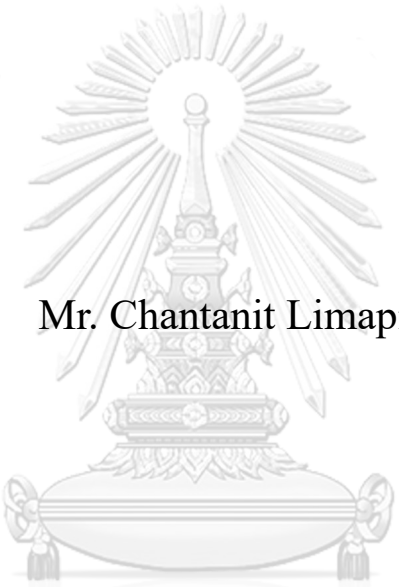
The effect of goodwill impairment avoidance on future performance growth: Evidence from Thailand

Mr. Chantanit Limapichat



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ผลของการหลีกเลี่ยงการรับรู้การด้อยค่าของค่าความนิยมต่อความสามารถในการทำกำไรในอนาคต:หลักฐานจากประเทศไทย

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สารนิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาวิทยาศาสตรมหาบัณฑิต
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ชาญธนิต ลิ่มอภิชาต : ผลของการหลีกเลี่ยงการรับรู้การด้อยค่าของค่าความนิยมต่อความสามารถในการทำกำไรในอนาคต:หลักฐานจากประเทศไทย. (The effect of goodwill impairment avoidance on future performance growth: Evidence from Thailand) อ.ที่ปรึกษาหลัก : รศ. ดร.บุญเลิศ จิตรมณีโรจน์

การศึกษานี้สำรวจผลกระทบของการหลีกเลี่ยงการรับรู้การด้อยค่าของค่าความนิยมต่อการเติบโตของกำไรในอนาคตของบริษัทที่จดทะเบียนในตลาดหลักทรัพย์แห่งประเทศไทย(SET) โดยมีช่วงเวลาของการศึกษาครอบคลุมระยะเวลา 14 ปี ตั้งแต่ปี พ.ศ.2551 ถึง พ.ศ.2564 โดยการวิจัยนี้มีกลุ่มตัวอย่าง 405 กลุ่มตัวอย่าง จาก 124 บริษัท สารนิพนธ์ฉบับนี้ใช้วิธีการวิเคราะห์การถดถอยพหุคุณเป็นแบบจำลองหลักในการศึกษา

งานศึกษานี้พบหลักฐานว่า บริษัทที่หลีกเลี่ยงการรับรู้การด้อยค่าของค่าความนิยมจะมีการเติบโตของอัตราการทำกำไรต่ำลงในปีถัดไป ที่น่าสนใจคือผลกระทบลบที่เกิดขึ้นจากการหลีกเลี่ยงการตัดมูลค่าสินทรัพย์สินที่มีน้อยกว่าสำหรับบริษัทที่ได้รับการสอบบัญชีจากหนึ่งในบริษัทสอบบัญชีรายใหญ่ (Big 4) เมื่อเทียบกับบริษัทที่ได้รับการสอบบัญชีจากบริษัทที่ไม่ใช่ Big 4

ผลลัพธ์ของงานศึกษานี้มีมีนัยเชิงปฏิบัติต่อผู้มีส่วนเกี่ยวข้องในภาคการเงินของประเทศไทย ผู้ใช้งบการเงินสามารถปรับปรุงการตัดสินใจโดยการตรวจสอบความน่าเชื่อถือของงบการเงินและตระหนักถึงบริษัทที่มีข้อสงสัยในการหลีกเลี่ยงการรับรู้การด้อยค่าของค่าความนิยม หน่วยงานกำกับสามารถใช้ผลวิจัยนี้เพื่อพิจารณาการปรับปรุงมาตรฐานบัญชี อีกทั้งงานศึกษานี้ยังย้ำถึงความสำคัญของบริษัทสอบบัญชีรายใหญ่ (Big 4) ในการบรรเทาผลกระทบที่ไม่พึงประสงค์ เน้นย้ำถึงความสำคัญของชื่อเสียงและการกำกับดูแลในการรายงานทางการเงิน โดยเฉพาะอย่างยิ่งที่เกี่ยวข้องกับการรับรู้การด้อยค่าของค่าความนิยม

สาขาวิชา	การเงิน	ลายมือชื่อนิสิต .....
ปีการศึกษา	2566	ลายมือชื่อ อ.ที่ปรึกษาหลัก .....

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Chantanit Limapichat : The effect of goodwill impairment avoidance on future performance growth: Evidence from Thailand. Advisor: Assoc. Prof. BOONLERT JITMANEEROJ, Ph.D.

This study explores the impact of goodwill impairment avoidance on the future financial performance growth of firms listed on the Stock Exchanges of Thailand (SET). Spanning 14 years from 2008 to 2021, the research analyzes 405 observations from 124 distinct firms, utilizing multivariate regression models to uncover the relationship. The study also focuses on understanding how Big 4 auditors can impact this dynamic.

The study finds evidence that firms avoiding timely goodwill impairment exhibit lower performance growth in the subsequent year. Interestingly, the negative impact of goodwill avoidance is less pronounced for firms audited by one of the Big 4 compared to those audited by non-Big 4 firms.

The practical implications of the findings extend to stakeholders in Thailand's financial landscape. Users of financial statements can refine decision-making by scrutinizing report reliability and staying vigilant about firms suspected of goodwill impairment avoidance. Regulators can leverage the research to consider improvements to accounting standards. The study highlights the crucial role of Big 4 audit firms in mitigating adverse effects, emphasizing the significance of auditor reputation and oversight in financial reporting, particularly concerning goodwill impairment recognition.

Field of Study:	Finance	Student's Signature .....
Academic Year:	2023	Advisor's Signature .....

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Chantanit Limapichat

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CHAPTER 1
INTRODUCTION

Research Background

There is a growing trend of public firms worldwide participating in mergers and acquisitions, leading to an increase in the amount of goodwill on their financial statements. In Thailand, for example, the number of firms carrying goodwill increased from 58 in 2008 to 183 in 2022. The size of goodwill can greatly affect a firm's overall financial position, highlighting the need for accuracy in reporting goodwill.

Goodwill allows investors to monitor how managers allocate capital. It represents the value from past acquisitions and indicates how well the management uses these acquired assets. But after the introduction of SFAS 142 by FASB in 2001 and IAS 36 by IASB in 2004, the accounting for goodwill changed. These changes removed the need for periodic amortization and replaced it with an impairment-only approach. This new regulation causes concerns and debates amongst researchers and experts (Beatty & Weber, 2006; Jarva, 2009).

One concern is the difficulty of verifying the value of these assets. Future cash flow predictions, which are crucial for impairment testing, heavily rely on managerial judgment. This reliance can be challenging for external monitors like auditors and financial analysts, who must measure and assess these judgments (Ayres et al., 2019).

The subjective nature of goodwill impairment could also lead to manipulation by managers. They might delay or accelerate impairments or manage the reported amounts of impairment losses (Filip et al., 2015; Li & Sloan, 2017; Ramanna & Watts, 2012). This raises questions about whether goodwill impairment losses accurately and timely reflect a firm's goodwill balance or if they are influenced by managerial or firm-level incentives.

Studies have shown that managers may avoid timely recognition of goodwill impairments for reasons related to compensation and reputation (Beatty & Weber, 2006; Filip et al., 2021; Glaum et al., 2018; Ramanna & Watts, 2012). To justify avoiding goodwill impairment, managers may manipulate earnings, either through

real activities or accrual-based activities. However, these manipulations can harm a firm's future performance growth (Han & Tang, 2020).

Despite the potential for manipulation, external monitors like the board of directors, audit committee, external auditors, and financial analysts can help discourage managers from avoiding goodwill impairments (Albersmann & Quick, 2020; Ayres et al., 2019; Han et al., 2021). In particular, engagement with reputable audit firms, especially the Big Four auditors, can play a critical role in ensuring the integrity of goodwill impairment reporting. These auditors are known for their rigorous audit processes and can provide additional scrutiny to impairment assessments.

The increase in firms carrying goodwill assets only highlights the importance of timeliness of timely goodwill impairment. Research has suggested that goodwill impairment is important to investors (Li & Sloan, 2017; Li et al., 2011). For example, companies that impair their goodwill often see a decline in their stock prices, implying a signaling effect. A similar effect was also found in Thailand (Kietpojanajinda, 2014).

The issue of goodwill impairment avoidance is significant, and its potential impact on financial reporting quality warrants a closer examination. Notably, little empirical evidence exists regarding its financial consequences and the potential influence of Big Four auditors when firms avoid timely goodwill impairment. Addressing these gaps, our study has a dual focus. Firstly, we scrutinize the effect of timely goodwill impairment avoidance on the future performance growth of firms listed on the Stock Exchange of Thailand (SET). Secondly, we delve into the role of Big Four auditors in this scenario and how it impacts firms' performance growth. The outcomes of this study could have practical implications for financial statement users, regulators, and investors in Thailand. Financial statement users might gain insights to evaluate the reliability of financial reports better. Regulators could use the findings to consider improvements to accounting standards and guidelines related to goodwill impairment recognition. Lastly, investors might be able to make more informed decisions by understanding the potential impact of goodwill impairment avoidance on a firm's prospects in the Thai market.

Contribution

This proposed study makes several significant contributions to the existing literature on goodwill impairment avoidance and its effects on future performance growth, particularly in the context of Thai companies.

1.Filling a research gap in the Thai context: Empirical research on the specific topic of goodwill impairment avoidance and its impact in Thailand is limited. By conducting this study in the Thai context, the research aims to fill this gap and contribute to a better understanding of the consequences of goodwill impairment avoidance in Thai business environment.

2.Investigating the moderating role of Big 4 auditors: By introducing the interaction term between goodwill impairment avoidance and the presence of Big 4 auditors, this study seeks to explore how the reputation and expertise of Big 4 auditors may affect the relationship between avoidance behavior and future performance growth. This extension contributes to a better understanding of the role of audit quality in mitigating or exacerbating the potential negative effects of goodwill impairment avoidance on a firm's future prospects.

Objectives

1. Investigate the association between goodwill impairment avoidance and future performance growth

2. Examine the effect of being audited by a Big4 firm on the relationship between goodwill impairment avoidance and future performance growth.

CHAPTER 2
LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The change in goodwill accounting

In 2001, the Financial Accounting Standards Board (FASB) addressed these concerns by issuing SFAS 142, which introduced a new approach to goodwill accounting. This standard eliminated goodwill amortization and required impairment testing of all goodwill using estimates of its current fair value. The FASB anticipated that SFAS 142 would enhance financial reporting by providing a better reflection of the underlying economics of acquired assets and improving users' understanding of expectations and changes in goodwill and other intangible assets over time (Ramanna & Watts, 2012).

The International Accounting Standards Board (IASB) followed the FASB's lead and introduced similar standards. In 2004, the IASB issued IFRS 3, Business Combinations, and IAS 36, Impairment of Assets, aligning international accounting practices with SFAS 142. These IASB standards also eliminated goodwill amortization and required periodic impairment testing based on fair value estimates.

In Thailand, the current practice standard of the so-called "impairment-only approach" began in 2008 when the TFAC (Thailand Federation of Accounting Professions) issued TAS 36, following IFRS 3 and IAS 36. TAS 36 mandates that all Thai companies must test their goodwill for impairment every year. Under the impairment-only approach, companies in Thailand are required to assess the carrying value of their goodwill and determine if it is impaired.

Managerial Discretion and Goodwill Impairment Avoidance

However, despite the intentions behind SFAS 142, the adoption of the impairment-only approach has not resolved all concerns. Critics argue that the reliance on fair value estimates for impairment testing introduces challenges, such as the subjectivity and potential manipulation of these estimates (Ayres et al., 2019).

Ramanna and Watts (2012) employed the BTM<1 ratio as a criterion to determine when firms should write off their goodwill. It may be possible to assume

that companies falling under this ratio might possess "positive private information" regarding future cash flows, which could be used as a justification for not impairing their goodwill value. However, Ramanna and Watts (2012) argued that if this were the case, there should be evidence of an increase in either company share repurchases, or net insider buy transactions. Their study, however, found no such evidence, leading them to conclude that companies with BTM<1 do not have material reasons to avoid impairing their goodwill. The findings of Ramanna and Watts (2012) shed light on the persistence of the issue even in a heavily regulated financial reporting environments like the United States. Their research revealed that even in this context, 69% of the firms did not impair their goodwill when they should have. This highlights the significance of examining the factors influencing goodwill impairment decisions and the potential implications harms of untimely goodwill impairment might cause to financial reporting quality.

In another study, Filip et al. (2015) found that managers often postpone timely goodwill impairment recognition by engaging in real activities manipulation. They manipulate current cash flows upward to justify their decision to avoid recognizing an impairment loss in the given financial period. However, this manipulation of earnings has been shown to have detrimental effects on a firm's future performance, as it necessitates subsequent reversals in future earnings. Similarly, Li and Sloan (2017) studied the impact of SFAS 142 and found that the adoption of the impairment-only approach has resulted in relatively overstated goodwill balances and untimely impairments. They also investigated investors' degree of anticipation regarding untimely goodwill impairment and discovered that, in general, investors do not fully anticipate the untimely nature of goodwill impairment.

External monitoring and how firms convince auditors.

Glaum et al. (2018) conducted a comprehensive study across 21 countries, focusing on IFRS-compliant firms. Their findings revealed that firms operating in jurisdictions with robust accounting and auditing enforcement are more likely to recognize goodwill impairment in a timely manner. They observed that firms in countries with high enforcement promptly recognized impairment losses on goodwill, while those in countries with weaker enforcement were less responsive to declines in

goodwill's economic value. Managerial motivations, including concerns about CEO reputation, also played a role in these decisions, even in high enforcement countries like the U.S. The study further suggested that private monitoring served as a counterbalance to weaker public enforcement in countries with lower enforcement levels.

Research suggests that multiple stakeholders such as the board of directors (inclusive of the audit committee), external auditors, and financial analysts play a crucial role in discouraging managers from avoiding goodwill impairments (Ayres et al., 2019; Bepari & Mollik, 2015). Additionally, Majid (2015) found that an increase in the proportion of shares held by non-controlling shareholders enhances their incentive to oversee managers' behavior regarding goodwill impairments, thereby preventing potential manipulations.

Despite these constraints, some managers might resort to inflating their firm's earnings to give the impression that goodwill is not impaired, even if its economic value has declined. This behavior often stems from the intention to safeguard their private interests from potential harm that may result from an impairment (Filip et al., 2015).

Consequences of Goodwill Impairment Avoidance

Despite internal and external monitoring constraints, Filip et al. (2015) found that manager still can avoid timely goodwill impairment recognition by resorting to inflating their firm's earnings to give an impression that goodwill is not impaired, even if its economic value has declined. This behavior often stems from the intention to safeguard their private interests from potential harm that may result from an impairment.

However, when managers strategically evade the timely recognition of goodwill impairment and manipulate their firm's current performance, this will lead to an artificial inflation of its financial assets compared to firms that promptly recognize impairments. This inflationary effect masks the true economic condition of the firm and undermines its future performance growth prospects (Han & Tang, 2020).

Moreover, the act of avoiding goodwill impairment introduces uncertainty regarding the firm's future profitability. Impaired goodwill is less effective in generating future profits, and by neglecting impairment recognition in the short term, the probability of recording a significant impairment later increases (Giner & Pardo, 2015). This further emphasis that untimely recognition of impairment can have severe consequences for the firm's overall performance.

Furthermore, avoiding goodwill impairment can result in upward earnings management through the manipulation of accruals and real activities. Manipulating accrual earnings inflates current financial results but eventually leads to future reversals and a decline in performance. Similarly, real earnings management techniques, such as sales manipulation or cost-cutting measures, may provide temporary boosts to current earnings but can have negative long-term effects on profitability. For example, discount promotions aimed at increasing short-term net income can erode long-term profitability due to reduced per-unit profit. Additionally, increasing production initially lowers unit product costs but can result in higher future expenses, such as product maintenance. Cutting discretionary spending in areas like research and development (R&D), advertising, and general administrative costs may elevate current earnings but compromise the firm's future growth prospects (Zang, 2012).

In summary, the avoidance of goodwill impairment, whether through accrual or real earnings management, has the potential to harm a company's future performance growth. Despite the temporary improvements in short-term performance, these actions come at the expense of the firm's long-term performance.

Based on this analysis, our hypothesis states that there is a negative association between goodwill impairment avoidance and a firm's future performance growth.

H1: Goodwill impairment avoidance is inversely related to a firm's future performance growth.

Auditing goodwill in the post-amortization era is proven to be new challenges for managers as the elimination of goodwill amortization made auditors have to evaluating the reasonableness of management’s assumptions in regard to goodwill

valuation and the future cashflow. This creates misalignment in incentives between managers and auditors, since firms' management are likely to prefer not to recognize goodwill impairment, in contrast, external auditors would like to minimize the bias in management's goodwill impairment testing. In Ayres et al. (2019) they found that the decision for a firm to record goodwill write-off is associated with an increase in the probability of external auditor dismissal.

Big 4 auditing firms are commonly recognized for their superior audit quality (Friedrich et al., 2023; Johnson et al., 2002) which is driven by several key factors. Primarily, their wide-ranging client portfolio reduces their dependency on any single client, thereby mitigating potential conflicts of interest. In situations where independence issues may arise with a client, the potential risk to their relationships with other clients acts as a deterrent against biased practices (DeAngelo, 1981). In addition, these firms are exposed to heightened litigation risks due to their considerable financial resources, which incentivizes them to uphold high-quality audits to fend off potential legal consequences (DeFond & Zhang, 2014). Their robust brand reputation, cultivated over time, motivates them to maintain excellent audit services, as any perceived decline in audit quality could significantly affect their standing in the industry (Francis & Wilson, 1988). Moreover, the reputational costs linked to compromised audit quality or independence issues are likely substantial for Big 4 auditors. The financial and reputational ramifications of these issues could eclipse the benefits of retaining certain clients, thus discouraging inappropriate collusion with management, and ensuring the preservation of audit integrity and quality.

Consequently, it can be inferred that Big 4 auditors would enforce stricter adherence to the timely recognition of goodwill impairment, ensuring no clear indications are missed. However, existing evidence suggests that the influence of external auditors on goodwill impairment loss may be constrained, given its inherently hard-to-verify nature (Albersmann & Quick, 2020).

Thus, given their reputation and independence at stake, Big 4 auditors would be unlikely to allow a client with clear evidence of the need for goodwill impairment to avoid timely recognition. Therefore, firms in our sample that were audited by Big 4

firms and recognized as avoiding timely goodwill impairment would mostly comprise firms where the evidence may not be clear-cut enough for the Big 4 auditor to enforce goodwill impairment.

In contrast, non-Big 4 auditors may not have the same level of liberty in selecting their clients as the Big 4 firms do. The challenge in auditing goodwill impairment testing as proposed by Ayres et al. (2019) might potentially lead non-Big 4 auditors to be more tolerant of obvious signs of goodwill impairment and to align with management's decision not to recognize goodwill impairment loss even when the evidence strongly indicates that impairment is warranted. Consequently, the effects of avoiding timely goodwill impairment on future performance growth may differ between these groups.

Thus, we propose our second hypothesis:

H2: The negative effect of goodwill impairment avoidance on a firm's future performance growth is less pronounced in Big 4 audited firms compared to non-Big 4 audited firms.

CHAPTER 3
RESEARCH DESIGN

Data

The data for our study was sourced from firms listed on the Stock Exchange of Thailand spanning the years 2008 through 2021. The commencement of our sampling from theperiodic was chosen because this year marked the implementation of TAS 36 in Thailand, consequently making it the inaugural year when goodwill had to undergo an impairment test as opposed to a periodic amortization. Data collection for our sample was executed primarily through the Bloomberg Terminal database. However, the Bloomberg Terminal does not provide data for past auditors for firms. To supplement this, we manually gathered data from the respective financial statements of each firm in our sample from the data publicly provided by the Thai SEC.

Identifying when firm should recognize goodwill impairment loss.

Impairment tests rely on subjective fair value estimates to assess the value of Cash Generating Units (CGUs) (Hitz, 2007). It is crucial for our empirical strategy to accurately identify firms that may be postponing the acknowledgment of economic goodwill impairments, referred to as suspect firms. Unfortunately, information regarding goodwill impairment tests, which are carried out at the CGU level or a group of CGUs, is not accessible to external users. Therefore, determining whether firms are delaying the recognition of goodwill impairment needs to be inferred from publicly available data. One approach to accomplish this is to concentrate on the market and book values at the firm level.

Our methodology for identifying firms that may potentially avoid goodwill impairment is based on the framework established by Ramanna and Watts (2012),. Several academic studies, including those conducted by Ramanna and Watts (2012), Filip et al. (2015), Ayres et al. (2019), Han and Tang (2020) and Filip et al. (2021), have utilized the Market-to-Book (MTB) ratio as a fundamental indicator to signal when firms should contemplate recognizing goodwill impairments.

In our study, we specifically consider a Market-to-Book ratio below 1 for two consecutive years as an indicative criterion for potential goodwill impairment. Ramanna and Watts (2012) provide substantial support for this approach, positing that when a firm's market value of equity falls below its book value, it often serves as an early warning signal of a forthcoming asset write off. This phenomenon is typically attributed to an overstated book value on the balance sheet. An MTB ratio below 1 signifies that the market values the firm's net assets at a lower level than what is reported on the balance sheet, strongly implying a potential overstatement of asset values, including that of goodwill.

Goodwill is distinct among assets for its verification challenges; it lacks the concrete reference points that tangible assets or certain intangible assets have, which allows for easier valuation adjustments. Therefore, if a firm's book value remains

overstated after accounting for adjustments to other assets, the attention turns to the potential impairment of goodwill. Given that it is more elusive in terms of independent verification, if the market consistently deems the net assets to be worth less than the recorded book value, it is often goodwill that is suspected to be impaired. Consequently, an MTB ratio below 1 can serve as a critical indicator prompting the need to assess and possibly write off goodwill to reflect the financial reality of the firm.

Given the difficulty in verifying goodwill, if a firm's overall asset book value remains overstated even after adjusting for other assets, it raises a strong suspicion that goodwill might indeed be overstated. This situation suggests potential goodwill impairment because, as goodwill is near-unverifiable compared to other assets, if the market perceives the net asset value to be lower than what is recorded on the balance sheet, it implies that goodwill may be impaired. Therefore, a write-down may be necessary to align the reported values with economic reality. In this sense, an MTB ratio less than 1 can be a valuable signal for assessing the potential impairment of goodwill.

Moreover, focusing on MTB being below 1 for two consecutive years is even more stringent. This extended period of underperformance makes the indicator more robust, as it demonstrates a sustained undervaluation of the company's net assets relative to their book value. If overall asset book value remains overstated after adjustments and the MTB remains below 1 for two consecutive years, it strongly implies goodwill overvaluation and potential impairment. Therefore, an MTB ratio less than 1, sustained over two years, is a highly useful and stringent signal for assessing potential goodwill impairment.

Importantly, firms that have already taken an appropriate write-off to address the issues identified by the MTB ratio are not included in our sample. This exclusion is based on the rationale that their MTB ratio should no longer be lower than 1 after the necessary adjustments have been made.

Sample Selection Process

Table 1. illustrate the selection process of our study. The objective of our sample selection was to curate a list of firms that would provide meaningful insights for our analysis. Our initial pool was derived from all firms that reported goodwill between 2008 and 2021 on the Stock Exchange of Thailand, totaling 1,525 firms. However, to ensure the data's clarity and precision, we implemented several exclusions to enhance its robustness and meaningfulness.

The first notable exclusion criterion pertained to firms that exhibited no signs of goodwill impairment or firms that did not have an MTB (Market-to-Book) ratio less than 1 for two consecutive years and did not record any goodwill impairment during this period. This initial screening led to the removal of 883 observations from our sample.

Another exclusion was applied to firms within the financial sector. Firms in this sector, which include banks, insurance companies, and securities entities, were omitted from our selection. This decision stems from the unique accounting systems under which these firms operate, which are notably different from other industries. As a result, the book value of financial firms cannot be directly compared with their non-financial counterparts. This criterion led to the exclusion of 59 observations.

Another important criterion for exclusion concerned the fiscal year-end. Firms without fiscal year-end statements dated December 31 were removed from the sample. This step was taken to ensure consistent data across the sample. By including only firms with a standard fiscal year-end, we provided a consistent time frame for all companies, thus avoiding potential discrepancies from varying reporting periods. This criterion led to the removal of 47 observations from our sample.

Lastly, following the methodology outlined by (Han & Tang, 2020), we exclude firms with goodwill balances that represent less than 0.1 percent of their total assets from our analysis. The purpose of this exclusion is to enhance the precision and relevance of our impairment avoidance measures. By concentrating on firms where goodwill accounts for more than 0.1% of the total assets before impairments in a given fiscal year, we focus on companies for whom goodwill is a noteworthy part of their asset base. This methodological choice helps ensure clarity in observing impairment avoidance effects, grounding our results in more substantial data. This criterion led to the additional removal of 131 observations from our sample.

After these exclusions, the final sample comprised 405 firms. These firms were then classified into two distinct groups for subsequent analysis:

- "Suspected Firms": This category includes 140 firms that exhibit a noteworthy pattern. Specifically, their Market-to-Book (MTB) ratio has remained consistently below 1 for two or more consecutive years. This persistent low MTB ratio raises suspicion of potential avoidance of goodwill impairment recognition. Despite the market valuing these firms' net assets below their

book value, they have not recorded any goodwill impairment during this period. This sustained disparity implies a possible overstatement of goodwill on their balance sheets.

- "Impaired Firms": The second group comprises 265 firms that have indeed recognized goodwill impairment within the study period. These companies have reported impairments in their financial statements, which reflect a reduction in the carrying amount of goodwill to its recoverable amount. The inclusion of these firms provides a valuable contrast to the "Suspected Firms," enabling a comprehensive examination of the goodwill impairment landscape across companies with varying financial conditions.

Our categorization of the final sample into "Suspected Firms" and "Impaired Firms" serves as a foundation for our comparative analysis. This differentiation is vital as we investigate whether avoiding the recognition of goodwill impairment has an impact on a firm's future performance growth. By studying these two groups, our research aims to determine whether delaying goodwill impairment recognition influences a company's future performance growth.

Table 1: Sample Selection Criteria and Final Sample Composition

Selection Criteria	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Total Firms Reporting Goodwill	59	55	55	62	72	79	86	101	125	140	161	174	177	179	1525
Excluded due to Lack of Impairment Indicators	36	28	32	42	48	53	50	60	76	79	91	84	93	111	883
Excluded from Financial Sector	2	3	3	2	2	3	5	8	4	6	6	5	3	7	59
Excluded due to Non-Standard Fiscal Year-End	0	1	2	3	3	3	3	4	4	4	5	5	5	5	47
Excluded for Goodwill below 0.1% Threshold	9	5	7	5	6	7	7	7	12	15	15	15	11	10	131
Final Sample After Exclusions	12	18	11	10	13	13	21	22	29	36	44	65	65	46	405
Suspect firms	8	10	4	3	5	4	6	7	7	6	12	21	25	22	140
Impaired firms	4	8	7	7	8	9	15	15	22	30	32	44	40	24	265

Sample

Following the selection process, our sample for analysis was successfully constructed. Our sample consists of two data groups: suspected firms, which are firms identified as having potential goodwill impairment loss but have not recorded any goodwill write-off in that year, and impaired firms, which are firms that have impaired their goodwill in the respective year.

In total, our sample encompasses 405 firm-year observations. Among these, 140 observations belong to the "Suspected Firms" category, while 265 observations are categorized as "Impaired Firms," as summarized in Table 2.

Table 2: Distribution of Suspected and Impaired Firms Across Years.

Year	Suspect Firms	Impaired Firms
2008	8	4
2009	10	8
2010	4	7
2011	3	z7
2012	5	8
2013	4	9
2014	6	15
2015	7	15
2016	7	22
2017	6	30
2018	12	32
2019	21	44
2020	25	40
2021	22	24
Total	140	265
	Total	405

Interestingly, in the year 2008, which was marked by the global financial crisis, only 4 out of the 12 firms that met the criteria for recognizing goodwill impairments based on our analysis proceeded with the impairment. This trend was consistent with our observations during the COVID-19-affected years of 2019 and 2020. Despite significant economic shocks and the corresponding anticipation of a substantial increase in the number of firms recognizing goodwill impairments, the actual rise was unexpectedly minimal. This pattern suggests that firms may intentionally avoid recognizing goodwill impairments. This finding aligns with prior literature that indicates firms tend to be opportunistic in their approach to recognizing goodwill impairments (Ramanna & Watts, 2012).

During economic downturns, such as those experienced during these crises, there is typically an elevated risk of asset impairments, particularly for intangible assets like goodwill. Nevertheless, our observations underscore a potential reluctance or delay by firms in promptly addressing goodwill impairments during these critical periods. This hesitancy, coupled with the counterintuitive nature of these decisions during economic recessions, hints at the presence of a deliberate strategy. Firms may intentionally defer these impairments to project an image of financial resilience, thereby seeking to reassure stakeholders and mitigate potential adverse market reactions. This behavior emphasizes the discretionary nature of accounting decisions concerning goodwill.

In summary, these results highlight how companies make decisions about goodwill impairments, especially during financial downturns. There's a clear difference between what we expected to see and what companies conducted. This calls for further research to understand why companies make these choices and what it means for financial reporting.

Methodology

To investigate the relationship between a firm's future performance and goodwill impairment avoidance, this study employs a baseline multivariate regression model influenced by Han and Tang (2020). The models are specified as follows.

Empirical Models

- $\Delta ROA_{i,t+1} = \beta_0 + \beta_1 \text{SUSPECT}_{i,t} + \beta_2 \text{Big4}_{i,t} + \beta_3 \text{SUSPECT}_{i,t} * \text{Big4}_{i,t} + \beta_4 Size_{i,t} + \beta_5 \text{LEV}_{i,t} + \beta_6 \text{M/B}_{i,t} + \beta_7 \text{GROWTH}_{i,t} + \beta_8 \text{INTANG}_{i,t} + YEAR\_FE + INDUSTRY\_FE + \epsilon$
- $\Delta ROE_{i,t+1} = \lambda_0 + \lambda_1 \text{SUSPECT}_{i,t} + \lambda_2 \text{Big4}_{i,t} + \lambda_3 \text{SUSPECT}_{i,t} * \text{Big4}_{i,t} + \lambda_4 \text{Size}_{i,t} + \lambda_5 \text{LEV}_{i,t} + \lambda_6 \text{M/B}_{i,t} + \lambda_7 \text{GR}OWTH_{i,t} + \lambda_8 \text{INTANG}_{i,t} + YEAR\_FE + INDUSTRY\_FE + \epsilon$

Our study concludes with two models that incorporate both industry and year fixed effects to increase robustness. In each model, for a given firm i at year t, the dependent variable signifies the change in different aspects of the firm's financial performance - namely ΔROA (Return on Assets) and ΔROE (Return on Equity). The primary independent variable across all models is SUSPECT, a dummy variable that equals one if the firm is suspected of avoiding impairing goodwill, and zero otherwise. This variable is aimed to capture the potential influence of goodwill impairment avoidance on the firm's financial performance. Industry fixed effects are included to account for shared characteristics and conditions within the same industry,

while year fixed effects control for broad influences affecting all firms in a particular year. The inclusion of these fixed effects ensures our models isolate the impact of goodwill impairment avoidance from these external factors. The results of these models are used to test H1: Goodwill impairment avoidance is inversely related to a firm's future performance growth.

In the first equation, the dependent variable is ΔROA which represents the change in Return on Assets, which indicates the efficiency of the company in using its assets to generate profit. In the second equation, the dependent variable is ΔROE which represents the change in Return on Equity, which represents the company's financial performance from the perspective of equity holders. It incorporates the same set of independent variables as the first equation, including the primary independent variable, SUSPECT.

In all of the equations, there are several control variables introduced to account for other factors that may influence the company's financial performance. These include:

- BIG4, indicates whether the firm's auditor is one of the Big 4 auditing firms or not, Big4 equals 1 if the firm is audited by a Big4 firm, and 0 otherwise. The inclusion of this variable aims to control for the potential influence of auditing quality on a firm's financial performance.
- Size, represented by the natural log of the firm's total assets, which can reflect the scale and market position of the firm.
- LEV, the book value of the firm's total liabilities divided by the book value of its assets, a measure of financial leverage.
- M/B, the firm's market-to-book ratio, which can indicate market perceptions of the firm's growth prospects.
- GROWTH, the growth rate of the firm's revenue, a measure of the firm's ability to expand its business.
- INTANG, the ratio of the firm's intangible assets over the total assets, capturing the significance of intangible resources in the firm's asset structure.
- YEAR_FE is year fixed effect.
- INDUSTRY_FE is industry fixed effect.

We expect the estimated coefficients of SUSPECT in all three models, namely β_1 and λ_1 to be significantly lower than 0 since we hypothesize that SUSPECT has an inverse relationship with firm's future performance growth.

An interaction term, $\text{SUSPECT}_{i,t} * \text{Big4}_{i,t}$, is also added in these models, allowing the models to examine whether the relationship between goodwill impairment avoidance and financial performance varies depending on whether the firm is audited by a Big 4 auditor. and thus able to test H2: The negative effect of goodwill impairment avoidance on a firm's future performance growth is less pronounced in Big 4 audited firms compared to non-Big 4 audited firms.

We expect the estimated coefficients of the interaction terms $\text{SUSPECT}_{i,t} * \text{Big4}_{i,t}$ in all the equations (β_3, λ_3) to be significantly above 0, as we expect the presence of Big4 Audit firms to lessen the effects of avoiding timely goodwill impairment loss.

CHAPTER4

EMPIRICAL RESULTS

Descriptive Statistic

Table 3: Descriptive Statistic

VARIABLES	N	mean	sd	min	p25	p50	p75	max
Dependent Variables								
$\Delta ROA_{i,t+1}$	405	0.0018	0.0483	-0.148	-0.0218	0.0019	0.0222	0.127
$\Delta ROE_{i,t+1}$	405	-0.0006	0.12	-0.367	-0.042	0.00369	0.0514	0.288
Independent Variable								
Suspect	405	0.346	0.476	0	0	0	1	1
Control Variables								
BIG4	405	0.76	0.427	0	1	1	1	1
Size	405	9.899	1.711	6.396	8.61	9.722	10.98	14.75
LEV	405	0.493	0.173	0.0965	0.387	0.495	0.626	0.914
MTB	405	1.734	4.171	0.0261	0.663	0.928	1.672	78.68
Growth	405	0.0399	0.323	-0.963	-0.104	0.0139	0.135	2.659
Intang	405	0.081	0.11	0	0.0119	0.0373	0.0941	0.727

Table 3 provides a comprehensive outline of the descriptive statistics for the variables under study, For the dependent variables, $\Delta ROA_{i,t+1}$ exhibits a mean value of 0.0018, indicating a modest average shift in the return on assets amongst firms in the sample. Its median value, closely hovering at 0.0019, signals a balanced distribution around this central figure. However, the observed variability, marked by a standard deviation of 0.0483, underscores diverse company performances. This metric ranges from a decline of 14.8% to an increase of 12.7%. Similarly, $\Delta ROE_{i,t+1}$ has a slightly negative average of -0.0006, pinpointing a nominal average decrement in return on equity. The distribution here is notable: while the 50th percentile (median) is positive at 0.00369, the range stretches from a sharp decline of 36.7% to a rise of 28.8%.

Focusing on the independent variable, the Suspect metric presents a mean value of 0.346, suggesting that about 34.6% of our entire sample meet our criteria of suspected to avoid timely goodwill impairment.

Turning our focus to the control variable, BIG4, it reveals a noteworthy mean value of 0.76. This indicates that a substantial majority of firms within our sample are clients of the prominent BIG 4 audit firms. This finding aligns with expectations,

given that our sample primarily consists of firms with goodwill values on their balance sheets, which typically belong to the larger-sized companies who are more than capable of affording the higher audit fees typically associated with the BIG 4 audit firms. The Size variable, which represents the logarithm of total assets, averages at 9.899, with a standard deviation of 1.711, emphasizing the diverse scale of firms in the dataset. Another control variable deserving attention is MTB, which has an average of 1.734. This suggests that companies generally trade at approximately 1.73 times their book value. Yet, there's notable variability, as reflected by a standard deviation of 4.171. Such variability might be linked to differences in industry sectors; certain industries might naturally enjoy higher valuations due to growth opportunities, technological innovations, or market demand, whereas others could command more conservative valuations.

Correlation Coefficients

Table 4: Correlation Matrix

	Suspect	*$\Delta ROA_{i,t+1}$*	*$\Delta ROE_{i,t+1}$*	*BIG4*	*Size*	*LEV*	*MTB*	*Growth*	*Intang*
Suspect	1								
$\Delta ROA_{i,t+1}$	0.042292	1							
$\Delta ROE_{i,t+1}$	0.031173	0.928494	1						
BIG4	-0.18818	0.003941	0.015635	1					
Size	-0.24158	0.018871	0.039128	0.31982	1				
LEV	-0.17589	0.033415	0.018249	-0.00651	0.199602	1			
MTB	-0.1871	-0.16406	-0.17083	-0.0087	-0.05486	0.024344	1		
Growth	-0.00963	-0.1383	-0.10008	-0.00974	-0.02857	-0.01021	-0.05639	1	
Intang	-0.16494	-0.09309	-0.09589	0.007043	-0.04317	0.08835	0.250842	0.03858	1

To understand the interrelation between our key variables, we constructed a correlation matrix as depicted in Table 4. Here are the notable observations from the correlation matrix:

Firstly, when examining the relationship between $\Delta ROA_{i,t+1}$ and $\Delta ROE_{i,t+1}$, the correlation coefficient stands at a substantial 0.928494, signifying high statistical significance. This robust positive correlation indicates a strong and positive connection between the two metrics representing future performance growth. Given that both $\Delta ROA_{i,t+1}$ and $\Delta ROE_{i,t+1}$
are indicators of a firm's financial performance, this concurrent movement is anticipated, emphasizing their interconnected nature in evaluating a firm's future performance trajectory.

In contrast to earlier studies, such as the one conducted by Han and Tang (2020), our analysis reveals a different correlation pattern between Suspect (a proxy for goodwill impairment avoidance) and the two-performance metrics in our sample. Specifically, we find that the correlation coefficients between Suspect and $\Delta ROA_{i,t+1}$, as well as Suspect and $\Delta ROE_{i,t+1}$, are both positive but quite weak. The correlation coefficient between Suspect and $\Delta ROA_{i,t+1}$ is approximately 0.0423, indicating a minor positive association between goodwill impairment avoidance and changes in

return on assets. Similarly, the correlation between Suspect an $\Delta ROE_{i,t+1}$is relatively weak at around 0.0312. These unexpected findings do not align with the expectations set forth in H1 hypothesis, suggesting that goodwill impairment avoidance does not exhibit a negative correlation with future performance growth. However, it's worth noting that this positive correlation may be influenced by the potential mitigating effect on the impact of goodwill impairment avoidance of high-quality financial statement audits provided by BIG4 audit firms. The positive yet very weak correlation between Suspect and the performance measures could also be attributed to the absence of control variables in this preliminary analysis. To draw more definitive conclusions regarding our hypotheses, more stringent multiple regression analyses are necessary.

In terms of the correlation between BIG4 and Suspect, the coefficient is approximately -0.1882, indicating a weak negative association between the presence of BIG4 audit firms and Suspect (a proxy for goodwill impairment avoidance). This suggests that there is a slight negative relationship, implying that firms audited by BIG4 firms are less likely to engage in goodwill impairment avoidance. In addition, the relationship between the BIG4 audit firms and the performance metrics provides interesting observations. The correlation between BIG4 and $\Delta ROA_{i,t+1}$is a positive 0.0039, while its correlation with $\Delta ROE_{i,t+1}$ is slightly higher at 0.0156. These positive coefficients indicate that being audited by one of the BIG4 audit firms positively correlates with changes in a company's return on assets and equity. Thus, potentially supporting H2 hypothesis.

Additionally, we have conducted a thorough examination for multicollinearity by utilizing a correlation matrix, a crucial step to ensure the reliability of our regression results. The correlation matrix examination has provided reassuring outcomes, as it reveals that the coefficients of the variables included in our regression model exhibit relatively low levels of correlation. Importantly, all these correlations are well below the commonly accepted threshold of 0.8, which is a critical indicator of the absence of multicollinearity issues in our analysis. This finding significantly strengthens the credibility and accuracy of our regression results, as it indicates that the independent variables in our model are not excessively interrelated or redundant, allowing us to make robust and valid inferences from our regression analysis.

Univariate Test

Table 5: Univariate Test Results

Variable	Suspect=1 (N=140)		Suspect=0 (N=265)		Mean t-values (Student's t-test)	Mean z-values (Wilcoxon test)
	Mean	SD	Mean	SD		
$\Delta ROA_{i,t+1}$	0.0046	0.4624	0.0003	0.0494	-0.8498	-0.4450
$\Delta ROE_{i,t+1}$	0.0045	0.1126	-0.0033	0.1233	-0.6261	-0.3980

Table 5 presents the outcomes of univariate tests aimed at discerning differences in the mean values of the performance metrics $\Delta ROA_{i,t+1}$ and $\Delta ROE_{i,t+1}$ between two distinct groups: "Suspect = 1," representing firms suspected of avoiding timely goodwill impairment, and "Suspect = 0," representing firms that impair their goodwill.

For the $\Delta ROA_{i,t+1}$ metric, the "Suspect = 1" group exhibits an average value of 0.0046062, accompanied by a standard deviation of 0.0462378. In contrast, the "Suspect = 0" group reports an average $\Delta ROA_{i,t+1}$ of 0.0003127 with a standard deviation of 0.0494374. When scrutinizing the disparity between these groups using the Student's t-test, the computed t-value is -0.8498. This value suggests that the difference in $\Delta ROA_{i,t+1}$ between the groups is not statistical significance. This interpretation is further validated by the Wilcoxon test, which yields a z-value of -0.445 and a corresponding p-value of 0.6560. This higher p-value signifies that the distributions of $\Delta ROA_{i,t+1}$ between the two groups do not exhibit statistically significant differences.

The same result holds for the $\Delta ROE_{i,t+1}$metric, the "Suspect = 1" group displays an average value of 0.0045241, accompanied by a standard deviation of 0.1126107. Conversely, the "Suspect = 0" group has an average $\Delta ROE_{i,t+1}$of -0.0033094 and a standard deviation of 0.123342. The t-value derived from this comparison is -0.6261, once again indicating an absence of a significant difference in $\Delta ROE_{i,t+1}$between the groups at conventional significance levels. This outcome aligns with the results of the Wilcoxon test, which produces a z-value of -0.398 and a p-value of 0.6906. Once more, this p-value exceeds conventional significance levels, suggesting that the distributions of $\Delta ROE_{i,t+1}$between the two groups do not display substantial differences.

In conclusion, the univariate analysis presented in Table 3 does not offer strong evidence of a significant difference in either $\Delta ROA_{i,t+1}$ or $\Delta ROE_{i,t+1}$between the two Suspect groups. This is consistent with what we conclude from the coefficients analysis.

Once more, the absence of significant differences in these univariate tests might be attributed to several factors. Firstly, the presence of high-quality financial

statement audits, particularly those conducted by BIG4 audit firms, may mitigate the negative impact of goodwill impairment avoidance. Secondly, the lack of control variables in this analysis could contribute to these findings. This absence means that certain influencing factors that have not been considered may be affecting the relationship between the Suspect groups and the performance metrics. Consequently, this could diminish the discernible distinctions between the two Suspect groups when considered in isolation.

Hausman Test

This paper conducts a Hausman test to ensure that our choice of using fixed effects in our models is correct. Selecting the appropriate model between the fixed effects (FE) and random effects (RE) approaches is crucial when dealing with panel data. Each model has its own set of assumptions, and using the wrong model can lead to biased results.

Table 6: Hausman Test

Chi-square	DF	P-value
30.15	8	0.0002

The results of the Hausman test are presented in Table 6. The Hausman test yields a chi-squared statistic of 30.15 with a p-value of 0.0002. This low p-value indicates a statistically significant difference at 1% level in coefficients between the fixed and random effects models. Therefore, it further confirms the validity of using fixed effects in our regression analysis.

Multivariate Regression Analysis

Table 7: Multivariate Regression Analysis Results

VARIABLES	(1) $\Delta ROA_{i,t+1}$	(2) $\Delta ROE_{i,t+1}$
Suspect	-0.0159*	-0.0473**
	(0.0958)	(0.0490)
Suspect*BIG4	0.0217*	0.0625**
	(0.0694)	(0.0329)
BIG4	-0.00923	-0.0289
	(0.282)	(0.164)
LEV	0.0193	0.0353
	(0.229)	(0.430)
MTB	-0.00166***	-0.00424***
	(2.20e-07)	(3.76e-09)
Growth	-0.0179**	-0.0311
	(0.0342)	(0.112)
Intang	-0.0453*	-0.110*
	(0.0838)	(0.0831)
Size	-0.00152	-0.00211
	(0.426)	(0.667)
Constant	0.0303	0.0672
	(0.148)	(0.192)
Observations	405	405
R-squared	0.140	0.140
Industry FE	YES	YES
Year FE	YES	YES

Robust pval in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The estimated results of our empirical models for future performance growth and suspect avoiding goodwill impairment firms are presented in Table 7. We use $\Delta ROA_{i,t+1}$as the dependent variable in column 1. $\Delta ROE_{i,t+1}$ is used as the dependent variable in column 2. Both of these dependent variables are proxies for future performance growth.

The estimated coefficient of Suspect in column 1 is -0.0159 and statistically significant at 10% level. The negative sign indicating an inverse relationship between Suspect and $\Delta ROA_{i,t+1}$, The marginal statistically significant of Suspect in $\Delta ROA_{i,t+1}$ model could be due to the limitations of the number of observations since we only have 405 observations in our sample only. The estimated coefficients of Suspect in column 2 is -0.0473 and statistically significant at 5% level indicating an inverse relationship between Suspect and $\Delta ROA_{i,t+1}$. The results from both of the empirical

models in regard to the estimated coefficients of Suspect are consistent with previous literature (Filip et al., 2015; Han & Tang, 2020) and our hypothesis 1 that **H1: Goodwill impairment avoidance is inversely related to a firm's future performance growth**.

The estimated coefficient of the interaction term Suspect*BIG4 in column 1 is 0.0217, and it is statistically significant at the 10% level. The relative marginal significance of this interaction term might be influenced by the limitations in the sample size, as we have only 405 observations. This positive coefficient indicates that the negative association between Suspect and change in ROA is mitigated for firms audited by one of the Big 4 compared to those audited by non-Big 4 firms. In column 2, the estimated coefficient of the interaction term Suspect*BIG4 is 0.0625 and statistically significant at the 5% level. Similarly, the positive coefficient for the interaction term in the ROE model indicates that the negative relationship between Suspect and change in ROE is less pronounced for companies audited by one of the Big 4 audited firms compared to companies audited by a non-Big 4 audited firm.

Our regression analysis consistently and significantly supports Hypothesis 2 that H2: **The negative effect of goodwill impairment avoidance on a firm's future performance growth is less pronounced in Big 4 audited firms compared to non-Big 4 audited firms**. Which suggests that the negative impact of goodwill impairment avoidance on a firm's future performance growth is less pronounced in Big 4 audited firms compared to non-Big 4 audited firms. This finding strongly indicates that the presence of Big 4 auditors plays a moderating role, as proposed in the hypothesis. It highlights the significance of auditor reputation and oversight in the financial reporting process, especially in the context of goodwill impairment recognition. This observation aligns with previous research, which has emphasized that firms audited by one of the BIG 4 audit firms tend to exhibit better financial statement quality. Given the reputation and independence at stake, Big 4 auditors are less likely to permit a client with clear evidence of the need for goodwill impairment to avoid timely recognition (Ayres et al., 2019).

CHAPTER 5

ROBUSTNESS TEST

To validate our main findings, we conducted two additional robustness tests.

Relaxing the Suspect Criteria

To enhance the reliability and robustness of our primary findings, we conducted a supplementary analysis by refining our suspect criteria. In our initial approach, we required a firm's MTB to be less than 1 for two consecutive years, which could be deemed too stringent given our limited dataset. To address this concern and to align with prior research methodologies, we adjusted our criteria to require that MTB be less than 1 for just one year. This method is consistent with the approach used by Filip et al. (2015).

Table 8: Relaxing the Suspect Criteria - Multivariate Regression Analysis Results

VARIABLES	(3) $\Delta ROA_{i,t+1}$	(4) $\Delta ROE_{i,t+1}$
Suspect	-0.0164*	-0.0487**
	(0.0904)	(0.0383)
Suspect*BIG4	0.0180*	0.0538*
	(0.0976)	(0.0504)
BIG4	-0.00934	-0.0292
	(0.249)	(0.163)
LEV	0.0168	0.0286
	(0.220)	(0.478)
MTB	-0.00150**	-0.00410***
	(0.0110)	(3.60e-09)
Growth	-0.00204	-0.0131***
	(0.261)	(0)
Intang	-0.0565**	-0.124**
	(0.0101)	(0.0320)
Size	-0.00137	-0.00202
	(0.395)	(0.657)
Constant	0.0157	0.0311
	(0.419)	(0.553)
Observations	472	472
R-squared	0.120	0.137
Industry FE	YES	YES
Year FE	YES	YES

Robust pval in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The results of the multivariate regression analysis using the new refined criteria are presented in Table 8. By relaxing the suspect criteria, our sample size expanded to 472 observations, an increase of 67 observations from the main models.

For the $\Delta ROA_{i,t+1}$ model, the estimated coefficient for Suspect is -0.0164, and although its significance is marginal with a p-value of 0.0904, it implies a potentially adverse relation between firms suspected of delaying goodwill impairment and their subsequent performance. This negative association is more noticeable for the $\Delta ROE_{i,t+1}$ model, where the estimated Suspect coefficient is -0.0487 and is significant at the 5% level with a p-value of 0.0383. These results highlight our primary assertion that avoiding goodwill impairment could hamper a firm's future performance growth, supporting our H1 hypothesis.

Consistent with our primary results, the interaction term 'Suspect*BIG4' remains a key aspect of our analysis. In both the $\Delta ROA_{i,t+1}$ and $\Delta ROE_{i,t+1}$ models, it continues to exhibit estimated positive coefficients (0.0180 and 0.0538, respectively), with corresponding p-values of 0.0976 and 0.0504 indicating the statistical significance of these estimates. These results reinforce the idea that the presence of Big 4 auditors may have a mitigating effect, partially alleviating the adverse consequences of goodwill impairment avoidance and thereby contributing to firms' future performance growth, supporting our H2 hypothesis.

Furthermore, other control variables such as MTB and Intang remain statistically significant and exhibit consistent directions and magnitudes with our main findings. This reinforces the robustness of our primary results and provides additional support for the validity of our conclusions.

Incorporating Auditor Tenure as a Control Variable and Interaction Term

To further validate our findings, we conducted an additional robustness test. In this test, we introduced the 'Long_tenure' variable as an additional control to measure audit quality. We also explored the interaction effect between 'Suspect' and 'Long_tenure,' denoted as 'Suspect*Long_tenure,' to investigate how longer tenure of audited firms influences the impact of untimely goodwill impairment on performance growth.

The 'Long_tenure' variable is a binary indicator, taking a value of 1 when firms have retained the same auditor for at least three consecutive years.

The existing literature presents two contrasting theories regarding the impact of auditor tenure on the quality of financial statements. One perspective suggests that as auditors maintain longer relationships with a company, they have the opportunity to accumulate valuable knowledge about the firm. This accumulated knowledge could potentially enhance their efficiency and accuracy in performing their auditing tasks,

implying that longer tenure may indicate higher quality financial statements (Ghosh & Moon, 2005; Knapp, 1991).

On the other hand, some studies propose a different view, indicating that long tenure might lead to complacency or over-familiarity, potentially compromising the quality of financial statements (DeAngelo, 1981; Francis, 2004).

Considering these differing viewpoints, our analysis aims to shed light on how the length of auditor tenure interacts with the impact of untimely goodwill impairment on a firm's performance growth.

Table 9: Incorporating Auditor Tenure – Multivariate Regression Analysis Results

VARIABLES	(5) $\Delta ROA_{i,t+1}$	(6) $\Delta ROE_{i,t+1}$
Suspect	-0.0236*	-0.0705**
	(0.0559)	(0.0229)
Suspect*BIG4	0.0206*	0.0579**
	(0.0810)	(0.0451)
Suspect*Long_tenure	0.0125	0.0391
	(0.264)	(0.165)
BIG4	-0.00875	-0.0267
	(0.301)	(0.188)
Long_tenure	-0.00320	-0.0163
	(0.693)	(0.391)
LEV	0.0197	0.0373
	(0.225)	(0.408)
MTB	-0.00166***	-0.00424***
	(2.54e-07)	(8.85e-09)
Growth	-0.0181**	-0.0325
	(0.0342)	(0.101)
Intang	-0.0440*	-0.105*
	(0.0969)	(0.0983)
Size	-0.00136	-0.00132
	(0.479)	(0.792)
Constant	0.0341	0.0762
	(0.115)	(0.154)
Observations	405	405
R-squared	0.143	0.145
Industry FE	YES	YES
Year FE	YES	YES

Robust pval in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The test results are reported in Table 9. By including the 'Long_tenure' variable as a control for audit risk and introducing the interaction term 'Suspect*Long_tenure' to explore the interaction between longer tenure of audited firms and firms suspected of avoiding timely goodwill impairment, our main findings remain robust. The estimated coefficients of 'Suspect' in both the $\Delta ROA_{i,t+1}$and $\Delta ROE_{i,t+1}$ models retain their negative sign and achieve statistical significance with p-values of 0.0559 for $\Delta ROA_{i,t+1}$ and 0.0229 for $\Delta ROE_{i,t+1}$. These results support our H1 hypothesis, indicating the adverse effects of avoiding timely goodwill impairment on future performance growth.

The mitigating effects of having a Big4 auditor on Suspect firms also persist, as the estimated coefficients of the interaction term between 'Suspect' and 'BIG4' remain statistically positive in both models, aligning with our H2 hypothesis. Notably, the magnitude of this mitigation appears to decrease when the 'Long_tenure' variable is included in our models.

Furthermore, while the estimated coefficient of the interaction term between 'Suspect' and 'Long_tenure' is marginally statistically insignificant (possibly due to limitations in the number of observations), its positive sign suggests a potential mitigation effect on the impact of goodwill impairment avoidance on future performance growth for firms with longer durations of audited firms acting as external monitors. This implies that longer auditor tenure may be weakly associated with higher audit quality.

The 'Long_tenure' variable remains a subject of debate. Some studies argue that long tenure leads to overfamiliarity with clients, potentially undermining financial statement quality (DeAngelo, 1981; Francis, 2004). However, the opposite view contends that long tenure can result in auditors gaining expertise and experience, ultimately enhancing audit quality (Ghosh & Moon, 2005; Knapp, 1991). Therefore, our findings do not conclusively support the notion that long tenure leads to weaker audit quality. Instead, this empirical evidence weakly supports the idea that long auditor tenure may be associated with higher audit quality, as evidenced by the less pronounced harmful effects of goodwill impairment avoidance among firms with longer-tenured auditors, as indicated by positive sign of ‘Long_tenure’ estimated coefficients in both the $\Delta ROA_{i,t+1}$ and $\Delta ROE_{i,t+1}$ models. This result is contradicted with what Albersmann and Quick (2020) found in the study conduct in German stock market in which they found that a longer tenure leads to more untimely goodwill impairments.

CHAPTER 6
CONCLUSION

This research aimed to investigate the intricate dynamics between firms suspected of avoiding timely goodwill write-offs and the subsequent impact on the performance growth of firms listed on the Stock Exchanges of Thailand (SET). The primary objective was to provide empirical evidence regarding the potential negative consequences of failing to recognize goodwill impairments promptly.

In this study, we collected data spanning 14 years, from 2008 to 2021, resulting in 405 observations (firm-years) across 124 unique firms. Our analysis revealed several noteworthy findings that contribute to the existing literature on goodwill impairment avoidance and its implications.

First, our research did not find substantial evidence supporting the notion that managers convey positive private information by refraining from recording goodwill impairments, as intended by standard setters. This suggests that goodwill impairment avoidance may not be driven primarily by attempts to signal favorable private information to the market.

On the contrary, our study did find significant evidence supporting the notion that managers exploit the unverifiable nature of goodwill accounting. Firms that avoid timely goodwill write-offs tend to experience a decline in their future performance growth, as demonstrated by our results. This aligns with previous research by Beatty and Weber (2006) and Ramanna and Watts (2012), emphasizing the adverse consequences of goodwill impairment avoidance on a firm's financial prospects.

Additionally, our research revealed that firms audited by one of the Big 4 audit firms (BIG4) exhibit higher-quality financial reports. These firms appear to mitigate the detrimental effects of goodwill impairment avoidance, suggesting that the presence of Big 4 auditors plays a moderating role in this context. This finding emphasizes the importance of auditor reputation and oversight in the financial reporting process, particularly concerning goodwill impairment recognition.

In summary, our study contributes to literature in several ways. Firstly, we address a significant gap by examining the effects of goodwill impairment avoidance in the Thai context, which has been previously underexplored. Secondly, we explore how the influence of Big 4 auditors can affect the negative impact of goodwill impairment avoidance, shedding light on the role of audit quality in this context. Through these focal points, our study provides fresh insights into the broader conversation on audit quality and goodwill impairment avoidance.

The central findings of our research indicate a substantial inverse association between "Suspect" firms and future performance growth. This reaffirms the notion that these firms typically experience reduced performance growth.

Moreover, the moderating role of Big 4 auditors is significant. Firms audited by one of the Big 4 exhibit a softened adverse relationship, underscoring the credibility and oversight of these major auditing entities.

In conclusion, our research provides valuable insights into the complex interplay between goodwill impairment avoidance, firm performance growth, and the moderating role of Big 4 auditors. These findings contribute to a deeper understanding of financial reporting practices and their implications, particularly in the context of goodwill impairment recognition.

Limitations

While our study has yielded insightful discoveries, it is crucial to acknowledge its inherent limitations.

Firstly, the sample size, consisting of 405 observations, although sufficient for achieving statistical significance, remains relatively modest. This limitation can potentially affect the generalizability and robustness of our results. A larger sample size would provide a more solid foundation for analysis, offering broader insights and a more detailed understanding of the issues under investigation.

Furthermore, our study employs the market-to-book (MTB) ratio as a criterion for identifying "Suspect" firms, a common approach in research of this nature. However, this criterion has its own set of drawbacks. While it effectively identifies firms with a strong indication of goodwill impairment, it does not encompass all instances of impaired goodwill. Some firms with an MTB ratio above one might still conceal unacknowledged impaired goodwill. Therefore, while the MTB ratio is a useful tool, it is not exhaustive in its ability to identify impairment.

In light of these constraints, future research should aim to address these limitations. Expanding the sample size would enhance the robustness and external validity of the findings, providing a more comprehensive perspective. Additionally, there is a clear need for the development and utilization of more refined criteria or methods that can detect goodwill impairment in a more precise manner. These methodological advancements would contribute to a more precise identification of impairment avoidance behavior, ultimately enhancing the reliability and utility of research outcomes in the study of timely goodwill impairment avoidance.

Implications

The findings of this study have significant practical implications for various stakeholders in Thailand's financial landscape. Financial statement users, including analysts, creditors, and shareholders, can gain valuable insights into evaluating the reliability of financial reports. By understanding the potential consequences of goodwill impairment avoidance, they can be more vigilant in assessing firms suspected of such practices, ultimately enhancing the quality of their decision-making. Furthermore, regulators in Thailand can leverage these findings to consider improvements to accounting standards and guidelines related to goodwill impairment

recognition. Investors can benefit by incorporating the risk associated with goodwill impairment avoidance into their investment strategies. Recognizing that firms engaged in such practices may experience lower future performance growth, investors can adjust their risk profiles and make more informed investment decisions.

Moreover, the inclusion of Big 4 audit firms in this study's analysis reveals important insights into the auditing profession's role and influence in mitigating the adverse effects of goodwill impairment avoidance. The findings underscore the significance of auditor reputation and oversight in the financial reporting process, particularly concerning goodwill impairment recognition.

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