionary accruals and the difference in corruption. Column (1) uses the entire sample, while Column (2) focuses on cases where target firms operate in more corrupt countries than the acquirers. Columns (3) and (4) present the model results with the interaction term between discretionary accruals and the difference in contract enforcement. Column (3) uses the entire sample, while Column (4) examines cases where target firms operate in countries with lower contract enforcement scores than the acquirers. Column (5) reports the model results incorporating the interaction term between discretionary accruals and the geographic distance between the target and acquirer countries. All models include year, industry, and country fixed effects, with robust standard errors reported in parentheses. Statistical significance is denoted by \*, \*\*, and \*\*\*, corresponding to the 10%, 5%, and 1% levels, respectively. Appendix A provides detailed definitions and descriptions of all employed variables.

In addition to these alternative earnings management proxies, we replace the corruption difference variable using the “control of corruption” index published by the World Bank. Similarly, the difference in contract enforcement is substituted with the “rule of law” index, also provided by the World Bank. Both indexes range from −2.5 for highly corrupt countries with inefficient legal systems to +2.5 for fully transparent countries with robust legal systems.

The results of Table 8, using discretionary accruals generated by the Kothari et al. (2005) model, are consistent with those in Table 5, confirming the robustness of the findings. Discretionary accruals (DACC) remain a significant predictor of deal withdrawal across all models. Country-level differences, including corruption and rule of law, show similar patterns of insignificance, while geographic distance retains its slight but weakly significant ( $p$ -value < 10%) negative effect, consistent with Table 5. Control variables such as stock-for-stock deals and hostile deals remain strong and significant predictors, while deal size becomes marginally significant in the new table.

After applying the robustness test on Model (3), the results mostly align with those in Table 6, confirming the consistency of findings. The direct effect of discretionary accruals (DACC\_roa) remains insignificant, as in Table 6. Interaction terms with corruption (CONTR\_CORR\_dif × DACC) and rule of law (RULE\_dif × DACC) differences are positive but insignificant when using the total sample, similar to Table 6. However, the interaction term with geographic distance (Distance × DACC) becomes more significant ( $p$ -value < 5%) compared to Table 6, where it was marginally significant ( $p$ -value < 10%). In subsamples, the interaction term CONTR\_CORR\_dif × DACC remains significant when targets operate

in more corrupt countries than acquirers, confirming the main findings. Conversely, when the rule of law is used instead of the contract enforcement difference, interaction terms remain positive but insignificant, unlike the significant results observed with contract enforcement. Control variables, including stock-for-stock deals, hostile deals, and acquirer experience, retain their strong significance, while deal size shows marginal significance in the new table. Overall, excluding the replacement of the contract enforcement difference, the results remain consistent and robust, demonstrating that the relationship between earnings management, corruption, geographic distance, and M&A outcomes is reliable even when alternative measures are used.

Table 10 presents the results of the logistic regression analyses (Model (2)) using discretionary accruals estimated with the non-linear model proposed by Ball and Shivakumar (2006) (DACC\_NL). Across all columns, the coefficient of DACC\_NL remains significant and positive, reaffirming the role of earnings management in increasing the likelihood of M&A completion failure. In line with the main results of Table 5, Table 10 shows that country-level differences in corruption (CORR\_dif) and contract enforcement (CE\_dif) are insignificant across all columns. However, geographic distance demonstrates a weak negative effect on deal withdrawal in the individual model (Column (4)), becoming more significant in the aggregate model that includes all variables (Column (5)). This finding confirms the main results indicating that geographic distance has a stronger moderating impact when analyzed alongside other country-level differences. The control variables Seek, Stock, Hostile, and Experience consistently exhibit strong significance, documenting their importance in predicting M&A outcomes. On the other hand, D\_Size remains insignificant in all specifications. Overall, Table 10 confirms the robustness of the main findings (Table 5) and underscores the relevance of earnings management and geographic factors.

Table 11 replicates Model (3) using discretionary accruals estimated via the Ball and Shivakumar (2006) model (DACC\_NL), focusing on the interaction terms with institutional and geographic differences. For corruption differences, the interaction term (CONTR\_CORR\_dif  $\times$  DACC\_NL) remains significant ( $p$ -value  $<$  5%) in cases where targets operate in more corrupt countries than acquirers (Column (2)). While the results are slightly weaker compared to Table 6, they consistently demonstrate that institutional asymmetry amplifies the impact of earnings management on deal withdrawal. For contract enforcement differences, the interaction term (CE\_dif  $\times$  DACC\_NL) is insignificant in the entire sample and when targets operate in environments with weaker enforcement than the acquirers. This result contrasts the insights in Table 6, where the interaction term was significant in such cases, suggesting the Ball and Shivakumar model captures this relationship less robustly. For geographic distance, the interaction term (Distance  $\times$  DACC\_NL) improves in significance, shifting from marginal significance ( $p$ -value  $<$  10%) in Table 6 to stronger significance ( $p$ -value  $<$  5%) in Table 11 (Column 5). Overall, while the significance levels and patterns of interaction terms remain largely consistent between the two tables, the Ball and Shivakumar model refines the estimates, particularly by better capturing the role of geographic asymmetries.

## 5. Research Implications

This study contributes to the academic literature by demonstrating the significant role of accrual-based earnings management in influencing M&A outcomes, particularly the likelihood of deal withdrawal. By focusing on cross-border transactions, the research expands the existing knowledge, concentrating on transactions without distinguishing between domestic and cross-border. This focus on cross-border M&As highlights the challenges of information asymmetry, institutional disparities, and geographic distance. The study also sheds light on the ability of acquirers to detect low-quality financial reporting,

even under conditions of increased uncertainty, emphasizing the interaction between earnings management and institutional and geographic differences. The findings pave the way for future research to explore the interplay between financial reporting practices and institutional factors across various global contexts, providing a richer understanding of cross-border M&A dynamics.

From a practical standpoint, the study underscores the critical importance of robust due diligence processes for acquirers to mitigate the risks derived by earnings management, particularly under high-risk institutional contexts. Acquirers should exploit advanced financial analysis tools and incorporate the expertise of M&A advisors to address challenges arising from geographic and institutional asymmetries. Managers of target firms should also recognize the potential reputational and transactional risks associated with earnings manipulation, as such practices can lead to deal completion failure and damage their reliability in future transactions. On a policy level, the findings highlight the need to amplify anti-corruption measures, enhance legal enforcement procedures, and harmonize financial reporting standards, such as accounting standards and legislation. Policymakers can also promote transparency by establishing stricter disclosure requirements and encouraging international collaboration to reduce institutional disparities, ultimately fostering a more stable and efficient M&A environment.

## 6. Concluding Remarks and New Research Avenues

This research investigates the relationship between the level of accrual-based earnings management by target firms and the likelihood of withdrawal in cross-border M&As. The sample consists of 496 listed European target firms involved in cross-border deals announced between 2006 and 2023. The findings reveal that target firms in cross-border M&As do not exhibit higher earnings management levels than those in domestic deals. Additionally, no significant differences in earnings management were observed between target firms in more corrupt countries or countries with lower legal efficiency than acquirers compared to targets in more transparent environments with efficient legal systems.

Using a logistic regression model, the results demonstrate that accrual-based earnings management is strongly associated with the likelihood of deal withdrawal. This outcome suggests that acquirers possess mechanisms to detect low-quality financial reporting by target firms, leading even to deal termination. Also, no significant direct effect was found between country-level differences, such as corruption levels or contract enforcement indices, and the likelihood of withdrawal. This finding also supports the notion that acquirers can address the obstacles met due to institutional disparities in the economic environments in which acquirers and target firms operate. In other words, the results highlight the role of M&A advisors in mitigating the risks and addressing the adaptation of acquirers in the reality of the target firms' economic conditions. Furthermore, the interaction between earnings management and country-level differences generally showed no significant effect, except for geographic distance, where a weakly positive impact was identified. In subsamples, when target firms operate in more corrupt environments or countries with lower legal-system efficiency than acquirers, the interaction between earnings management and these country-level differences becomes significantly positive. This insight suggests that acquirers likely pay closer attention to financial reporting quality when targets are located in institutionally weaker economies and are more inclined to penalize earnings manipulation. Institutional weaknesses in the target's country amplify the adverse effects of distorted financial reporting, increasing the likelihood of deal withdrawal. These findings emphasize the importance of institutional context in shaping the dynamics between financial reporting quality and M&A outcomes.

While this study provides important insights, several limitations must be acknowledged. First, the focus on European target firms may restrict the generalizability of the findings to non-European contexts, where institutional and cultural factors could result in different M&A conditions. Future research could handle this limitation by expanding the analysis to include emerging and developed economies outside Europe, offering a broader view of the relationship between earnings management and M&A outcomes. In essence, a comparative study among the different economic environments could offer significant findings. Second, relying solely on accrual-based earnings management proxies ignores the effects of real earnings management practices, which are allegedly less detectable and equally significant for the topic investigation. Incorporating real earnings management measures in future studies would enable a more comprehensive examination of the various forms of financial manipulation and their influence on deal outcomes.

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## Appendix A

**Table A1.** Variable definition.

Variable Abbreviation	Definition
A	Total assets
CE_dif	The difference between the contract enforcement index of the country where the target firm operates and the country where the acquirer operates is the employed index, a contract enforcement index published by the World Bank.
CONT_CORR_dif	The difference is between the country's corruption level in which the target firms operate and the country in which the acquirer operates. The employed index is the "control of corruption" index published by the World Bank.
CORR_dif	The difference is between the country's corruption level in which the target firms operate and the country in which the acquirer operates. The employed index is the Corruption Perceptions Index (CPI) published by Transparency International.
D_size	Represents deal size calculated as the natural logarithm of the deal value.
DACC	The absolute value of discretionary accruals in the period preceding the announcement of an M&A, calculated as the residuals of the regression, Equation (1) (Dechow et al., 1995 model)
DACC_roa	The absolute value of discretionary accruals in the period preceding the announcement of an M&A is calculated using the Kothari et al. (2005) model.
DACC_NL	The absolute value of discretionary accruals in the period preceding the announcement of an M&A, calculated through Ball and Shivakumar (2006) model.
Deal_withdraw	The dummy variable equals 1 for target firms that participated in M&As that were eventually withdrawn; otherwise, it equals 0 for completed deals.



**Table A1.** *Cont.*

Variable Abbreviation	Definition
Distance	The geographic index between the target firm's and acquirer's countries.
Experience	The number of M&As in which the examined firm was involved during the last fifteen years before the examined M&A.
Hostile	The dummy variable equals 1 for hostile M&A; otherwise, it equals 0.
Industry	The categorical variable equals 0 when the target firm and the acquirer belong to different "mid-industries", 1 when the target firm and the acquirer operate in the same "macro-industry" and different "mid-industries" and 2 when the two sides operate in the same "mid-industry". "Macro-industry" and different "mid-industries" are sector classifications provided by Refinitiv Eikon.
PPE	The gross property, plant, and equipment.
RULE_dif	The "rule of law" index published by the World Bank.
Seek	The percentage of the target firm's equity that the acquirer aimed to acquire after the completion of the M&A deal.
Stock	Dummy variable equals 1 for stock-for-stock M&As, otherwise equals 0.
TA	Total accruals are calculated as the earnings before extraordinary items, subtracting the cash flows from operations.
$\Delta$ REC	The change in revenue.
$\Delta$ REV	The change of account receivables.

**Table A2.** Shapiro–Wilk normality test for the absolute value of discretionary accruals.

Variable	Obs	W	V	z	Prob > z
Absolute value of discretionary accruals (DACC)	496	0.504	165.639	12.279	0.000

## Note

<sup>1</sup> A hostile M&A occurs when the acquirer seeks to take control of a target firm without the consent of its management, typically bypassing them to appeal directly to shareholders. Hostile bids are often motivated by the intention to discipline or replace underperforming management, aiming to improve the profitability of the target. In contrast, a friendly M&A is characterized by cooperation between the acquirer and the target firm's management, who support the transaction. Friendly bids usually aim to achieve synergistic gains, as the collaboration of the target's management is necessary for realizing strategic or operational benefits (Sudarsanam & Mahate, 2006).

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