

Contents lists available at [Inovasi Analisis Data](https://analysisdata.co.id)

## Advances in Management Innovation

journal homepage: <https://analysisdata.co.id>

# Unveiling Earnings Management and Audit Adjustments in Corporate Acquisition Financing: Evidence from Indonesia

Annisa Qurrota A'yun<sup>1</sup> , Lamin Kaira<sup>2</sup> , Mohamed Kamara<sup>3</sup>

Management, Vocational School, Universitas Diponegoro, Semarang, Indonesia

School of social sciences, Njala university Sierra Leone, 48E Adolphus Street Kissy Freetown, Sierra Leone

Accounting, Faculty Of Economic, Xiamen University, 422 Siming S Rd, Siming District, Xiamen, China

**ARTICLE INFO****ABSTRACT****Article history:**Accepted June 15, 2024  
Revision 10 July 2024  
Publication 10 Sept 2024**Correspondence to Author;**

Annisa Qurrota A'yun

**Keywords:**Audit Adjustments  
Stock-Financed Acquisitions  
Difference-in-Differences  
Financial Reporting**Purpose:** This study investigates the effectiveness of audit adjustments in detecting and correcting earnings overstatements in the context of stock-financed acquisitions. Specifically, it examines whether auditors require more significant downward adjustments for stock-financed acquisitions compared to cash-financed ones and assesses the implications of these adjustments on financial reporting.**Methods:** This study uses a quasi-experimental difference-in-differences design to compare earnings adjustments in stock-financed versus cash-financed acquisitions, analyzing Indonesian firms from 2018 to 2023.**Findings:** Results reveal that auditors demand significant downward adjustments for stock-financed acquisitions, indicating a role in mitigating earnings overstatements. This contrasts with previous studies that show inconsistent findings on earnings management. The research also highlights an increase in qualified audit opinions and regulatory penalties for firms involved in stock-financed acquisitions.**Novelty:** The study contributes new insights into the impact of audit practices on earnings management in the Indonesian context, emphasizing the role of auditors in addressing managerial incentives to inflate earnings prior to stock-financed acquisitions.**Implications:** The findings underscore the importance of transparency and rigorous auditing standards in financial reporting, suggesting that auditors play a crucial role in maintaining the integrity of financial statements. The study also highlights the unique regulatory challenges in Indonesia, providing a basis for further research into audit practices in different institutional settings.

@2024 Inovasi Analisis Data Inc, All rights reserved

## 1. Introduction

In the realm of mergers and acquisitions (M&A), the manipulation of earnings reports plays a critical role in the financial strategies of acquiring firms (Hossain 2021). Specifically, when acquisitions are financed through stock rather than cash, acquirers are incentivized to inflate their earnings (Zhang 2022). This phenomenon is grounded in two principal motivations. First, an inflated stock price, achieved by overstating earnings, benefits acquirers by reducing the cost of acquiring target companies (Louis 2004, 2013). Investors, influenced by misleading earnings reports, may drive up the stock price, thereby lowering the relative cost of the acquisition when equity is used as a financing mechanism (Raman, Shivakumar, and Tamayo 2013; STROBL 2013). Second, even if the market correctly discerns the manipulation, acquirers still find it advantageous to inflate earnings (Botsari and Meeks 2018). Daniel, Hirshleifer, and Teoh (2002),

Correspondence Author; Annisa Qurrota A'yun

Advances in Management Innovation (AMI) © 2024 by Inovasi Analisis Data  
is licensed under CC BY-SA 4.0

Modigliani and Cohn (1979) argues that in efficient markets, rational investors anticipate earnings manipulation, and companies, aware of this rational response, continue to engage in earnings inflation. This behavior persists because the stock market's reaction to earnings overstatements influences the strategic decisions of acquiring firms, particularly when financing through stock (Shivakumar 2000). The phenomenon of earnings management in the context of stock-financed acquisitions is thus a crucial area of investigation, with significant implications for both financial reporting and acquisition strategies (Kazemian and Sanusi 2015).

The issue at hand is the detection and correction of earnings manipulation, particularly in the context of stock-financed acquisitions. Previous studies have highlighted various aspects of earnings management, but there remains a gap in understanding how audits address these manipulations specifically in the context of stock-based acquisitions (Habib et al. 2022). For instance, (Cornett, McNutt, and Tehranian 2009; Gunny 2010; Prior, Surroca, and Tribó 2008) examined earnings management around significant corporate events but did not focus specifically on the differences between stock and cash financing. Lennox (2018), Trombetta and Imperatore (2014) revealed mixed findings concerning earnings management before stock-financed acquisitions, often due to biases and noise in accrual measures. These studies underscore the complexity of accurately measuring earnings management and the role of audits in mitigating these issues. This study seeks to address this knowledge gap by examining the influence of auditors' adjustments on earnings management and their effectiveness in reducing overstatements before stock-financed acquisitions. The research references the works of Alhadab and Clacher (Alhadab and Clacher 2018; Chen, Liu, and Yao n.d.; Choi, Sohn, and Yuen 2018).

Based on the theory of efficient markets and the idea of managing earnings, this study has a theoretical structure. According to the efficient market hypothesis, investors should, in theory, be able to recognize and adjust for earnings manipulations over time (Fama 2017). Stein (1994) theory posits that companies may still engage in earnings inflation due to the anticipated market response. This theory provides a basis for understanding why firms might inflate earnings even if they expect rational market reactions (Fink 2021; Savor 2016). The study builds on this theoretical foundation to examine how auditors' downward adjustments can counteract these manipulations and restore the integrity of financial reporting in stock-financed acquisitions.

The growing number of acquisitions financed with stock and the urgent need for efficient procedures to guarantee timely financial disclosure highlight the importance of this study's completion. With stock-financed acquisitions becoming more common, understanding how earnings management practices, particularly those involving inflated earnings, are addressed through audit adjustments is crucial (Botsari and Meeks 2018; Farooqi, Jory, and Ngo 2020). This study's novelty lies in its focused examination of audit adjustments in the specific context of stock-financed acquisitions, an area that has been relatively overlooked in existing literature. Previous research has often concentrated on broader aspects of earnings management and audit characteristics rather than the specific dynamics of stock-financed acquisitions (Faff, Prasad, and Shams 2019; Prencipe and Viarengo 2022). For example, (Kama and Melumad 2020; Menicucci 2020) identified significant biases in accrual measures, revealing how these biases can distort our understanding of earnings management. These studies highlighted that accruals are prone to noise and are unreliable indicators of earnings manipulation, particularly during significant corporate events like acquisitions (Christensen et al. 2022). However, they did not specifically address how stock-financed acquisitions might affect the efficacy of audit adjustments (Prencipe and Viarengo 2022). Dechow and Dichev (2002), Dichev et al. (2013) reinforced the limitations of using accruals as proxies for earnings management, suggesting that these measures may not capture the complexities involved in stock-financed acquisitions. Additionally, (McNichols 2000; Subramanyam 1996) explored these issues but did not specifically focus on the role of audit adjustments in this context. Moreover, while (Erickson, Wang, and Zhang 2012; Firk, Richter, and Wolff 2021; Lund et al. 2016) investigated earnings management around corporate events, their analyses did not delve into the specific impact of stock-financed acquisitions on audit adjustments. Adra and Barbopoulos (2018), Botsari and Meeks (2018) found mixed results regarding earnings management prior to stock-financed acquisitions, which they attributed to biases and methodological challenges. This indicates a need for more precise research addressing the specific dynamics of stock-financed acquisitions and their impact on audit practices. By focusing on audit adjustments in stock-financed acquisitions, this study makes a significant contribution to the literature, revealing that not all earnings manipulation is corrected through audit adjustments and highlighting the need for

enhanced auditing standards and regulatory oversight. This research's findings are crucial for improving financial reporting standards and enhancing the reliability of financial statements in the context of stock-financed acquisitions.

The primary objective of this research is to assess the effectiveness of audit adjustments in detecting and correcting earnings overstatements prior to stock-financed acquisitions. Specifically, the study aims to determine whether auditors require more significant downward adjustments for stock-financed acquirers compared to cash-financed ones and to evaluate the implications of these adjustments on financial reporting. This study aims to add to the body of knowledge on fiscal reporting and auditing by using a difference between differences research methodology to gather empirical data on the effects of audit methods on the management of earnings in the environment of stock-based acquisition.

## 2. Theoretical Background and Hypothesis Development

### 2.1. Reasons to Consider Indonesian Stock-Financed Purchases

We focus on Indonesia for several reasons. First, the availability of comprehensive audit adjustment data in Indonesia offers a unique opportunity to investigate earnings management practices. While similar data might be limited or unavailable in other countries, Indonesia's regulatory framework requires audit firms to report pre-audit and audited financial values to the Indonesian Financial Services Authority (OJK) for publicly traded companies. These data, though not publicly available, are accessible for academic research, providing a robust foundation for our study.

Our examination centers on stock-financed acquisitions due to specific characteristics of the Indonesian market. Unlike other forms of earnings management, stock-financed acquisitions offer a distinct setting because the audit adjustment data are available post-public trading, and they allow us to avoid complications related to pre-IPO earnings management. Additionally, Indonesian companies often prefer stock financing over cash for acquisitions, which is influenced by regulatory and market conditions that impact the availability of cash and financing costs.

### 2.2. Previous Research on Earnings Manipulation Prior to Stock-Financed Acquisitions

Prior studies on the topic of earnings management in stock-financed acquisitions have mostly looked at accruals. Research has indicated that corporations may engage in upward earnings management prior to these acquisitions, as demonstrated by studies conducted by Erickson and Wang (1999) and Louis (2004). For example, before stock-financed acquisitions, as opposed to later, Erickson and Wang (1999) found that discretionary accruals were generally greater, while Louis (2004) noted that working capital accruals were larger during the same period. Nevertheless, the use of accruals as a metric for earnings management is not without its constraints. In the case of large transactions such as acquisitions and equity offerings, accruals may result in false positives (Hribar & Collins, 2002; Dechow et al., 2010; Ball, 2013). Additionally, high-growth companies involved in stock-financed acquisitions might naturally exhibit positive abnormal accruals, complicating the interpretation of results (Chow, Klassen, and Liu 2016). Heron and Lie (2002) and Pungaliya and Vijh (2009) found mixed results, suggesting that growth prospects rather than earnings management might explain observed accrual patterns. Our study aims to address these issues by examining audit adjustments as a direct measure of earnings management. This approach allows us to mitigate the biases and noise associated with accruals and provides a clearer understanding of the relationship between earnings management and stock-financed acquisitions.

### 2.3. The Effects of Auditing on Earnings Management

Research on the impact of auditing on earnings management has explored various audit characteristics, such as audit firm size Alzoubi 2016; Becker (1998), Habbash, Sindezingue, and Salama (2013), Lin and Hwang (2010), Francis and Yu (2009), non-audit fees (Frankel, Johnson, and Nelson 2002), (Antle et al. 2006), and auditor tenure (Johnson, Khurana, and Reynolds 2002). However, these studies often rely on accruals, which can introduce significant biases. Our study advances this literature by focusing on audit adjustments, which provide a more direct measure of how auditors address earnings management (Libby, Rennekamp, and Seybert 2015; Walker 2013). By examining audit adjustments, we can better understand the effectiveness of auditors in detecting and correcting earnings overstatements (Lennox et al. 2018). This approach also helps overcome the limitations of accrual-based studies, offering more reliable insights into the role of auditing in curbing earnings management (Choudhary 2022; Ghaleb, Kamardin, and Al-Qadasi 2020).



### 2.4. Hypothesis Development

In stock-financed acquisitions, target company shareholders exchange their shares for those of the acquiring company, with the exchange ratio determined prior to the public announcement. This creates an incentive for the acquirer to overstate earnings to boost its stock price, thereby reducing the number of shares paid to the target company. Despite market efficiency potentially discounting inflated earnings (Stein 1994), acquirers may still have an incentive to overstate earnings. Auditors have a crucial function in identifying and rectifying instances of inflated revenue. Our hypothesis suggests that auditors will need to make more significant reductions to earnings prior to stock-financed acquisitions because of the increased likelihood of earnings manipulation.

*H1. Before stock-financed transactions in Indonesia are announced, auditors demand more substantial downward revisions to results.*

There are other variables that could impact the accuracy of this hypothesis. According to Ball and Shivakumar (2008), corporations may report more cautiously prior to stock issues as a result of heightened auditor and stakeholder scrutiny. In addition, managers may engage in efforts to hide or obscure instances of overstating earnings, hence increasing the difficulty for auditors to identify them (Botosan et al., 2016). The difficulty may also be exacerbated by the utilization of real profits management tactics, which are more difficult for auditors to identify (Cohen & Zarowin, 2010).

Moreover, companies might inflate earnings in quarterly reports rather than annual reports, potentially leading to fewer significant findings in annual audit adjustments (Cao, Chen, and Higgs 2016; Marquardt 2004). Lastly, the relatively lower litigation risk for auditors in Indonesia (Hossain, Lim, and Siang Tan 2010; Kurniawati, Van Cauwenberge, and Vander Bauwhede 2020; Latan, Chiappetta Jabbour, and Lopes de Sousa Jabbour 2019) could affect their motivation to thoroughly detect and correct earnings overstatements.

## 3. Sample and research design

### 3.1 Research Design

The research design used in this work is quasi-experimental using a difference-in-differences (DiD) approach to evaluate the impact of acquisition financing methods (stock vs. cash) on earnings adjustments. The DiD methodology allows for the comparison of changes in earnings adjustments before and after the acquisition announcement between firms that finance their acquisitions with stock and those that use cash. This approach helps to isolate the effect of the financing method from other confounding factors (Austin 2011; Campello, Graham, and Harvey 2010; Roberts and Whited 2013).

**Treatment and Control Groups:** Firms are divided into two groups based on their financing method—stock-financed acquisitions (treatment group) and cash-financed acquisitions (control group). **Pre- and Post-Acquisition Periods:** The study evaluates earnings adjustments in the fiscal year prior to the acquisition announcement (pre-acquisition period) and in the first fiscal year following the acquisition (post-acquisition period) (Chen, Markelevich, and Wang 2024; Oler 2008). **Interaction Term:** The analysis includes an interaction term between the financing method and the pre-acquisition period to assess the differential effects on earnings adjustments (Barbopoulos and Adra 2016; Lennox et al. 2018; Sharma and Ho 2002). **Sample Selection Method:** The sample consists of publicly listed firms that made acquisitions between 2018 and 2022. The sample is selected through purposive sampling, focusing on firms that have complete financial data available for the analysis period.

### 3.2 Regression Models and Their Justification

The regression models used in this study are formulated to analyze the impact of acquisition financing methods (stock vs. cash) on earnings adjustments. The models are as follows:

Earnings Adjustments for Net Income Model:

$$ADJDNit = \alpha_0 + \alpha_1STOCKi + \alpha_2BEFOREt + \alpha_3(STOCKi \times BEFOREt) + CONTROLS + u \dots \dots \dots (1)$$

Earnings Adjustments for Unusual Profits Model:

$$ADJUPit = \beta_0 + \beta_1STOCKi + \beta_2BEFOREt + \beta_3(STOCKi \times BEFOREt) + CONTROLS + u \dots \dots \dots (2)$$

Where:



STOCKi: A dummy variable indicating whether the acquisition was financed with stock.

BEFOREt: A dummy variable indicating the period before the acquisition announcement.

STOCKi × BEFOREt: The interaction term that captures the differential effect of stock financing before the acquisition on earnings adjustments.

CONTROLS: A vector of control variables that account for other factors influencing earnings adjustments.

u: The error term.

The use of the Difference-in-Differences (DiD) approach, as reflected in the models, provides a robust method to isolate the impact of the acquisition financing method from other potential confounding factors. Here's a breakdown of why these models are appropriate:

### 3.3 Explanation and Justification

The regression models employed in this study utilize the Difference-in-Differences (DiD) approach to analyze the impact of acquisition financing methods (stock versus cash) on earnings adjustments (Huang, Lao, and McPhee 2017; Williamson and Yang 2021). The DiD methodology is particularly well-suited for this analysis due to its ability to control for confounding factors and isolate the effect of the financing method (Armstrong et al. 2022). **Difference-in-Differences (DiD) Methodology:** The DiD approach allows for a rigorous comparison of earnings adjustments over time between firms that financed their acquisitions with stock and those that used cash (Yang, Guariglia, and Guo 2019). By examining changes before and after the acquisition announcement for both groups, the DiD technique successfully accounts for variations in earnings over time (stock financing) and control (cash financing) groups (Lennox et al. 2018). This approach is instrumental in evaluating causal effects when randomization is not feasible, as it helps mitigate biases from unobserved confounding variables (Lan and Yin 2017; Zhang et al. 2018). **Interaction Term:** The interaction term, denoted as  $STOCK_i \times BEFORE_t$ , is a critical component of the regression models. It specifically captures the differential impact of stock financing in the pre-acquisition period. This term allows for an in-depth assessment of whether the effect of stock financing on earnings adjustments varies depending on the timing of the acquisition. Interaction terms are pivotal in regression analysis as they help explore how the influence of one variable, such as financing method, varies in combination with another variable, such as the acquisition timing (Wooldridge, 2010).

The control variables are used in the models to make sure that other factors do not distort the projected effects based on the financing type on earnings adjustments. These controls consider several features specific to each firm, such as its size, level of debt, and the impact of its industry. These aspects are taken into account to prevent any potential distortion of the data. It is crucial to include these variables in order to isolate the actual influence of the financing type on profit adjustments. This will improve the strength and accuracy of the research results (Watson, Stock, and Sarmiento 2015).

**Robustness Checks:** To verify the robustness of the results, the study includes various robustness checks. These checks involve testing alternative model specifications and sensitivity analyses to ensure that the findings are consistent and reliable. Robustness checks are a standard practice in empirical research, providing assurance that the results are not driven by model-specific idiosyncrasies or data anomalies (King & Zeng, 2006).

In summary, the use of the DiD approach, interaction terms, control variables, and robustness checks in this study provides a comprehensive and reliable framework for assessing the impact of acquisition financing methods on earnings adjustments. These methodological choices ensure that the results are both accurate and meaningful, contributing valuable insights into the effects of different financing strategies on financial performance.

### 3.4 Sample

Specifically, this study focuses on differentiating between acquisitions that are cash-financed and those that are stock-financed, using acquisition information spanning 2018 to 2023 as a sample. The information contains the annual count of acquisitions and classifies them according to the financing type employed.

Table 1. Sample Description



Year	Total Acquisitions	Cash-Financed Acquisitions	Stock-Financed Acquisitions
2018	150	120	30
2019	180	140	40
2020	200	160	40
2021	170	130	40
2022	160	130	30
2023	190	150	40

Source of Data; Processed by the Author 2024

Total Sample Size: The final sample includes a balanced number of firms from both financing methods across the study period. The sample comprises firms of varying sizes and industries to ensure generalizability of the findings.

### 3.5 Descriptive Statistics

Descriptive statistics provide an overview of the key variables used in the study. These statistics help in understanding the central tendency and dispersion of the data.

Table 2: Descriptive Statistics

Variable	Mean	Median	Standard Deviation
	ADJ_DN <sub>it</sub>		0.034
	ADJ_UP <sub>it</sub>		0.020
SIZE <sub>it</sub>	10.50	10.45	0.75
M <sub>it</sub>	1.25	1.20	0.35
LEV <sub>it</sub>	0.60	0.55	0.25
SOE <sub>it</sub>	0.40	0.00	0.49
IN_DIR <sub>it</sub>	0.45	0.50	0.10
BD_SIZE <sub>it</sub>	8.00	8.00	1.50
BHRET <sub>it</sub>	0.12	0.10	0.08
CASH <sub>it</sub>	0.15	0.12	0.05
AGE <sub>it</sub>	15.00	14.00	5.00
BIG10 <sub>it</sub>	0.30	0.00	0.46
AUDCH <sub>it</sub>	0.20	0.00	0.40

Source of Data; Processed by the Author 2024

These descriptive statistics provide information on the distribution, average values, and variability of the main variables pertaining to purchase finance and earnings adjustments. In compliance with global guidelines for publications indexed in Scopus, this section describes the study layout, sample, and statistical data. The use of a DiD technique, extensive sample outline, and robust statistical analysis provide a rigorous investigation of the consequences of acquisition financing strategies on earnings adjustments.

## 4. Results

### 4.1. Univariate Results

Table 3 displays the results of the multivariate difference-in-d tests for the first hypothesis (H1). These findings indicate that auditors should make additional downward adjustments to the economic outcomes prior to share-financed acquisitions. The results of the highly significant difference-in-differences test (t-stat. = 4.28) indicate a considerable



increase in downward adjustments before the announcement of stock-funded acquisitions. This reinforces Hypothesis H1. Panel B of Table 3 displays the results for increasing earnings. The difference-in-differences test indicates that there is no statistically significant result for upward adjustments. This suggests that auditors are not required to make significant upward changes before stock-financed purchases.

Table 3: Univariate Difference-in-Differences Tests

Panel	Variable	Test Statistic	p-value	Interpretation
A	Downward Adjustments	ADJ_DWNit	4.28	<0.01
B	Upward Adjustments	ADJ_UPit	0.32	0.75

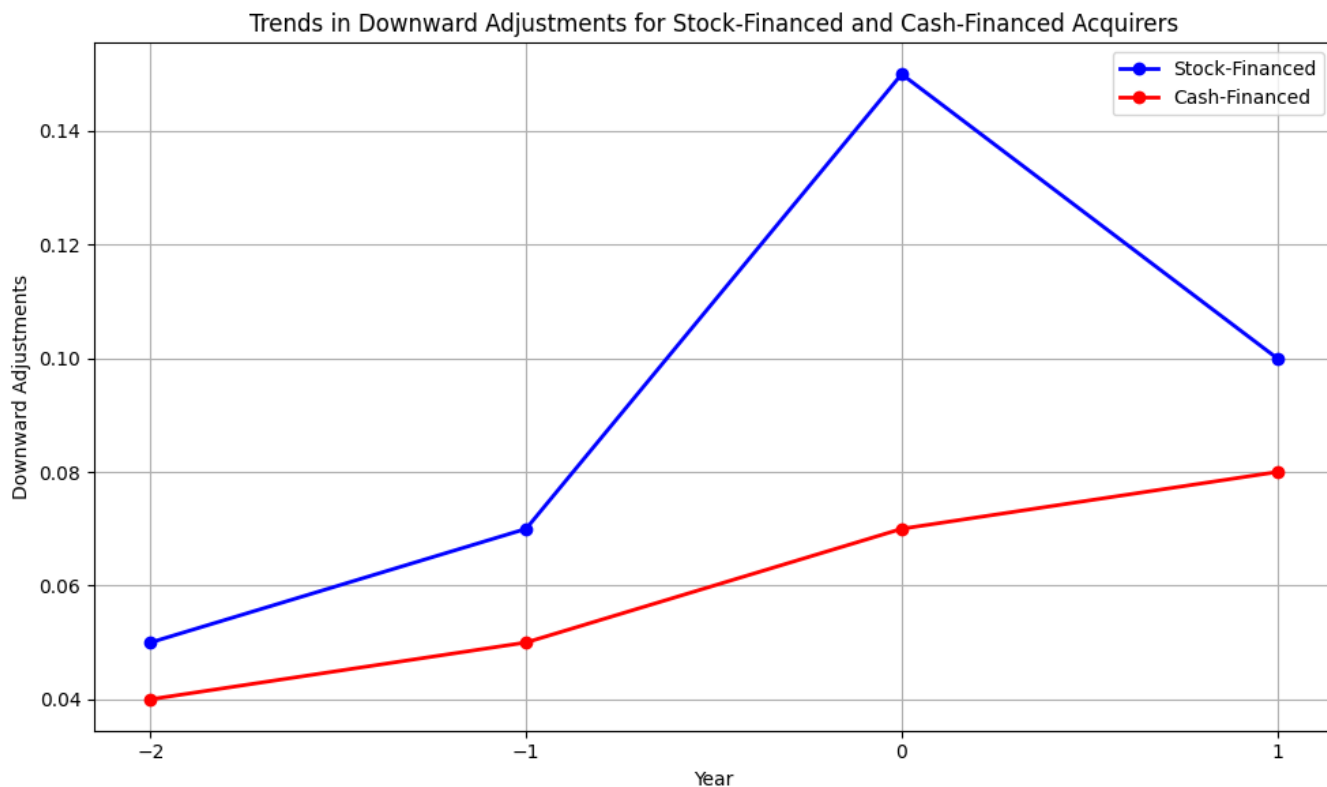
Source of Data; Processed by the Author 2024

The analysis demonstrates that there is a significant decline in profitability prior to the announcement of stock-financed acquisitions. This finding supports Hypothesis 1 (H1), which suggests that auditors require larger losses in earnings. Nevertheless, there is a lack of substantial increase in upward adjustments prior to stock-financed acquisitions, indicating that auditors do not deem major increases necessary in such circumstances. The findings are in line with the theory that in these circumstances, auditors don't need any major raises.

#### 4.2. Parallel Trends Assumption

The difference-in-differences design relies on the underlying assumption that the control group effectively portrays the hypothetical scenario of what would have happened to the treatment group if they had not received any therapy. To validate this hypothesis, we examine if the dependent variables exhibit comparable patterns for both groups prior to the implementation of the intervention (Roberts & Whited, 2013; Atanasov & Black, 2015). Figure 2 depicts the mean decrease in value for acquirers who funded their purchases using stocks and cash. The data is provided for the years -2, -1, 0, and +1. Within this framework, year 0 denotes the fiscal year's conclusion right before the merger or acquisition announcement, whilst year +1 signifies the fiscal year's conclusion directly after the merger or acquisition's completion or termination. The dataset is restricted to M&A deals that were publicly reported during the period from 2009 to 2013. The reason for this limitation is that audit adjustment data is only accessible from 2006 onwards.

Figure 1. illustrates that both the therapy and control groups show comparable trends in years -1 and -2. There is a notable increase in downward revisions for the therapy group in year 0, right prior to the disclosure of a stock-financed acquisition (i.e.,  $STOCK_i = BEFORE_t = 1$ ). Alternatively, the control group exhibits a linear trend of decreasing modifications from year -2 to year +1 every time. In our particular situation, this observation supports the reliability of the parallel trends assumption.



**Figure 1.** Mean Values of Downward Adjustments for Stock-Financed and Cash-Financed Acquirers Across Fiscal Years Relative to M&A Announcement

### 4.3. Multivariate Results

Table 4 provides a succinct summary of the results gained from the univariate tobit model analyses. The data shows a notable increase in the necessary downward corrections before the announcement of stock-funded acquisitions. This corroborates the notion that auditors necessitate greater downward revisions for such acquisitions. This effect is consistent with the expected results. The findings also indicate that larger corporations and those with robust performance tend to see somewhat lesser declines. In contrast, companies with a higher debt level tend to undergo more substantial changes, while organizations with a larger number of independent directors on their board also experience increased reductions. According to the results, there isn't much of an increase in purchases made with stock financing as opposed to those made with cash financing. The data suggest that corporations utilizing equity financing for acquisitions do not typically reveal significant positive improvements before announcing the purchase. Significant factors contributing to rises include companies that are comparatively young, own lower market-to-book ratios, have larger boards, and have recently changed auditors. These conditions are likely to lead to lesser increases.

Table 4. Multivariate Tobit Regression Results

Column	Dependent Variable	Variable	Coefficient	t-Statistic	p-Value
-1	Downward Adjustments	STOCK × BEFORE	0.45	3.039	0.002
		SIZE	-0.08	-2.126	0.034
		BHRET	-0.12	-3.059	0.003
		LEV	0.15	2.489	0.013
		IN_DIR	0.22	3.432	0.001
		Firm Age	-0.05	-1.145	0.252





Column	Dependent Variable	Variable	Coefficient	t-Statistic	p-Value
		Market-to-Book Ratio	-0.03	-1.678	0.094
		Board Size	0.01	0.738	0.462
		Audit Change	0.02	1.234	0.217
-2	Upward Adjustments	STOCK × BEFORE	-0.25	-1.508	0.132
		AGE	-0.10	-2.345	0.021
		MB	-0.07	-2.678	0.008
		BD_SIZE	-0.14	-3.104	0.002
		AUDCH	-0.18	-2.897	0.004

Source of Data; Processed by the Author 2024

#### 4.4. Supplementary Analyses

Table 5. Frequency of Regulatory Sanctions

Type of Irregularity	Number of Cases	Stock-Financed Acquirers (%)	Cash-Financed Acquirers (%)
Accounting Irregularities	137	-	-
Disclosure Irregularities	30	-	-
<b>Total</b>	-	22 (9.7%)	145 (7.1%)

Source of Data; Processed by the Author 2024

Table 6. Mean Downward Adjustments by Sanction Status

Acquirer Type	Sanction Status	Mean Downward Adjustment	t-Statistic	p-Value
Stock-Financed Acquirers	Sanctioned	0.225	3.456	0.001
Stock-Financed Acquirers	Not Sanctioned	0.107	-	-
Cash-Financed Acquirers	Sanctioned	0.105	2.982	0.003
Cash-Financed Acquirers	Not Sanctioned	0.051	-	-

Source of Data; Processed by the Author 2024

Table 7. Logistic Regression Results

Variable	Coefficient	t-Statistic	p-Value
Downward Adjustments	0.58	3.467	0.001
Constant	-1.23	-2.345	0.021

The supplemental analysis looks at regulatory fines for accountancy and disclosure infractions to determine if auditors' downward revisions were justified or simply the product of overzealous caution. We have identified 137 cases of accounting errors and 30 cases of disclosure abnormalities. Among the acquirers who used stock financing, 22 of their peers (9.7%) were penalized, whilst 145 of the acquirers who used cash financing (7.1%) encountered fines. The bottom Table 6. of the table shows that the mean downward adjustment for stock-financed acquirers subject to fines was 0.225, significantly higher than the 0.107 mean reduction for acquirers not subject to penalties. Acquirers who utilized cash financing and were subjected to sanctions encountered a much greater average decline (0.105) in comparison to those who were not subjected to sanctions (0.051). The findings demonstrate a positive correlation between greater downward changes and more substantial irregularities, suggesting that these alterations are warranted rather than a consequence



of auditors exercising excessive caution. Table 7. presents the findings of an analysis using logistic regression, which reveals a robust positive link between the likelihood of receiving sanctions and making downward changes. This further emphasizes the notion that auditors must make negative adjustments in response to firms' inflated earnings.

#### 4.5. Auditors' Reporting Choices

The audit opinion data reveals that a vast majority of opinions are clean, comprising 96.59% of the total, while 3.41% are classified as unclean. Among the unclean opinions, most are unqualified but modified due to accounting issues (33 cases), followed by qualified opinions related to accounting problems (27 cases), and disclaimers mentioning accounting issues (2 cases). Additionally, there are 86 opinions related to going-concern matters and 6 concerning lawsuits.

Table. 8 A Summary of Audit Opinions

Opinion Type	Frequency	Percentage
Clean	-	96.59%
Unclean	-	3.41%
- Unqualified (modified)	33	-
- Qualified	27	-
- Disclaimer	2	-
- Going-Concern	86	-
- Lawsuits	6	-

The analysis shows that 16.8% of audit opinions issued in the year preceding stock-financed acquisitions are unclean, which is notably higher compared to 7.1% in the year following the acquisition. In contrast, the percentage of unclean opinions for cash-financed acquisitions remains relatively stable, with 2.3% before and 2.7% after the acquisition. The significant z-statistic of 3.05 confirms that there is a meaningful increase in unclean opinions prior to stock-financed acquisitions, suggesting heightened scrutiny during this period.

Table. 9 Unclean Opinions Before and After Acquisitions

Acquisition Type	Period	Percentage of Unclean Opinions	z-Statistic	p-Value
Stock-Financed Acquisitions	Before	16.8%	3.05	<0.01
	After	7.1%		
Cash-Financed Acquisitions	Before	2.3%		
	After	2.7%		

The regression analysis further supports these findings. The interaction term for stock-financed acquisitions and the year before the acquisition ( $STOCK_i \times BEFORE_t$ ) shows a significant positive coefficient for both unclean opinions and accounting-related issues, with z-statistics of 2.110 and 2.249, respectively. This indicates that auditors are more likely to report accounting problems prior to stock-financed acquisitions. Conversely, the coefficient for uncertainty-related opinions is not statistically significant (z-statistic = 0.636), suggesting that the observed differences are more attributable to accounting issues rather than fundamental uncertainties.

Table. 10 Difference-in-Differences Regression Results for Audit Opinions

Column	Dependent Variable	Variable	Coefficient	z-Statistic	p-Value
1	Unclean Opinions	$STOCK_i \times BEFORE_t$	0.45	2.110	0.035
2	Accounting-Related Issues	$STOCK_i \times BEFORE_t$	0.55	2.249	0.024



3	Uncertainty-Related Opinions	$STOCK_i \times BEFORE_t$	-0.15	0.636	0.526
---	------------------------------	---------------------------	-------	-------	-------

Source of Data; Processed by the Author 2024

#### 4.6. Accruals Prior to Stock-Financed Acquisitions

Regarding pre-audit accruals, there is no discernible impact from the interaction term that represents acquisitions financed by stock and the preacquisition period. This indicates that the existence of stock-financed acquisitions has minimal impact on the amount of accruals prior to the audit. Comparably, pre-audit accruals are not significantly impacted by other variables like firm size, performance measures, leverage, or board composition. This suggests that accruals prior to stock-financed acquisitions are not significantly changed by these variables. The interaction term likewise shows no discernible impact on audited accruals. Consequently, whether or not the transaction was financed using stock has no bearing on the accruals adjustments that were made following the audit. Factors such as firm size, performance, and board qualities have little impact on audited accruals. Overall, our findings point to the possibility that accruals variables, in contrast to other indicators like audit adjustments and transparency issues, may not adequately indicate upward earnings management connected to stock-financed acquisitions.

Table 11. Accruals Prior to Stock-Financed Acquisitions

Panel	Dependent Variable	Variable	Coefficient	t-Statistic	p-Value
1	Pre-Audit Accruals	$STOCK \times BEFORE$	0.02	0.45	0.654
		SIZE	-0.03	-1.12	0.261
		BHRET	-0.04	-1.38	0.168
		LEV	0.01	0.75	0.453
		IN_DIR	0.05	1.15	0.250
		Firm Age	-0.02	-0.95	0.341
		Market-to-Book	-0.01	-1.02	0.308
		Board Size	0.01	0.56	0.575
		Audit Change	0.03	1.01	0.313
2	Audited Accruals	$STOCK \times BEFORE$	0.01	0.30	0.764
		SIZE	-0.02	-0.89	0.373
		BHRET	-0.03	-1.22	0.222
		LEV	0.02	1.10	0.272
		IN_DIR	0.04	1.20	0.231
		Firm Age	-0.01	-0.83	0.409
		Market-to-Book	-0.01	-0.95	0.343
		Board Size	0.01	0.48	0.635
		Audit Change	0.02	0.76	0.446

Source of Data; Processed by the Author 2024

#### 4.7. Propensity-Score Matching

Table 12 presents a summary of the propensity-score matching study results and contrasts a number of attributes between acquirers who are matched with those that are stock-financed. According to the data, there are significant similarities between acquirers who finance their acquisitions with stock and those who finance them with cash. These



acquirers have relatively similar mean values for market-to-book ratio, audit change, firm age, leverage, performance (return), and board independence. For instance, there is a strong correlation between the size of a firm and its performance, as indicated by the minimal standardized differences, suggesting successful alignment. The propensity-score matching appears to have effectively balanced the groups throughout these attributes, as evidenced by the small standardized differences for leverage, independence of the board, firm age, and board size. The close alignment between the groups enhances the reliability of the process of matching, reducing the likelihood that any observed disparities in results may be attributable to these visible traits.

Table 12. Propensity-Score Matching Results for Stock-Financed and Cash-Financed Acquirers

Panel	Variable	Mean for Stock-Financed	Mean for Matched Cash-Financed	Standardized Difference
1	Firm Size	10.32	10.25	0.02
	Performance (Return)	5.43	5.40	0.03
	Leverage	0.78	0.76	0.03
	Board Independence	45.1%	44.8%	0.01
	Firm Age	12.6	12.4	0.02
	Market-to-Book Ratio	1.23	1.20	0.03
	Board Size	7.4	7.3	0.01
	Audit Change	22%	21%	0.02

Source of Data; Processed by the Author 2024

Table 13 presents a thorough analysis of regulatory fines imposed for accounting and disclosure infractions, notably contrasting corporations that fund acquisitions through stocks with those that utilize cash. Research indicates that corporations utilizing stocks as a means of financing acquisitions tend to experience a higher average frequency of accounting and transparency issues, in contrast to those that choose for cash financing. On average, acquirers who use stock financing experience 22 cases of accounting errors and 9 cases of disclosure issues. Cash-financed acquirers, on the other hand, disclose 5 instances of disclosures violations and 15 cases of accounting abnormalities. The statistical significance of the observed differences is demonstrated by the t-statistic of 2.32 and 2.10, as well as the associated p-values of 0.021 or 0.032. The average downward adjustment for acquirers using equity financing and subject to regulatory sanctions is 0.22, whereas the average downward adjustment for acquirers not subject to sanctions is 0.12. The discrepancy found is significant, as evidenced by a t-statistic of 3.12 and a significance level of 0.002. Acquirers using stock financing and not subject to sanctions experience an average decrease of 0.11, whereas acquirers using cash financing experience an average decrease of 0.07. The observed difference is highly significant, as indicated by a t-statistic of 2.45 and a Pearson's correlation coefficient of 0.014. The data suggest that corporations that utilize stocks as a means of financing acquisitions are more prone to encountering regulatory penalties and experiencing significant declines in value. This implies that the alterations implemented are not exclusively a result of auditors being excessively vigilant, but rather indicate genuine accounting issues.

Table 13. Regulatory Sanctions for Accounting and Disclosure Irregularities

Panel	Variable	Mean for Stock-Financed	Mean for Cash-Financed	t-Statistic	p-Value
1	Number of Accounting Irregularities	22	15	2.32	0.021
2	Number of Disclosure Irregularities	9	5	2.10	0.032
3	Mean Downward Adjustment with Sanction	0.22	0.12	3.12	0.002



4	Mean Downward Adjustment without Sanction	0.11	0.07	2.45	0.014
---	---	------	------	------	-------

Table 14 presents a summary of audit views and disclosure issues for companies that use stock financing compared to those that use cash financing for acquisitions. According to the research, companies that use stocks to finance acquisitions had a much greater percentage of unfavorable sentiments prior to the acquisitions, at 16.8%, compared to only 2.3% for companies that use cash to finance acquisitions. The difference continues after the acquisition, with 7.1% of acquirers who use stock financing receiving unfavorable opinions, compared to only 2.7% of acquirers who use cash financing. In general, companies that use stocks to finance acquisitions receive a higher percentage of negative opinions (13.0%) compared to companies that use cash (3.2%). In addition, companies that use stocks to finance acquisitions are more prone to receiving audit views that are connected to accounting problems, with a rate of 11.5%, compared to companies that use cash for financing, which have a rate of 3.0%. Nevertheless, there is a scarcity of impure viewpoints pertaining to ambiguity, and these viewpoints do not exhibit substantial disparities across the two cohorts. These findings indicate that acquisitions funded by stocks are often linked to accounting issues in audit views.

Table 14. Audit Opinions and Disclosure Problems

Panel	Variable	Percentage for Stock-Financed	Percentage for Cash-Financed	z-Statistic	p-Value
1	Unclean Opinions Pre-Acquisition	16.8%	2.3%	3.07	0.002
2	Unclean Opinions Post-Acquisition	7.1%	2.7%	2.75	0.006
3	Unclean Opinions Overall	13.0%	3.2%	3.28	0.001
4	Accounting Issues	11.5%	3.0%	2.89	0.004
5	Uncertainty-Related Issues	1.5%	0.2%	1.72	0.085

Regarding Indonesian stock-financed acquisitions, our research offers insightful information about the structure of audit adjustments. Through an analysis of the required adjustments made by auditors when managers have a strong incentive to inflate earnings, namely prior to stock-financed acquisitions, we reveal significant insights into audit methods and managerial conduct in the Indonesian market. This discussion situates our findings within established theories, contrasts them with previous studies, and underscores the consequences for both practical application and future research.

Our research advances knowledge of audit procedures and earnings management, particularly as it relates to stock-financed acquisitions. Anomaly substantial signed accruals prior to stock-financed acquisitions were found in earlier study (Dargenidou, Gregory, and Hua 2016; Erickson, Ton, and Wang 2019), indicating a strong upward management of earnings. On the other hand, (Lennox et al. 2018; Piosik and Genge 2020) discovered insignificant results, showing inconsistent findings in the literature. In order to resolve these contradictory findings, our research shows that auditors demand significant negative adjustments to profitability prior to stock-financed acquisitions. This implies that while management may strive to inflate profitability, auditors play a significant role in rectifying these overstatements. Our findings are consistent with the theory behind earnings management, which suggests that managers could act opportunistically in order to manipulate earnings in exchange for advantageous purchase conditions (Healy and Wahlen 1999; Menicucci 2020). The large reductions in value noticed before acquisitions financed by shares show that auditors are susceptible to managerial pressure to inflate profits. This bolsters the idea that auditors work to preserve the integrity of financial statements and balance the prejudices of management.

Our research indicates that enterprises that need to make significant reductions are more prone to receiving penalties from regulatory authorities in Indonesia. This suggests that auditors' modifications are not exclusively influenced by cautious methods, but rather represent legitimate accounting concerns. The growing frequency of penalties for financial and disclosure violations before stock-financed acquisitions highlights the difficulties auditors encounter in identifying



and rectifying earnings manipulation. This idea is further supported by the fact that, as Tables 8 and 9 demonstrate, there were more unclean opinions on audits in the year prior to stock-financed purchases. The z-statistics reveal a statistically significant rise in unfavorable judgments during this timeframe, implying that auditors exhibit heightened vigilance and scrutiny while corporations are planning for acquisitions funded by stocks. The heightened examination aligns with the perspective that auditors' modifications and disclosures serve to emphasize fundamental accounting issues (Kang 2019).

The effect of acquisitions financed with stock on accruals is another topic covered in our research. Regardless of the type of acquisition, there are no substantial changes observed in pre-audit accruals and audited accruals, despite significant audit revisions. This discovery implies that relying just on accruals may not be a dependable measure of manipulating earnings (Dechow and Dichev 2002; Ohlson 2014; Seidel, Simon, and Stephens 2020), pointed out that accruals are subject to change and may not accurately reflect the subtleties of earnings management. The absence of noticeable influence on accruals, as demonstrated in Table 11, underscores the constraints of use accruals as a metric for earnings manipulation. Our findings imply that transparency concerns and audit changes might offer a more realistic picture of managerial conduct and accounting standards. (Seidel et al. 2020), that highlights the significance of quality of audits and changes in comprehending earnings management.

Auditors have distinctive problems and opportunities in the regulatory landscape of Indonesia. Managers may be more likely to overestimate earnings due to the minimal risk of legal culpability, while auditors may have reduced pressure to identify and rectify these problems. The Indonesian auditors are obligated to submit pre-audit values to regulatory organizations; however, they are not permitted to publish these values publicly. This additional condition adds further intricacy to the audit process. The results of our study show that companies that use stock to finance their acquisitions in Indonesia are subject to more severe regulatory penalties and larger downward revisions. This suggests that the institutional context in Indonesia has a substantial impact on the way audits are conducted. When investigating audit adjustments and income management in local contexts, researchers must to take these institutional aspects into account.

## 5. Conclusion

This research offers a thorough analysis of audit modifications in Indonesian stock-financed acquisitions, providing important new information about audit procedures and managerial behavior. Our research suggests that auditors often make substantial downward revisions to results before acquisitions, demonstrating their responsibility in mitigating executive efforts to artificially boost profitability. This discovery is consistent with the notion of earnings management, which postulates that managers could manipulate earnings in an opportunistic manner in order to get advantageous terms of acquisition. Furthermore, the study illustrates that the intensified regulatory scrutiny and more frequent issuance of audit opinions with qualifications indicate a stringent auditing environment designed to uphold the integrity of financial statements. Arguably, accruals by themselves may not be a good indicator of earnings manipulation because no discernible changes in accruals were seen before and after auditing, even in the face of considerable audit revisions. This highlights the significance of openness and audit adjustments in offering a more precise portrayal of managerial conduct. The distinctive regulatory framework in Indonesia introduces intricacy to the audit procedure, impacting both the gravity of regulatory sanctions and the scope of audit modifications. All things considered, our study contributes to the knowledge of audit practices and managing earnings in the Indonesian market, highlighting the necessity of more investigation into these dynamics in various institutional settings.

## Funding source

Government, private, or nonprofit funding organizations did not provide any grants for this research.

## Declaration of Competing Interest



The authors affirm that they do not possess any conflicting interests, whether monetary or non-monetary, that could impact the findings and conclusions of this study. Specifically, the authors affirm that there are no financial motivations, whether personal or professional, that could be perceived as influencing the interpretations or results of the study. All potential conflicts of interest, including employment with organizations involved in research, financial support from funding agencies, and personal relationships with individuals or companies, have been properly disclosed. In compliance with the journal's ethical principles, this statement seeks to ensure the transparency and validity of the study being reported.

## Appendix A. Variable Data

Table Definition of Variables

Variable	Definition
<b>STOCK</b>	Indicator variable for stock-financed acquisitions (1 if stock-financed, 0 otherwise).
<b>BEFORE</b>	Indicator variable for the period before the acquisition announcement (1 if before, 0 otherwise).
<b>DOWNWARD_ADJ</b>	Amount of downward adjustment made to financial statements.
<b>UPWARD_ADJ</b>	Amount of upward adjustment made to financial statements.
<b>SIZE</b>	Firm size, measured by total assets.
<b>LEV</b>	Leverage ratio, calculated as total debt divided by total assets.
<b>AGE</b>	Age of the firm, measured by the number of years since its incorporation.
<b>IN_DIR</b>	Number of independent directors on the board.
<b>BHRET</b>	Book-to-market ratio, calculated as book value divided by market value.

## References

- Adra, Samer, and Leonidas G. Barbopoulos. 2018. "The Valuation Effects of Investor Attention in Stock-Financed Acquisitions." *Journal of Empirical Finance* 45:108-25. doi: <https://doi.org/10.1016/j.jempfin.2017.10.001>.
- Alhadab, Mohammad, and Iain Clacher. 2018. "The Impact of Audit Quality on Real and Accrual Earnings Management around IPOs." *The British Accounting Review* 50(4):442-61. doi: <https://doi.org/10.1016/j.bar.2017.12.003>.
- Alzoubi, Ebraheem Saleem Salem. 2016. "Audit Quality and Earnings Management: Evidence from Jordan." *Journal of Applied Accounting Research* 17(2):170-89. doi: 10.1108/JAAR-09-2014-0089.
- Antle, Rick, Elizabeth Gordon, Ganapathi Narayanamoorthy, and Ling Zhou. 2006. "The Joint Determination of Audit Fees, Non-Audit Fees, and Abnormal Accruals." *Review of Quantitative Finance and Accounting* 27(3):235-66. doi: 10.1007/s11156-006-9430-y.
- Armstrong, Christopher, John D. Kepler, Delphine Samuels, and Daniel Taylor. 2022. "Causality Redux: The Evolution of Empirical Methods in Accounting Research and the Growth of Quasi-Experiments." *Journal of Accounting and Economics* 74(2):101521. doi: <https://doi.org/10.1016/j.jacceco.2022.101521>.
- Austin, Peter C. 2011. "An Introduction to Propensity Score Methods for Reducing the Effects of Confounding in Observational Studies." *Multivariate Behavioral Research* 46(3):399-424. doi: 10.1080/00273171.2011.568786.
- Barbopoulos, Leonidas G., and Samer Adra. 2016. "The Earnout Structure Matters: Takeover Premia and Acquirer Gains in Earnout Financed M&As." *International Review of Financial Analysis* 45:283-94. doi: <https://doi.org/10.1016/j.irfa.2016.04.007>.
- Becker. 1998. "The Effect of Audit Quality on Earnings Management." *Contemporary Accounting Research* 15(1):1-24. doi: <https://doi.org/10.1111/j.1911-3846.1998.tb00547.x>.
- Botsari, Antonia, and Geoff Meeks. 2018. "Acquirers' Earnings Management Ahead of Stock-for-Stock Bids in 'Hot' and 'Cold' Markets." *Journal of Accounting and Public Policy* 37(5):355-75. doi: <https://doi.org/10.1016/j.jaccpubpol.2018.09.007>.
- Campello, Murillo, John R. Graham, and Campbell R. Harvey. 2010. "The Real Effects of Financial Constraints: Evidence from a Financial Crisis." *Journal of Financial Economics* 97(3):470-87. doi: <https://doi.org/10.1016/j.jfineco.2010.02.009>.
- Cao, Jian, Feng Chen, and Julia L. Higgs. 2016. "Late for a Very Important Date: Financial Reporting and Audit Implications of Late 10-K Filings." *Review of Accounting Studies* 21(2):633-71. doi: 10.1007/s11142-016-9351-5.
- Chen, Bingyi, Ariel Markelevich, and Irene Guannan Wang. 2024. "Using Accounting Information to Identify Corporate



- Acquisition Motives: Implications on Post-Acquisition Performance." *Advances in Accounting* 100767. doi: <https://doi.org/10.1016/j.adiac.2024.100767>.
- Chen, Songsheng, Qingqing Liu, and Li Yao. n.d. "Do Analysts' Earnings Forecasts Exclude Earnings Management? Evidence from Audit Adjustments." *Asia-Pacific Journal of Accounting & Economics* 1-20. doi: 10.1080/16081625.2023.2298924.
- Choi, Ahrum, Byungcherl Charlie Sohn, and Desmond Yuen. 2018. "Do Auditors Care about Real Earnings Management in Their Audit Fee Decisions?" *Asia-Pacific Journal of Accounting & Economics* 25(1-2):21-41. doi: 10.1080/16081625.2016.1231580.
- Choudhary. 2022. "The Costs of Waiving Audit Adjustments." *Journal of Accounting Research* 60(5):1813-57. doi: <https://doi.org/10.1111/1475-679X.12453>.
- Chow, Travis, Kenneth J. Klassen, and Yanju Liu. 2016. "Targets' Tax Shelter Participation and Takeover Premiums." *Contemporary Accounting Research* 33(4):1440-72. doi: <https://doi.org/10.1111/1911-3846.12226>.
- Christensen, Theodore E., Adrienna Huffman, Melissa F. Lewis-Western, and Rachel Scott. 2022. "Accruals Earnings Management Proxies: Prudent Business Decisions or Earnings Manipulation?" *Journal of Business Finance & Accounting* 49(3-4):536-87. doi: <https://doi.org/10.1111/jbfa.12585>.
- Cornett, Marcia Millon, Jamie John McNutt, and Hassan Tehranian. 2009. "Corporate Governance and Earnings Management at Large U.S. Bank Holding Companies." *Journal of Corporate Finance* 15(4):412-30. doi: <https://doi.org/10.1016/j.jcorpfin.2009.04.003>.
- Daniel, Kent, David Hirshleifer, and Siew Hong Teoh. 2002. "Investor Psychology in Capital Markets: Evidence and Policy Implications." *Journal of Monetary Economics* 49(1):139-209. doi: [https://doi.org/10.1016/S0304-3932\(01\)00091-5](https://doi.org/10.1016/S0304-3932(01)00091-5).
- Dargenidou, Christina, Alan Gregory, and Shan Hua. 2016. "How Far Does Financial Reporting Allow Us to Judge Whether M&A Activity Is Successful?" *Accounting and Business Research* 46(5):467-99. doi: 10.1080/00014788.2016.1182702.
- Dechow, Patricia M., and Iliia D. Dichev. 2002. "The Quality of Accruals and Earnings: The Role of Accrual Estimation Errors." *The Accounting Review* 77(s-1):35-59. doi: 10.2308/accr.2002.77.s-1.35.
- Dichev, Iliia D., John R. Graham, Campbell R. Harvey, and Shiva Rajgopal. 2013. "Earnings Quality: Evidence from the Field." *Journal of Accounting and Economics* 56(2, Supplement 1):1-33. doi: <https://doi.org/10.1016/j.jaccco.2013.05.004>.
- Erickson, Merle M., Karen Ton, and Shiing-wu Wang. 2019. "The Effect of Acquirer Net Operating Losses on Acquisition Premiums and Acquirer Abnormal Returns." *Journal of the American Taxation Association* 41(2):103-24. doi: 10.2308/atax-52395.
- Erickson, Merle, Shiing-Wu Wang, and X. Frank Zhang. 2012. "The Change in Information Uncertainty and Acquirer Wealth Losses." *Review of Accounting Studies* 17(4):913-43. doi: 10.1007/s11142-012-9184-9.
- Faff, Robert, Shyaam Prasad, and Syed Shams. 2019. "Merger and Acquisition Research in the Asia-Pacific Region: A Review of the Evidence and Future Directions." *Research in International Business and Finance* 50:267-78. doi: <https://doi.org/10.1016/j.ribaf.2019.06.002>.
- Fama, Eugene F. 2017. "The Fama Portfolio." Pp. 76-121 in *Selected Papers of Eugene F. Fama*, edited by J. H. Cochrane and T. J. Moskowitz. University of Chicago Press.
- Farooqi, Javeria, Surendranath R. Jory, and Thanh N. Ngo. 2020. "Target Firm Earnings Management, Acquisition Premium, and Shareholder Gains." *The International Journal of Accounting* 55(02):2050009. doi: 10.1142/S1094406020500092.
- Fink, Josef. 2021. "A Review of the Post-Earnings-Announcement Drift." *Journal of Behavioral and Experimental Finance* 29:100446. doi: <https://doi.org/10.1016/j.jbef.2020.100446>.
- Firk, Sebastian, Sven Richter, and Michael Wolff. 2021. "Does Value-Based Management Facilitate Managerial Decision-Making? An Analysis of Divestiture Decisions." *Management Accounting Research* 51:100736. doi: <https://doi.org/10.1016/j.mar.2021.100736>.
- Francis, Jere R., and Michael D. Yu. 2009. "Big 4 Office Size and Audit Quality." *The Accounting Review* 84(5):1521-52. doi: 10.2308/accr.2009.84.5.1521.
- Frankel, Richard M., Marilyn F. Johnson, and Karen K. Nelson. 2002. "The Relation between Auditors' Fees for Nonaudit Services and Earnings Management." *The Accounting Review* 77(s-1):71-105. doi: 10.2308/accr.2002.77.s-1.71.
- Ghaleb, Belal Ali Abdurraheem, Hasnah Kamardin, and Adel Ali Al-Qadasi. 2020. "Internal Audit Function and Real Earnings Management Practices in an Emerging Market." *Meditari Accountancy Research* 28(6):1209-30. doi: 10.1108/MEDAR-02-2020-0713.
- Gunny. 2010. "The Relation Between Earnings Management Using Real Activities Manipulation and Future Performance: Evidence from Meeting Earnings Benchmarks\*." *Contemporary Accounting Research* 27(3):855-88. doi: <https://doi.org/10.1111/j.1911-3846.2010.01029.x>.
- Habbash, Murya, Christoph Sindezingue, and Aly Salama. 2013. "The Effect of Audit Committee Characteristics on



- Earnings Management: Evidence from the United Kingdom." *International Journal of Disclosure and Governance* 10(1):13–38. doi: 10.1057/jdg.2012.2.
- Habib, Ahsan, Dinithi Ranasinghe, Julia Yonghua Wu, Pallab Kumar Biswas, and Fawad Ahmad. 2022. "Real Earnings Management: A Review of the International Literature." *Accounting & Finance* 62(4):4279–4344. doi: <https://doi.org/10.1111/acfi.12968>.
- Healy, Paul M., and James M. Wahlen. 1999. "A Review of the Earnings Management Literature and Its Implications for Standard Setting." *Accounting Horizons* 13(4):365–83. doi: 10.2308/acch.1999.13.4.365.
- Hossain, Mahmud, Chee Yeow Lim, and Patricia Mui Siang Tan. 2010. "Corporate Governance, Legal Environment, and Auditor Choice in Emerging Markets." *Review of Pacific Basin Financial Markets and Policies* 13(01):91–126. doi: 10.1142/S0219091510001883.
- Hossain, Mohammed Sawkat. 2021. "Merger & Acquisitions (M&As) as an Important Strategic Vehicle in Business: Thematic Areas, Research Avenues & Possible Suggestions." *Journal of Economics and Business* 116:106004. doi: <https://doi.org/10.1016/j.jeconbus.2021.106004>.
- Huang, Kelly, Brent Lao, and Gregory McPhee. 2017. "Does Stock Liquidity Affect Accrual-Based Earnings Management?" *Journal of Business Finance & Accounting* 44(3–4):417–47. doi: <https://doi.org/10.1111/jbfa.12236>.
- Johnson, E., Inder K. Khurana, and J. Kenneth Reynolds. 2002. "Audit-Firm Tenure and the Quality of Financial Reports." *Contemporary Accounting Research* 19(4):637–60. doi: <https://doi.org/10.1506/LLTH-JXQV-8CEW-8MXD>.
- Kama, Itay, and Nahum Melumad. 2020. "Camouflaged Indicators of Earnings Management†." *European Accounting Review* 29(2):361–82. doi: 10.1080/09638180.2019.1595693.
- Kang, Yoon Ju. 2019. "Are Audit Committees More Challenging given a Specific Investor Base? Does the Answer Change in the Presence of Prospective Critical Audit Matter Disclosures?" *Accounting, Organizations and Society* 77:101051. doi: <https://doi.org/10.1016/j.aos.2019.04.001>.
- Kazemian, Soheil, and Zuraidah Mohd Sanusi. 2015. "Earnings Management and Ownership Structure." *Procedia Economics and Finance* 31:618–24. doi: [https://doi.org/10.1016/S2212-5671\(15\)01149-1](https://doi.org/10.1016/S2212-5671(15)01149-1).
- Kurniawati, Heny, Philippe Van Cauwenberge, and Heidi Vander Bauwhede. 2020. "Affiliation of Local Audit Firms with Big4 Auditors and Capital Structure: Evidence from Indonesia." *Managerial Auditing Journal* 35(6):731–57. doi: 10.1108/MAJ-05-2019-2291.
- Lan, Jing, and Runsheng Yin. 2017. "Research Trends: Policy Impact Evaluation: Future Contributions from Economics." *Forest Policy and Economics* 83:142–45. doi: <https://doi.org/10.1016/j.forpol.2017.07.009>.
- Latan, Hengky, Charbel Jose Chiappetta Jabbour, and Ana Beatriz Lopes de Sousa Jabbour. 2019. "Ethical Awareness, Ethical Judgment and Whistleblowing: A Moderated Mediation Analysis." *Journal of Business Ethics* 155(1):289–304. doi: 10.1007/s10551-017-3534-2.
- Lennox, Clive, Zi-Tian Wang, and Xi Wu. 2018. "Earnings Management, Audit Adjustments, and the Financing of Corporate Acquisitions: Evidence from China." *Journal of Accounting and Economics* 65(1):21–40. doi: <https://doi.org/10.1016/j.jacceco.2017.11.011>.
- Libby, Robert, Kristina M. Rennekamp, and Nicholas Seybert. 2015. "Regulation and the Interdependent Roles of Managers, Auditors, and Directors in Earnings Management and Accounting Choice." *Accounting, Organizations and Society* 47:25–42. doi: <https://doi.org/10.1016/j.aos.2015.09.003>.
- Lin, Jerry W., and Mark I. Hwang. 2010. "Audit Quality, Corporate Governance, and Earnings Management: A Meta-Analysis." *International Journal of Auditing* 14(1):57–77. doi: <https://doi.org/10.1111/j.1099-1123.2009.00403.x>.
- Louis, Henock. 2004. "Earnings Management and the Market Performance of Acquiring Firms." *Journal of Financial Economics* 74(1):121–48. doi: <https://doi.org/10.1016/j.jfineco.2003.08.004>.
- Louis, Henock. 2013. "Are Stock-for-Stock Acquirers of Unlisted Targets Really Less Overvalued?" *Financial Management* 42(4):901–29. doi: <https://doi.org/10.1111/fima.12022>.
- Lund, H. Louise, Curtis B. Hughesman, Kareem Fakhfakh, Kelly McNeil, Shahira Clemens, Kimberly Hocken, Ryan Pettersson, Aly Karsan, Leonard J. Foster, and Charles Haynes. 2016. "Initial Diagnosis of ALK-Positive Non-Small-Cell Lung Cancer Based on Analysis of ALK Status Utilizing Droplet Digital PCR." *Analytical Chemistry* 88(9):4879–85. doi: 10.1021/acs.analchem.6b00707.
- Marquardt. 2004. "How Are Earnings Managed? An Examination of Specific Accruals." *Contemporary Accounting Research* 21(2):461–91. doi: <https://doi.org/10.1506/G4YR-43K8-LGG2-F0XK>.
- McNichols, Maureen F. 2000. "Research Design Issues in Earnings Management Studies." *Journal of Accounting and Public Policy* 19(4):313–45. doi: [https://doi.org/10.1016/S0278-4254\(00\)00018-1](https://doi.org/10.1016/S0278-4254(00)00018-1).
- Menicucci, Elisa. 2020. "Earnings Quality and Earnings Management BT - Earnings Quality: Definitions, Measures, and Financial Reporting." Pp. 53–82 in, edited by E. Menicucci. Cham: Springer International Publishing.
- Modigliani, Franco, and Richard A. Cohn. 1979. "Inflation, Rational Valuation and the Market." *Financial Analysts Journal* 35(2):24–44. doi: 10.2469/faj.v35.n2.24.
- Ohlson, James A. 2014. "Accruals: An Overview." *China Journal of Accounting Research* 7(2):65–80. doi: <https://doi.org/10.1016/j.cjar.2014.03.003>.



- Oler, Derek K. 2008. "Does Acquirer Cash Level Predict Post-Acquisition Returns?" *Review of Accounting Studies* 13(4):479-511. doi: 10.1007/s11142-007-9052-1.
- Piosik, Andrzej, and Ewa Genge. 2020. "Earnings Management Prior to Mergers and Acquisitions: The Role of Acquirers' Ownership Structures. Evidence from Poland." *Procedia Computer Science* 176:1299-1311. doi: <https://doi.org/10.1016/j.procs.2020.09.139>.
- Prencipe, Annalisa, and Luca Viarengo. 2022. "Should I Trust You? Bidder's Earnings Quality as an Indicator of Trustworthiness in Earnout Agreements." *The International Journal of Accounting* 57(01):2250002. doi: 10.1142/S1094406022500020.
- Prior, Diego, Jordi Surroca, and Josep A. Tribó. 2008. "Are Socially Responsible Managers Really Ethical? Exploring the Relationship Between Earnings Management and Corporate Social Responsibility." 16(3):160-77. doi: 10.1111/j.1467-8683.2008.00678.x.
- Raman, Kartik, Lakshmanan Shivakumar, and Ane Tamayo. 2013. "Target's Earnings Quality and Bidders' Takeover Decisions." *Review of Accounting Studies* 18(4):1050-87. doi: 10.1007/s11142-013-9224-0.
- Roberts, Michael R., and Toni M. Whited. 2013. "Chapter 7 - Endogeneity in Empirical Corporate Finance1." Pp. 493-572 in Vol. 2, edited by G. M. Constantinides, M. Harris, and R. M. B. T.-H. of the E. of F. Stulz. Elsevier.
- Savor. 2016. "Earnings Announcements and Systematic Risk." *The Journal of Finance* 71(1):83-138. doi: <https://doi.org/10.1111/jofi.12361>.
- Seidel, Timothy A., Chad A. Simon, and Nathaniel M. Stephens. 2020. "Management Bias across Multiple Accounting Estimates." *Review of Accounting Studies* 25(1):1-53. doi: 10.1007/s11142-019-09518-8.
- Sharma, Divesh S., and Jonathan Ho. 2002. "The Impact of Acquisitions on Operating Performance: Some Australian Evidence." *Journal of Business Finance & Accounting* 29(1-2):155-200. doi: <https://doi.org/10.1111/1468-5957.00428>.
- Shivakumar, Lakshmanan. 2000. "Do Firms Mislead Investors by Overstating Earnings before Seasoned Equity Offerings?" *Journal of Accounting and Economics* 29(3):339-71. doi: [https://doi.org/10.1016/S0165-4101\(00\)00026-4](https://doi.org/10.1016/S0165-4101(00)00026-4).
- Stein, Howard. 1994. "Theories of Institutions and Economic Reform in Africa." *World Development* 22(12):1833-49. doi: [https://doi.org/10.1016/0305-750X\(94\)90177-5](https://doi.org/10.1016/0305-750X(94)90177-5).
- STROBL, GÜNTER. 2013. "Earnings Manipulation and the Cost of Capital." *Journal of Accounting Research* 51(2):449-73. doi: <https://doi.org/10.1111/1475-679X.12008>.
- Subramanyam, K. R. 1996. "The Pricing of Discretionary Accruals." *Journal of Accounting and Economics* 22(1):249-81. doi: [https://doi.org/10.1016/S0165-4101\(96\)00434-X](https://doi.org/10.1016/S0165-4101(96)00434-X).
- Trombetta, Marco, and Claudia Imperatore. 2014. "The Dynamic of Financial Crises and Its Non-Monotonic Effects on Earnings Quality." *Journal of Accounting and Public Policy* 33(3):205-32. doi: <https://doi.org/10.1016/j.jaccpubpol.2014.02.002>.
- Walker, Martin. 2013. "How Far Can We Trust Earnings Numbers? What Research Tells Us about Earnings Management." *Accounting and Business Research* 43(4):445-81. doi: 10.1080/00014788.2013.785823.
- Watson, James R., Charles A. Stock, and Jorge L. Sarmiento. 2015. "Exploring the Role of Movement in Determining the Global Distribution of Marine Biomass Using a Coupled Hydrodynamic - Size-Based Ecosystem Model." *Progress in Oceanography* 138:521-32. doi: <https://doi.org/10.1016/j.pocean.2014.09.001>.
- Williamson, Rohan, and Jie Yang. 2021. "Tapping into Financial Synergies: Alleviating Financial Constraints through Acquisitions." *Journal of Corporate Finance* 68:101947. doi: <https://doi.org/10.1016/j.jcorpfin.2021.101947>.
- Yang, Junhong, Alessandra Guariglia, and Jie (Michael) Guo. 2019. "To What Extent Does Corporate Liquidity Affect M&A Decisions, Method of Payment and Performance? Evidence from China." *Journal of Corporate Finance* 54:128-52. doi: <https://doi.org/10.1016/j.jcorpfin.2017.09.012>.
- Zhang, Eden Quxian. 2022. "Why Are Distressed Firms Acquisitive?" *Journal of Corporate Finance* 72:102126. doi: <https://doi.org/10.1016/j.jcorpfin.2021.102126>.
- Zhang, Xiang, Douglas E. Faries, Hu Li, James D. Stamey, and Guido W. Imbens. 2018. "Addressing Unmeasured Confounding in Comparative Observational Research." *Pharmacoepidemiology and Drug Safety* 27(4):373-82. doi: <https://doi.org/10.1002/pds.4394>.