



UNIVERSITY OF GOTHENBURG

SCHOOL OF BUSINESS, ECONOMICS AND LAW

Impair Me to Heaven: Big Bath Accounting and Market Reactions

*A Quantitative Study on Goodwill Impairments and Stock Price Effects in the Swedish
Stock Market*

GM1460 - Master's Degree Project in Accounting and Financial Management Spring 2025

School of Business, Economics and Law, University of Gothenburg, Sweden

Authors: Albin Västertun & William Pitsinki

Supervisor: Niuosha Samani

Acknowledgement

We would like to express our deepest gratitude to our supervisor, Niuosha Samani, for her invaluable guidance, support, and encouragement throughout the course of this project. Her insightful feedback, clear direction, and strong commitment have played a crucial role in shaping our research and helping us overcome challenges along the way. Niuosha's expertise and dedication have not only elevated the quality of our work but also greatly enriched our learning experience. We are truly thankful for her mentorship.

Abstract

This study investigates whether newly appointed Chief Executive Officers (CEOs) in Swedish publicly listed firms engage in big bath accounting by strategically timing goodwill impairments, and how such events influence stock market reactions. Utilizing a panel dataset of 3,354 firm-year observations from 2005 to 2020, we employ a logit model to assess the probability of impairment following CEO turnover, and an event study framework to evaluate cumulative abnormal returns (CARs) around annual report disclosures. The findings reveal that the likelihood of goodwill impairment increases significantly in the first fiscal year after a CEO transition, suggesting managerial discretion persists under IFRS standards. Furthermore, while standalone impairments result in negative abnormal returns, the market reaction is neutral when they coincide with CEO turnover. This interaction is statistically significant in wider event windows, indicating that investors perceive impairments by new CEOs less as opportunistic earnings management and more as credible signals of strategic renewal. These findings offer insights into the application of impairment rules and the interpretation of earnings management in the Swedish institutional setting.

Keywords

Big Bath Accounting, Goodwill Impairment, CEO Turnover, Earnings Management, IFRS, Event Study, Cumulative Abnormal Returns, Swedish Stock Market, Market Efficiency, Financial Reporting

Table of Contents

1. Introduction	1
1.1 Background	1
1.2 Problem Description	3
1.3 Purpose and Research Question	5
2. Literature Review	6
2.1 Regulation	6
2.2 Earnings Management & Big Bath Accounting	7
2.3 CEO Turnover & Stock Price Reaction	10
3. Research Methodology	13
3.1 Panel Data Regression	13
3.1.1 Research Design	13
3.1.2 Random Effect Model	15
3.2 Data Collection	16
3.3 Variables	16
3.3.1 Dependent Variable	16
Impairment of Goodwill	16
Cumulative Abnormal Return (CAR)	17
3.3.2 Independent Variables	19
CEO Turnover	19
Interaction CEO Turnover & Impairment of Goodwill	19
3.3.3 Control Variables	20
3.3.4 Winsorized Data	23
3.4 Descriptive Statistics	23
4. Results	28
5. Discussion	33
5.1 CEO Transitions and the Impairment of Goodwill	33
5.2 Big Bath Accounting and the Swedish Market	34
5.3. Limitations	36
6. Conclusion	38
References	40
Appendix	45
Appendix 1: Distribution of observations before and after winsorizing	45
Appendix 2: Hausman tests	45
Appendix 3: Controlling for Lagged Firm Performance	48

1. Introduction

1.1 Background

The primary purpose of financial information is to be useful to existing and potential investors, lenders, and other creditors (users) when making decisions about the financing of the entity and exercising rights to vote on, or otherwise influence, management's actions that affect the use of the entity's economic resources (IASB, 2022). Recognizing that these statements influence critical assessments of a firm's risk profile, growth prospects, and overall value, various frameworks and governance bodies have emerged to ensure transparency and accountability in financial reporting (Runesson et al., 2022). In Europe, the International Accounting Standards Board (IASB) constitutes the International Financial Reporting Standards (IFRS), guiding companies to prepare high-quality financial statements that accurately portray underlying economic realities (IASB, 2022). Under the IASB Conceptual Framework for Financial Reporting, firms are expected to present information providing a "true and fair view" of their financial position and performance by meeting the two fundamental qualitative characteristics of faithful representation and relevance. Faithful representation ensures the information is complete, neutral, and error-free, while relevance ensures it can make a difference in users' decisions (IASB, 2022). Nevertheless, with these principles-based standards, management retains discretion in measuring and disclosing assets and liabilities. This discretion is especially significant in the case of goodwill, an intangible asset recognized when a company acquires another entity at a price exceeding the fair value of its identifiable net assets (Hamberg & Beisland, 2014).

In recent years, goodwill on corporate balance sheets has grown significantly, partly due to the changes made in 2005, where accounting policy changes magnified its importance (Hamberg et al., 2011). The IASB updated IFRS 3 – Business Combinations and IAS 38 – Intangible Assets, which together led to the elimination of systematic goodwill amortization and the requirement for annual impairment testing under IAS 36 – Impairment of Assets (Knauer & Wöhrmann, 2016). This shift has allowed goodwill to accumulate on consolidated balance sheets without consistently affecting reported earnings the way systematic amortization once did (Hamberg et al., 2011). As a result, goodwill can reach substantial amounts, yet impairments often come late and in large sums (Li & Sloan, 2017). For instance, in Sweden, large firms such as SSAB wrote down SEK 33.3 billion in 2022, 99% of its total

goodwill (SSAB, 2023), and Ericsson impaired SEK 31.6 billion in 2023, constituting 38% of its total goodwill (Ericsson, 2024).

Despite this, critics argue that the continued buildup of goodwill may compromise the reliability and comparability of financial statements. Because goodwill no longer undergoes systematic amortization, managers have considerable latitude in choosing if and when to recognize impairments, potentially delaying necessary write-downs (Hellman, 2011; Kvaal & Nobes, 2010). Such discretion can reduce the transparency of reported performance, leaving investors and other stakeholders uncertain about a firm's true underlying economic condition, i.e., affecting the faithful representation quality characteristic (Glaum et al., 2018). When impairments do eventually occur, they tend to come in large, abrupt amounts (as illustrated by the Ericsson and SSAB case), increasing the volatility of earnings and the risk of market mispricing, which also in turn affects the relevance quality characteristic since the impairments do appear too late.

In response to rising concerns over the transparency of goodwill reporting, the IASB has undertaken a multi-year project aimed at enhancing disclosure requirements and improving the goodwill impairment model. Starting in 2020, the Board released a Discussion Paper focused on *Business Combinations, Disclosures, Goodwill and Impairment*, in which they explored ways to provide investors with more meaningful information about acquisitions (IASB, 2024). Key proposals included requiring firms to disclose the strategic objectives behind a business combination and to report on whether those objectives are being met in subsequent periods, along with simplifying and refining the impairment testing methodology. By seeking extensive feedback from preparers, auditors, and users of financial statements, the IASB has aimed to balance greater transparency with cost-benefit considerations for companies (IASB, 2024).

Although stakeholder feedback showed broad support for enhanced disclosures, the project remains ongoing, and a final standard has yet to be issued. The Board continues to deliberate on contentious issues such as whether to reintroduce goodwill amortization, how to calculate value in use more consistently, and whether annual impairment tests should remain mandatory or be replaced by an indicator-based approach, that is, a regime in which entities perform a full quantitative impairment test for goodwill only when specific internal or external “indicators” (for example, a sharp decline in market capitalisation, a sustained drop in forecast cash-flows, or significant adverse regulatory or economic changes) suggest that its

carrying amount may no longer be recoverable. As of the most recent project updates, no definitive conclusions have been reached, reflecting the inherent complexity of regulating intangible assets that lack obvious market prices and rely heavily on managerial assumptions (IASB, 2024).

This subjective nature of goodwill impairment persists for several reasons. First, managers must forecast future cash flows, choose discount rates, and allocate goodwill to cash-generating units, all of which involve forward-looking judgments that can vary significantly across firms. Second, intangible assets such as synergies, brand value, or customer relationships are notoriously difficult to measure and are influenced by changing market conditions (IASB, 2024). Even if the IASB finalizes new standards requiring more rigorous or consistent disclosures, management discretion remains unavoidable in estimating these uncertain outcomes. Consequently, despite progress toward clearer guidance and additional transparency, goodwill impairment testing will likely continue to pose challenges for investors seeking an unambiguous gauge of a firm's long-term economic position.

1.2 Problem Description

Due to the large amount of accumulated goodwill that has built up on corporate balance sheets since the 2005 shift away from systematic amortization (Knauer & Wöhrmann, 2016), which has increased the risk of a big, sudden write-down, is much more pressing. The flexibility in accounting standards and the sheer size of goodwill also enable firms to adjust reported performance through various procedures, including earnings management (Svabova et al., 2021). Indeed, the prevalence of such practices is well documented, with research indicating that many firms regularly manipulate financial outcomes (Ditchev et al., 2013).

One particular situation in which this flexibility in accounting standards can facilitate earnings management arises when a new Chief Executive Officer (CEO) takes office, a pivotal corporate event often accompanied by changes in strategy, governance, and financial reporting (Mackey, 2008; Huson et al., 2004). In these circumstances, the incoming CEO may have incentives to recognize goodwill impairments early in their tenure, attributing weaker results to previous leadership and establishing a lower performance baseline (Strong & Meyer, 1987). This approach, known as big bath accounting, can serve multiple objectives such as managing stakeholder expectations, meeting performance benchmarks, or distancing the current leadership from inherited problems. However, by strategically timing goodwill

impairments in this way, managers risk distorting a firm's financial statements, making it difficult for investors to assess true economic health and potentially contributing to mispricing in capital markets (Shiller, 2003). Importantly, not all earnings management is necessarily opportunistic or intended to deceive. Adopting the perspective of Watts and Zimmerman (1990), earnings management occurs whenever managers exercise discretion in accounting, whether their motive is to maximize firm value or to seek personal advantage. Fields et al. (2001) likewise point out that such discretion can serve various legitimate aims, from signaling valuable information to aligning with contractual objectives.

This tension between opportunism and information arises particularly with goodwill impairments because managers can either use them to distort current earnings and subsequently report stronger future performance, or as a “clean slate” mechanism signaling a strategic shift that benefits long-term performance (Haggard et al., 2015). Investors then face the challenge of discerning whether a recorded impairment is motivated by personal managerial incentives or whether it conveys valuable information about the firm's prospects. In principle-based regimes such as IFRS, the subjective nature of impairment testing (e.g., forecasting future cash flows and selecting discount rates) further intensifies this ambiguity (Hellman, 2011). Consequently, examining big bath practices through goodwill write-downs offers a unique lens into how managerial discretion can be harnessed both to mislead and to enhance the informational value of reported earnings.

Connecting this to the recent sizable impairments by Swedish listed firms like SSAB and Ericsson raises two questions. Firstly, whether an earnings management motive, specifically big bath accounting, might underlie these goodwill write-downs in the Swedish market. This inquiry is particularly compelling in Sweden due to its strong rule of law (Porta et al., 1998) and rigorous regulatory oversight through agencies like Finansinspektionen (Hellman, 2011). In principle, these factors should constrain managerial latitude in manipulating earnings, i.e., limit a manager's ability to manipulate earnings. However, if big-bath write-offs and late goodwill impairments still occur, it could point to managerial motives, something regulators should examine more closely.

Secondly, it is still unclear how investors on the Swedish stock market react when a sizable goodwill write-down is announced at the same time a new CEO takes office. Such events create information gaps (Healy & Palepu, 2001). Outsiders must judge whether the charge signals a real loss in asset value or a discretionary “big-bath” move. In theory, a semi-strong

efficient market should absorb that news quickly (Fama, 1970), yet other behavioural research points to possible under-reactions, overreactions, or short-lived mispricing (Hellman, 2011; Shiller, 2003), and event-study work has documented abnormal returns around impairment disclosures (Francis et al., 1996). Therefore, clear and decision-useful reporting becomes crucial, helping investors decide whether a write-down reflects genuine economic stress or managerial opportunism (Runesson et al., 2022).

U.S. evidence shows that incoming CEOs are more likely to make big-bath write-downs when the outgoing CEO no longer remains on the board (Daniele et al., 2024). Other studies find that goodwill impairments can trigger forced CEO departures, as boards often view them as credible signals of underperformance (Cowan et al., 2023). Research also suggests that large one-time charges may improve, rather than hide, the firm's information environment (Haggard et al., 2015). This study examines whether patterns observed in prior research also apply in Sweden, a setting with a strong rule of law. Specifically, it investigates whether incoming Swedish CEOs engage in big-bath accounting through goodwill write-downs announced shortly after a CEO change, and how the market reacts to such charges as reflected in share price movements. For practitioners, our evidence, considered alongside recent high-profile goodwill impairments by SSAB and Ericsson, can support boards, auditors, and regulators in assessing whether IFRS-based safeguards are sufficient to deter strategic big baths. It may also inform the IASB's ongoing review of the impairment-only model (IASB, 2024; Ericsson, 2023; SSAB, 2023), while offering insights into how the market interprets goodwill write-downs linked to CEO turnover.

1.3 Purpose and Research Question

The purpose of this study is to examine the relationship between CEO transitions, goodwill impairments, and stock price reactions. More specifically, this thesis seeks to determine whether newly appointed CEOs engage in big bath accounting by recognizing impairments and write-downs upon taking office and whether/how the interaction between CEO turnover and impairments of goodwill affects stock prices.

To achieve this, the study aims to answer the following research question:

Do new CEOs in Sweden engage in big bath accounting by strategically timing goodwill impairments, and how does the Swedish stock market respond to significant write-downs executed under CEO turnover?

2. Literature Review

2.1 Regulation

All publicly listed firms in Sweden must prepare their consolidated financial statements according to IFRS, consistent with the European Union's *Regulation (EC) No 1606/2002* in effect since 2005, Runesson et al. (2022). The key standards relevant for understanding big bath accounting include IAS 36, IFRS 3, and IAS 38. IAS 36 (Impairment of Assets) specifies procedures ensuring assets are not recorded above their recoverable amounts. Companies must perform impairment tests annually for goodwill and indefinite-life intangible assets, and whenever indicators of impairment arise for other assets. Essential criteria include calculating the asset's recoverable amount through clearly documented cash flow projections, discount rates, and other valuation assumptions (IASB, 2021a). IFRS 3 (Business Combinations) outlines the recognition and measurement of identifiable assets and liabilities acquired during business combinations. Goodwill, generated from acquisitions under this standard, requires annual impairment testing governed by IAS 36 (IASB, 2021b). IAS 38 (Intangible Assets) regulates intangible assets other than goodwill, allowing management discretion in estimating useful lives and the timing of impairment assessments (IASB, 2021a).

These standards theoretically aim to enhance the faithful representation and relevance of financial statements, ensuring that impairments align with underlying economic realities (IASB, 2022). Nonetheless, managerial incentives can shape how strictly these rules are applied, potentially influencing the extent to which impairment provisions are leveraged opportunistically (Healy, 1985). Studies show that principle-based approaches still allow subjective valuations (Hellman, 2011; Kvaal & Nobes, 2010). Such leeway is particularly pronounced in goodwill impairment calculations, where forecasting future cash flows and selecting discount rates remain highly manager-dependent (Li & Sloan, 2017).

In Sweden, additional oversight by the Swedish Financial Supervisory Authority (Finansinspektionen) and a strong rule of law aim to further limit manipulative reporting (Hellman, 2011). However, local enforcement practices may not eliminate all forms of opportunism. Managers retain some capacity to delay or understate impairments by exploiting judgmental “gray areas” inherent in IFRS (Kvaal & Nobes, 2010; Leuz et al., 2003). For instance, setting key valuation assumptions too optimistically can postpone

necessary write-downs, allowing earnings management even under robust formal regulations (Glaum et al., 2018). Thus, even within the Swedish setting, impairment tests stay subjective, leaving managers scope for strategic write-downs, especially when earnings pressures grow (Li & Sloan, 2017).

2.2 Earnings Management & Big Bath Accounting

The earnings management literature shows that the motivations behind it are complex. The literature distinguishes between opportunistic and efficient earnings management. Opportunistic earnings management occurs when managers manipulate earnings to serve their interests, potentially at the expense of shareholders. This perspective is rooted in agency theory, which suggests that managers may act in their self-interest rather than in the best interest of the shareholders (Watts & Zimmerman, 1986). On the other hand, the efficient-earnings-management view holds that managers use their reporting discretion to convey private insights about the firm's future performance, thereby making financial statements more informative (Subramanyam, 1996). This approach suggests that, in certain contexts, earnings management can align with shareholder interests by providing more relevant information. For example, Healy and Wahlen (1999) found that, although managers often engage in earnings management for opportunistic reasons, they may also smooth earnings to mitigate the appearance of economic volatility, making reported figures more reflective of a firm's long-term performance. According to their review, such smoothing can enhance the interpretability of financial results by filtering out short-term fluctuations, potentially helping stakeholders form more accurate assessments of the firm's underlying value (Healy & Wahlen, 1999).

The theory of big bath accounting, introduced by Healy (1985), is one type of opportunistic earnings-management strategy in which firms record large, one-time, income-reducing charges to deliberately lower current-period earnings, thereby setting a low baseline that makes future results look stronger (Runesson et al., 2022; Hope & Wang, 2018). Moore (1973) observed that income-decreasing accounting decisions often coincide with CEO turnover, as incoming executives may seek to shift the blame for poor performance onto their predecessors (Murphy & Zimmerman, 1993; Strong & Meyer, 1987). By recognizing significant write-downs early in their tenure, new CEOs can effectively eliminate underperforming assets and lay the groundwork for improved profitability moving forward (Kirschenheiter & Melumad, 2002). This approach reflects a broader tendency among firms

to delay the release of negative information, clustering "bad news" into a single period to avoid prolonged market scrutiny (Kothari et al., 2009; Mendenhall & Nichols, 1988). Supporting this, Francis et al. (1996) also find that firms often bundle negative disclosures into one reporting window, reinforcing the big bath effect by setting a lower performance benchmark.

Meanwhile, some research underscores a potentially informative aspect when large write-downs, such as goodwill impairments, reflect genuine restructuring or the removal of inefficiencies (Strong & Meyer, 1987). This tension between opportunism and efficient earnings management creates a matter of judgment for investors, who must decide whether a large impairment of goodwill reflects personal managerial incentives or genuinely signals the firm's prospects. In the IFRS setting, the subjective nature of impairment testing further intensifies this ambiguity (Hellman, 2011). Consequently, examining big bath practices through goodwill write-downs offers a unique lens into how managerial discretion can be harnessed both to obfuscate and, at times, to enhance the informational value of reported earnings.

Methodologically, many of these studies employ accrual-based models and, more specifically, look at "income-decreasing" abnormal accruals, such as the Modified Jones Model (Dechow et al., 1995), to disentangle normal earnings components from those driven by managerial discretion. By pinpointing the discretionary portion of accruals, researchers can measure the extent of big bath accounting behavior and assess whether such write-offs align more with legitimate asset revaluations or opportunistic financial statement manipulation. These findings highlight how big bath accounting serves as a tool for shaping future earnings, while also underscoring the importance of robust governance mechanisms to mitigate opportunistic reporting (Dechow et al., 1995).

Additionally, Haggard et al. (2015) examined big bath accounting by looking at the effects of large non-recurring charges on subsequent financial reporting quality. In their study, a bath is defined following Elliott and Shaw's (1988) approach as any fiscal year-end observation in which special items are negative and exceed 1% of lagged total assets in which they found that firms engaging in such practices subsequently experience smoother earnings, diminished measures of information asymmetry, and heightened stock price responsiveness to unexpected earnings. Their analysis further distinguishes between forced baths, often occurring in firms with weaker corporate governance where managerial discretion is

constrained, and voluntary baths, where management exercises greater discretion. The findings suggest that forced baths lead to more pronounced improvements in financial transparency, thereby supporting the transparency hypothesis and reinforcing the view that big bath accounting functions as an opportunistic earnings management strategy (Haggard et al., 2015).

Impairment of goodwill is an example of large, one-off charges that can facilitate a big bath effect. Managers may strategically time or inflate impairment charges to depress current earnings (Haggard et al., 2015). Using impairments of goodwill as a proxy for big bath accounting aligns with Haggard et al. (2015) findings on the effects of large non-recurring charges, as goodwill write-downs often resemble the “bath” events that shape subsequent reporting quality.

Moreover, Cowan et al. (2023) demonstrate that goodwill impairment charges serve as performance signals strongly associated with forced CEO turnovers, especially when these impairments are unexpected relative to overall firm performance and audited by Big 4 auditors. This indicates that high audit quality enhances the governance usefulness of goodwill impairments (Cowan et al., 2023). Similarly, Daniele et al. (2024) find that CEO turnover significantly increases the incidence of big bath accounting. However, when outgoing CEOs remain on the board, the likelihood of opportunistic big baths is notably reduced, indicating a governance mechanism that limits earnings manipulation by incoming CEOs.

Big bath accounting also seems to surface under many accounting regimes. Even within a principles-based system such as IFRS, the judgment allowed under IAS 36 and IAS 37 still leaves room for opportunistic charges (Stolowy & Breton, 2004). For goodwill, however, IFRS rules are broadly comparable to those in U.S. GAAP, and IFRS does not provide any additional discretion. What could matter more are the incentives surrounding CEO turnover, earnings targets, or the desire to bundle bad news, forces that can still trigger large one-off write-downs in the event of the Swedish setting (Filip & Raffournier, 2014). Transparent disclosures, rigorous boards, and active audit committees can dampen such behaviour (Glaum et al., 2018), yet managers may persist if they believe the future payoff outweighs reputational or regulatory costs (Kothari et al., 2009; Murphy & Zimmerman, 1993). Consequently, assessing whether incoming Swedish CEOs exploit goodwill-impairment discretion by using goodwill impairments as a proxy for big bath accounting could highlight

how well the Swedish setting limits opportunistic earnings management. It becomes particularly interesting with Sweden's strong rule of law, and the several sizable goodwill impairments in recent years, which suggest that such opportunism may be dampened but not eliminated (SSAB, 2023; Ericsson, 2023).

Building on this discussion, there is reason to expect that newly appointed CEOs use big bath accounting strategies shortly after their arrival. Specifically, since goodwill write-downs represent sizable, non-recurring charges that can be attributed to prior management's decisions, CEOs have an incentive to record these impairments early in their tenure. This aligns with the logic that large negative special items, such as goodwill impairments, resemble the “bath” events noted by Haggard et al. (2015), which can reset a firm's financial baseline and potentially improve subsequent reported performance. Consequently, the following hypothesis is proposed:

H₁: CEO transitions are positively associated with increased goodwill impairments recognized in the subsequent fiscal period.

2.3 CEO Turnover & Stock Price Reaction

Connecting to the earnings management and big bath accounting literature discussed above, a second central question arises regarding whether and how big bath accounting influences stock prices. Starting from the perspective of the EMH, the semi-strong form suggests that all publicly available information, including announcements of a CEO transition and the impairments of goodwill, should be rapidly and accurately factored into share prices, leaving little scope to systematically exploit such events for excess returns (Fama, 1970, 1991). However, market participants often face asymmetric information (Healy & Palepu, 2001). Firms may strategically time their disclosures or selectively release information, leading to a gap between what corporate insiders know and what is communicated externally (Francis et al., 1996). Under ideal conditions, timely and transparent financial reporting, aligned with the qualitative characteristics of relevance and faithful representation (IASB, 2022), helps reduce this information gap. By providing decision-useful, faithfully represented financial statements, managers reduce information asymmetry, enabling investors to interpret corporate events, such as CEO turnover events and subsequent impairment charges, more accurately, thereby fostering more efficient price formation (Healy & Palepu, 2001; Huson et al., 2004).

The Signaling Theory (Spence, 1973; Zhang & Rajagopalan, 2010) adds another layer by suggesting that CEO turnover can act as a powerful signal of a firm's future direction or the competence of incoming leadership. Investors may interpret the appointment of a new CEO, especially following a period of underperformance, as evidence of strategic renewal, potentially boosting the stock price if the market views this development favorably (Warner et al., 1988; Huson et al., 2004). Conversely, uncertainty regarding the new leader's capabilities may generate negative sentiment until additional performance-related information becomes available (Parrino, 1997). Thus, from a theoretical standpoint, it seems that the net stock price impact could be positive, negative, or even negligible, depending on whether investors view the leadership change and the subsequent impairment as a genuine strategic reset or a worrying sign of deeper structural issues.

Empirical research on the direct impact of CEO turnover on stock price behavior also shows mixed findings but underscores that leadership transitions can provoke heightened volatility. Several studies document negative stock price performance preceding CEO turnover, often reflecting poor firm results that trigger boards to replace top leadership, and a potentially positive immediate reaction to the turnover announcement itself (Huson et al., 2004). However, some evidence points to uncertain or even insignificant short-term reactions, influenced by whether the turnover is forced or voluntary, and whether the successor is perceived as an external "change agent" or an internal continuation of the existing strategy (Khanna & Poulsen, 1995; Warner et al., 1988; Parrino, 1997).

The theory of big bath accounting seems to further complicate these stock price dynamics. The limited literature does not fully agree on how investors react. Some studies imply that markets may negatively interpret large write-downs of goodwill if they view them as pure opportunism (Li et al., 2011; Bartov et al., 1998), while others suggest that these impairments may positively signal a genuine strategic overhaul, leading to more favorable stock performance down the line (Strong & Meyer, 1987; Glaum et al., 2023). Because investor sentiment and regulatory scrutiny vary across jurisdictions, it remains uncertain whether the Swedish market fully anticipates and prices in this potential manipulation, or if, in line with behavioral finance critiques, short-term inefficiencies arise that enable abnormal returns.

Ultimately, the tendency for impairment of goodwill around a change of CEO and the theory of big bath accounting highlights an interesting question in capital-market research regarding market efficiency and investor interpretation. Given these competing viewpoints, it remains

ambiguous whether investors perceive large write-downs as merely opportunistic “bath” maneuvers or as informative signals of genuine strategic realignment. Hence, the second hypothesis is more tentative:

H₂: The moderating effect of CEO turnover on the relationship between goodwill impairment and subsequent cumulative abnormal returns is indeterminate.

3. Research Methodology

3.1 Panel Data Regression

To examine the phenomena of big bath accounting, captured by impairment activity and CEO transitions, and to investigate the market's reaction to such activities in the Swedish market, we employ a panel data regression approach influenced by Haggard et al. (2015). This method allows us to observe both cross-sectional data (i.e., multiple firms) and time-series dimensions (i.e., observations across several years). We control for industry effects to account for systematic sector differences, such as varying regulatory intensity, which may influence both impairment decisions and CEO turnover. In practice, we work with an unbalanced panel, as not all firms have observations for every year, due to missing data, new firms entering, or firms delisting from the market. While unbalanced panels necessitate careful handling of missing values to avoid biased estimates, they more accurately reflect real-world datasets, where complete information for every unit across every period is rarely available.

3.1.1 Research Design

To investigate whether CEO turnover affects the likelihood of impairments, we first develop Model 1, in which impairment (*GW_Impairment_d*) serves as the dependent variable, and CEO turnover (*CEO_d*) is the primary independent variable. Because both the dependent variable and the main explanatory variable are binary, a logit model is well-suited to capture the probability of an impairment (Fagerland & Hosmer, 2012). This approach ensures predicted values remain in the 0–1 range and allows us to interpret the effect of CEO turnover on the odds of reporting an impairment, making it more appropriate than linear methods for this setting.

Model (1)

$$\begin{aligned} Pr(GW_Impairment_d_{it} = 1) = \Lambda[& \beta_0 + \beta_1 CEO_d_{it} + \beta_2 Firm_age_{it} + \beta_3 Size_{it} + \\ & \beta_4 B/M\ Ratio_{it} + \beta_5 ROA_{it} + \beta_6 Goodwill_{it} + \beta_7 Leverage_{it} + \\ & \beta_j Industry_t + \beta_k year_t + \varepsilon_{it}] \end{aligned}$$

Model 2 focuses on cumulative abnormal returns (CAR) as the dependent variable and includes only standard control variables. This baseline model assesses whether firm age, size, book-to-market ratio, return on assets, goodwill, and leverage, along with industry and year

fixed effects, help explain abnormal returns, without accounting for CEO turnover or goodwill impairments.

Model (2)

$$CAR_i(t_1, t_2) = \beta_0 + \beta_1 Firm_age_{it} + \beta_2 Size_{it} + \beta_3 B/M\ Ratio_{it} + \beta_4 ROA_{it} + \beta_5 Goodwill_{it} + \beta_6 Leverage_{it} + \beta_j Industry_t + \beta_k year_t + \varepsilon_{it}$$

In Model 3, we introduce the goodwill impairment dummy (GW_Impairment_d) to determine whether the market reacts to impairment announcements, above and beyond the baseline controls used in Model 2. This specification allows us to isolate the effect of goodwill impairment on abnormal returns.

Model (3)

$$CAR_i(t_1, t_2) = \beta_0 + \beta_1 GW_Impairment_d_{it} + \beta_2 Firm_age_{it} + \beta_3 Size_{it} + \beta_4 B/M\ Ratio_{it} + \beta_5 ROA_{it} + \beta_6 Goodwill_{it} + \beta_7 Leverage_{it} + \beta_j Industry_t + \beta_k year_t + \varepsilon_{it}$$

Finally, Model 4 introduces both CEO turnover and its interaction with goodwill impairment (CEO_d*GW_Impairment_d). This allows us to capture the combined effect of these two events on abnormal returns, thereby testing for potential “big bath” behavior. By incorporating the main effects of CEO_d and GW_Impairment_d as well as their interaction, we can assess whether the coincidence of a CEO change and an impairment announcement yields a distinct market reaction beyond each event’s impact.

Model (4)

$$CAR_i(t_1, t_2) = \beta_0 + \beta_1 CEO_d_{it} + \beta_2 GW_Impairment_d_{it} + \beta_3 (CEO_d_{it} * GW_Impairment_d_{it}) + \beta_4 Firm_age_{it} + \beta_5 Size_{it} + \beta_6 B/M\ Ratio_{it} + \beta_7 ROA_{it} + \beta_8 Goodwill_{it} + \beta_9 Leverage_{it} + \beta_j Industry_t + \beta_k year_t + \varepsilon_{it}$$

In all models, ε captures unobserved factors at the firm i and time t levels. Taken together, these four models allow us to explore the influence of CEO turnover on the likelihood of impairment, and how goodwill impairments and CEO turnover, separately and jointly, affect cumulative abnormal returns.

Additionally, to address concerns about reverse causality and to strengthen the robustness of our main findings, we re-estimated models 1 and 4 by including a lagged measure of ROA (Lagged_ROA), following Wooldridge (2010). The results of this supplementary analysis are presented in Appendix 3.

3.1.2 Random Effect Model

Building on the panel structure of our dataset, we initially estimate a random-effects (RE) model. The RE specification captures unobserved, time-invariant firm heterogeneity and preserves the between-firm variation that is central to our research question. By treating each firm's fixed attributes, such as entrenched managerial philosophy, ownership structure, or stable industry membership, as stochastic draws, the estimator keeps both within- and between-firm information in the sample. The downside is RE's strong requirement that firm effects be independent of the regressors. If hidden, time-invariant traits, such as CEO behavioural factors or a deep-rooted culture that shapes both impairment policy and turnover, violate this, the estimates become biased. FE would soak up those confounders, but only by eliminating between-firm information and ballooning the parameter count.

We believe the RE assumption is plausible in our context for three reasons. Firstly, we include an extensive set of controls (firm size, leverage, growth opportunities, board independence, etc.) together with industry and calendar-year dummies, which should absorb much of the potential correlation between time-invariant firm traits and the regressors. Secondly, the efficiency gains of RE are especially valuable in our unbalanced panel. Firms enter and exit the sample during 2005–2020, and many report impairments only sporadically. Estimating separate intercepts for the numerous “thin” firms in an FE framework would dilute power, whereas RE, by contrast, lets us share information across firms, so the estimates are more precise and the confidence intervals are narrower. Thirdly, our dataset has lots of firms (large N) but only a moderate number of years (T). When that's the case, theory says that, so long as the key RE assumption (no correlation between the firm effects and the regressors) is roughly true, RE will deliver smaller standard errors than FE.

Nevertheless, we subject the assumption to empirical scrutiny by conducting a Hausman specification test (Hausman, 1978), where we contrast the coefficient vectors from FE and RE estimations. For all four model specifications, the χ^2 test statistics are insignificant at the 5 % level (see Appendix 2), so we cannot reject the null hypothesis of coefficient

equivalence. This result supports the consistency of the RE estimator. That said, the Hausman tests cannot rule out omitted variable bias, time-varying factors, that could still confound our estimates.

3.2 Data Collection

We manually collected data on CEO turnovers for all companies listed on Nasdaq Stockholm, including those in the Small Cap, Mid Cap, and Large Cap, for the period 2005 to 2020. This resulted in an initial total of 3,664 firm-year observations. Financial data for these observations were retrieved from Capital IQ, a platform offering comprehensive and reliable information on publicly traded companies. Its accuracy and efficient data access made it well-suited for our analysis.

However, due to instances of missing values in certain years for some firms, our final sample is reduced to 3,354 observations, as shown in Table 1. Although this missing data leads to an unbalanced panel, we address the associated estimation challenges by employing a random effects model and dummy variables, as discussed in the previous section.

Selection Criteria Regression Analysis	
Steps	N
Total number of firm-year observations from 2005 to 2020	3664
Less:	
<i>Observations missing the variables used in the regression analysis</i>	-310
Final sample	3354

Table 1: Selection Criteria for Panel Data Regression

3.3 Variables

The following sections present the dependent, independent, control, and dummy variables included in the models, along with the error term. Each variable is explained in terms of its calculation, application, and relevance to the analysis.

3.3.1 Dependent Variable

Impairment of Goodwill

This dummy captures whether a firm recognizes a goodwill write-down in a given fiscal year. Goodwill often constitutes a sizable share of intangible assets, and the timing of write-downs is subject to managerial discretion in principle-based regimes (Hellman 2011; Kvaal & Nobes

2010; Glaum et al. 2018). As such, goodwill impairments are widely used to test “big-bath” behavior (Healy 1985; Haggard et al. 2015). Following prior work on non-recurring items (Elliott & Shaw 1988), we obtain each firm’s reported impairment expense from Capital IQ and recode it as a binary variable. 1 if any goodwill write-down is reported in the fiscal period, 0 otherwise. The binary specification focuses on the presence of an impairment event, consistent with our interest in strategic timing, rather than its magnitude.

- Model 1 (logit): GW_Impairment_d is the dependent variable, enabling us to test whether CEO turnover increases the likelihood of recording a write-down.
- Models 3–4 (CAR regressions): the same indicator becomes a key explanatory variable (and, in Model 4, enters an interaction with CEO turnover) to assess how markets react to impairment announcements, both on their own and when they coincide with leadership change.

Cumulative Abnormal Return (CAR)

Following MacKinlay’s (1997) event-study framework, the filing date of the annual report is chosen as the event date, with quarterly reports excluded, because under IFRS, the annual report typically constitutes the first definitive disclosure of any goodwill impairment (Glaum et al., 2018). To balance the risk of missing early signals or delayed market reactions with the risk of unrelated news contamination, we calculate cumulative abnormal returns over an event window from five days before to five days after the filing date (−5 to +5). This ± 5 -day window is commonly used in event studies and is sufficient to capture staggered disclosures or investors’ delayed response, particularly to complex impairment information, while remaining narrow enough to limit confounding effects (MacKinlay, 1997). To estimate normal returns, we use an estimation window from 210 to 6 trading days before the event (−210 to −6), in line with standard practice, which recommends a clean pre-event period of sufficient length for stable parameter estimation (Brown & Warner, 1985; MacKinlay, 1997). This structure helps ensure the validity of our inferences regarding the market reaction to IFRS-compliant disclosures.

To estimate cumulative abnormal returns, we employ a market model. Specifically, we calculate the expected return for each firm i on date t by regressing its returns on the daily returns of the OMX Stockholm All-Share Index (OMXSPI) over the estimation window. We incorporate a daily risk-free rate, computed by taking the annual yield on the Swedish

10-year government bond and dividing by 365 to approximate a daily rate. The justification for using a government bond yield as the risk-free rate follows the logic that it is backed by a highly rated sovereign issuer with negligible default risk. As Damodaran (2012) explains, a truly risk-free asset should have no default or reinvestment risk, and Sweden's sovereign credit rating (e.g., AAA) indicates that Swedish government bonds meet this criterion (Standard & Poor's Global, 2025). The market model used to estimate returns for firm i on trading day t is specified as follows:

$$R_{it} - R_{f,t} = a_i + B_i * (R_{m,t} - R_{f,t}) + \varepsilon_{it}$$

$R_{i,t}$ = Return of firm i on day t .

$R_{f,t}$ = Daily risk-free rate on day t .

$R_{m,t}$ = market return on day t .

ε_{it} = Zero mean error term.

a_i & B_i = Firm-specific parameters estimated from regression.

Over the event window, the expected (normal) return for firm i on day t is then:

$$\hat{R}_{it} = R_{f,t} + \hat{a}_i + \hat{B}_i(R_{m,t} - R_{f,t})$$

$\hat{R}_{it}$ = Predicted (normal) return of firm i on day t .

$\hat{a}_i$ & $\hat{B}_i$ = Estimated intercept and slope from the market model regression.

Abnormal return is then computed using normal and expected returns, as follows:

$$AR_{it} = R_{it} - \hat{R}_{it}$$

AR_{it} = Abnormal return for firm i at date t

Since abnormal return refers to a specific date, we need to aggregate the abnormal returns into cumulative abnormal returns to be able to draw inferences for the event:

$$CAR_i(t_1, t_2) = \sum_{t=t_1}^{t_2} AR_{it}$$

CAR_i = Cumulative abnormal return for firm i

t_1 = First day of the event window in which we measure the market's reaction.

t_2 = Last day of the event window in which we measure the market's reaction.

In this event-study design, we select the IFRS annual report filing as the event date (day 0) since, for Swedish-listed firms, this report typically constitutes the first public disclosure of any goodwill impairment. Large-sample U.S. evidence by Li and Ramesh (2009) shows that 10-K filings can trigger distinct price reactions even when an earlier earnings announcement is available, underscoring that the filing itself conveys material, novel information. Assuming, as argued by Kothari and Warner (2007), that no significant information leakage occurs before day 0, any abnormal price effects should emerge only once the report is released.

To capture this immediate reaction, we define a narrow baseline cumulative abnormal return (CAR) window of $[0,+1]$, spanning the trading day of the filing and the following day to allow for a modest processing lag. For robustness, we then extend the window symmetrically to $[-3,+3]$ and $[-5,+5]$. The seven-day window accommodates a broader but still focused event horizon around the disclosure, while the eleven-day window recognises that some information may leak a few days early or be digested a few days late. Analyzing three event windows together offers a complete yet concise assessment of when and how strongly the market reacts to goodwill-impairment disclosures, allowing us to attribute any abnormal returns to the annual-report filing.

3.3.2 Independent Variables

CEO Turnover

CEO Turnover indicates whether a firm appoints a new chief executive officer in a given fiscal period. Consistent with prior research (Moore, 1973; Murphy & Zimmerman, 1993; Strong & Meyer, 1987), leadership changes can be a trigger for income-decreasing accounting decisions, including goodwill write-downs. Operationally, CEO Turnover is coded as a binary (dummy) variable equal to 1 if the firm has a newly appointed CEO during the fiscal year and 0 otherwise.

Interaction CEO Turnover & Impairment of Goodwill

The final independent variable included in the analysis is an interaction term between CEO Turnover and Impairment of Goodwill. This interaction variable explicitly captures the combined effect of these two events occurring simultaneously, reflecting the conditional relationship between leadership changes and accounting decisions regarding goodwill

write-downs. By examining this interaction, the study can investigate whether the presence of a new CEO moderates the market's perception of goodwill impairment announcements.

The theoretical rationale for introducing an interaction term stems from prior research indicating that new CEOs might strategically engage in big bath accounting practices to clear the financial slate and attribute negative financial outcomes to prior management (Healy, 1985; Murphy & Zimmerman, 1993). Consequently, investors may perceive goodwill impairments differently if they coincide with CEO turnovers, potentially interpreting such impairments as deliberate managerial decisions rather than objective economic losses. This could lead to a more pronounced market reaction compared to impairment announcements occurring in periods without CEO changes. By multiplying the CEO turnover dummy and the goodwill impairment dummy, we obtain an interaction variable that equals one when both events occur in the same fiscal period and zero otherwise. When used alongside the two original dummies, this approach yields four distinct outcome categories, namely no event, CEO turnover only, impairment only, and both events. Utilizing this interaction term in the empirical model allows the analysis to distinguish between the independent effects of CEO turnover and goodwill impairment events and their conditional effect on stock returns.

3.3.3 Control Variables

Firm Age

Including firm age as a control variable is warranted because firm maturity is linked to greater operational stability and more predictable earnings. Older firms tend to have established processes and stable performance relative to younger firms. Thus, variations in financial outcomes may reflect differences in firm life-cycle stages rather than the phenomena under study. For example, research by DeAngelo and Skinner (1996) provides evidence that firm maturity significantly influences earnings stability and quality. Controlling for firm age helps to isolate the effect of the variables of interest from differences that are simply due to the natural progression of a firm's development.

Size

Including firm size as a control variable is important because it captures the scale and operational scope of a firm, which can influence earnings stability and transparency. Total assets provide a stable measure of firm size that is less susceptible to short-term market fluctuations compared to market capitalization. Empirical research by Skinner (1994)

documents that larger firms tend to exhibit smoother earnings and greater reporting consistency, likely due to diversified operations and more mature management practices. By controlling for firm size using total assets, we can more accurately isolate the effects of the variables of interest from those driven by differences in scale.

Book/market - Ratio

Including the book-to-market ratio as a control variable is warranted because it is a key indicator of a firm's valuation and financial condition. Firms with a high book-to-market ratio are often perceived as value firms, which may exhibit different risk profiles and earnings quality compared to growth firms. Extensive research, such as that by Fama and French (1993), demonstrates that the book-to-market ratio captures important differences in firm risk and return characteristics. Controlling for this ratio helps to isolate the effects of our variables of interest from variations that are driven by differences in firm valuation.

ROA

Return on assets is a key indicator of a firm's profitability and operational efficiency. It measures how effectively a firm uses its assets to generate earnings and serves as an important signal of managerial performance. Research by DeAngelo et al. (1996) shows that return on assets is closely linked to earnings quality and financial reporting practices. By controlling for return on assets, we can account for differences in firm performance that might otherwise confound the relationships of interest in our study. We calculate ROA manually by dividing EBIT by the firm's Total Assets.

Goodwill

Since our dependent variable is the impairment of goodwill, we also control for the amount of Goodwill on the balance sheet (Glaum et al., 2018). To improve comparability across firms of varying sizes, we scale the raw impairment amount by total assets, often using an average of current and previous-year total assets to account for size changes over time (Filip & Raffournier, 2014). This scaled variable captures the relative magnitude of goodwill write-downs, helping to isolate the extent to which managers may be exercising discretion in the timing or magnitude of impairments.

Leverage

Leverage is included to control for a firm's capital structure, as the level of financial risk can influence both managerial decision-making and how the market interprets goodwill impairments. Higher leverage may pressure management to engage in earnings management practices, such as taking goodwill impairments to shift blame or reset expectations (Beatty & Weber, 2006). At the same time, leveraged firms are often subject to heightened investor and creditor scrutiny, which can amplify the perceived severity of an impairment announcement. In this context, leverage is relevant not only when examining the likelihood of impairments being recorded but also for understanding variations in market reactions, as captured by CAR. A highly leveraged firm may experience more negative abnormal returns following an impairment due to elevated perceived risk or concerns about financial distress. Leverage is calculated as total debt divided by total equity (Debt/Equity).

Year-Specific Effects

We also include year-specific effects as control variables in our model to help capture macroeconomic and regulatory variations across the time frame of our analysis (2005-2020). Each fiscal year could have distinct characteristics influenced by economic cycles, regulatory changes, and shifts in accounting standards or investor sentiment that systematically impact all firms' stock returns. By including year-specific dummy variables, we effectively control for such systematic temporal differences, isolating the unique impacts of impairment disclosures and CEO turnovers from broader market and economic conditions.

Industry-Specific Effects

Finally, incorporating industry-specific effects as control variables addresses systematic differences across industries that may affect market reactions to goodwill impairments and CEO turnover. Firms within the same industry often share common economic environments, competitive pressures, regulatory frameworks, and investor expectations. Certain sectors can exhibit higher volatility and intangible asset intensity compared to more stable industries like utilities or consumer staples. These inherent differences could lead to distinct investor responses to impairment events or executive changes. By employing industry-specific dummy variables, we control for these persistent sector-level influences, enhancing our model's precision in isolating firm-level strategic accounting choices and managerial decisions from industry-driven factors.

3.3.4 Winsorized Data

To improve the robustness of the regression analysis and reduce the influence of extreme values, the return on assets (ROA) variable was winsorized. During the data review, outliers in ROA were identified that could potentially distort the distribution and compromise the reliability of the model estimates. Winsorization, a standard technique for handling outliers, was applied by capping extreme values at defined percentile thresholds. In this study, ROA was winsorized at the 1st and 99th percentiles, whereby values below the 1st percentile were set equal to the 1st percentile, and values above the 99th percentile were set equal to the 99th percentile. This adjustment limits the impact of firms with unusually high or low profitability that might otherwise exert disproportionate influence on the regression results.

Winsorization was applied exclusively to ROA to retain the natural variation in all other variables, especially those related to market-based outcomes such as CAR. By addressing these extreme values, the analysis more accurately captures the underlying relationship between CEO turnover, goodwill impairments, and firm performance in the Swedish context.

3.4 Descriptive Statistics

The variables presented in the previous section will be used both for the descriptive statistics and the regressions, and their names as well as definitions are presented in Table 2 below.

Descriptions		
Variable	Description	Unit
CAR 1	Cumulative abnormal returns in the (0,1) window	Percentage
CAR 2	Cumulative abnormal returns in the (-3,3) window	Percentage
CAR 3	Cumulative abnormal returns in the (-5,5) window	Percentage
Impairment_d	Dummy for whether the firm recorded an impairment loss	-
CEO_d	Dummy variable for whether there was a CEO turnover	-
Impair x CEO	Interaction term between <i>Impairment_d</i> and <i>CEO_d</i>	-
Firm_age	Number of years since the firm's founding	Years
Size	Total assets of the firm, representing firm size	Log of MSEK
B/M_Ratio	Book-to-market ratio, used as a proxy for growth opportunities	Ratio
ROA	Return on assets, measuring firm profitability	Ratio
GW_Scaled	Total recorded goodwill scaled by total assets	MSEK
Leverage	Ratio of total debt to total equity	Ratio
Industry	Industry classification based on sectoral dummies	-
Year	Year fixed effects to control for time trends	-

Table 2: Definitions of variables included in models 1-4.

The descriptive statistics for the final sample of 3,354 firm-year observations are summarized in Table 3 below. The table presents the number of observations, mean, standard deviation, minimum, and maximum values for each variable included in our models.

Overall, the descriptive statistics indicate reasonable variation across key variables. For instance, the three CAR windows (CAR 1, CAR 2, and CAR 3) all show means close to zero, as expected for market-adjusted return measures. However, they also display substantial ranges, reflecting the variation in investor responses to goodwill impairments and CEO turnover events.

The Impairment variable is binary with a mean of 0.14, indicating that goodwill impairments occurred in approximately 14% of the firm-year observations. Similarly, the CEO Turnover variable has a mean of 0.12, suggesting that about 12% of observations involved a change in CEO.

Financial performance, as measured by ROA, has been winsorized at the 1st and 99th percentiles to mitigate the influence of extreme outliers. The average ROA is 0.05, reflecting generally low but positive profitability levels across the sample. The continuous control variables, such as Size (mean: 8.04), Book-to-Market ratio (mean: 0.61), and Leverage (mean: 1.32), show distributions consistent with previous empirical research on listed firms.

It is important to note that the final sample size reflects only observations with complete data across all required variables. If any data used in calculating variables such as ROA, Leverage, or Book/Market ratio was missing, the entire observation was excluded from the sample. For example, ROA depends on both net income and total assets, and if either were missing, the observation was dropped. This data-cleaning process ensures the accuracy and reliability of the regression analyses and avoids biases introduced by incomplete information.

Descriptive Statistics

Variables	Obs	Mean	Std. Dev.	Min	Max	p1	p99	Skew.	Kurt.
CAR1	2749	.001	.039	-.512	.309	-.102	.124	-.584	21.84
CAR2	2733	.001	.08	-2.142	.408	-.188	.187	-9.138	227.636
CAR3	2881	.007	.1	-2.163	.702	-.248	.268	-4.852	104.077
CEO_d	3354	.12	.349	0	1	0	1	2.049	5.197
Impairment_d	3354	.14	.301	0	1	0	1	2.658	8.064
Impair x CEO	3354	.019	.138	0	1	0	1	6.973	49.62
Firm_age	3354	50.643	7.035	20	76	34	66	-.062	3.165
Size	3354	8.041	2.174	2.145	15.216	3.816	14.58	.462	3.034
B/M_Ratio	3354	.649	.925	-8.212	29.504	.015	3.329	14.21	373.54
ROA	3354	2447.995	7312.74	-.268	85737	-.268	33859	5.917	47.859
GW_Scaled	3354	.162	.172	0	.768	0	.607	.836	2.69
Leverage	2925	40.305	438.548	-.498	16840.79	.063	649.111	25.362	828.374

Table 3: The table presents the number of observations (Obs), mean, standard deviation (Std. Dev.), minimum (Min), and maximum (Max) for each variable. The 1st and 99th percentiles (p1 and p99) are shown for outlier sensitivity, and ROA has been winsorized accordingly.

Table 4 showcases the distribution of firms per year, where the annual counts are tightly clustered between 192 and 234 firms, or roughly 5.7–7.0 % of the total, so the panel is evenly balanced across 2005-2020. This steadiness signals that no single calendar year dominates the sample and that any attrition over time is modest rather than abrupt.

Summary Statistic Per Year		
Year	Distribution of Firms	%
2005	207	6.17%
2006	217	6.47%
2007	221	6.59%
2008	223	6.65%
2009	217	6.47%
2010	204	6.08%
2011	214	6.38%
2012	193	5.75%
2013	193	5.75%
2014	205	6.11%
2015	222	6.62%
2016	234	6.98%
2017	210	6.26%
2018	205	6.11%
2019	197	5.87%
2020	192	5.72%
Grand Total	3354	100.00%

Table 4: This table shows how many of the 3,354 firms appear in each calendar year from 2005–2020.

Table 5 shows the distribution of firms per industry. Of the 3,354 firms, nearly half fall into two sectors, Industrials (28.3 %) and Information Technology (17.2 %), while Health Care, Consumer Discretionary, and Financials contribute another third. The remaining six sectors, especially Energy (0.6 %) and Utilities (1.1 %), are thinly represented. Consequently, sector-level results will be driven mainly by the five largest industries, and findings for the sparsely sampled groups should be interpreted with care.

Summary Statistic Per Industry		
Industry Classification	Distribution of Firms	%
Communication Services	123	3.67%
Consumer Discretionary	398	11.87%
Consumer Staples	88	2.62%
Energy	20	0.60%
Financials	336	10.02%
Health Care	434	12.94%
Industrials	948	28.26%
Information Technology	577	17.20%
Materials	166	4.95%
Real Estate	228	6.80%
Utilities	36	1.07%
Grand Total	3354	100.00%

Table 5: The table breaks down the 3,354 sample firms across the 11 different industry classifications.

Table 4 presents the Pearson correlation coefficients for all model variables, with significance indicated at the 5 percent level. The three cumulative abnormal return measures are all positively and significantly interrelated (CAR1–CAR2: $r=0.284$; CAR1–CAR3: $r=0.210$; CAR2–CAR3: $r=0.828$), supporting that these windows capture a common underlying market reaction. The impairment indicator exhibits modest negative correlations with CAR2 and CAR3 and a small positive association with the CEO-turnover dummy, suggesting that recognized impairments tend to coincide with both lower abnormal returns and an increased likelihood of managerial change. Its interaction with CEO turnover is strongly correlated with each constituent dummy and positively related to firm size, as expected. Among the control variables, book-to-market is positively correlated with CAR1 and negatively with CAR2, while ROA shows a positive association with size but a negative association with the CEO-turnover dummy and the interaction term. Scaled goodwill is positively correlated with both the impairment dummy and the interaction term. Finally, leverage is negatively correlated with book-to-market and with scaled goodwill.

Pearson correlation matrix

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. CAR1	1											
2. CAR2	0.284*	1										
3. CAR3	0.210*	0.828*	1									
4. Impairment_d	-0.039*	-0.086*	-0.053*	1								
5. CEO_d	-0.023	0.007	-0.014	0.049*	1							
6. Impair X CEO	-0.015	0.008	0.006	0.421*	0.345*	1						
7. Firm_age	0.019	-0.007	0.011	0.014	-0.139*	-0.042*	1					
8. Size	0.017	-0.000	0.017	0.111*	-0.002	0.053*	0.127*	1				
9. B/M_Ratio	0.057*	-0.046*	-0.019	0.024	0.029	0.008	0.0131	0.044*	1			
10. ROA	0.026	0.025	0.035	-0.055	-0.085*	-0.040*	0.004	0.246*	-0.049*	1		
11. GW_Scaled	0.005	0.0105	0.031	0.114*	0.031	0.081*	-0.047*	-0.007	-0.016	0.063*	1	
12. Leverage	-0.003	0.0054	-0.004	0.008	0.020	-0.011	0.016*	-0.051*	-0.012	-0.021	-0.056*	1

* $P < 0.05$

Table 6: The table presents the Pearson Correlation Matrix for all of the defined variables.

4. Results

The marginal-effects estimates in Table 7 indicate that several firm-specific factors meaningfully affect the likelihood of recognising a goodwill impairment. A change of chief executive officer (CEO_d) is associated with a statistically significant increase of 4.3 percentage points in the probability that the firm records an impairment, supporting our view that new CEOs are more willing to write down inherited goodwill balances. Firm age also matters, as each additional year increases the probability of impairment by roughly 0.25 percentage points, indicating that more mature firms are incrementally more prone to write-downs. Firm size, measured as the natural logarithm of total assets, has a positive and significant effect as well. An increase of one log point (equivalent to a roughly 2.7-fold rise in assets) lifts the likelihood of impairment by about 1.1 percentage points. We also find that goodwill scaled by total assets is statistically significant and has a large effect, indicating that firms with more goodwill relative to their size are more likely to record impairments. By contrast, the book-to-market ratio, return on assets, and leverage are not statistically significant at the 5 percent level, so we draw no conclusions about their relationship with impairment incidence. Overall, these results highlight CEO turnover, firm maturity, scale, and the size of the goodwill balance itself as the primary drivers of impairment decisions in our sample.

Marginal effects		
(1)		
Impairment_d	ME	Z-Value
CEO_d	.0426***	2.89
Firm_age	.0025**	2.57
Size	.0111**	2.15
B/M_Ratio	.0041	0.51
ROA	1.63e-07	0.15
GW_Scaled	1.324***	2.15
Leverage	4.35e-06	0.45
Industry fixed effects	Yes	
Year fixed effects	Yes	
Pseudo r-squared	.0992	
Observations	2 909	

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 7: Marginal effects from Model 1, with Goodwill Impairment as the dependent variable. The primary variable of interest, CEO change, was examined alongside relevant control variables to assess its effect on goodwill impairments.

Table 8 presents the results for Model 2, where cumulative abnormal returns CAR1–CAR3 are regressed solely on the standard control variables, together with industry and year fixed effects. Across all three event-window specifications, nearly none of the controls help to explain abnormal performance. The lone exception is the book-to-market ratio, which is positive and statistically significant at the 5 percent level in the narrowest window, CAR1. Its coefficient of 0.00253 suggests that a one-unit increase in the ratio raises short-run abnormal returns by roughly 0.25 percentage points. Firm age, size, profitability (ROA), goodwill intensity, and leverage are not significant at the 5 percent level in any column, so no reliable inferences can be drawn about their individual effects. Consistent with the insufficiency of significant predictors, the explanatory power of Model 2 remains limited, with R-squared values of 1.8 percent for CAR1, 20.5 percent for CAR2, and 10.8 percent for CAR3. These findings indicate that the conventional firm-level controls, even when complemented by fixed effects, offer only modest insight into cumulative abnormal returns, thereby motivating the introduction of CEO-turnover and goodwill-impairment variables in subsequent models.

Regression Output			
	(1)	(2)	(3)
VARIABLES	CAR1	CAR2	CAR3
Firm_age	6.92e-05 (0.000125)	-0.000247 (0.000254)	-9.09e-05 (0.000317)
Size	0.000596 (0.000533)	7.76e-06 (0.00109)	-0.000504 (0.00148)
B/M_Ratio	0.00253** (0.00115)	0.000299 (0.00235)	0.00221 (0.00292)
ROA	-2.15e-08 (1.31e-07)	2.27e-07 (2.71e-07)	3.17e-07 (3.69e-07)
GW_Scaled	0.00293 (0.00555)	-0.00249 (0.0115)	0.00281 (0.0153)
Leverage	-7.63e-09 (1.74e-06)	7.50e-07 (3.56e-06)	-5.02e-07 (4.40e-06)
Industry fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Constant	-0.0110 (0.00900)	0.0164 (0.0182)	-0.00614 (0.0233)
R-squared	0.018	0.205	0.108
Observations	2,429	2,411	2,536
Number of firm_id	296	296	302

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 8: Regression output from Model 2, only with the dependent variables Car 1-3 and the control variables.

Turning to Table 9, which extends Model 2 by adding the impairment dummy, we find evidence that goodwill write-downs are viewed unfavourably by the market. The coefficient

on Impairment_d is negative and statistically significant in all three event windows. Firms announcing an impairment earn abnormal returns that are about 0.53 percentage points lower in the shortest window CAR1, 2.26 percentage points lower over the medium window CAR2, and 1.78 percentage points lower in the longest window CAR3. Among the control variables, the book-to-market ratio remains significant, but its sign changes across windows, positive for CAR1 and negative for CAR2, while it becomes insignificant for CAR3. This mixed pattern suggests that any valuation effect is sensitive to the length of the return window. No other control is significant at the 5 percent level, so we draw no conclusions about firm age, size, profitability, goodwill intensity, or leverage. Although the impairment dummy raises the model's explanatory power only modestly (R-squared rises to between 1.9 percent and 6.0 percent), its consistently negative and significant coefficient underscores that goodwill write-downs convey adverse information to investors even after we control for standard firm characteristics and fixed effects.

Regression Output			
VARIABLES	(1) CAR1	(2) CAR2	(3) CAR3
Impairment_d	-0.00526** (0.00262)	-0.0226*** (0.00544)	-0.0178*** (0.00650)
Firm_age	8.90e-05 (0.000125)	-0.000192 (0.000253)	-6.55e-05 (0.000317)
Size	0.000605 (0.000531)	0.000228 (0.00109)	-0.000264 (0.00148)
B/M_Ratio	0.00259** (0.00115)	-0.00498** (0.00235)	-0.00325 (0.00292)
ROA	-1.80e-08 (1.31e-07)	2.26e-07 (2.70e-07)	3.09e-07 (3.69e-07)
GW_Scaled	0.00385 (0.00556)	0.000662 (0.0114)	0.00474 (0.0153)
Leverage	6.73e-08 (1.74e-06)	1.04e-06 (3.55e-06)	-3.45e-07 (4.39e-06)
Industry fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Constant	-0.0110 (0.00900)	0.0164 (0.0182)	-0.00614 (0.0233)
R-squared	0.019	0.029	0.060
Observations	2,429	2,411	2,536
Number of firm_id	296	296	302

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 9: Regression output from Model 3, with Car 1-3 as the dependent variable examined alongside the impairment dummy and the relevant control variables.

Table 10 reports Model 4, where we introduce the interaction term $\text{Impair} \times \text{CEO}$ to test whether the market reacts differently when a goodwill write-down is taken by a newly appointed chief executive. The interaction effect is substantial and reaches statistical significance at the 5 percent level in the two wider windows. When an impairment coincides with a CEO turnover, cumulative abnormal returns increase by approximately 3.1 percentage points in CAR2 and 2.4 percentage points in CAR3. At the same time, the stand-alone impairment dummy remains negative, with abnormal returns of -0.54 percentage points in CAR1, -2.83 percentage points in CAR2, and -2.28 percentage points in CAR3. These results suggest that the market reacts less negatively to impairments when they are made under new leadership. In contrast, impairments under continuing leadership continue to result in substantial value losses. The interaction effect is not significant in the tightest window (CAR1), so we cannot draw any meaningful interpretations about investors revising their views during this period.

Among the controls, only the book-to-market ratio remains significant at the 5 percent threshold, positively related to abnormal returns in CAR1 and negatively related in CAR2, while it loses significance in CAR3. Firm age, size, profitability, goodwill intensity, and leverage remain statistically equivalent from zero and are therefore not interpreted. The addition of the interaction term lifts explanatory power modestly, with R-squared values of 2.0 percent, 3.2 percent, and 6.1 percent for CAR1, CAR2, and CAR3, respectively.

Regression Output			
VARIABLES	(1) CAR1	(2) CAR2	(3) CAR3
Impair x CEO	0.00118 (0.00608)	0.0306** (0.0128)	0.0241** (0.0144)
Impairment_d	-0.00549** (0.00288)	-0.0283*** (0.00593)	-0.0228*** (0.00715)
CEO_d	-0.0029 (0.00259)	-0.0059 (0.00597)	-0.0078 (0.00717)
Firm_age	9.06e-05 (0.000125)	-0.000153 (0.000253)	-2.85e-05 (0.000317)
Size	0.000605 (0.000531)	0.000250 (0.00109)	-0.000259 (0.00147)
B/M_Ratio	0.00259** (0.00115)	-0.00489** (0.00234)	-0.00323 (0.00291)
ROA	-1.87e-08 (1.31e-07)	2.05e-07 (2.70e-07)	2.98e-07 (3.66e-07)
GW_Scaled	0.00381 (0.00557)	-0.000290 (0.0114)	0.00435 (0.0152)
Leverage	7.34e-08 (1.74e-06)	1.16e-06 (3.55e-06)	-2.02e-07 (4.39e-06)
Industry fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Constant	-0.0110 (0.00900)	0.0164 (0.0182)	-0.00614 (0.0233)
R-squared	0.020	0.032	0.061
Observations	2,429	2,411	2,536
Number of firm_id	296	296	302
Standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			

Table 10: Regression output from Model 4, with Car 1-3 as the dependent variable. The primary variable of interest, interaction variable (Impair x CEO), was examined alongside relevant control variables to assess its effect on CAR.

As a further robustness check, we re-estimated Models 1 and 4, including lagged ROA as an additional control variable (Appendix 3). The main results remain consistent, the interaction effect (Impair $\times$ CEO) remains positive and significant in Model 4, and the impairment probability in Model 1 is still significantly associated with CEO turnover. The lagged ROA variable itself is not statistically significant, indicating that past performance does not confound the key findings.

5. Discussion

5.1 CEO Transitions and the Impairment of Goodwill

Hypothesis 1 suggested that firms experiencing a CEO transition are more likely to recognise a goodwill impairment in the first full fiscal year after the change. The marginal-effects estimates reported in Table 7 support this expectation. The presence of a new chief executive increases the likelihood of an impairment by about 4 percentage points. Accordingly, we reject the null hypothesis of no association. The findings that write-downs cluster around CEO changes in the Swedish setting suggest that the discretion built into the current rules remains significant. While Swedish regulators do review the assumptions used in impairment tests, these reviews occur only after the impairment decisions have been made and reported (Hellman, 2011).

Although this pattern is consistent with an opportunistic interpretation, where incoming managers prefer to recognise inherited losses promptly to establish a lower earnings baseline (Healy, 1985; Strong & Meyer, 1987), we acknowledge that not all big bath behavior is necessarily opportunistic. As highlighted by Haggard et al. (2015), such impairments can also serve a non-opportunistic purpose by improving the information environment and signaling a strategic reset. Therefore, while our findings support the notion that CEO changes are associated with an increased likelihood of impairments, we cannot conclusively determine whether this behavior reflects opportunistic motives or legitimate strategic re-evaluations. This ambiguity is reinforced by the limitations of our data. Although we observe a statistically significant increase in impairments following CEO transitions, we cannot determine whether these decisions are ultimately value-reducing or informative.

Moreover, we find that goodwill scaled by total assets is also statistically significant, indicating that the sheer size of goodwill holdings independently contributes to the likelihood of impairment. This suggests that, beyond any managerial discretion associated with leadership changes, firms with larger goodwill balances may face increasing pressure to write down assets, even when controlling for other financial characteristics.

The results also align with Haggard et al. (2015) and Daniele et al. (2024), who support the hypothesis that new CEOs are more inclined to engage in big bath accounting by recognizing impairments early in their tenure. These substantial one-off charges may reflect managerial discretion to reset the firm's financial baseline, particularly following a change in leadership.

Furthermore, it is consistent with Daniele et al. (2023) observation that CEO transitions increase the occurrence of big bath behavior, suggesting that newly appointed executives may exploit the discretion allowed under IFRS to attribute poor performance to predecessors. These results indicate the notion that goodwill impairments can serve as strategic tools in earnings management, particularly during leadership changes, and affirm the relevance of big bath accounting practices.

However, our findings diverge from earlier U.S. studies, which often identify low profitability, high leverage, and a high book-to-market ratio as key predictors of goodwill impairments (Francis et al., 1996; Li & Sloan, 2017). In our model, none of these factors is statistically significant. One possible explanation could be the Swedish regulations, where firms must provide robust documentation to support an impairment, demonstrating that the decline in asset value is more than just a short-term dip in performance. This requirement may limit the use of short-term financial indicators, such as temporary drops in profitability, as sufficient grounds for impairment. Consistent with prior IFRS research, the likelihood of goodwill impairment increases with the size of accumulated goodwill, while other factors shape how firms approach impairment decisions (Glaum et al., 2018).

Thus, while these findings from Model 1 demonstrate the likelihood of impairment under new leadership, their practical implications become clearer when also considering how the market reacts to these impairments, a topic we turn to next.

5.2 Big Bath Accounting and the Swedish Market

Our results show partial support for the moderating effect of CEO turnover on the relationship between goodwill impairments and cumulative abnormal returns. Model 2 shows that firm-level controls alone have limited explanatory power for abnormal returns, while Model 3 demonstrates that goodwill impairments are linked to significantly negative stock reactions. However, Model 4 reveals a positive and statistically significant interaction effect in the broader event windows (CAR2 and CAR3), indicating that the market reacts less negatively when impairments coincide with a CEO change. Consequently, while the hypothesis was formulated as “indeterminate,” our findings suggest a significant moderating effect. We therefore reject the null hypothesis of indeterminacy at the 5% significance level based on Models 3 and 4.

Connecting this to the semi-strong form of the Efficient Market Hypothesis (Fama, 1970), the results partially support this view. The significant negative reaction to impairments (Model 3) is consistent with the idea that markets interpret such write-downs as indicative of deteriorated asset quality or managerial failure. However, the market's nuanced reaction to impairments that occur alongside CEO turnover, reflected in the positive and significant interaction term in Model 4, suggests investors interpret these events differently.

The results seem to align more closely with Signaling Theory (Spence, 1973). The less negative or near-neutral reaction to impairments under new CEOs may indicate that investors interpret these actions as a “strategic reset”, a signal that the new leadership is cleaning up past mistakes and setting the firm on a more sustainable path. Thus, the empirical results are more supportive of signaling theory than of a purely mechanical EMH interpretation, suggesting that context, such as leadership change, influences how investors process accounting information.

Although we cannot draw definitive conclusions about whether impairments coinciding with CEO turnover reflect opportunistic behavior or genuine management actions, the positive coefficient on the $\text{Impair} \times \text{CEO}$ interaction suggests that the market may interpret these impairments as justified adjustments rather than opportunistic write-downs. This interpretation is supported by the market reaction being significantly less negative and nearly neutral when impairments coincide with CEO transitions.

Connecting to previous literature, these findings align with Strong and Meyer (1987) and Glaum et al. (2023), who suggest that large write-offs, particularly under new management, can be interpreted as credible commitments to restructuring rather than manipulation by the market. On the other hand, the results are not in line with Bartov et al. (1998) and Li et al. (2011), who found that markets penalize such impairments regardless of context, suggesting they are typically viewed as opportunistic. The moderating effect also supports Haggard et al. (2015), who found that large non-recurring charges can sometimes enhance the information environment, leading to improved investor confidence. The market's more muted response to impairments under new CEOs in our study may reflect such a perception that the action, while aggressive, is part of a legitimate transition strategy.

Taken together, our findings carry practical implications for regulators and standard setters, particularly the IASB. The fact that goodwill impairments are more likely following CEO

transitions (H1) and that markets react less negatively when impairments coincide with leadership change (H2) suggests that investors perceive these events as credible signals of a strategic reset rather than as a purely opportunistic maneuver. This nuanced market response challenges the assumption that all goodwill impairments are interpreted as negative news and raises questions about whether the impairment-only model under IAS 36 adequately distinguishes between opportunistic and informative write-downs.

For the IASB, these findings raise a key policy dilemma. While current rules give firms flexibility to apply managerial judgment, this discretion can be used either to clarify or to distort the true state of firm performance. Our evidence suggests that users of financial statements interpret impairments differently depending on the surrounding circumstances, particularly in the presence of a CEO change. Suppose investors react less negatively to impairments that coincide with leadership transitions. In that case, this suggests such write-downs may not always be perceived as negative signals, but rather as part of a strategic reset. This challenges the assumption that all goodwill impairments are interpreted uniformly and raises questions about whether the current impairment model fully meets the IASB's goal of providing transparent and decision-useful information (IASB, 2022).

These insights underscore the potential value of more detailed, context-specific disclosures around the strategic reasoning for impairments, especially when linked to changes in executive leadership. Such disclosure enhancements, already under discussion in the IASB's *Goodwill and Impairment* project, may prove more effective in addressing concerns about opportunism than further tightening recognition thresholds. Improving transparency about managerial intent could help investors better assess whether an impairment reflects genuine restructuring or opportunistic earnings management, thereby reinforcing both the relevance and the faithful representation of financial statements.

5.3. Limitations

Our empirical design and robustness checks increase confidence in the results, yet several limitations remain. We anchor each event to the annual report filing date and examine cumulative abnormal returns over a plus or minus five trading day window. This longer window guards against information leaks and delayed price discovery, but also risks capturing unrelated news. By contrast, the narrower zero to one day window may miss slower

market reactions, and treating the annual report as the first disclosure may be too strict when firms sometimes pre-announce impairments in press releases or quarterly filings.

Abnormal returns are estimated using a single-factor market model over the 210 trading days before the event. A multi-factor benchmark, such as the Fama and French three-factor model, could better account for priced risk, particularly in stocks with small capitalization or high book-to-market ratios. Thin trading in smaller shares can bias beta estimates, and assuming constant variance ignores the volatility spikes that often accompany accounting announcements.

Our proxy for potential big bath behaviour combines a CEO turnover dummy with a binary indicator for goodwill impairment. It does not distinguish between voluntary and forced CEO departures, a factor that may influence the likelihood or motivation for impairment decisions. Nor can it separate regulatory-driven write-downs from discretionary ones, making it difficult to assess the underlying intent. In addition, coding impairments as a binary variable means that we treat all impairment events equally, regardless of their size. A write-down of fifty million kronor is thus treated the same as one of thirty-five billion, potentially masking differences in magnitude and materiality. Our approach also omits other non-recurring charges, such as restructuring costs or inventory write-offs, which are often used in big bath reporting strategies. As a result, our measurement likely underrepresents the full scope of earnings management activities that can follow CEO transitions.

Our data on CEO turnover was collected manually, which introduces the possibility of human error. Misclassifying a non-event as a turnover or vice versa would add noise to the interaction variable and could weaken the estimated effects. Further, the sample period spans the global financial crisis, the European sovereign debt turmoil, and the onset of the COVID-19 pandemic. Year fixed effects absorb average macro shocks but cannot capture industry-specific differences in how these episodes affected firms.

Finally, although we included lagged ROA as a robustness check in our models 1 and 4 to partially address concerns about reverse causality, this approach cannot fully resolve potential endogeneity. While they reinforce the stability of our primary findings, causality remains an open question that future research could address more directly. Thus, these considerations imply that our findings are best viewed as conditional on Sweden's institutional setting, the chosen event study framework, and our specific measures of big bath behaviour.

6. Conclusion

This study set out to explore whether newly appointed CEOs in Sweden strategically time goodwill impairments as a form of big bath accounting and how such impairments are interpreted by the stock market. Through a comprehensive empirical design combining a logit model with event-study methodology, we find robust evidence in support of our hypotheses. Specifically, we reject the null hypothesis of no relationship between CEO turnover and impairment activity. Our results show that the likelihood of recording a goodwill impairment increases significantly in the fiscal year following a CEO transition, suggesting that managerial discretion under IFRS continues to permit earnings management behaviors in the Swedish institutional setting. Furthermore, while standalone goodwill impairments yield significantly negative abnormal returns, our interaction term reveals that when impairments coincide with CEO turnover, the market reaction is largely neutral. This pattern indicates that investors distinguish between opportunistic and informative impairments, treating the latter as a credible reset rather than mere manipulation, aligning with the logic of semi-strong market efficiency and signaling theory.

These findings contribute meaningfully to the literature and have practical implications for both regulators and firms. In particular, they lend empirical support to the ongoing deliberations by the IASB in its 2024 discussion paper on enhancing goodwill accounting. Our results underline that, despite current IFRS safeguards, discretion over the timing of impairments remains, and the market response varies based on contextual cues like CEO turnover. This suggests that reforms aimed merely at refining valuation models may be insufficient unless accompanied by enhanced disclosure requirements that help investors assess managerial intent. Requiring firms to disclose whether impairments follow a change in leadership and to explain the strategic rationale behind such write-downs could improve transparency and reinforce financial statements' faithful representation and relevance.

Moreover, the relevance of our findings is heightened in the wake of recent large impairments by Swedish firms such as SSAB and Ericsson. The magnitude of these write-downs has sparked concern over the timeliness and credibility of impairment testing. Our evidence suggests that investors may interpret such impairments differently, depending on the presence or absence of CEO transitions, which further complicates market interpretations of financial distress. If such large impairments are seen as opportunistic rather than informative, they risk undermining investor confidence in reported earnings. Consequently, this work highlights

how the market distinguishes between efficient and opportunistic earnings management, particularly in the high-stakes context of goodwill impairments, providing a useful lens for both boards and regulators.

Despite its contributions, this thesis is not without limitations. Most notably, our empirical models capture associations but cannot definitively attribute causality. Additionally, our study focuses on relatively short-term market reactions, leaving open the question of how such impairments affect longer-term valuation and performance. Future research could build on our findings by employing qualitative methods, such as interviews with financial analysts or CFOs, to explore how impairment disclosures are interpreted in practice. Another promising avenue would be to examine whether similar patterns hold in other IFRS-based markets with different levels of enforcement, or whether investor reactions vary depending on the magnitude of the impairment and characteristics of the incoming CEO.

Moreover, it would be valuable for future studies to distinguish between “good” and “bad” big baths, as described by Haggard et al. (2015). “Good” big baths may serve a constructive purpose by clearing the air and initiating a strategic reset. In contrast, “bad” big baths may be linked to opportunistic behavior, such as masking prior income-increasing manipulations or continuing earnings management in subsequent periods. Identifying this distinction could help clarify when impairments reflect transparent corporate governance versus when they signal deeper concerns about managerial intent and financial reporting quality. Finally, as the IASB moves closer to finalizing its goodwill reforms, future studies could revisit this topic post-implementation to evaluate whether new standards successfully mitigate the discretionary behavior we have documented.

References

- Bartov, E., Lindahl, F. W., & Ricks, W. (1998). "Stock Price Behavior Around Announcements of Write-Offs." *Review of Accounting Studies* 3(4): 327-346.
- Cowan, A. R., Jeffrey, C., & Wang, Q. (2023). Does writing down goodwill imperil a CEO's job? *Journal of Accounting and Public Policy*, 42, 107015.
- Damodaran, A. (2012). *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset* (3rd ed.). John Wiley & Sons.
- Daniele, M., Desai, P., Imperatore, C., & Pettinicchio, A. (2024). Big baths around turnovers: What happens if the former CEO stays on board? *European Accounting Review*, 33(5), 1639–1666.
- Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. *The Accounting Review*, 70(2), 193–225.
- Dichev, I. D., Graham, J. R., Harvey, C. R., & Rajgopal, S. (2013). Earnings quality: Evidence from the field. *Journal of Accounting and Economics*, 56(2–3), 1–33.
- Elliott, J. A., & Shaw, W. H. (1988). Write-offs as accounting procedures to manage perceptions. *Journal of Accounting Research*, 91-119.
- Ericsson. (2024). Ericsson Annual Report 2023. Retrieved from: <https://www.ericsson.com/49317f/assets/local/investors/documents/2024/annual-report-2024-en.pdf>
- Fagerland, M. W., & Hosmer, D. W. (2012). A generalized Hosmer–Lemeshow goodness-of-fit test for multinomial logistic regression models. *The Stata Journal*, 12(3), 447-453.
- Fama, E. F. (1991). Efficient capital markets: II. *The journal of finance*, 46(5), 1575-1617.
- Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *The Journal of Finance*, 25(2), 383–417.
- Fields, D., Lys, Z., & Vincent, L. (2001). Empirical Research on Accounting Choice. *Journal of Accounting and Economics*, 2001, vol. 31, issue 1-3, 255-307.

Filip, A., & Raffournier, B. (2014). Financial crisis and earnings management: The European evidence. *The International Journal of Accounting*, 49(4), 455–478.

Francis, J. R., Hanna, J. D., & Vincent, L. (1996). Causes and effects of discretionary asset write-offs. *Journal of Accounting Research*, 34, 117–134.

Glaum, M., Landsman, W. R., & Meyer, N. (2023). *How deep is your bath? Cross-country differences in earnings management following CEO turnovers*.

Glaum, M., Landsman, W. R., & Wyrwa, S. (2018). Goodwill impairment: The effects of public enforcement and monitoring by institutional investors. *The Accounting Review*, 93(6), 149–180.

Haggard, K. S., Howe, J. S., & Lynch, A. M. (2015). The effects of large nonrecurring charges on future earnings and earnings response coefficients. *Journal of Business Finance & Accounting*, 42(9–10), 1207–1239.

Hamberg, M., & Beisland, L-A. (2014). "Changes in the value relevance of goodwill accounting following the adoption of IFRS 3," *Journal of International Accounting, Auditing and Taxation*, vol. 23(2), pages 59-73.

Hamberg, M., Paananen, M., & Novak, J. (2010). The Adoption of IFRS 3: The Effects of Managerial Discretion and Stock Market Reactions. *European Accounting Review*, 20(2), 263–288.

Hausman, J. A. (1978). Specification tests in econometrics. *Econometrica: Journal of the Econometric Society*, 1251-1271.

Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of accounting and economics*, 31(1-3), 405-440.

Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13(4), 365–383.

- Healy, P. M. (1985). The effect of bonus schemes on accounting decisions. *Journal of Accounting and Economics*, 7(1–3), 85–107.
- Hellman, N. (2011). Soft adoption and reporting incentives: A study of the impact of IFRS on financial statements in Sweden. *Journal of International Accounting Research*, 10(1), 61–83.
- Hope, O.-K., & Wang, J. (2018). Big bath accounting revisited: Timing of write-offs and investor response. *Accounting and Finance*, 58(4), 1035–1061.
- Huson, M. R., Malatesta, P. H., & Parrino, R. (2004). Managerial succession and firm performance. *Journal of Financial Economics*, 74(2), 237–275.
- International Accounting Standards Board (IASB). (2024). *Business combinations—Disclosures, goodwill, and impairment (Exposure Draft)*. IFRS Foundation. Retrieved from: <https://www.ifrs.org/projects/work-plan/goodwill-and-impairment/>
- International Accounting Standards Board (IASB). (2022). *Conceptual Framework for Financial Reporting*. IFRS Foundation. Retrieved from: <https://www.ifrs.org/issued-standards/list-of-standards/conceptual-framework/>
- International Accounting Standards Board (IASB). (2021a). *IAS 36: Impairment of Assets*. IFRS Foundation. Retrieved from: <https://www.ifrs.org/issued-standards/list-of-standards/ias-36-impairment-of-assets/>
- International Accounting Standards Board (IASB). (2021b). *IAS 38: Intangible Assets*. IFRS Foundation. Retrieved from: <https://www.ifrs.org/issued-standards/list-of-standards/ias-38-intangible-assets/>
- Kirschenheiter, M., & Melumad, N. (2002). Can “big bath” and earnings smoothing coexist as equilibrium financial reporting strategies? *Review of Accounting Studies*, 7(2–3), 219–246.
- Khanna, N., & Poulsen, A. B. (1995). Managers of financially distressed firms: Villains or scapegoats? *The Journal of Finance*, 50(3), 919–940.
- Knauer, T., & Wöhrmann, A. (2016). Market Reaction to Goodwill Impairments. *European Accounting Review Forthcoming*.

- Kothari, S. P., Shu, S., & Wysocki, P. D. (2009). Do managers withhold bad news? *Journal of Accounting Research*, 47(1), 241–276.
- Kvaal, E., & Nobes, C. (2010). International differences in IFRS policy choice: A research note. *Accounting and Business Research*, 40(2), 173–187.
- Leuz, C., Nanda, D., & Wysocki, P. D. (2003). Earnings management and investor protection: an international comparison. *Journal of Financial Economics*, 69(3), 505–527.
- Li, K. K., & Sloan, R. G. (2017). Has goodwill accounting gone bad? *Review of Accounting Studies*, 22(2), 964–1003.
- Li, Z., Shroff, P. K., Venkataraman, R., & Zhang, I. X. (2011). Causes and consequences of goodwill impairment losses. *Review of Accounting Studies*, 16(4), 745–778.
- Li, E. X., & Ramesh, K. (2009). Market reaction surrounding the filing of periodic SEC reports. *The Accounting Review*, 84(4), 1171–1208.
- Mackey, A. (2008). The effect of CEOs on firm performance. *Strategic Management Journal*, 29(12), 1357–1367.
- MacKinlay, A. C. (1997). Event studies in economics and finance. *Journal of Economic Literature*, 35(1), 13–39.
- Mendenhall, R. R., & Nichols, W. D. (1988). Bad news and differential market reactions to announcements of earlier quarters versus fourth-quarter earnings. *Journal of Accounting Research*, 26, 63–86.
- Moore, M. L. (1973). Management changes and discretionary accounting decisions. *Journal of Accounting Research*, 11(1), 100–107.
- Murphy, K. J., & Zimmerman, J. L. (1993). Financial performance surrounding CEO turnover. *Journal of Accounting and Economics*, 16(1–3), 273–315.
- Parrino, R. (1997). CEO turnover and outside succession: a cross-sectional analysis. *Journal of Financial Economics*, 46(2), 165–197.
- Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of Political Economy*, 106(6), 1113–1155.

Regulation (EC) No 1606/2002 of the European Parliament and of the Council of 19 July 2002 on the application of international accounting standards. *Official Journal of the European Communities* L243, 1–4.

Runesson, E., Marton, J. & Samani, N. (2022) *Financial Accounting Theory, An accounting quality approach* (2nd ed.) Studentlitteratur AB, Lund.

Shiller, R. J. (2003). From efficient markets theory to behavioral finance. *The Journal of Economic Perspectives*, 17(1), 83–104.

Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics*, 87, 355–374.

SSAB. (2023). SSAB Annual Report. Retrieved from:
<https://mb.cision.com/Public/980/3947345/8aab378c035efea5.pdf>

Standard & Poor's Global Ratings. (2025). *Sweden's AAA/A-1+ ' Ratings Affirmed; Outlook Stable*.

Stolowy, H., & Breton, G. (2004). Accounts manipulation: A literature review and proposed conceptual framework. *Review of Accounting and Finance*, 3(1), 5–92.

Strong, J., & Meyer, J. (1987). Asset write-downs: Managerial incentives and security returns. *The Journal of Finance*, 42(3), 643–661.

Subramanyam, K. R. (1996). The pricing of discretionary accruals. *Journal of Accounting and Economics*, 22(1–3), 249–281.

Svabova, L., Tesarova, E. N., Durica, M., & Strakova, L. (2021). Evaluation of the impacts of the COVID-19 pandemic on the development of the unemployment rate in Slovakia: counterfactual before-after comparison. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 16(2), 261-284.

Warner, J. B., Watts, R. L., & Wruck, K. H. (1988). Stock prices and top management changes. *Journal of Financial Economics*, 20, 461-492.

Watts, R., & Zimmerman, J. (1990). Positive Accounting Theory: A Ten-Year Perspective. *The Accounting Review*, 65, 131-156.

Watts, R. L., & Zimmerman, J. L. (1986). *Positive Accounting Theory*. Prentice Hall.

Wooldridge, J. M. (2010). *Econometric Analysis of Cross-Section and Panel Data* (2nd ed.). MIT Press.

Zhang, Y., & Rajagopalan, N. (2010). Once an outsider, always an outsider? CEO origin, strategic change, and firm performance. *Strategic Management Journal*, 31(3), 334–346.

Appendix

Appendix 1: Distribution of observations before and after winsorizing

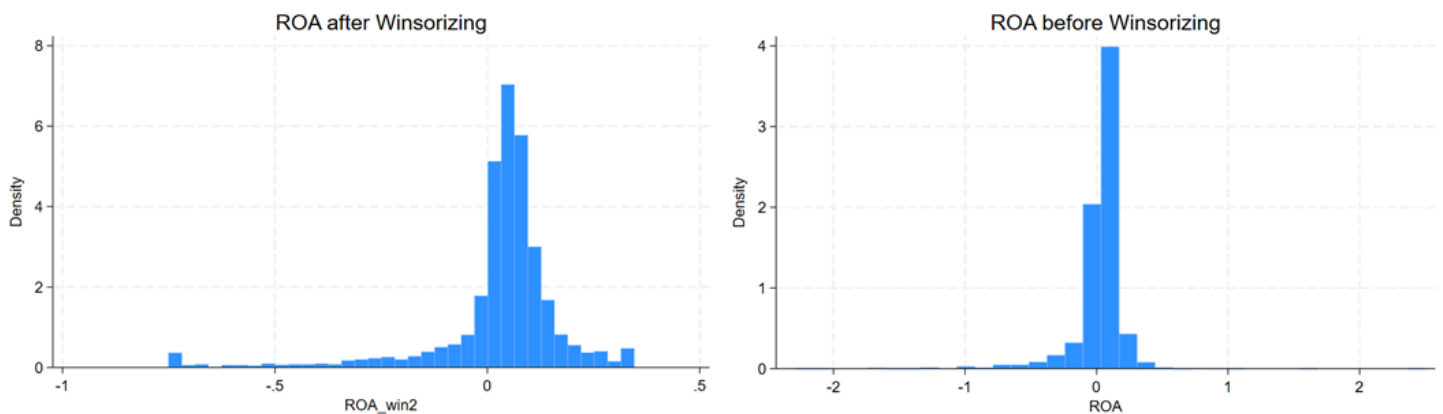


Table 11: Before and after winsorizing on ROA. Before winorsing, as can be seen in the right picture, there are several outliers. After winsorizing at the 1th and 99th percentiles, the extreme values are closer to the majority of values, and the effect of outliers on the statistical analysis is significantly reduced. Note that the values of the axis are different between the before and after distributions.

Appendix 2: Hausman tests

Hausman Test Model 1				
	Model FE	Model RE	Difference (FE-RE)	Std. err.
Ceo_d	0.027	0.036	0.009	0.004
Firm_age	0.001	0.002	-0.001	0.001
Size	0.013	0.010	0.003	0.011
Bm_ratio	-0.000	0.003	-0.003	0.001
ROA	2.92e-06	5.954e-07	2.33e-06	1.40e-06
Gw_Scaled	0.002	0.117	-0.115	0.074
Leverage	0.008	0.005	0.002	0.001

Test of H0: Difference in coefficients not systematic.

Prop > Chi2 = 0.441

Table 12: Hausman test computed on Model 1 using Impairment as the dependent variable, CEO change as the independent variable, and control variables.

Hausman Test Model 2				
	Model FE	Model RE	Difference (FE-RE)	Std. err.
Firm_age	0.000	0.000	0.000	0.000
Size	0.001	1.84e-06	0.001	0.002
Bm_ratio	0.003	0.002	0.002	0.001
ROA	-2.21e-07	1.63e-08	-2.37e-07	2.61e-07
Gw_Scaled	0.023	0.003	0.020	0.014
Leverage	0.001	0.001	0.000	0.000

Test of H0: Difference in coefficients not systematic.

Prop > Chi2 = 0.167

Table 13: Hausman test computed on Model 2 (Only using control variables) using CAR1 as the dependent variable.

Hausman Test Model 3				
	Model FE	Model RE	Difference (FE-RE)	Std. err.
Impair_d	-0.006	-0.006	-0.000	0.001
Firm_age	0.000	0.000	0.000	0.000
Size	0.000	0.000	0.001	0.002
Bm_ratio	0.003	0.002	0.002	0.001
ROA	-2.03e-07	1.52e-08	-2.18e-07	2.60e-07
Gw_Scaled	0.023	0.003	0.020	0.014
Leverage	0.001	0.001	0.000	0.000

Test of H0: Difference in coefficients not systematic.

Prop > Chi2 = 0.189

Table 14: Hausman test computed on Model 3 with CAR1 as dependent variable, Impairment as independent variable, and control variables.

Hausman Test Model 4

	Model FE	Model RE	Difference (FE-RE)	Std. err.
Impair x Ceo	0.001	0.003	-0.002	0.002
Impair_d	-0.006	-0.006	-0.000	0.001
Ceo_d	-0.000	-0.003	0.003	0.001
Firm_age	0.000	0.000	0.000	0.000
Size	0.000	0.000	0.001	0.002
Bm_ratio	0.003	0.002	0.002	0.001
ROA	-2.02e-07	1.54e-08	-2.18e-07	2.60e-07
Gw_Scaled	0.023	0.003	0.020	0.014
Leverage	0.001	0.001	0.000	0.000

Test of H0: Difference in coefficients not systematic.

Prop > Chi2 = 0.053

Table 15: Hausman test computed on Model 4 with CAR1 as the dependent variable, the Interaction variable of Impairment and Ceo change as independent variables, and control variables.

Appendix 3: Controlling for Lagged Firm Performance

Regression Output				
VARIABLES	Model 1	Model 4		
	Impairment_d	CAR1	CAR2	CAR3
Impair x CEO	-	0.00295 (0.00664)	0.0257** (0.01181)	0.0265** (0.01893)
Impairment_d	-	-0.00691** (0.00295)	-0.01543*** (0.00531)	-0.0056*** (0.00741)
CEO_d	0.42812 (0.183925)	-0.00245 (0.00241)	0.00124 (0.00439)	0.00236 (0.00615)
Firm_age	0.02097 (0.000125)	0.00088 (0.00012)	0.00015 (0.000205)	0.00045 (0.00034)
Size	0.18533 (0.06503)	-0.00013 (0.00005)	-0.00239 (0.00114)	-0.00302 (0.00162)
B/M_Ratio	0.029280** (0.08132)	0.000264** (0.00109)	0.00042 (0.00177)	0.00315 (0.00247)
ROA	1.45e-05 (0.43957)	0.00045 (0.00046)	-0.00677 (0.00851)	-0.00572 (0.00118)
Lagged_ROA	0.34118 (0.48227)	0.00038 (0.00045)	0.00983 (0.00861)	0.00702 (0.01194)
GW_Scaled	2.06647 (0.630225)	0.00046 (0.00575)	-0.00517 (0.01218)	0.00191 (0.01754)
Leverage	0.04578 (0.02603)	0.00105 (0.00035)	-0.00018 (0.00065)	-0.00316 (0.00091)
Industry fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Constant	-0.0101 (0.00901)	0.0199 (0.0181)	-0.00827 (0.0147)	0.0187 (0.0197)
R-Squared/Pseudo R2	0.1495	0.022	0.035	0.0063
Observations	2,974	2,429	2,411	2,536
Number of firm_id	310	296	296	302
Standard errors in parentheses				
*** p<0.01, ** p<0.05, * p<0.1				

Table 16: This table displays the regression results for Models 1 and 4, incorporating lagged ROA as a control to test the robustness of our primary findings. While lagged ROA is not significant, the key relationships remain consistent, reinforcing the results and addressing concerns about reverse causality.