Master Thesis U.S.E.

Exploring the Impact of Board Characteristics on Accounting Conservatism

Canditate: Emmanouil (Manuel) Palantzidis
ST.NO: 1045458 / e.palantzidis@students.uu.nl
Faculty: Law, Economics and Governance
Master Program: Financial Management

Supervisor: Drs. LEE, Jung Hee (Hailey)
Second Reader: Dr. Kees Koedijk

June, 2024

Abstract

This study examines the impact of historically significant governance mechanisms on accounting conservatism in the United States. Inside directors, CEO duality, and board size during 1999–2001 are a particular focus, because this period was a time of widespread corporate scandals and heightened regulatory scrutiny. The central concern is to uncover which board characteristics might be enhancing this kind of accounting-financial reporting conservatism. While using the market-to-book ratio (price to book value) approach as a proxy to quantitatively measure accounting conservatism -and not the accrual-based method as stated in the research proposal-, this research provides a robust analysis of how governance mechanisms like inside directors, CEO duality, and board size influence conservative financial reporting practices. The findings reveal that a higher proportion of inside directors and larger board sizes are significantly associated with the effect on accounting conservatism. From those findings, the importance of internal governance is clear. It ensures the financial integrity, and the transparency as well, especially during periods of thorough regulatory oversight. This study has put forward an important academic output, which particularly may be used for the benefit of national policymakers, corporate leaders, and academics involved in the analysis of the link between the composition of the board and financial reporting quality.[1]

JEL-codes: C23, G34, M41

Keywords: Accounting conservatism (CON), inside directros, CEO duality, board size, proxy: price to book value.

[1]The author expresses gratitude for the support and extends heartfelt thanks to Drs. Hailey Lee, and Dr. Kees Koedijk, for their invaluable guidance and support throughout the research and writing of this thesis.

Table of Contents

List of Tables in Appendix 2

1. Introduction

This paper investigates the connection between the board characteristics and accounting conservatism among public-listed companies in the United States traded in the US stock exchanges and more particularly in NASDAQ, NYSE, NYSE AMERICAN, US OTC, especially in the year 1999-2001-the years used for this study are cases of corporate scandals and subsequent regulatory changes. The paper is entitled "Exploring the Impact of Board Characteristics on Accounting Conservatism.". This study intends to thoroughly analyze the nature of the relationship between an organization's governance and the conservatism with which it reports its fiscal position.

The accounting conservative principle is an indispensable outline that not only makes financial reporting more accurate but also more trustworthy and transparent by allowing write-offs to happen before the gains can be secured (Watts, 2003). Corporate governance practices play a pivotal role in shaping firm transparency and financial integrity, as extensively reviewed by Shleifer and Vishny. (Shleifer & Vishny, 1997). This is particularly important for investors as they need factual financial data to create informed opinions and take important decisions. This research is relevant for the reason that the effect of these mechanisms on the corporate financial reporting is not fully illuminated while the regulatory environment today demands cautious and clear reporting from the companies (LaFond & Watts, 2008), (La Porta et al., 2000).

Despite the extensive body of literature on corporate governance and its impact on various financial outcomes, there remains a significant gap in understanding the specific influence of board characteristics on accounting conservatism (Bhagat & Bolton, 2008). Related disciplines have so far predominantly investigated the general financial performances like revenues and earnings management (Beekes, Pope, & Young, 2004). However, this study uniquely employs the price-to-book value ratio as a proxy to measure accounting conservatism, providing a robust analysis of how governance mechanisms—like inside directors, CEO duality, and board size—affect conservative accounting-financial reporting practices (Ball & Shivakumar, 2005; Holthausen & Watts, 2001).

In the initial research proposal, the accrual-based method was designated as the proxy for measuring accounting conservatism; however, for a more comprehensive analysis, this

approach was subsequently replaced with the market-to-book ratio (price-to-book value) as the primary measurement proxy.

Addressing this gap is crucial for several reasons. Initially, this study should provide strong empirical results on what kind of internal governance mechanisms matter and how they could influence conservative accounting practices (Jensen & Murphy, 1990;, (Gompers, Ishii, & Metrick, 2003). Additionally, having a grasp of such connections plays a key role in the hands of policymakers and business leaders in finding the right techniques for installing board structures that improve accounting quality, and as a result, the market becomes more stable during such uncertain states, which in turn improves the confidence of the investors (Hermalin & Weisbach, 2003; Spence, 1973).

The main research question is: What impact do governance mechanisms—like inside directors, CEO duality, and board size—have on accounting conservatism practices (Harris & Raviv, 2008)? This question is broken down into sub-questions that examine the specific impact of each governance feature on conservative accounting practices

The findings reveal that a higher number of inside directors and a larger board size are significantly associated with increased accounting conservatism, as stated in previous research. (Healy & Palepu, 2001; Ahmed& Duellman, 2007). These findings will also help in academic discourse by looking into the role of board composition in preserving financial integrity and transparency, which is now more important than ever during periods of heightened regulatory scrutiny (Basu, 1997).

This thesis is structured as follows: Chapter 2 delves into the literature review, examining existing research on inside directors, CEO duality, and board size, which leads to the development of three hypotheses. Chapter 3 outlines the data sources, sample selection process, and the construction of variables, providing the foundation for the research methodology. In Chapter 4, the empirical results derived from the analysis are presented. Chapter 5 discusses the robustness of the findings and includes additional tests to support the conclusions. Chapter 6 interprets the results within the broader context of corporate governance and accounting conservatism. Finally, Chapter 7 concludes the study by summarizing key insights and proposing directions for future research.

2. Literature Review and Hypothesis Development

While researching on the relationship between corporate boards in the aspect of governance and financial reporting, many studies have been devoted to board characteristics and their effects on factors including earnings management and corporate performance. However, discussions focusing on the specific impact of board composition on conservative accounting practices, in contrast to broader financial strategies, are less prevalent and require further exploration (DeFond & Zhang, 2014). This paucity of research points to a significant absence in the literature as regards determinations of how various board structures relate systematically to the conservatism used in reporting of financials.

The principle of accounting conservatism is one of the most important rules that puts more emphasis on the understatement rather than overstatement of financial performance and positionsm especially in conditions of uncertainty. This conservative approach ensures that liabilities and losses are recognized promptly, which protects investors and stakeholders from potential overstatements of financial health (LaFond & Roychowdhury, 2008). These accounting principles have often been criticized for their lack of rigidity, especially in regard to how they are implemented; the structure and composition of a company's board can greatly dictate the level of stringency with which these principles are followed. Inside directors, CEO duality and board of directors size have been thought of as having a very important influence on the conservatism applied in financial reporting.

Research Questions:

- What effect does the composition of the board have on the degree of accounting conservatism in companies?
- Based on board characteristics, are there notable variations in the way accounting conservatism is applied across sectors and sizes of firms?
- What impact do governance mechanisms—like inside directors, CEO duality and the board size—have on accounting conservatism practices?

This study examines how board composition affects accounting conservatism using agency theory. According to agency theory, unless proper governance mechanisms take place, conflicts of interest between managers (agents) and shareholders (principals) may result in non-ideal financial reporting procedures (Jensen and Meckling, 1976). Crucial elements of these governance procedures are considered to be the board characteristics, which may be crucial in fostering accounting conservatism to protect the interests of shareholders.

Cornett et al. (2007) examine how ownership influences corporate performance, suggesting that effective governance can lead to better operational outcomes and more conservative accounting practices

Inside Directors:

When companies have more internal directors, they tend to favor a conservative approach to accounting. This is because inside directors have a vested interest in protecting the company's reputation and preventing any financial scandals. By being more cautious in their accounting practices, they can present a more transparent view of the company's financial health. (Hermalin and Weisbach, 2003).

CEO Duality:

The combination of the CEO and chairman roles (CEO duality) can potentially reduce the independence of the board of directors. The separation of CEO and chairman roles has been argued to enhance corporate governance by reducing conflicts of interest and improving board independence (Brickley, Coles, & Jarrell, 1997). This lack of independence may lead to the CEO making riskier accounting decisions, as there is less oversight and accountability. This concentration of decision-making power can compromise the accuracy of financial reporting by reducing the use of conservative accounting practices. (Finkelstein & D'Aveni, 1994).

Board Size:

According to prior research, larger boards might provide a wider range of viewpoints and areas of expertise, which would enable more efficient monitoring and, as a result, more conservative accounting procedures (Dalton et al., 1998). According to the prior study, there is a positive correlation between higher degrees of accounting conservatism and larger boards, which reflects careful financial reporting.

The theoretical framework and the literature that the study has evaluated, provide support for this study's hypotheses.The hypotheses aim to empirically test the theoretical propositions regarding the impact of board characteristics on accounting conservatism. By doing so, this research seeks not only to contribute to the theoretical discussion but also to provide empirical evidence to our understanding of how corporate governance mechanisms influence financial reporting practices.

2.1. The Role of Inside Directors

First off, accounting conservatism can be significantly impacted by the number of inside directors, who are usually top executives within the organisation. These directors are more inclined to support conservative accounting methods in order to protect the organization's long-term viability because they frequently have a thorough understanding of the business's operations. According to research, there is a positive correlation between the number of inside directors and accounting conservatism because of their insider knowledge and personal commitment in the company, which promote conservative financial reporting (Aggarwal & Williamson, 2016). This connection supports the idea that more inside directors equate to more conservative accounting standards by highlighting the crucial role inside directors play in improving the accuracy and dependability of financial disclosures.

Hypothesis 1

Justification and Rationale

According to the prior research, board features and accounting conservatism are strongly correlated (Leuz et al., 2003; Gompers et al., 2003). Corporate governance structures are necessary to reduce agency costs and increase business value in the face of conflicts of interest between managers and other stakeholders (Shleifer and Vishny, 1997). As the highest level of decision control, the board of directors is essential to the approval and oversight of managerial choices (Hermalin and Weisbach, 2003).

Beasley's (1996) empirical study highlights the significant influence that a company's board of directors' composition has on the degree of financial statement fault. This analysis suggests

that certain characteristics of the board, and more specifically, the proportion of inside directors, may enhance the board's ability to oversee financial reporting processes and to discourage activities that may undermine financial integrity.

Additionally, board strength and accounting conservatism have a complementary relationship (Ahmed et al., 2010; Dhaliwal et al., 2011). Since asymmetric information and limited liability between managers and stakeholders result in agency costs, strong boards necessitate greater conservatism (Bushman et al., 2006). According to Basu (1997), conservatism restricts managerial discretion to exaggerate earnings and net assets, which reduces deadweight losses and increases firm value. Furthermore, conservatism facilitates the discovery of initiatives with a negative net present value (NPV), increases board scrutiny, and helps monitor investment strategies (Ball and Shivakumar, 2005).

Even though some factors, like the non-recording of growth options and potential adverse effects on investment decisions, may mitigate the positive relation between board strength and conservatism (Dechow et al., 1995). The prior literature generally supports the idea that stronger boards (meaning more inside directors) are more likely to demand conservative accounting practices (Fields et al., 2001).

This hypothesis seeks to understand the underlying mechanisms and motives that drive financial reporting methods in organizations by examining the relationship betweeninside directors, accounting conservatism, and financial performance measures. The results can offer important new perspectives on how internal governance frameworks influence market perceptions of corporate value and financial transparency.

Research Implications

The results of the study have important implications for both theoretical knowledge and real-world applications in the fields of financial reporting and corporate governance. The study helps us better understand the strong link between careful accounting and board characteristics by confirming previous findings. In practical terms, the study supports previous research by highlighting the critical role that strong governance procedures have in improving financial reporting's dependability. It emphasizes how crucial strong boards are to pushing for more

conservatism, advancing shareholder interests and influencing laws meant to promote corporate accountability and transparency.

H1: A higher proportion of inside directors on the board is associated with increased accounting conservatism.

2.2. The Role of CEO duality

Secondly, CEO duality could affect the level of conservatism of the company's financial statements. While some believe that merging both positions in one individual is logical and constitutes an effective leadership model, opponents suggest that situating the CEO and the chairman in one person may reduce the independence of the board and limit its monitoring authority. It could end up to poor accounting policies as the combined leader may adopt high risk expansion techniques than sound say, accounting practices (García-Meca & Sánchez-Ballesta, 2009).

Hypothesis 2

One term that is usually used to describe CEO duality is "unitary board structure" or "combined CEO-chairperson roles". (Finkelstein, D'Aveni,1994)

Justification and Rationale

Dynamics of Corporate Leadership: A concentration of power at the centre of organizational decision-making is represented by CEO duality, which is defined by the CEO acting as the chairperson at the same time. The consolidation of authority has the potential to greatly impact financial reporting practices as well as strategic direction.

Implications for Governance Structure: CEO duality could weaken the checks and balances that come with it. Managerial discretion may be able to influence accounting conservatism when there is less independent scrutiny, which could lead to the manipulation of financial reporting components. (Bebchuk & Fried, 2003).

Decision-Making Autonomy: CEO-duality promotes a centralised decision-making environment that may put stakeholders' long-term interests at risk in favour of short-term and personal goals. This tendency to prioritise short-term performance indicators over the caution necessary for conservative accounting methods could be detrimental.

Concerns about Board Independence: When compared to boards with distinct duties, those with CEO-duality structures may demonstrate a loss of independence and monitoring capacity. This can result in a governance climate that is less supportive of conservative accounting, since management discretion might be strengthened by a lack of strong oversight. (Dalton et al., 1998).

Research Implications

This hypothesis explores the complex interactions between accounting conservatism and corporate governance frameworks, particularly CEO duality. Through examining how centralised leadership dynamics affect financial reporting procedures, the research seeks to improve our understanding of how governance systems affect organizational integrity and transparency. Empirical analysis can provide valuable insights that can enrich governance frameworks and improve stakeholders' trust in financial disclosures.

H2: CEO duality is negatively related to accounting conservatism.

2.3. The Role of Board Size

Thirdly the board size is also an important criteria that can influence the level of conservative practicies in acoounting and financial reports. Larger boards would provide a different perspective and better oversight, possibly resulting in more conservative accounting practices. On the other hand, it could get cumbersome when it becomes too big and might hinder coordination and decision-making, which in return could negatively impact the conservative financial reporting angle (Pathan & Faff, 2013).

Hypothesis 3

The number of members on a board, termed as board size, is positively associated with higher levels of accounting conservatism within companies (Elshandidy&Hassanein, 2014).

Board decisions on compensation structures, reflecting the degree of accounting conservatism, can substantially affect the firm's strategic financial outcomes. (Mehran, 1995). Our study aims to explore the complex relationship between accounting conservatism and board composition in businesses. The research wants to provide some insight into how differences in board membership affect financial reporting methods by concentrating on the connection between board size and accounting conservatism. To achieve this goal, it is suggested that higher degrees of accounting conservatism are associated with larger boards, which are defined by a higher membership count.

Justification and Rationale

Higher Oversight Capabilities: Larger boards with a wider range of people with different backgrounds and viewpoints have bigger oversight capacities. A larger board's combined experience and inspection promote a culture of caution and diligence in financial reporting procedures. (Dalton et al., 1998)

Robust Decision-Making Processes: Robust decision-making processes in companies are facilitated by a wider pool of board members. Larger boards are more likely to adopt conservative accounting methods after much discussion and debate, placing a higher value on truthful financial data depiction than on temporary profits. (Bebchuk & Fried, 2003).

Mitigation of Agency Costs: By closely observing management decisions and defending shareholder interests, larger boards are better able to reduce agency costs. Conservative accounting rules are implemented in a way that is favorable due to the increased responsibility and openness that larger boards engender. (Finkelstein & D'Aveni, 1994).

Alignment with Stakeholder Expectations: The accountability purpose of financial reporting is increasingly important for diverse stakeholders, such as investors, lenders or regulators. Larger boards could simply reign in accounting conservatism and view accounting conservatism as a

tool of corporate governance, where business practices are aligned with the expectations of stakeholders through the use of their oversight tools. (Dalton et al., 1998)

Research Insights

Prior investigations, including Dechow and Dichev's (2002) study, have emphasised the favourable association between board size and accounting conservatism. These studies have clarified the methods by which larger boards support and maintain conservative accounting practices, using theoretical frameworks and empirical research.

In conclusion, the literature review and theoretical framework collectively establish a foundation for this study's investigation into the role of board characteristics in fostering accounting conservatism. They highlight the significance of this research in filling the identified gap in the literature and offer a structured approach to exploring the complex dynamics at play.

H3: A larger board size correlates with greater accounting conservatism.

2.4. Bridging the Gap in Governance Research

The objective is to bridge the communication gap in the research and improve knowledge of how particular board characteristics affect the conservatism in accounting practices by addressing these aspects through a complete literature analysis. In addition to its academic value, this investigation is crucial for regulators and practitioners who want to create governance frameworks that improve the dependability and correctness of financial reporting (Jensen & Meckling, 1976; Sundaramurthy & Lewis, 2003).

In essence, all the literature described up to a certain period of time pointed to the importance that governance systems play when it comes to the continuation of conservative accounting practices. The first understanding of this relationship was pioneered by Watts (2003) while Beekes et al (2004) when analyzing the nature of these problems when there was a lot of change happening within the business and regulatory sectors in the early 2000s. By this work, they discovered that the role of the governance mechanisms in affecting the financial reporting when there was increased market instability and during the formulation of new regulatory

mechanisms triggered by major corporate failures and the subsequent adoption of higher compliance measures.

Nevertheless, these early approaches provided useful insights to such a theme, although the depth of the examinations being insufficient in capturing the multi- faceted dynamics in those periods. While offering pertinent insights into the influence of institution-based factors on accounting, they mainly targeted more generalized features of governance arrangements without specifying the board features that bear on conservative accounting practices. For instance, these studies tended to aggregate governance attributes without isolating the effects of individual elements like board independence, financial expertise on the board, and the roles of audit committees. Therefore, this study is designed to fill these gaps by going further into identifying the dynamic features of board composition and its effects on accounting conservatism.

2.5. The Role of Accounting Conservatism and Board Characteristics in Corporate Governance

The foundation theories by Berle and Means (1932), Jensen and Meckling (1976), and Jensen (1986) provide significant core about the relation between managers and shareholders, all pointing towards the fact that the potential agency relationships require contracting to manage any conflicts of interests. They are intended to eliminate the agency problems whereby managers act in an entirely different way from the shareholders' interests, by making the rewards and punishments issue to match those of the shareholders. However, due to the fundamental weaknesses and gaps in these contractual relationships, there is usually the potential for managerial self-interest motivated by perceived and actual opportunities which may actually be against the interest of the shareholders (Armstrong et al., 2010).

In this context, accounting conservatism emerges as a vital mechanism to counterbalance managerial opportunism. As asserted by Hodgdon (2003), conservatism in accounting requires that profits are recognized in a guarded manner, while losses are recorded immediately, thereby avoiding managers from inflating the financial strength of the business as advocated by Watts (2003). This principle is important to avoid a situation whereby the financial statements that are prepared contain some amount of risk because of being overly conservative besides being reliable.

Further exploration of this concept by scholars such as Guay and Verrecchia (2006) and recent studies by LaFond and Roychowdhury (2008) have delved deeper into how accounting conservatism can serve as an effective corporate governance mechanism. It also emphasizes that conservatism decreases the possibility of the managerial misreporting through augmenting the financial statements' extent of verifiability and prominence. In other words, conservatism reduces the problem of potential managerial over-optimism and saves investors from the effects of too high income levels by prolonging value herkánz conservative methods strictly verified income recognition.

Furthermore, because conservative accounting methods make financial statements a more trustworthy source of information for making decisions, their adoption is linked to a rise in confidence among stakeholders and investors (Zhang, 2008). This confidence is essential to preserving a company's reputation and can greatly lower the possibility of legal actions pertaining to financial misreporting.

Thus, accounting conservatism improves the general integrity and openness of financial reporting in the corporate sector in addition to complementing the basic ideas of corporate governance by offering a useful instrument for addressing agency difficulties. It is a crucial subject for additional scholarly research and real-world implementation in modern corporate governance due to its continued relevance and effectiveness in lowering agency costs (Christensen, Nikolaev, & Wittenberg-Moerman, 2016).

While prior research such as Ahmed and Duellman (2007), and Gompers et al. (2003) emphasized the power of board as a governance structure that facilitates timely financial reporting with reduced agency costs, they did not explore the governance aspects that make boards unique and influential. One of the most significant gaps in the review is how different characteristics of board structure directly influence conservative accounting practices.

To systematically organize the findings, key literature discussing the relationship between corporate governance and accounting conservatism was reviewed. The methods applied in each of these studies were evaluated. The main points and outcomes were demonstrated in order to enhance the impression as to how boards of directors' different characteristics affect conservative accounting. Utilizing this strategy enhances the consistency of the speech with the research question and subordinate questions of the thesis as well.

3. Data sources, variable construction, and research methodology

The research strategy section of this thesis highlights the methods and approaches that are used to analyze the impact of board characteristics on accounting conservatism among publicly traded firms. This section is structured to ensure that the research follows a clear, logical, and reproducible approach that is in line with academic standards.

This study employs a quantitative method using a deductive approach to research. Based on the already established theoretical framework, hypotheses concerning the influence of inside directors, CEO duality, and board size on accounting conservatism are developed. The analysis strictly alligns with the pre-defined hypotheses, avoiding data mining and ensuring the research progresses from theoryto data.

This research methodology is designed to robustly test the hypotheses derived from the theoretical framework, providing a clear and structured approach to understanding how board characteristics influence accounting conservatism. This methodological strategy enhances the credibility and scientific contribution of the research.[2]

3.1. Data

Initially, primary data on the impact of board characteristics on accounting conservatism among publicly traded companieslisted on the S&P500 index, reflecting the specific focsus of this study on the U.S. market -and more specifically traded on the US stock exchanges of NASDAQ, NYSE, NYSE AMERICAN, and US OTC- is collected through the use of FACTSET's databases. The data covered financial and governance reports from 1999 to 2001. Significant legislative developments took place during that time, making it an ideal time to

[2] This thesis places a strong emphasis on the replicability of its results. All the data and methodologies are described in detail to ensure that other researchers can replicate the study. The STATA commands used for the analysis are provided in the appendix, and any modifications to the data are fully documented.

The study aligns with ethical guidelines in data collection and analysis, particularly concerning the privacy and accuracy of the data used. Data sources are reliable and commonly used in academic research, ensuring the integrity of the research findings.

examine corporate governance. Secondary data, including financial statements, proxy statements, corporate governance reports, and regulatory filings of publicly traded firms, are incorporated to enhance the empirical analysis. This methodological approach ensures a thorough analysis by integrating other sources with the reliable data from FACTSET. The research puts a strong emphasis on academic precision and examines the complex relationships between board features and accounting practices using a combination of primary and secondary data.

3.2. Sample Selection

A stratified sampling method is employed to ensure representation across different industries, as accounting conservatism may vary by sector due to industry-specific risks and regulatory environments. Companies missing detailed information on their board makeup or those that went through major changes during the study period were left out. This is because these situations could distort the results of the analysis.

In this study, 376 firms selected from the S&P 500 were carefully chosen to account for industry effects, resulting in the use of twenty industry dummies based on further breakdown of the data. Although the main focus of this research is not on industry variations, these dummies are crucial for controlling fixed industry effects across the various models used in the analysis. Nevertheless, the specific industry dummy coefficients, despite being important for understanding variations in accounting conservatism by industry, are not included in the regression model outputs as they might distract from the main research question. **Table 1**, which provides the detailed sample breakdown by industry sector, offers a general point of view for the dataset. This detailed breakdown assists with the validity and reliability of the results and prevents over-emphasizing certain factors that may not necessarily be apparent in other sectors, contributing to the support of the generalization across different industries as well as the validity of the observed links between board characteristics and accounting conservatism.

Table 1

Industry Distribution Sample Analysis

Presents the distribution of sampled firms across different industries, illustrating the scope and diversity of the study.

Sector	Frequency	Percent	Cumulative Percent
Commercial Services	21	5.59	5.59
Communications	1	0.27	5.85
Consumer Durables	13	3.46	9.31
Consumer Non-Durables	25	6.65	15.96
Consumer Services	19	5.05	21.01
Distribution Services	17	4.52	25.53
Electronic Technology	40	10.64	36.17
Energy Minerals	7	1.86	38.03
Finance	10	2.66	40.69
Health Services	11	2.93	43.62
Health Technology	28	7.45	51.06
Industrial Services	23	6.12	57.18
Non-Energy Minerals	10	2.66	59.84
Process Industries	13	3.46	63.30
Producer Manufacturing	53	14.10	77.39
Retail Trade	21	5.59	82.98
Technology Services	41	10.90	93.88
Transportation	5	1.33	95.21
Utilities	18	4.79	100.00
Total	376	100.00	

3.3. Variable construction and descriptive statistics

3.3.1. Dependent Variable:

Accounting Conservatism:

Accounting conservatism, an important aspect of financial reporting, emphasizes the careful reporting of financial events and transactions. A company must record its liabilities and expenses as soon as they are foreseeable, but it must wait to recognize assets and revenues until they can be guaranteed with great certainty. (Basu, 1997). By avoiding exaggerating the company's achievements and financial situation, this strategy increases stakeholders' trust in the accuracy of financial statements.

Conservatism in accounting decreases the possibility of investors, creditors and other claimants depending on false or excessively positive financial data, thus reducing the danger of

misleading financial revelation. According to the proposed study, accounting conservatism measures the quality and noise of corporate governance.

The study hypothesizes that certain attributes of the board, and more precisely, the degree of inside directorship, the overlap of the positions of chief executive officer and chairperson (CEO duality), and size and composition of the board, could have a detrimental impact on the company's propensity towards conservatism (Hermalin and Weisbach, 2003; Adams and Ferreira, 2007).

This definition emphasizes how crucial accounting conservatism is to improving stakeholder trust and financial reporting accuracy and transparency, which is in line with the larger research goal of clarifying the connection between board composition and the use of conservatism in accounting practices in businesses (Anderson and Reeb, 2004; Gompers et al., 2003).

Measurement of Accounting Conservatism; Market-To-Book-Ratio (Price-To-Book-Value); A lower ratio indicates a higher presence of accounting conservatism and vice versa

In this study, the market-to-book ratio, which is one of the most commonly accepted measurements, is employed to showcase the amount to which the asset values of the company are assessed and compared to market prices. Basu (1997) highlights the effectiveness of this ratio in reflecting more conservative asset valuations due to its ability to capture a timelier recognition of losses. Similarly, Beaver and Ryan (2005) found that smaller book-to-market ratios, meaning lower price-to-book value, are often linked to conservative accounting, further validating this ratio's utility. The power of predicting future earnings as well as the imbalance on the side of conservative financial reporting modes were discussed by LaFond and Watts (2018). One of the primary factors contributing to the adoption of conservative accounting practices is related to the corporate governance structure and characteristics, such as the representation of different groups on the boards, as discovered by Khan and Watts (2009) in their study about market-to-book ratios as a critical indicator of this phenomenon. Such findings satisfy the objective of determining the role governance features such as the existence of inside directors, duality of the CEO, and board structure play on conservative accounting practices and principles. Conservatism is one of the tangible measures of accounting in two dimensions. One of them, which is the market-to-book ratio, is usually lower when a company is considered to be more conservative in their assets and equity evaluation. It includes the

possibility that a balance sheet could also be incorporated where the company might plan to present its financial information more carefully, maybe even underestimating its earnings or assets to avoid stating the financial health of the company entirely wrong.

3.3.2. Independent Variables

***Inside Directors*:** Board members who have deep knowledge of the company's internal workings and how it operates in its industry. They are able to enrich board debates and discussions through their executive roles in a firm. For example, they understand the operations of a company as well as their experience in that field, thus making them the best people for board discussions and debates. An inside director could be a CEO or CFO, for instance. The presence of inside directors ensures that board judgment and corporate objectives are aligned

Inside Directors (Proportion of Board Composition): Described as the proportion of the board members who are also business leaders, this indicates the board's tendency for conservative accounting because it reflects internal knowledge and direct engagement in the company's operations. In the study, the independent variable of inside directors is expressed as a number of inside directors and not as a percentage.

***CEO Duality*:** CEO duality is determined by verifying whether a CEO serves simultaneously as chairman of the board of directors. (Finkelstein & D'Aveni, 1994). The way in which a company makes decisions (including its corporate governance arrangements) may be affected by CEO duality. This might include how much power management and the board have, how strategic decisions get made, and how much monitoring and accountability there is.

CEO Duality (Binary): The combination of the CEO and chairman responsibilities is represented by a binary variable (1 = Yes, 0 = No), which captures the power concentration and its effect on accounting conservatism.

Board Size: The Board size indicates the total number of members on a company's board of directors. It stands for the variety and depth of knowledge found in boardrooms. A larger board usually means that more people are involved in the procedures for making strategic decisions.

The size and makeup of a board have an impact on the dynamics of governance and the efficiency of oversight procedures.

Board Size: Measured by the total number of directors on the board, taking into account the variety of viewpoints and the possibility of more thorough discussion and supervision, which may have an impact on the company's accounting procedures.

3.3.3. Control Variables

CVs include firm size (measured by market capitalization), leverage, profitability (measured by the gross income margin of the firm), sales growth and the age of the firm to control for other factors that might influence accounting conservatism.

1. Firm Size (measured by market capitalization in million): Larger companies tend to adopt more conservative accounting methods in order to meet up external expectations because they frequently have more complex operations and are exposed to public and governmental scrutiny. Using firm size as a control variable helps separate the impact of the board's characteristics from the size of the firms. (Adams and Ferreira, 2007).
2. Leverage (total debt to total assets ratio): Firms with higher leverage tend to adopt more conservative accounting practices to mitigate the risks associated with high debt levels and to comply with debt covenants (Aggarwal & Samwick, 2003), (Ahmed and Duellman, 2007).
3. Profitability (measured by gross income margin): Profitability can influence management's accounting choices, where more profitable firms might have fewer incentives to adopt conservative accounting due to lower financial distress risks (Ball and Shivakumar, 2005).
4. Sales Growth: Growth in sales can have an impact on financial reporting because firms experiencing rapid expansion may feel pressure to meet investor expectations, which can affect their conservative accounting practices. (Bushman, R. M., & Piotroski, J. D. 2006)
5. Age of the Firm: Older firms might are more accounting-practicing-based and might be more conservative to protect their long-established reputations. The firm's age can also

reflect its life cycle stage, which influences its financial reporting practices (Hermalin and Weisbach, 2003).

Table 2 provides simple descriptive statistics for key governance variables, including the P/BV ratio, number of inside directors, CEO duality, and average board size among S&P 500 firms. Mean and variance are important measures that can be used to determine the quality and variability of the obtained data, which in turn helps to determine the suitability of the data for subsequent regression analysis. By presenting this foundational data, the table enhances transparency and supports the replicability of the research, strengthening the reliability of the analysis in exploring the hypothesized relationships between governance structures and accounting conservatism. Such an approach enhances the fact that the findings are empirically rooted, facilitating a robust examination of the study's research questions.

Table 2

Summary Statistics of Examined Variables

Provides descriptive statistics such as mean, standard deviation, and range for the key governance variables and the price-to-book value ratio, offering an overview of the data set used.

Variable	Obs	Mean	Std. Dev.	Min	Max
price_to_bv	376	5.551905	6.988946	.354095	87.74
insd_drcrtrs	376	0.4467777	0/124159	0.25	1.00
ceo_duality	376	.353734	.478617	0	1
board_size	376	5.989362	4.02524	1	33
market_cap	376	34908.87	139460.2	5358339	2079225
leverage	376	.259219	.1743758	0	.8474469
sales_growth	376	12.52529	10.26335	-217391	82.96705
gimgn	376	38.32355	20.05218	1.992783	98.65644
yrs_operat	376	59.54787	41.81493	0	207

*price_to_bv is expressed as a number of price-to-book value

*insd_drctrs is expressed in numbers of people that are inside directors

*ceo_duality is a dummy variable expressed in 1 and 0, if there is presence or no presence of CEO duality, respectively

*board_size is expressed in numbers of people that are placed on the board

*market_cap is expressed in millions of U.S. dollars ($)

*leverage is expressed in percentages (%)

*sales_growth is expressed in percentages (%)

*gimrgn is expressed in percentages (%)

*yrs_operat is expressed as a number of years

In the analysis of Pearson Correlation Matrix -**Table 3**- it emerged that there was a high degree of multicollinearity between the variables: board size and inside directors, as captured by the coefficient 0.7763. This makes the use of these variables in the generation of regression models for this study questionable due to the likelihood of carrying a similar information load that may lead to instability and questionable interpretation. However, the correlation coefficients between the variables are still below the acceptable level of concern commonly considered to be a result of multicollinearity of 0. 8. Two variables of interest, the board size and inside directors, present a strong correlation. To diagnose the extent to which this multicollinearity may affect the regression analysis, it would be preferable to calculate the Variance Inflation Factor. If there is significant Multicollinearity in the data and VIF indicates the same, then other data-transforming methods like dimensional reduction methods or modifications in the model specification must be done to make the results more accurate.

Table 3

Pearson Correlation Matrix of Study Variables

**** p<0.01, ** p<0.05, * p<0.1*

This table indicates the Pearson correlations between the dependent and the independent variables -Detailed definitions are given in Appendix 1; ****** and ***** represent significance level at the 5% and 10% significance levels respectively.

	price_to_bv	insd_dctr	ceo_duality	board_size	market_cap	leverage	sales_growth	gimgn	yrs_operat
price_to_bv	1.000								
insd_dctr	-0.1929*	1.000							
ceo_duality	-0.0352	0.0358	1.000						
board_size	0.1628*	0.7763*	0.0822	1.000					
market_cap	0.1101	0.2703*	-0.0023	0.3326*	1.000				
leverage	0.1601*	0.2248*	0.0070	0.2603*	-0.0264	1.000			
sales_growth	0.0047	-0.1858*	0.0634	-0.1945*	-0.0405	-0.1117*	1.000		
gimgn	0.1711*	-0.1681*	-0.0235	-0.2095*	0.1509*	-0.2741*	-0.0165		
yrs_operat	0.0495	0.1194*	0.0837	0.1738*	-0.0469	0.1474*	-0.1227*	-0.2018*	1.000

**** p<0.01, ** p<0.05, * p<0.1*

4. Empirical Results

The data analysis section of this thesis is reserved for testing the relations established in the hypotheses with the help of the regression model. This entails understanding the manner in which inside directors, CEO duality and board size influence the level of accountability in accounting measured by market-to-book ratio (price-to-book value) and taking into account all the control variables: firm size, leverage, profitability, sales growth and the age of the firm. Before attempting to perform the regression analysis, diagnostic checks were done to ensure that the chosen empirical model was adequate in every way and to investigate issues associated with multicollinearity, heteroscedasticity and the normality of residuals.

This was done for each independent variable while also controlling the profound control variables: firm size, leverage, profitability, sales growth and the age of the firm, which are frequently deemed to have an impact on conservative accounting practices. The interpretation of regression coefficients helped ascertain the strength and direction of these relationships. In addition, robustness checks were conducted by employing alternative specifications and including interaction terms to explore potential moderating effects between all variables.

Complementing the research analysis, statistical values were also computed in order to test the level of significance of the findings; hence, in addition to the statistical relevance, the results were also checked for economic significance. It is beneficial to perceive what characteristics of governance have an impact on accounting conservatism. Following such an approach, there is a direct perception of findings regarding the effects of governance characteristics on accounting conservatism, which offers solid insights that are rather useful for further academic research and improving practices in the corporate governance world.

The primary methodology for analysing the connection between accounting conservatism and board features will be regression analysis. To be more precise, after adjusting for company size, industry, and market-to-book ratio (price-to-book value), a multiple regression model will be used to evaluate the percentage of inside directors, CEO duality, and the effects of board size on measures of accounting conservatism. This approach is used as it is capable of managing several independent variables and is appropriate for evaluating hypotheses regarding correlations between quantitative measurements.

$$CON = \beta 0 + \beta 1 * Inside\_Directors + \beta 2 * CEO\_duality + \beta 3 * Board\_Size + CVs + \epsilon$$

Where:

- CON represents the level of accounting conservatism for the firm.
- Inside_Directors is the number of inside directors on the board for the firm.
- CEO_duality is a binary variable indicating CEO/chair separation for firm. (0=no presence of accounting conservatism, 1=presence of accounting conservatism)
- Board_Size represents the size of the board of the firm.
- β0 is the intercept term.
- β1, β2, and β3, are the coefficients of the respective variables.
- CVs: Control Variables: firm size (measured by market capitalization), leverage, profitability (measured by the gross income margin of the firm), sales growth and the age of the firm.
- ϵ is the error term capturing unexplained variance in accounting conservatism for the firm.

In this study, as stated in the previous section, accounting conservatism (CON) will be measured by using the proxy of market-to-book ratio (price-to-book value), with a lower ratio indicating higher accounting conservatism and vice-versa. Following that the model of the regression equation stands as:

$$-|Price\_to\_bv| = \beta 0 + \beta 1 * Inside\_Directors + \beta 2 * CEO\_duality + \beta 3 * Board\_Size + CVs + \epsilon$$

Where:

- Price_to_bv represents the proxy of measuring the level of accounting conservatism for the firm. (A lower ratio indicating higher accounting conservatism and vice-versa).
- Inside_Directors is the number of inside directors on the board for the firm.
- CEO_duality is a binary variable indicating CEO/chair separation for firm.
- Board_Size represents the size of the board for the firm
- β0 is the intercept term.
- β1, β2, and β3, are the coefficients of the respective variables.

- CVs: Control Variables: firm size (measured by the market capitalization), leverage, profitability (measured by the gross income margin of the firm), sales growth and the age of the firm
- ϵ is the error term capturing the unexplained variance in accounting conservatism for the firm.

The study can evaluate the effect of different board attributes (such as board size, CEO/chair separation, and inside director proportion) on the degree of accounting conservatism in businesses using this regression equation. The direction of these interactions can be understood by looking at the coefficients (β's), which can aid in our understanding of how company governance influences accounting processes.

In this study, the market-to-book ratio (price-to-book value) is employed to measure accounting conservatism, with a lower ratio indicating higher conservatism. The dependent variable is represented as -|Price_to_bv| for several reasons.

Firstly, this transformation ensures directional clarity, making it easier to interpret the regression coefficients. Higher values of -|Price_to_bv| correspond to greater accounting conservatism, which aligns with the study's objectives. Secondly, the absolute value transformation avoids negative values, ensuring the dependent variable remains positive and thus maintaining model stability. Additionally, this representation aligns with the study's hypotheses, facilitating straightforward interpretation of how governance characteristics impact conservatism. Finally, this methodological approach improves the statistical robustness of the model by addressing potential issues like heteroscedasticity.

In this thesis, we explore the evolution of accounting conservatism across 376 firms in the S&P 500 by analyzing the price-to-book value (P/BV) ratio as a proxy for conservatism. The study categorizes conservatism into four levels—100%, 75%, 50%, and 25%, as seen in **Table 4** — based on the P/BV ratio to understand how firms' financial reporting practices have adapted over time.

Table 4

Quarterly Analysis of Accounting Conservatism Levels

Analysis of accounting conservatism measured by the price-to-book value ratio, categorized into four levels (100%, 75%, 50%, and 25%) to observe changes across quarters.

P/BV	CON
0.35-2.1	100%
2.1-3.47	75%
3.47-6.58	50%
6.58-87.74	25%

In the regression results of this study, the variables **insd_drctrs**, **board_size**, **leverage**, and **gimrgn** show significant effects on the price-to-book value ratio, evidenced by p-values less than 0.05. On the other hand, **ceo_duality**, **market_cap**, **sales_growth**, **yrs_operat**, and the intercept are not statistically significant, indicating these do not have a discernible impact on the dependent variable in the current model. This analysis identifies key factors that significantly contribute to variations in accounting conservatism. (**Table 5**)

$$-|Price\_to\_bv| = \beta 0 + \beta 1 * Inside\_Directors + \beta 2 * CEO\_duality + \beta 3 * Board\_Size + CVs + \epsilon$$

Table 5

Regression Analysis: Dependent and Independent Variables

This table provides the regression equation used to analyse the relationship between board characteristics and accounting conservatism, along with coefficients.

		Prob > F	R-squared	Adj R-squared	Root MSE
		0.00000	0.1233	0.1042	6.6148
Source	**SS**	**df**	**MS**	**Number of obs**	**F(8, 367)**
Model	2258.6586	8	282.33227	376	6.45
Residual	16058.356	367	43.7557383		
Total	18317.0141	375	48.845371		

price_to_bv	Coefficient	Standard Error	t-value	p-value	95% Confidence Interval
insd_drcrtrs	-3.966076	1.754462	-2.91	0.024	(-7.450998, 0.51648057)
ceo_duality	-0.597494	0.7200852	-1.07	0.409	(-2.01076, 0.8212133)
board_size	1.007963	0.1175195	3.24	0.002	(-0.8266221, 1.856305)
market_cap	1.81e-06	2.73e-06	0.66	0.507	(-3.55e-06, 7.17e-06)
leverage	7.33947	2.10111	3.49	0.001	(3.203233, 11.47771)
sales_growth	0.0514219	0.034336	1.56	0.121	(-0.5474216, 0.1173013)
gimgregn	0.0913443	0.186965	4.91	0.000	(0.5656071, 1.277795)
yrs_operat	0.0981306	0.0085529	1.06	0.292	(-0.0778586, 0.0276399)
_cons	-0.286451	1.8737	-0.01	0.989	(-3.759428, 3.661885)

The F-test results with a statistic of 6.93 and a p-value of 0.0000 indicate strong evidence against the null hypothesis that all regression coefficients are zero. This confirms that the variables included—inside directors, CEO duality, board size, market capitalization, leverage, sales growth, gross income margin, and years of operation—collectively have significant explanatory power on the price-to-book value ratio, effectively assessing the impact of corporate governance on accounting conservatism. **(Table 6)**

Table 6

Results of F-test for Model Validation

This table outlines the results of the F-test used to validate the statistical significance and explanatory power of the regression model.

price_to_bv	Value
(1) insd_drcrtrs =	0
(2) ceo_duality =	0
(3) board_size =	0
(4) market_cap =	0
(5) leverage =	0
(6) sales_growth	0
(7) gimgn =	0
(8) yrs_operat =	0
F(8, 367) =	6.45
Prob > F =	0.0000

Tables 7-8-9-10 present the yearly fluctuations in the mean of price-to-book value (P/BV) ratio from 1999 to 2001 across S&P 500 firms. This section details how the P/BV ratio decreased from a high of 7.586 in 1999, indicating low conservatism, to more moderate levels of conservatism, with ratios of 3.587 in 2000 and 3.038 in 2001, both reflecting the 50% conservatism category. This section simply outlines the yearly trends in the data, laying the groundwork for a deeper discussion in Section 5 of the thesis.

Table 7

Annual Mean of Price-to-Book Value Ratio for 1999

This table shows the distribution of the mean price-to-book value ratio among firms for the year 1999, highlighting the level of accounting conservatism during this period.

	Mean	Std. Err.	[95% Conf. Interval]
price_to_bv	7.586487	2.913107	0.6980841~14.47489

Table 8

Annual Mean of Price-to-Book Value Ratio for 2000

This table shows the distribution of the mean price-to-book value ratio among firms for the year 2000, highlighting the level of accounting conservatism during this period.

	Mean	Std. Err.	95% Conf. Interval
price_to_bv	3.587213	0.6756919	1.43686~5.737566

Table 9

Annual Mean of Price-to-Book Value Ratio for 2001

This table shows the distribution of the mean price-to-book value ratio among firms for the year 2001, highlighting the level of accounting conservatism during this period.

	Mean	Std. Err.	95% Conf. Interval
price_to_bv	3.037629	0.2360105	0.3883808~6.036426

Table 10

Annual Mean of Price-to-Book Value Ratio for years 1999-2000-2001

This table compares the annual mean price-to-book value ratios over the three years 1999-2000-2001, to illustrate trends and variations in accounting conservatism.

	Obs	Mean	Std. Dev.	Min	Max
price_to_bv	376	5.551905	6.988946	.354095	87.74

5. Robustness and Additional Tests

The regression analysis reveals that inside directors and board size significantly influence accounting conservatism, with more inside directors associated with more conservative practices and larger boards with less. Leverage and gross income margin also show significant effects, indicating less conservatism with higher values in these variables. Conversely, CEO duality, market capitalization, sales growth, and years of operation do not significantly impact accounting conservatism. **(Table 11)**

Table 11

Regression Analysis: Levels of Significance

This table provides the regression equation used to analyse the relationship between board characteristics and accounting conservatism, along with the significance levels (*** p<0.01, ** p<0.05, * p<0.1) which are displayed to indicate the strength and significance of each predictor.

	(1) price_to_bv
insd_drcrts	-3.96***
	(-2.91)
ceo_duality	-0.597
	(-1.07)
board_size	1.007***
	(3.24)
market_cap	0.000000189
	(0.66)
leverage	7.339***
	(3.49)
sales_growth	0.0514
	(1.56)
gimgn	0.0913***
	(4.91)
yrs_operat	0.0981
	(1.06)
Constant	-0.286
	(-0.01)
Observations	376
t statistics in parenthesis * p<0.1, **p<0.05, ***p<0.01	

The Breusch-Pagan/Cook-Weisberg test results from our analysis in **Table 12** clearly show that we have to reject the null hypothesis of the presencce of homoscedasticity and that our model has an issue with heteroskedasticity—essentially, the variability of the errors changes depending on the value being predicted. This is shown by a very high chi-square statistic of 278.76 and a p-value of essentially zero, which leads us to dismiss the idea that the error variance is constant.

Given this issue, it is important to take some necessary steps in order to ensure that our model remains reliable. Using robust standard errors can help correct for the inconsistency in variance and give us more trustworthy estimates of our coefficients and errors. Making these adjustments will help improve our model's accuracy and the reliability of our conclusions.

Table 12

Breusch-Pagan/Cook-Weisberg Test Results for Heteroscedasticity in Regression Estimates

This table presents results from the Breusch-Pagan/Cook-Weisberg test to check for heteroscedasticity, ensuring the reliability of regression estimates.

Test	Statistic
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity	
Ho: Constant variance	
Variables: fitted values of price_to_bv	
chi2(1)	278.76
Prob > chi2	0.0000

The multicollinearity assessment conducted on the independent variables within the regression model -**Table 13**- reveals an optimal structure, ensuring the robustness and reliability of the estimated coefficients. The variables **board_size** and **insd_drcts**, with **Variance Inflation Factors (VIFs)** of **2.83** and **2.54** respectively, demonstrate moderate low multicollinearity; however, these levels are significantly below the commonly accepted thresholds of 5 or 10, thus posing no concern for the integrity of the model's outcomes.

All other variables, including **market_cap**, **gincmrgn, leverage**, **yrs_operat**, **sales_growth** and **ceo_duality**, present VIFs that range from 1.21 down to 1.02, indicating very low multicollinearity. This minimal interdependence among the predictors confirms that each variable contributes uniquely and significantly to the regression analysis.

The overall mean VIF of 1.51 further proves the minimal presence of multicollinearity across the model, thereby substantiating the statistical validity and interpretative reliability of the regression results within the study.

Table 13

Analysis of Multicollinearity Among Variables

This table details the Variance Inflation Factor (VIF) for each variable to evaluate the degree of multicollinearity present in the regression analysis.

Variable	VIF	1/VIF
board_size	2.83	0.353680
insd_drcrtrs	2.54	0.394290
market_cap	1.21	0.828021
gimgn	1.19	0.837943
leverage	1.15	0.867599
yrs_operat	1.09	0.916663
sales_growth	1.07	0.932187
ceo_duality	1.02	0.978000
Mean VIF	1.51	

The robust regression analysis in **Table 14** confirms that the variables inside directors and board size are significant, with the former showing a consistent negative impact on price to book value and further positive impact on accounting conservtism, while the latter a significant positive impact on price to book value and further a negative impact on accounting conservatism. The variables CEO duality, market capitalization, sales growth, and years of operation remain non-significant, maintaining consistency with initial findings. This focused summary sets the stage for a deeper discussion in Section 5 regarding the implications of these findings.

Table 14

Robustness Check of Regression Results

This table reviews the robustness of the regression results through additional tests and adjustments, confirming the stability and reliability of findings.

				Linear Regression	**Value**
				Number of obs	376
				F(8, 367)	10.50
				Prob > F	0.0000
				R-squared	0.1233
				Root MSE	6.6148
price_to_bv	**Coefficient**	**Std. Error**	**t-statistic**	**P-value**	**95% Conf. Interval**
insd_drctrs	-3.966076	1.504048	-2.64	0.009	[-6.92371, -1.008425]
ceo_duality	-0.597494	0.643594	-0.92	0.356	[-1.86039, 0.6708017]
board_size	1.007963	0.099811	3.10	0.135	[0.462611, 1.344255]
market_cap	1.81e-06	1.58E-06	1.14	0.253	[-1.34E-07, 4.92E-06]
leverage	7.33947	3.751622	1.96	0.051	[0.038145, 14.7166]
sales_growth	0.0514219	0.0327133	1.64	0.102	[-0.010772, 0.11786]
gimrghn	0.0913443	0.190312	4.79	0.000	[0.0538245, 0.1286724]
yrs_operat	0.0981306	0.132401	0.68	0.496	[-0.017085, 0.1350654]
_cons	-0.286451	2.33239	-0.01	0.991	[-4.613116, 4.559888]

6. Results and Interpretation

Table 2 provides descriptive statistics for the variables utilized in this study, focusing on corporate governance and accounting conservatism among S&P 500 firms. Going through the observations across 376 firms, the data captures the variability and central tendencies in board characteristics and financial metrics. The price-to-book value ratio, which is used as a proxy for accounting conservatism, has a mean of 5.55, suggesting varied levels of conservatism across firms. Notably, the average proportion of inside directors per board is approximately 0.44 (44%), indicating a moderate high presence of inside directors. Additionally, CEO duality is present in 35.37% of the firms, reflecting a substantial overlap between the CEO and board chair roles. However, since the independent variable of CEO duality is expressed as a dummy variable which takes values 0 indicating that there is no presence of ceo duality while 1 indicates the presence of CEO duality, a 35.37% suggests that in a general picture and on average there is no presence of CEO duality. The data also reveals the board size averages around 6 members, with substantial variations in firm size as indicated by the average market capitalization of 34,908.87 million. This comprehensive statistical overview provides a foundational understanding of the sample, crucial for examining the hypothesized relationships between governance structures and conservative financial reporting for both the independent variables and the control ones.

As explained by the regression analysis results in this study, and more specifically in **Table 5**, the characteristics of the board have impacts on accounting conservatism, where a lower P/B represents a higher level of accounting conservatism and vice versa. These findings align with prior research that has shown that higher levels of inside directors tend to be correlated with higher levels of accounting conservatism (Watts & Zimmerman, 1986; Ahmed& Duellman, 2007).

As the coefficient of inside directors in this model was negative (coefficient of -3.966076, p = 0.024), this supports the first hypothesis that insider-dominated boards may advocate for more prudent financial disclosures to protect their stakes and reputation within the company, implementing more conservatism in their accounting practices. (A negative relationship of the inside directors with the price to book value ratio further indicates a positive relationship of inside directors with accounting conservatism; while a lower price to book value ratio shows higher levels of accounting conservatism.)

On the other hand, the variable CEO duality was not found to have an influence on accounting conservatism at a level of significance p=0.409, which makes us reject the previously made second hypothesis that CEO duality could negatively influence the level of external reporting and financial application of qualitative features; accounting conservatism (Finkelstein & D'Aveni, 1994). This outcome suggests that the influence of CEO duality may be more nuanced and potentially moderated by other governance factors not captured within this model.

There are conceivable situations in which CEO duality could positively correlate with accounting conservatism, despite the fact that CEO duality frequently prompts worries about power concentration and its tendency to promote less conservative accounting procedures. This correlation may arise from the CEO's dual role's ability to better align their interests with the company's long-term goals, which in turn encourages risk-averse financial reporting. Moreover, in order to maintain credibility and confidence with stakeholders, the CEO may feel pressured to follow more stringent accounting guidelines due to the heightened responsibilities and visibility that come with being a dual CEO. Furthermore, having authority over board and management decisions might support a more cohesive and cautious strategic plan. Lastly, the influence of CEO duality on accounting practices could be moderated by other governance mechanisms, such as the effectiveness of the audit committee or the presence of independent directors, suggesting that the relationship between CEO duality and accounting conservatism is complex and potentially contingent on a broader set of governance factors.

The findings that larger boards are associated with a higher price-to-book value ratio and further lower accounting conservatism (coefficient of 1.007963 and p = 0.002) contradicts the third hypothesis derived from agency theory that larger boards enhance conservative financial reporting through improved oversight (Jensen, 1993), (Adams & Ferreira, 2007). Several factors could explain this outcome. Firstly, larger boards may face coordination challenges that hinder effective decision-making and oversight. As noted by Hermalin and Weisbach (2003), larger groups can have more difficulty reaching consensus and may struggle with efficient governance mechanisms. This inefficiency can lead to less conservative financial reporting, as the board's ability to monitor and control management effectively is compromised.

Furthermore, it may be more difficult to implement stringent accounting procedures due to the complexity of managing a larger board, which might erode responsibility. Larger boards with

more oversight responsibilities may have less strict financial reporting requirements, which raises the price-to-book value ratio and signals less accounting conservatism.
Larger boards may also have problems with "free-riding," a situation in which members put in less effort themselves and depend on others to supervise and monitor administration. This may lead to less stringent financial scrutiny and a decline in the board's overall efficacy (Hermalin & Weisbach, 2003).

Regarding control variables, two of them were significant: leverage and gross income margin (gimrgn) which were in a negative direction, meaning that high-leveraged firms engage in higher price-to-book value and further less conservative accounting practices. Higher leverage results in less conservative accounting being acted upon by the firms, probably with the aim of enhancing the financial appearance to the stakeholders (Beaver et al., 2005). When examining the correlation of gimrgn with the price-to-book value ratio, it was found to be positively significant, which is in concordance with prior studies that have discussed that profitability could reduce the probability of conservatism because companies that are associated with high profitability may not need to look more conservative to attract investors (Ball & Shivakumar, 2005).

The model's explanatory power, with an R-squared of 0.1233, indicates that while the variables selected provide some insight into factors affecting accounting conservatism, much of the variability remains unexplained, suggesting the presence of other influential factors not included in this model. This aligns with the notion that accounting conservatism is a multifaceted phenomenon influenced by a complex array of both observable and latent factors (LaFond & Watts, 2008).

All in all, this study enhances the knowledge of this particular field with respect to the extent to which specific board features impact on financial reporting technique while also suggesting that there remains much more work to be done to uncover other variables and conditions that can affect accounting conservatism. This research contributes to the ongoing debate in corporate governance literature and provides evidence useful for further development of the theoretical models of the board role and the quality of financial reporting.

The F-test presented in the regression model in **Table 6** is a critical component for assessing the overall explanatory power and significance of the model. The reported F-statistic of 6.45

and an associated p-value of 0.0000 strongly indicate that the null hypothesis—that all regression coefficients are zero and the model has no explanatory power—can be rejected.

Such a low p-value suggests that the regression model, incorporating variables like inside directors, CEO duality, board size, market capitalization, leverage, sales growth, gross income margin, and years of operation, significantly explains the variability in the dependent variable of the price-to-book value ratio.

Rejecting the null hypothesis in our regression model demonstrates that the chosen variables when examined altogether significantly affect the dependent variable, confirming the model's capability to explore factors influencing accounting conservatism. This finding supports the use of these variables for analyzing how corporate governance influences financial and accounting reporting practices.

Going through **Tables 7-8-9-10** we can discuss the following results:

For 1999, the mean P/BV ratio was recorded at 7.586, positioning it in the 25% conservatism category. This reflects a period of low conservatism where firms likely reported higher asset valuations relative to their book values, possibly influenced by the optimistic economic conditions of the late 1990s. In 2000, the mean P/BV ratio decreased to 3.587, falling into the 50% conservatism category. This shift indicates a move towards moderate conservatism, aligning market valuations more closely with book values, which could suggest a response to initial signs of market correction or new accounting standards introduced around that time. By 2001, the mean P/BV further adjusted to 3.038, maintaining its position in the 50% conservatism category. This continued trend towards moderate conservatism indicates an ongoing adjustment in financial reporting practices among the firms, likely in response to the evolving regulatory landscape following major corporate scandals.

Throughout the period from 1999 to 2001, this trend towards increased conservatism highlights a significant shift in the financial reporting landscape. The progression from a high P/BV ratio in 1999 to a significantly lower one by 2001 underlines a move towards more cautious and prudent financial disclosures. This shift is particularly relevant to our thesis, as it underscores the influence of board characteristics and governance mechanisms on the adoption of conservative accounting practices. The data from this period provides empirical support for the

hypothesis that stronger governance can lead to more conservative accounting, contributing to a broader understanding of corporate governance's impact on financial reporting quality.

The robust regression analysis in the study, as seen in **Table 14** , serves to confirm the findings from the initial regression analysis, adjusting for potential heteroscedasticity to ensure the integrity and reliability of the results. This analysis revealed that the variable representing inside directors retained a significant negative coefficient, reinforcing the existing literature that a higher number of inside directors tends to present more conservative accounting practices (Watts & Zimmerman, 1986). The robustness of this result across both standard and adjusted models gives strong support to the hypothesis that insider presence on the board can influence financial conservatism due to insiders' deeper familiarity with and vested interest in the company.

Similarly, the findings regarding CEO duality remained consistent with those of the initial regression, showing no significant impact on accounting conservatism. This persistence across analyses underscores the complexity of CEO duality's influence on financial reporting, possibly indicating that its effects are nuanced or overshadowed by other governance structures (Finkelstein & D'Aveni, 1994).

The analysis also highlighted the role of board size, which showed a significant positive relationship with the price-to-book value ratio, suggesting that larger boards might be associated with a higher price-to-book value and further less conservative accounting practices. This finding challenges traditional theories posited by agency theory, which suggest that larger boards should enhance conservative reporting due to better oversight capabilities (Jensen, 1993; Hermalin & Weisbach, 2003). Instead, the result might reflect potential coordination issues and diluted responsibility among larger groups of directors, suggesting a need for more nuanced investigations into how board size affects governance outcomes.

Moreover, other control variables such as leverage and gross income margin continued to show a significant relationship with the dependent variable, aligning with theories that suggest financial structure and performance metrics influence accounting practices (Beaver et al., 2005), while the rest of the control variables continued to remain insignificant.

The robust regression analysis not only confirmed many of the findings from the initial model but also enhanced the credibility of these results by demonstrating their stability under a robust

check. This strengthens the conclusions drawn from the study and provides a well-rounded understanding of how different aspects of corporate governance impact accounting conservatism. These results make a valuable contribution to the academic discussion on corporate governance and financial reporting, providing empirical support for refining governance structures to foster more conservative financial disclosures.

Incorporating year-specific dummies, as seen in **Table 15**, enhances the understanding of how board characteristics and corporate governance mechanisms affect accounting conservatism over the years of 1999 and 2000. This approach is particularly pertinent given the thesis' focus on assessing the impact of governance structures during a period marked by increased regulatory omission.

The regression findings show that the year-specific effects for 1999 and 2000 did not reach levels of statistical significance, as their p-values yielded 0.568 and 0.758, respectively. From such findings, it is suggested that the influence of governance mechanisms on the degree of accounting conservatism was not affected by such aspects of the external economics or regulations of the years under analysis. The absence of significant year-specific effects supports the hypothesis that effective governance practices consistently influence financial reporting standards, regardless of temporal fluctuations.

It is important to note that 2001 serves as the reference year in this analysis. The choice of a reference year provides a baseline against which the effects of previous years are measured, highlighting that the stability in governance impact observed in 1999 and 2000 persists into 2001. This consistency underlines the critical role of robust corporate governance in ensuring stringent financial reporting standards, irrespective of external conditions.

Therefore, these results highlight how crucial it is to have strong governance mechanisms established in order to enforce strict financial reporting regulations. The findings add to the wider discussion about corporate governance by highlighting its critical function in maintaining financial transparency in a range of legislative and economic contexts (Jensen & Meckling, 1976; La Porta et al., 2000).

Table 15

Impact of Board Characteristics on Accounting Conservatism with Year-Specific Controls

This table analyzes how board characteristics influenced accounting conservatism over the years, with controls for specific yearly economic and regulatory changes (1999-2000).

Description	Value
Number of obs	376
F(10, 365)	7.48
Prob > F	0.0000
R-squared	0.1230
Root MSE	6.6008

price_to_bv	Coefficient	Std. Error	t-statistic	P-value	95% Conf. Interval
insd_drcrtrs	-3,73405	1,319452	-2,83	0,024	(-7.450998, 0.51648057)
ceo_duality	-0,51342	0,508337	-1,01	0,254	(-2.01076, 0.8212133)
board_size	1,000010	0,318475	3,14	0,002	(-0.8266221, 1.856305)
market_cap	0,000002	0,000003	0,61	0,185	(-3.55e-06, 7.17e-06)
leverage	7,213110	2,179187	3,31	0,051	(3.203233, 11.47771)
sales_growth	0,039992	0,026840	1,49	0,126	(-0.5474216, 0.1173013)
gimgregn	0,088141	0,018914	4,66	0,000	(0.5656071, 1.277795)
yrs_operat	0,088997	0,087252	1,02	0,298	(-0.0778586, 0.0276399)
year1999	1,282652	2,982912	0,43	0,568	(-3.365773, 6.038922)
year2000	-0,414543	0,921207	-0,45	0,758	(-3.200269, 2.431553)
_cons	-1,548385	1,779753	-0,87	0,444	(-5.365208, 2.388635)

The analysis of industry-specific accounting conservatism based on the price-to-book value ratios -**Table 16**- indicates that Utilities exhibit the highest level of accounting conservatism with a P/BV of 2.07, placing it in the 75% conservatism category. On the other end, Consumer Services show the lowest level of conservatism with a P/BV of 11.61, categorized under the 25% conservatism level. These findings highlight significant variability in accounting conservatism across different sectors, reflecting how industry-specific factors and regulatory environments influence financial reporting practices.

Table 16

Industry-Specific Price-to-Book Value Ratios and Accounting Conservatism

This table examines the levels of accounting conservatism across different industries, highlighted by variations in price-to-book value ratios.

Sector	Price to Book Value	Level of Accounting Conservatism
Utilities	2.067	100%
Energy Minerals	2.663	100%
Consumer Durables	2.989	75%
Finance	3.231	75%
Transportation	3.579	75%
Non-Energy Minerals	3.383	75%
Communications	4.342	50%
Consumer Non-Durables	4.211	50%
Health Services	4.174	50%
Industrial Services	4.787	50%
Process Industries	5.681	50%
Producer Manufacturing	4.413	50%
Retail Trade	6.295	50%
Distribution Services	4.400	50%
Electronic Technology	5.203	50%
Health Technology	6.451	50%
Commercial Services	8.377	25%
Technology Services	8.520	25%
Consumer Services	11.608	25%

7. Discussion and Conclusion

This thesis examined the impact of board characteristics on accounting conservatism among S&P 500 companies during the critical period of 1999 to 2001. By integrating the frameworks of agency theory and prior empirical findings, this study contributes uniquely to the extant literature by providing a robust analysis using the price-to-book value ratio as a measure of accounting conservatism.

Inside directors, CEO-duality and board size were the main topics of this study. These elements are critical to comprehending how internal governance can impact conservative financial and accounting statement reporting. This is an area that has not received much research outside of the financial services industry, despite being frequently discussed in relation to financial firms during periods of notable regulatory changes.

The study's findings indicate that an increased proportion of inside directors and larger board size have positive relation to accounting conservatism which in accordance with agency theory as expressed by Jensen and Meckling (1976) and related to Ahmed and Duellman (2007). The results of this research, therefore, expand the current study by noting these characteristics as valuable contributions to the improvement of the transparency and accuracy of financial and accounting reporting practices during additional scrutiny by other countries' regulators.

For future research, an extension of this study into different economic climates or a broader range of industries may yield deeper insights. In addition, analyzing the influence of other external governance factors, such as regulation or specific market conditions, on the relationship between board characteristics and the level of accounting conservatism might help to expand the discussion of the study's limitations as well.

From a practical standpoint, this research suggests that board characteristics play a major role in fostering conservatism in accounting practices. These findings should be taken into serious consideration by decision-makers, especially those in governance and regulatory bodies, when designing policies to enhance the integrity of the financial reporting system. For instance, encouraging the effect of a higher proportion of inside directors could be a strategic move to bolster conservative financial reporting and thus enhance investor confidence and market stability

While this study provides significant insights, it acknowledges several limitations. The focus on publicly traded companies during a specific timeframe may limit the generalizability of the findings. The theoretical approach predominantly relies on agency theory, which may not capture newer governance dynamics influenced by evolving global business practices and technological advancements. Methodologically, the use of the price-to-book value ratio, while robust, excludes other potential measures of conservatism that could affect the comprehensiveness of the results.

In conclusion, this thesis confirms that certain board characteristics, notably the number of inside directors and the overall board size, significantly influence accounting conservatism. These findings not only support the theoretical propositions regarding the efficacy of internal governance mechanisms but also offer practical guidance for enhancing the transparency and reliability of financial reporting. The results are both statistically significant and, given the context of corporate governance, economically significant, suggesting that the effects observed are not only numerically robust but also materially impactful in real-world terms.

As considering the implications of these findings, it is clear that enhancing board effectiveness in promoting conservative accounting practices is crucial for maintaining corporate integrity and protecting stakeholder interests. Future research should continue to explore these relationships across different contexts and through varied methodological lenses to build on the foundation this study has laid.

Finally, going through the narrative set in the introduction, this study illustrates the transformative potential of effective board governance on financial reporting standards. The journey from regulatory upheaval to enhanced corporate transparency underscores a broader narrative of governance evolution, a story that continues to unfold in the corridors of global finance.

With this conclusion, the research returns to the original hypothesis that was presented at the beginning. It provides an extensive story, from theoretical investigation to empirical confirmation and useful implications, with the goal of developing a strong final statement that not only brings the study to a conclusion but also stimulates reflection and further research.

Appendices

Appendix 1: Variable Definition

Variable	Definition
PRICE_TO_BOOK_VALUE	Market-to-book ratio (Price-to-book value), used as a proxy to measure accounting conservatism, where a lower ratio indicates higher conservatism and vice versa
INSIDE_DIRECTORS	Number of board members who are also company executives, indicating the level of internal oversight.
CEO_DUALITY	Binary variable (1 = CEO is also the chairman, 0 = CEO and chairman roles are separate), capturing the concentration of power within the board.
BOARD_SIZE	Total number of directors on the board, representing the diversity and potential for broader oversight.
MARKET_CAP	Market capitalization of the firm, measured in millions of U.S. dollars, reflecting the firm's size.
LEVERAGE	Total debt to total assets ratio, indicating the firm's financial leverage.
SALES_GROWTH	Percentage of sales growth, showing the firm's growth trajectory.
GROSS_INCOME_MARGIN	Gross income margin of the firm, measured as a percentage, indicating profitability.
YEARS_OPERATED	The number of years the firm has been in operation, reflecting its maturity and market experience.

Appendix 2: Tables

Table 1: Industry Distribution Sample Analysis

Table 1 presents the distribution of sampled firms across different industries, illustrating the scope and diversity of the study.

Sector	Frequency	Percent	Cumulative Percent
Commercial Services	21	5.59	5.59
Communications	1	0.27	5.85
Consumer Durables	13	3.46	9.31
Consumer Non-Durables	25	6.65	15.96
Consumer Services	19	5.05	21.01
Distribution Services	17	4.52	25.53
Electronic Technology	40	10.64	36.17
Energy Minerals	7	1.86	38.03
Finance	10	2.66	40.69
Health Services	11	2.93	43.62
Health Technology	28	7.45	51.06
Industrial Services	23	6.12	57.18
Non-Energy Minerals	10	2.66	59.84
Process Industries	13	3.46	63.30
Producer Manufacturing	53	14.10	77.39
Retail Trade	21	5.59	82.98
Technology Services	41	10.90	93.88
Transportation	5	1.33	95.21
Utilities	18	4.79	100.00
Total	376	100.00	

Table 2: Summary Statistics of Examined Variables

Table 2 provides descriptive statistics such as mean, standard deviation, and range for the key governance variables and the price-to-book value ratio, offering an overview of the data set used.

Variable	Obs	Mean	Std. Dev.	Min	Max
price_to_bv	376	5.551905	6.988946	.354095	87.74
insd_drcrtrs	376	0.4467777	0/124159	0.25	1.00
ceo_duality	376	.353734	.478617	0	1
board_size	376	5.989362	4.02524	1	33
market_cap	376	34908.87	139460.2	5358339	2079225
leverage	376	.259219	.1743758	0	.8474469
sales_growth	376	12.52529	10.26335	-217391	82.96705
gimgn	376	38.32355	20.05218	1.992783	98.65644
yrs_operat	376	59.54787	41.81493	0	207

Table 3: Pearson Correlation Matrix of Study Variables

Table 3 **** p<0.01, ** p<0.05, * p<0.1*

This table indicates the Pearson correlations between the dependent and the independent variables; ** and * represent significance levels at the 5% and 10% significance levels, respectively.

	price_to_bv	insd_dctr	ceo_duality	board_size	market_cap	leverage	sales_growth	gimgn	yrs_operat
price_to_bv	1.000								
insd_dctr	-0.1929*	1.000							
ceo_duality	-0.0352	0.0358	1.000						
board_size	0.1628*	0.7763*	0.0822	1.000					
market_cap	0.1101	0.2703*	-0.0023	0.3326*	1.000				
leverage	0.1601*	0.2248*	0.0070	0.2603*	-0.0264	1.000			
sales_growth	0.0047	-0.1858*	0.0634	-0.1945*	-0.0405	-0.1117*	1.000		
gimgn	0.1711*	-0.1681*	-0.0235	-0.2095*	0.1509*	-0.2741*	-0.0165		
yrs_operat	0.0495	0.1194*	0.0837	0.1738*	-0.0469	0.1474*	-0.1227*	-0.2018*	1.000

Table 4: Quarterly Analysis of Accounting Conservatism Levels

Table 4 provides analysis of accounting conservatism measured by the price-to-book value ratio, categorized into four levels (100%, 75%, 50%, and 25%) to observe changes across quarters.

P/BV	CON
0.35-2.1	100%
2.1-3.47	75%
3.47-6.58	50%
6.58-87.74	25%

Table 5: Regression Analysis: Dependent and Independent Variables

Table 5 Provides the regression equation used to analyse the relationship between board characteristics and accounting conservatism, along with coefficients

	Prob > F	R-squared	Adj R-squared	Root MSE
	0.00000	0.1233	0.1042	6.6148

Source	SS	df	MS	Number of obs	F(8, 367)
Model	2258.6586	8	282.33227	376	6.45
Residual	16058.356	367	43.7557383		
Total	18317.0141	375	48.845371		

price_to_bv	Coefficient	Standard Error	t-value	p-value	95% Confidence Interval
insd_drcrtrs	-3.966076	1.754462	-2.91	0.024	(-7.450998, 0.51648057)
ceo_duality	-0.597494	0.7200852	-1.07	0.409	(-2.01076, 0.8212133)
board_size	1.007963	0.1175195	3.24	0.002	(-0.8266221, 1.856305)
market_cap	1.81e-06	2.73e-06	0.66	0.507	(-3.55e-06, 7.17e-06)
leverage	7.33947	2.10111	3.49	0.001	(3.203233, 11.47771)
sales_growth	0.0514219	0.034336	1.56	0.121	(-0.5474216, 0.1173013)
gimgregn	0.0913443	0.186965	4.91	0.000	(0.5656071, 1.277795)
yrs_operat	0.0981306	0.0085529	1.06	0.292	(-0.0778586, 0.0276399)
_cons	-0.286451	1.8737	-0.01	0.989	(-3.759428, 3.661885)

Table 6: Results of F-test for Model Validation

Table 6 Outlines the results of the F-test used to validate the statistical significance and explanatory power of the regression model.

price_to_bv	Value
(1) insd_drcrtrs =	0
(2) ceo_duality =	0
(3) board_size =	0
(4) market_cap =	0
(5) leverage =	0
(6) sales_growth	0
(7) gimgn =	0
(8) yrs_operat =	0
F(8, 367) =	6.45
Prob > F =	0.0000

Table 7: Annual Mean of Price-to-Book Value Ratio for 1999

Table 7 Shows the distribution of the mean price-to-book value ratio among firms for the year 1999, highlighting the level of accounting conservatism during this period.

	Mean	Std. Err.	[95% Conf. Interval]
price_to_bv	7.586487	2.913107	0.6980841~14.47489

Table 8: Annual Mean of Price-to-Book Value Ratio for 2000

Table 8 Shows the distribution of the mean price-to-book value ratio among firms for the year 2000, highlighting the level of accounting conservatism during this period.

	Mean	Std. Err.	95% Conf. Interval
price_to_bv	3.587213	0.6756919	1.43686~5.737566

Table 9: Annual Mean of Price-to-Book Value Ratio for 2001

Table 9 Shows the distribution of the mean price-to-book value ratio among firms for the year 2001, highlighting the level of accounting conservatism during this period.

	Mean	Std. Err.	95% Conf. Interval
price_to_bv	3.037629	0.2360105	0.3883808~6.036426

Table 10: Comparative Analysis of Price-to-Book Value Ratio from 1999 to 2001

Table 10 Compares the annual mean price-to-book value ratios over the three years 1999-2000-2001, to illustrate trends and variations in accounting conservatism

	Obs	Mean	Std. Dev.	Min	Max
price_to_bv	376	5.551905	6.988946	.354095	87.74

Table 11: Regression Analysis: Levels of Significance

Table 11 Provides the regression equation used to analyse the relationship between board characteristics and accounting conservatism, along with the significance levels (*** p<0.01, ** p<0.05, * p<0.1) which are displayed to indicate the strength and significance of each predictor.

	(1) price_to_bv
insd_drcrts	-3.96***
	(-2.91)
ceo_duality	-0.597
	(-1.07)
board_size	1.007***
	(3.24)
market_cap	0.000000189
	(0.66)
leverage	7.339***
	(3.49)
sales_growth	0.0514
	(1.56)
gimgn	0.0913***
	(4.91)
yrs_operat	0.0981
	(1.06)
Constant	-0.286
	(-0.01)
Observations	376
t statistics in parenthesis * p<0.1, **p<0.05, ***p<0.01	

Table 12: Breusch-Pagan/Cook-Weisberg Test Results for Heteroscedasticity in Regression Estimates

Table 12 Presents results from the Breusch-Pagan/Cook-Weisberg test to check for heteroscedasticity, ensuring the reliability of regression estimates.

Test	Statistic
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity	
Ho: Constant variance	
Variables: fitted values of price_to_bv	
chi2(1)	278.76
Prob > chi2	0.0000

Table 13: Analysis of Multicollinearity Among Variables

Table 13 Details the Variance Inflation Factor (VIF) for each variable to evaluate the degree of multicollinearity present in the regression analysis.

Variable	VIF	1/VIF
board_size	2.83	0.353680
insd_drcrtrs	2.54	0.394290
market_cap	1.21	0.828021
gimgn	1.19	0.837943
leverage	1.15	0.867599
yrs_operat	1.09	0.916663
sales_growth	1.07	0.932187
ceo_duality	1.02	0.978000
Mean VIF	1.51	

Table 14: Robustness Check of Regression Results

Table 14 Reviews the robustness of the regression results through additional tests and adjustments, confirming the stability and reliability of findings.

Linear Regression	Value
Number of obs	376
F(8, 367)	10.50
Prob > F	0.0000
R-squared	0.1233
Root MSE	6.6148

price_to_bv	Coefficient	Std. Error	t-statistic	P-value	95% Conf. Interval
insd_drctrs	-3.966076	1.504048	-2.64	0.009	[-6.92371, -1.008425]
ceo_duality	-0.597494	0.643594	-0.92	0.356	[-1.86039, 0.6708017]
board_size	1.007963	0.099811	3.10	0.135	[0.462611, 1.344255]
market_cap	1.81e-06	1.58E-06	1.14	0.253	[-1.34E-07, 4.92E-06]
leverage	7.33947	3.751622	1.96	0.051	[0.038145, 14.7166]
sales_growth	0.0514219	0.0327133	1.64	0.102	[-0.010772, 0.11786]
gimrghn	0.0913443	0.190312	4.79	0.000	[0.0538245, 0.1286724]
yrs_operat	0.0981306	0.132401	0.68	0.496	[-0.017085, 0.1350654]
_cons	-0.286451	2.33239	-0.01	0.991	[-4.613116, 4.559888]

Table 15: Impact of Board Characteristics on Accounting Conservatism with Year-Specific Controls

Table 15 Analyzes how board characteristics influenced accounting conservatism over the years, with controls for specific yearly economic and regulatory changes (1999-2000).

Description	Value
Number of obs	376
F(10, 365)	7.55
Prob > F	0.0000
R-squared	0.1320
Root MSE	'6.6001

price_to_bv	Coefficient	Std. Error	t-statistic	P-value	95% Conf. Interval
insd_drctrs	-3.18239	1.406496	-2.26	0.024	[-5.948242, -0.4165375]
ceo_duality	-0.7908431	0.6773219	-1.17	0.244	[-2.122786, 0.5410999]
board_size	1.203265	0.3897493	3.09	0.002	[0.4362895, 1.969701]
market_cap	2.24E-06	1.58E-06	1.42	0.157	[-0.000000863, 0.00000534]
leverage	7.31976	3.704949	1.98	0.049	[0.0340346, 14.60549]
sales_growth	0.486114	0.0325719	1.49	0.136	[-0.0154407, 0.1126635]
gimrghn	0.892915	0.190036	4.86	0.000	[0.0549212, 1.296618]
yrs_operat	0.0114062	0.0134126	0.85	0.396	[-0.0149695, 0.0377782]
year1999	1.336575	2.391246	0.56	0.577	[-3.365773, 6.038922]
year2000	-0.384358	1.431952	-0.27	0.789	[-3.200269, 2.431553]
_cons	-1488286	1.971499	-0.75	0.451	[-5.365208, 2.388635]

Table 16: Industry-Specific Price-to-Book Value Ratios and Accounting Conservatism

Table 16 Examines the levels of accounting conservatism across different industries, highlighted by variations in price-to-book value ratios.

Sector	Price to Book Value	Level of Accounting Conservatism
Utilities	2.067	100%
Energy Minerals	2.663	100%
Consumer Durables	2.989	75%
Finance	3.231	75%
Transportation	3.579	75%
Non-Energy Minerals	3.383	75%
Communications	4.342	50%
Consumer Non-Durables	4.211	50%
Health Services	4.174	50%
Industrial Services	4.787	50%
Process Industries	5.681	50%
Producer Manufacturing	4.413	50%
Retail Trade	6.295	50%
Distribution Services	4.400	50%
Electronic Technology	5.203	50%
Health Technology	6.451	50%
Commercial Services	8.377	25%
Technology Services	8.520	25%
Consumer Services	11.608	25%

References

1. Adams, R.B., and Ferreira, D. (2007). "A Theory of Friendly Boards." Journal of Finance, 62(1), 217-250.
2. Aggarwal, R., & Samwick, A. A. (2003). Why do managers diversify their firms? Agency reconsidered. The Journal of Finance, 58(1), 71-118.
3. Aggarwal, R., & Williamson, R. (2016). The impact of corporate governance practices on dynamic adjustment toward target capital structures. *Journal of Accounting and Public Policy*, 35(4), 417-433.
4. Ahmed, A.S. and Duellman, S., 2007. Accounting conservatism and board of director characteristics: An empirical analysis. Journal of accounting and economics, 43(2-3), pp.411-437.
5. Armstrong, C. S., Guay, W. R., & Weber, J. P. (2010). The role of information and financial reporting in corporate governance and debt contracting. *Journal of Accounting and Economics*, 50(2-3), 179-234.
6. Ball, R., & Shivakumar, L. (2005). Earnings quality in UK private firms: Comparative loss recognition timeliness. Journal of Accounting and Economics, 39(1), 83-128.
7. Basu, S. (1997). "The Conservatism Principle and the Asymmetric Timeliness of Earnings." Journal of Accounting and Economics, 24(1), 3-37.
8. Beasley, Mark S. "An Empirical Analysis of the Relation between Board of Director Composition and Financial Statement Fraud." Accounting Review 71, no. 4 (October 1996).
9. Beaver, W. H., & Ryan, S. G. (2005). Conditional and unconditional conservatism: Concepts and modeling. Review of Accounting Studies, 10(2-3), 269-309.
10. Bebchuk, L. A., & Fried, J. M. (2003). Executive compensation as an agency problem. Journal of economic perspectives, 17(3), 71-92.
11. Beekes, W., Pope, P., & Young, S. (2004). The link between earnings timeliness, earnings conservatism and board composition: evidence from the UK. Corporate Governance: An International Review, 12(1), 47-59.
12. Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. Journal of Corporate Finance, 14(3), 257-273.
13. Brickley, J. A., Coles, J. L., & Jarrell, G. (1997). Leadership structure: Separating the CEO and Chairman of the Board. Journal of Corporate Finance, 3(3), 189-220.

14. Bushman, R. M., & Piotroski, J. D. (2006). Financial reporting incentives for conservative accounting: The influence of legal and political institutions. Journal of Accounting and Economics, 42(1-2), 107-148.
15. Christensen, H. B., Nikolaev, V. V., & Wittenberg-Moerman, R. (2016). Accounting information in financial contracting: The incomplete contract theory perspective. *Journal of Accounting Research*, 54(2), 397-435.
16. Cornett, M.M., Marcus, A.J., Saunders, A., & Tehranian, H. (2007). "The impact of institutional ownership on corporate operating performance." Journal of Banking & Finance, 31(6), 1771–1794
17. Dalton, D. R., Daily, C. M., Ellstrand, A. E., & Johnson, J. L. (1998). Meta-analytic reviews of board composition, leadership structure, and financial performance. Strategic Management Journal, 19(3), 269-290.
18. Dechow, Patricia, and Ilia Dichev. "The quality of accruals and earnings: The role of accrual estimation errors." The Accounting Review 77, no. Supplement (2002): 35-59.
19. DeFond, M., & Zhang, J. (2014). A review of archival auditing research. *Journal of Accounting and Economics*, 58(2-3), 275-326.
20. Elshandidy, T., & Hassanein, A. (2014). Do IFRS and board of directors' independence affect accounting conservatism? Applied Financial Economics, 24(16), 1091-1102.
21. Fields, T. D., Lys, T. Z., & Vincent, L. (2001). Empirical research on accounting choice. Journal of Accounting and Economics, 31(1-3), 255-307.
22. Finkelstein, S., & D'Aveni, R. A. (1994). CEO Duality as a Double-Edged Sword: How Boards of Directors Balance Entrenchment Avoidance and Unity of Command. Academy of Management Journal, 37(5), 1079-1108.
23. FOROGHI, D., AMIRI, H., & FALLAH, Z. N. (2013). Corporate Governance and Conservatism. International Journal of Academic Research in Accounting, Finance and Management Sciences, 3(4), 61–71.
24. García-Meca, E., & Sánchez-Ballesta, J. P. (2009). Corporate governance and earnings management: A meta-analysis. *Corporate Governance: An International Review*, 17(5), 594-610.
25. Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. The Quarterly Journal of Economics, 118(1), 107-155.
26. Guay, W., & Verrecchia, R. E. (2006). Discussion of an economic framework for conservative accounting and Bushman and Piotroski (2006). Journal of Accounting and Economics, 42(1-2), 149-165.

27. Harris, M., & Raviv, A. (2008). A Theory of Board Control and Size. Review of Financial Studies, 21(4), 1797-1832.
28. 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.
29. Heninger, W. G. (2001). The association between auditor litigation and abnormal accruals. The Accounting Review, 76(1), 111-126.
30. Hermalin, B.E., and Weisbach, M.S. (2003). "Boards of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature." Economic Policy Review, 9(1), 7-26.
31. Holthausen, R. W., & Watts, R. L. (2001). The relevance of the value-relevance literature for financial accounting standard setting. Journal of Accounting and Economics, 31(1-3), 3-75.
32. Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. American Economic Review, 76(2), 323-329.
33. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. Journal of Financial Economics, 3(4), 305-360.
34. Jensen, M. C., & Murphy, K. J. (1990). Performance Pay and Top-Management Incentives. Journal of Political Economy, 98(2), 225-264.
35. Kellogg, R. L. (1984). Accounting activities, security prices, and lawsuits. Journal of Accounting and Economics, 6(3), 185-204.
36. Khan, M., & Watts, R. L. (2009). Estimation and empirical properties of a firm-year measure of accounting conservatism. Journal of Accounting and Economics, 48(2-3), 132-150.
37. La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2000). Investor protection and corporate governance. Journal of Financial Economics, 58(1-2), 3-27.
38. LaFond, R., & Roychowdhury, S. (2008). Managerial ownership and accounting conservatism. *Journal of Accounting Research*, 46(1), 101-135.
39. LaFond, R., and Watts, R.L. (2008). "The Information Role of Conservatism." The Accounting Review, 83(2), 447-478.
40. Measures of Accounting Conservatism: A Construct Validity Perspective, S.P. Kothari, Susan Shu, and Peter D. Wysocki, S.P. Kothari, Susan Shu, and Peter D. Wysocki
41. Mehran, H. (1995). Executive compensation structure, ownership, and firm performance. Journal of Financial Economics, 38(2), 163-184.

42. Pathan, S., & Faff, R. (2013). Does board structure in banks really affect their performance? *Journal of Banking & Finance*, 37(5), 1573-1589.
43. Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. The Journal of Finance, 52(2), 737-783.
44. Spence, M. (1973). Job Market Signaling. Quarterly Journal of Economics, 87(3), 355-374.
45. St. Pierre, K., & Anderson, J. A. (1984). An analysis of the factors associated with lawsuits against public accountants. The Accounting Review, 59(2), 242-263.
46. Sundaramurthy, C., & Lewis, M. (2003). Control and collaboration: Paradoxes of governance. *Academy of Management Review*, 28(3), 397-415.
47. Watts, R. L., & Zimmerman, J. L. (1986). Positive accounting theory. Prentice-Hall. zimm
48. Watts, R.L. (2003a). "Conservatism in Accounting, Part I: Explanations and Implications."Accounting Horizons, 17(3), 207–221.
49. Watts, R.L. (2003b). Conservatism in Accounting, Part II: Evidence and Research Opportunities. Accounting Horizons, 17(4), 287–301.
50. Zhang, J. (2008). The contracting benefits of accounting conservatism to lenders and borrowers. *Journal of Accounting and Economics*, 45(1), 27-54.