

Impact of Board Gender Diversity on the Level of Accounting Conservatism: An analysis of UK Firms

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Abstract: The main objective of this study is to examine the impact of board gender diversity on accounting conservatism of United Kingdom based 100 companies which are listed on FTSE100 during the period from year 2009 to year 2020. By consider the main objective of this study, descriptive statistics, correlation matrix, pooled OLS regression analysis and random effects panel regression analysis have been performed in STATA as statistical analysis tools by consider the accounting conservatism as dependent variable, board gender diversity as independent variable along with firm size, leverage, profitability, and sale growth as control variables. The findings of empirical analysis suggest that board gender diversity is positively and significant linked with accounting conservatism of the selected firms. Furthermore, there is significant but negative relationship exist between accounting conservatism with firm size, profitability, and leverage. This study does not find any significant evidence in favour of the relationship between accounting conservatism and sale growth of UK selected firms. The findings of this study have some significant implications for policy makers, expertise, government authorities and other regulators to make and implement policies, rules and regulations more efficiently regarding board gender diversity, accounting conservatism and other significant financial reporting standards and governance process. Like other studies, this study also has some limitations due to limited data sample which may be insufficient to represent the population that having gender diversity on the accounting conservatism in UK, and limited period, which was 11 years starting from 2009 until 2020, thus the research can't generalize the result of UK firms, also it may have other factors that may impact that not considering in this research. Recommendations for future research are suggested, including expanding the sample size including firms with different backgrounds, geographic locations not only UK, and different time series, also future research should examine other factors that they might effect on the accounting conservatism with different industries.

Keywords: Board Gender Diversity, Accounting Conservatism, Profitability, Leverage, Sale Growth, Firm Size, United Kingdom, FTSE100, Literature Studies, Future Studies,

I. INTRODUCTION

The gender diversity has been a debatable subject in organizations' practices (Shaw *et al.*, 2021). Women have been found more risk-averse, less combative, less aggressive, less arrogant, more worried, and more conscientious than males in different studies, and all of these characteristics represent a conservative attitude (Khoo, 2021). Board characteristics that promote greater oversight reduce unethical behavior and increase the degree of conservatism in accounting practices (Almutairi and Quttainah, 2019). Women as more qualified board members, more risk-averse behavior, and greater expertise have been widely recognized as important characteristics of an effective board (Gilligan, 1977). Chiou and Chang (2020) stated that conservatism is an effective way to deal with problems which may arise due to the dissemination of asymmetric information. A critical component of corporate governance during the last few generations is financial reporting, for example shareholders in a company can't judge performance management or determine the investment choices

they have to undertake unless they have access to accessible, pertinent, and accurate information in the financial reporting. As a result, researchers, authorities, and accountants have worked on developing more advanced accounting processes to improve financial reporting's trustworthiness. Firms have a responsibility to be socially accountable both internally toward their employees and externally for their effect on immediate communities and more broadly of their influence on society as a whole (Chaudhri, 2016).

When there is a lack of integrity in a business, conservatism refers to the practice of identifying and recording all potential losses but not all potential earnings. It refers to the unequal timing of recognizing losses vs. profits. As a result of conservatism, growing expenses are recognized and financial statements are delayed (Abbas, 2020). According to Basu (1997), conditional conservatism explains the tendency of accountants to require a higher level of verification for recognizing good news in earnings than bad news. García-Meca *et al.* (2015) discovered that board integration has a considerable constructive influence on Accounting Conservatism (AC) and revenues management in organizations. For example, Norway enacted the very first gender equality law in 2003 which mandates that financial firms boost the percentage of women on corporate boards to 40%, with only a two-year time limit, this condition became mandatory in January 2006. To prevent getting compelled to disband, domestic listed companies had to designate more women executive directors to their companies. Following Norway's lead in enacting gender quota regulations, several other European countries, notably France, Denmark, Austria and Germany, then shortly followed in enacting gender quota law on a required or volunteer basis (Lim, 2011). However, Adams and Ferreira (2009) suggested that gender diversity in the board composition lowers the performance of companies which already have a robust corporate governance practices in their examination of the influence of Norwegian laws on capital structure. More female board members in such firms' corporate boardrooms improved the monitoring ability of their boards of directors, resulting in executives being unnecessarily scrutinized by the committees, limiting company growth and decreasing company value.

In UK, an investigation of such a relationship will be important in assessing whether required gender quota laws should be enacted related to the business considerations instead of political and economic campaigning for gender equality (Chen *et al.*, 2020). Nevertheless, the influence of the board gender diversity on accounting conservatism in British corporations in the framework of the corporate governance principle (ASXCGC 2010) remains an interesting research subject that's not been systematically investigated (Almutairi and Quttainah, 2019). Thus, the goal of this study is to identify the effect of the board gender diversity on listed companies' implementation of conservative accounting procedures. The findings of this research work would not only provide regulatory agencies with a better understanding of the effect of existing mandatory gender quota requirements on boards of directors in respect of monetary information quality, but they'll also serve as a guide for regions that have yet to decide among consensual and mandatory gender allotment regulations.

This research is important for three major reasons, as explained below:

- 1- A comprehensive evaluation of the effect of the board gender diversity on the level of accounting conservatism.
- 2- Duo to the existence of agency conflict whereas dividends and debt holders are the parties with agency conflicts in a firm, accounting conservatism reduces conflicts between shareholders and creditors because it benefits both parties (lenders and borrowers), also conservatism allows lenders to take necessary actions to protect their interests in the face of bad news more quickly, and conservatism reduces debt costs for borrowers.
- 3- This research helps boards in the monitoring and evaluating process of the performance of the leadership which is an important responsibility of the board of directors. The board handles important decisions for the organization. To monitor and evaluate managers effectively, the board

of directors requires verifiable financial information of the highest quality during the monitoring and evaluating process. also, conservatism has been perceived to constrain managers' opportunistic behavior and offset managerial bias to improve accounting quality.

Research Objectives

The aim of this research is to examine the effects of the board gender diversity in relation to the accounting conservatism. The research question is addressed:

- What is the effect of the board gender diversity on the level of accounting conservatism?

Research Methodology

The goal of this research is to look into the connection amongst board gender diversity and accounting conservatism in the United Kingdom. Given the conflicting results of earlier empirical research, the goal of this work is to discover an explanation instead of describing the phenomenon. As a result, a constructive method based on regression analysis is more appropriate for this research to identify the possible connection between the two notions in the context of the UK. As a result, this research uses a quantitative approach to investigate the formulated hypotheses by targeting the sample of United Kingdom based 100 companies which are currently listed on FTSE100. It has been used a constructive method based on regression analysis to examine the effects of the board gender diversity in relation to the accounting conservatism. The sample of this study is based on 100 United Kingdom financial sector listed companies from FTSE 100 during the period from year 2009 to year 2020 (after the global financial crisis of year 2008).

Main Findings

Furthermore, this research has been illustrated the impact of core explanatory variable board gender diversity on the accounting conservatism. The results confirm the research hypothesis (H1): indicates that accounting conservatism and board gender diversity are positively and significantly linked with each other. Thus, profitability, firm size and leverage have significant but negative influence on accounting conservatism for the selected sample of this study. On the other hand, this study has not found any significant relationship existence between accounting conservatism and sale growth of the selected companies.

Contributions

This research adds to the theoretical and practical context of gender diversity on boards and accounting conservatism. It is based on the previous research on the impacts of board gender diversity on accounting conservatism (Buallay and Al-Ajmi, 2019). Wan-Hussin *et al.* (2021) looked at Finnish and American companies and concentrated on firms is although the period studied in their research is earlier than 2020, and the backdrop of their research has indeed been radically transformed by the adoption of ASXCGC2010.

Furthermore, this research adds to the current amount of information about the relationship among board gender diversity, and accounting conservatism by looking into the effects of the large level of feminine board members, and the duration of women directors mostly on level of accountancy conservatism. This expansion is not only broadening the extent of the topic research, and also adds a new-found dimension to the research.

II. LITERATURE REVIEW

Conservatism is one of the most essential and required principal with a long record. According to Basu (1997), conservatism in accountancy may be traced directly to the fifteenth century. According to empirical literature on conservatism, accounting practice has traditionally been affected by conservative ideology and has been increasingly orthodox in the last 30 years. There is no widely

agreed definition of conservatism, given its initial history and huge impact on accounting systems. Ruch and Taylor (2015) exaggerated description, "expect no gain and expect all losses," could be the first definition of conservatism. Expecting no gain doesn't really indicate that income should not be recorded till all revenue-related earnings have been collected, but also that the future cash flows ought to be verified. Some academic explanations are more comprehensive than others. Other authors for instance, describe conservatism as the principle that "once there is indeed a real uncertainty on which of two or even more accounting options should be adopted, the option with the less beneficial effect on shareholders' capital must be selected." Although this interpretation stresses the impact of conservatism on company's net underestimation, it is still imprecise (Ma et al., 2020).

According to Watts (2003), conservatism is defined as the accumulated economic effects recorded in the income statement as well as revenues or profits from the company's inception. As a result of this characterization, conservative critics may misinterpret conservatism as a tool for earning management. Several commonly used interpretations of conservatism exist as well. For instance, conservatism can be defined as attributing an item to cost or loss fairly soon, with the financial reporting rule inverted, implying an unbalanced relationship among expenditure (loss) and financial reporting (gain). Some academics have attempted to investigate and illustrate the idea of conservatism by differentiating between distinct varieties of conservatism (Watts, 2003, Hsu et al., 2017).

Accounting conservatism is categorized into two broad categories by Beaver and Ryan (2005) unconditional, and conditional conservatism. Unconditional conservatism is defined when financial earnings are overstated due to predetermined components of the accounting process, whereby, when total profit is clearly stated given adequately unfavourable circumstances, but not forward beneath fortunate conditions, this is referred to as conditional conservatism. Conditional conservatism is exemplified by the lesser cost or market criterion for stock and damage accounting of long-term tangible and intangible assets such as impairment accounting for collateral assets.

By describing both types of conservatism, a clear understanding of accounting conservatism has been developed along with multiple financial implications. The application of accounting standards related to unconditional conservatism has a pretty consistent influence throughout the time (Sharma, 2019). On the other hand, as shown on the financial declarations, the implementation of these policies connected with conditional conservatism is much more transient due to swings in the timeliness and substance of the information about which conditional conservatism is founded. As a result, there are discrepancies in the timeliness of income statement realization in a different way.

Secondly, various types of conservatism arise within varying situations. Watts (2003) has explained accounting conservatism in four ways: corporate contracting, litigation, contractual revenue, and legislation. Increased contractual and lawsuit risks promote conditional conservatism. Litigation concerns, as well as regulations and taxes, have an impact on unconditional conservatism; however, these financial indicators are greater for conditional conservatism.

When studying conservatism, factors like these must be taken into account (Chen et al., 2020). Directors' demographic profile has gotten increased attention in recent years, especially in corporate finance. It's because proprietors, shareholders, and financiers want to select members of the board with a variety of experiences in terms of intelligence and competence so that the board can safeguard their investments. Furthermore, accounting conservatism has attracted a lot of attention in corporate governance practices because of its usefulness in limiting executives' conflicts of interest, improving firm value, and thereby preserving share holders' objectives (Zhang et al., 2019).

This study claims that finance and accounting decisions have an impact on a company's tax situation. Administration may pick an accounting system that minimizes taxable income and working capital in expectation of the Inland Revenue accepting a taxable income. Previous research has found a link between businesses avoiding tax and accounting conservatism. Ferrell et al. (2019) investigated

whether taxes have an impact on accounting conservatism. Because taxes are a predictor of financial reporting integrity, they expect that corporations with huge gaps between pre-conservative book revenue and tax payable have been the most conservative (Caskey and Laux, 2017).

A study by Ball and Shivakumar (2005), suggested that private firms in United Kingdom are comparatively less conservative than public firms. García-Meca et al. (2015) discovered that firms with strong governance are more likely to have conservative accounting practices. The main purpose of accounting-based company's policy is to provide clear information to the users regarding the company's financial and operating position (Chiou and Chang, 2020). Investors, creditors, and government agencies are the main users of these information. The accounting conservatism mandates immediate recognition of losses (bad news) and delayed recognition of profits (good news) (Basu, 1997).

Accounting conservatism assists the CEO in order to optimize value creation through analyzing and advising the CEO (Iwasaki et al., 2018). Accounting conservatism has a responsibility to review a corporation's economic practices and supervise the quality of its financial statements. Accounting conservatism is an essential contractual strategy for procuring entities (Foroghi et al., 2013). A company is built because of the interaction between contractual parties. Managers, stockholders, and bond holders are the primary contractual participants, as well as the primary users of financial reports. In a firm, there are main forms of agency issues that develop among the three primary signatory participants. One of the issue arises from a conflict of interest between shareholders and managers (Freeman and Dmytriiev, 2017). Thus, managers have a knowledge edge over investors in remuneration contracts, and the two parties of the agreement have differing horizons on business success and asymmetrical paybacks. All of these factors could contribute to executives acting in self-interested ways (Srinidhi et al., 2017).

Diversity means the varied combination of values, qualities, and expert knowledge attributable by adjunct faculty groups in terms to board process and verdict in order to establish a link between corporate governance and a diversified management team (Srinidhi et al., 2017). In this perspective, gender diversity is defined as the addition of diverse views and perspectives rather than simply including people of different ethnic backgrounds (Wang and Kallunki, 2015). In general, board diversity is based on the level of diversification of board members from one another (Mohammed et al., 2017). This level of diversification can be analyzed on different physiological and cognitive basis such as age, sexuality, race, intellectual skills, ethnic heritage, life knowledge and observation opinions (Nasr and Ntim, 2018). This indicates that personal attributes should be significantly considered while examine the impact of diversity on governance. This means that while analyzing the impact of diversity on governance, personal attributes must be considered rather than to only explain how gender diversity affects management by looking at the board. The panel based strategic decisions are influenced by the traits of every individual board members (Adnan et al., 2018). Board including both male and female members will also have feminine characteristics rather than other undiversified board, only have male members.

The argument related to the importance of board gender diversity is still under discussion (Wang et al., 2018). Due to this importance and underrepresentation of women on the board, nations have adopted gender quota laws mandating the nomination of women to boards of directors. As a result of such updated policies and research attention, the number of women participants as board directors have been increased promptly. A study conducted by Farrell and Hersch (2005) examined the board participants of both men and women without any discrimination of around 500 Fortune companies. This study concluded that the likelihood of appointing a female manager in a particular year is inversely proportional to the ratio of females' appointments during the previous years in these

companies. Furthermore, it is also examined that the new hiring of female participant is directly linked with the resignation of the previous female board member.

Another study by Triana et al. (2014) investigated the impact of board gender diversity on the level of strategic implementation of US companies and suggested that management power and efficiency is directly linked with the presence of more female managers and board members in these companies. In other words, more diversified board members will have strong and favorable impact on management strengths and efficient decision making. The need of board gender diversification is higher when there are possibilities of lower profitability level (Rasche et al., 2017). Moreover, diligent and effective monitoring is associated with gender diversity on boards as per the findings of Srinidhi et al. (2011). According to Sultana and Van der Zahn (2011), gender-based diversified board can monitor and analyze the performance of managers more efficiently. It is also suggested that more gender-diverse boards tend to have higher audit standards (Srinidhi et al., 2011).

There are many studies in literature that have extensively discussed the importance of board gender diversity for the overall economic condition. A study conducted by International Monetary Fund in South Asia, Middle East, and North Africa suggested that the economic welfare has been increased by more than 20% due to the increased number of women participants in labor force (McKnight, 2019). Another important perspective is the enhancement of productivity and competitiveness (International Labor Organization, 2019). There is evidence that gender equality can lead to higher levels of innovation and companies with more women executives tend to produce more patents compared to companies that do not have any women executives. In addition, more diversified workforces tend to increase customer loyalty and brand recognition, as people who are part of open, diverse and inclusive environments tend to perform better, be more creative and develop innovative ideas for the brand (Phillips et al., 2014).

Prior Literature and Hypothesis Development

Gender diversity is considered as one of the important tools to improve the overall efficiency of corporate governance framework. Gender diversity is one of the most debatable issues in the laws of many jurisdictions and currently provide laws regarding specific quota-based programs to increase the number of women board members.

In the Middle East, meanwhile, the function of females in the executive forum receives less emphasis. Previous research Mohan and Chen (2004), looked at whether female executives have significant impact on financial, capital, and acquisition selections. This study also suggested that the judgments created by people (female executives) have a substantial impact on businesses. Furthermore, earlier research by Hillman et al. (2007) shown that executive female managers think independently, are more risk-reluctant and less susceptible to arrogance in choice than male directors. Furthermore, Ginesti et al. (2018) stated that having women members in the board improves corporate stability by making the board's actions and performance reports more effective. This viewpoint is in accordance with the agency theory, which claims that having female members on the board strengthens the surveillance systems and aligns executives' objectives with those of investors (Ginesti et al., 2018).

Notwithstanding the projected importance of gender diversity, it is still uncertain female employees affect accounting decisions, and prior study results are still inconsistent and contradictory. Firms with female CFOs, for instance, had notably lower earnings management or larger revenue earnings quality. (Liu et al., 2014). Ginesti et al. (2018) observed that having a woman on the management has a beneficial impact on the dispute process and the openness of financial statements, conducted on a review of 435 Italian companies from 2009 to 2013. Whereas on the other side the study by Peni and Vähämaa (2010) has demonstrated that gender doesn't account for discretionary accrual.

Concerning the association among accounting conservatism and women in the industry. Srinidhi et al. (2011) looked at the association between CEO gender, leader behavior, and accounting conservatism through a model obtained from 13,206 firm years reported in the United States from 1996 to 2008. They discovered a large and strong link among CEO gender and accounting conservatism. They claimed that female presidents are much more honest and willing to take risks, that they disclose higher conservative results, and that they can spot unfortunate news in earnings management more quickly.

The majority of board structure research is based on the percentage of board independence and how that affects financial reporting quality (Srinidhi *et al.*, 2011). Researchers recently discovered that boards with both men and women directors can perform better in terms of international finance and economic accounting (Srinidhi et al., 2011). The function of woman directors on a board can be described both at a personal and a collective level, in general. Females are now more emotional than men on an individualized level. Women directors can limit opportunism among executives by implementing more cautious accounting standards. In other words, conservatism minimizes the dangers encountered by women directors and encourages them to utilize conservatism as a tool to oversee executives, so reducing the hazards (Kallunki and Silvola, 2008).

From 2004 to 2010, Aguilera *et al.* (2018) looked at how gender diversity on boards and firm performance on audit committees affected accounting conservatism in the banking industry in 9 multiple nations, with a population of 159 banks. Studies also revealed that individual professionals in the banking industry have a favorable effect on financial conservatism and earnings quality. Furthermore, they discovered that institutions with higher boardroom female diversification and experienced members in auditing bodies have a lower differential temporality of recognizing profit reductions vs profits. According to the study of Boussaid et al. (2015), there is a link connecting the variables of gender diversity to the accounting conservatism. Furthermore, they stated that female directors increase board oversight.

Finland is often regarded as the pioneer in women's rights, being one of the few nations in the world with a significant fraction of women on the executive board. The percentage of female members of the board in Finnish publicly traded firms is regulated by the Corporate Governance Code's guidelines. To achieve gender equality in listed companies, the CG Code primarily uses a self-regulation strategy (Foroghi *et al.*, 2013). And, as seen by the indicates that the number of women on the board in Finnish listed businesses has increased in the previous ten years, self-regulation has demonstrated to be good in fostering gender equality. If the advances in gender equity on the panels of listed businesses are inadequate, the Finnish government should consider introducing legislative measures to achieve more equitable women presence on the directors of firms listed (Hu et al., 2017). In addition, there are corporate groups and education services in Finland that provide mentorship or educational services to females in order to facilitate them in acquiring strength and maturity in preparing for leadership roles. In light of Finland's growing gender diversity, it's both heartening and fascinating to look into the actual status of female board members (Aguilera *et al.*, 2018).

Previous research has looked at the association among board gender diversity and earnings conservatism from two angles. One line of research looks at this link via the lens of corporate governance. The individual characteristics of shareholders, as a form of asset vital to a corporation's existence and development, would assist a company in certain way, as according to accounting literature. In this regard, the presence of female directors must not be viewed solely as a symbolic gesture. Personality traits, abilities, skills, and cultural and social orientations would all influence overall gender distinctions between women and men managers (Khlif and Achek, 2017).

Women differ from men in terms of risk perception, degree of complacency, and management style in the wider public, as discussed earlier, the previous research has found that increasing the number of women on boards enhances firm performance and surveillance abilities by altering board behavior

patterns. According to the study of Adams and Ferreira (2009), female directors are less prone to have punctuality concerns than male directors; hence male directors have improved turnout when there are more female directors on the panel. In addition, DeBerg (1990) discovered that CEOs are more likely to be taken liable for bad stochastic performance in companies with much more female board members. The presence of female directors must not be viewed solely as a symbolic gesture.

In literature, the relationship between board gender diversity and accounting conservatism and suggested that female directors increase board oversight (Boussaid et al., 2015). A study by Ahmed and Henry (2012) suggested that the voluntary formation of audit committee tends to ensure board independence and decrease the board size, which is positively linked with unconditional accounting conservatism, and negatively related to the degree of conditional conservatism. These results found after controlling the other recognized determinants of accounting conservatism, governance and ownership influences, unobserved firm heterogeneity and considering the potential endogeneity between corporate governance structuring and conservative accounting practice.

Beekes *et al.* (2004) found that there is a significant positive correlation between the proportion of outside directors in the UK boards and the timelier reflection of bad news in earnings. On the other hand, Ahmed and Duellman (2007) studied the link between board attributes and accounting conservatism and found strong evidence that the degree of board independence and outside board ownership positively affects conditional and unconditional accounting conservatism in the United States. However, Lim (2011) examined that there is no significant gender difference between actual and self-estimated (EQ) emotion quotient levels. However, both men and women believe that men's EQ levels are higher than women's, which explains seven main themes, such as (emotion, cognition / mindset, personality / characteristics, biology, self-control, culture / beliefs and research results). García-Meca *et al.* (2015) also suggested that firms with strong boards use conservative accounting numbers as a governance tool, even in an institutional setting with low litigation risk such as Spain. It is being argued by many researchers that large boards take more time in making decisions and rather not discuss much about the performance of these boards. However, it is also discussed that large boards do possess more expertise, but still some costs arise because of the problems associated with large boards (Yermack, 1996).

It is also indicated that there are many issues associated with large boards and if the board is comprised of more than ten persons, the members are found to be indulged in expressing their own ideas instead of discussing those opinions that can be beneficial for the firms in board meetings which ultimately reduces the managerial inclination to employ conservatism (Lipton and Lorsch, 1992). It is also suggested that large size of the board will lead towards lower efficiency level (Mohammed et al., 2017). On the other hand, there are some studies which found that large size board tend to have a pool of expertise and knowledge but the problems like delayed decision making, existence of free riders etc., reduce the efficiency of large boards. Such a type of board is less likely to look into the decision-making process carried out by top managers hence does not demand conservatism. On the basis of this argument a large number of researchers have empirically proved that there exists a negative association between size of the board and AC. Table 1 provide the main findings of the impact of board gender diversity on the accounting conservatism. As a result of the above debate, this study hypothesizes:

H1: Gender diversity and accounting conservatism have a positive relationship.

Table 1: The impact of board gender diversity on the accounting conservatism

Author	Year	Main Findings
DeBerg	1990	It has been discovered that CEOs are more likely to be taken liable for bad stochastic performance in companies with much more female board members.
Farrell and Hersch	2005	They discover that the likelihood of appointing a woman director in a particular year is inversely proportional to the ratio of females on those companies the preceding year. Furthermore, the resignation of a female director is more likely to be met by the hiring of a female lead as a successor.
Ball & Shivakumar	2005	They observed that in comparison with public firms, private firms in the U.K. are less conservative.
Kallunki & Silvola	2008	Conservatism minimizes the dangers encountered by women directors and encourages them to utilize conservatism as a tool to oversee executives, thus reducing the hazards.
Adams & Ferreira	2009	Female directors are less prone to have punctuality concerns than male directors, hence male directors have improved turnout when there are more female directors on the panel.
Peni & Vähämaa,	2010	It has demonstrated that the gender doesn't account for discretionary accrual. Concerning the association among accounting conservatism and women in the industry.
Srinidhi & Gul & Tsui	2011	It has been discovered that boards with both men and women directors can perform better in terms of international finance and economic accounting.
Mohan & Chen	2014	The judgments created by people (female executives) have a substantial impact on businesses.
Boussaid & Hamza & Sougne	2015	There is a link connecting the variables of gender diversity to the accounting conservatism. Furthermore, they stated that female directors increase board oversight.
Khlif & Achek,	2017	Personality traits, abilities, skills, and cultural and social orientations would all influence overall gender distinctions between women and men managers.
Aguilera, Judge and Terjesen,	2017	Studies also revealed that individual professionals in the banking industry have a favorable effect on financial conservatism and earnings quality. Furthermore, they discovered that institutions with higher boardroom female diversification and experienced members in auditing bodies have a lower differential temporality of recognizing profit reductions vs profits
Ginesti & Caldarelli & Zampella	2018	Having women benches in the board improves corporate stability by making the board's actions and performance reports more effective. This viewpoint is in accordance with the agency theory, that claims that having female members on the board strengthens the surveillance systems and aligns executives' objectives with those of investors

III. RESEARCH METHODOLOGY

The main objective of this study is to investigate the influence of board gender diversity on accounting conservatism of 100 United Kingdom companies listed on FTSE 100 for the period from year 2009 to year 2020 specifically after the global financial crisis of year 2008.

The current research is based on prior research Ahmed and Duellman (2007); Chi et al. (2009); Ahmed and Henry (2012); García-Meca et al. (2015); Lim (2011) which have studied board gender diversity and accounting conservatism in United Kingdom based firms. Whereas the study of García Lara et al. (2007) has been discovered the relationships between the conditional conservatism and the board of director's characteristic. Furthermore, the illustration of the board diversity on chiefs' sheets (board sex diversity) research is a well-known issue that is receiving a great deal of attention at the moment (Zhu and Xia, 2011). The current research has been estimated the accounting conservatism as dependent variable through c-Score based on the findings of the model used by Basu (1997).

Data and Sample Selection

According to Nau (1995), the quantitative research approach involves a quantitative investigation into distinguishing features, elemental properties, and empirical boundaries. Furthermore, it shows a tendency to measure the amount or quantity or the frequency. Moreover, a quantitative approach was adopted in this research is to investigate the formulated hypotheses by examining huge information from the United Kingdom's listed FTSE100 companies. Further, a constructive method based on

regression analysis to identify the possible connection between the board gender diversity and accounting conservatism in the firms of United Kingdom, listed on FTSE 100. Furthermore, in this research, it has been selected particular sample period to discover an explanation instead of describing the phenomenon of board gender diversity and accounting conservatism in United Kingdom. A sample is a subset of a population or a universe (Taylor, 2005). Moreover, a sampling frame is a list or other device that is used to define population of the interest to the researcher (Bryman, 2004). Furthermore, in this research, the selection of the sample is based on 100 United Kingdom firms which are listed on FTSE 100 with the time period of 12 years which started from 2009 until 2020 which it meets the criteria of variables and following the outbreak of the 2008 financial crisis.

In addition, it has been excluded all firms with missing values and outliers. Further, it has been conducted a time-series request for obtaining accounting, market, governance variables through STATA software. Moreover, time series data typically exhibits some trending characteristics, such as consistent downward or upward trends. The industries for the data collections involved are financials, the basic material, industrials, consumer staples, health care, technology, discretionary of consumer, energy, real state, telecommunications, and utilities. Moreover, the dependent variable of this research is accounting conservatism, while the independent variable is board gender diversity, whereas control variables are sales growth, profitability, firm size, and leverage. Furthermore, the sample selection table 2 is mentioned below.

Table 2: The sample selection

Initial sample (FTSE100)	1,200
Excluded:	
Firms with missing value	114
Firms with extreme value (outliers)	89
Final sample:	997

Variable Definition and Econometric consideration

Table 3 shows the research variables' definitions with description.

Table 3: Definitions of the variables

Variable	Description	Definition
ACCCON	Dependent variable: accounting conversation	It is measured as C-Score estimated using (Khan & Watts ,2009) model.
BDIV	Independent variable: board gender diversity	It can be determined and measured through calculating the percentage of the female director's board.
SALEGR	Control variable: sales growth	It defined as the percentage of the change of the sale among various time periods.
PROF	Control variable: profitability	It equals to the net income dividing by the total assets.
FSIZE	Control variable: firm size	It measured by the natural logarithm of the value of the market equity.
LEV	Control variable: Leverage	It can be calculated as long-term debt scaled by the total assets.

The dependent variable: Accounting conservatism

There are many approaches found in literature in order to estimate accounting conservatism. This study has been used C-Score estimation to calculate accounting conservatism which is developed by Khan and Watts (2009). C-Score is based on the concept that measurement of earnings with bad news relative to good news. C-Score measuring tool is also used by other researchers. (Roychowdhury, 2010) in order to use as a measure of accounting conservatism for the companies. In this research, accounting conservatism is measured by C-Score model as the concept of asymmetric earnings implied by accounting conservatism [(Roychowdhury, 2010); (Khan and Watts, 2009); (Basu, 1997)]. Basically,

this model is based on the view that due to the asymmetry of the requirements of accounting for profit and loss confirmation, income generated by conservatism reflecting bad news is faster than good news.

Furthermore, this is a long-term, universal attribute of financial reporting rules and practices. It refers to the prudent response of the company when it comes to the uncertainties and risks inherent in the business environment (FASB, 1980). The C-Score model provides a firm-year measure of conditional conservatism. According to the study of Boussaid et al. (2014), the greater number of female boards, the more conservatism. There are reasons for the existence of such a relationship. First the risk-averse and less overconfident nature of female directors (Krishnan and Parsons, 2008). However, the voluntary formation of the audit committee, the increase in board director’s independences, and reduction of boards size are positively correlated with unconditional accounting conservatism (Ahmed and Henry, 2012).

In this research, after conducting a data stream through STATA software, in ‘Static Request’ page, it has been inserted Series/List, datatypes such as Name, ISIN, ICBIC, ICBIN, then it has been submitted it in order to have an output which is the overview of the data. After that, it has been conducted ‘Time Series Request’ in data stream and download each variable into a new excel sheet. As a firm-year measure of conditional conservatism, C-Score has been widely adopted by studies on accounting conservatism [(Ahmed and Duellman, 2007); (Kim and Zhang, 2016)].

The C-Score model has been initially based on the findings of the model used by Basu (1997) to estimate the accounting conservatism of the firm and this model can be expressed as an asymmetric function of stock returns;

$$Earn_i = \beta_0 + \beta_1 Neg_i + \beta_2 Ret_i + \beta_3 Neg_i \times Ret_i + \epsilon_i \dots\dots\dots(1)$$

Earn represents earnings; Ret represents returns (measure of news); and Neg represents a dummy variable that equals 1 when Ret is negative, but 0 otherwise. The second component of Equation (3.1) is β_2 which measures the timeliness of earnings to good news, while the third component β_3 measures the incremental timeliness to bad news (over good news) while β_3 measure for conditional conservatism, and the coefficient β_3 remains constant across firms.

Khan and Watts (2009) specify that firm-specific variables such as size, market-to-book ratio and leverage can determine both the timeliness of earnings to good news (G-Score) and the incremental timeliness of earnings to bad news (C-Score).

$$G - Score = \beta_2 = \mu_1 + \mu_2 Size_i + \mu_3 MTB_i + \mu_3 Lev_i \dots\dots\dots(2)$$

$$C - Score = \beta_3 = \gamma_1 + \gamma_2 Size_i + \gamma_3 MTB_i + \gamma_3 Lev_i \dots\dots\dots(3)$$

Moreover, it has been estimated empirical estimators of μ_k and γ_k (for k = 1-4) using annual cross section regression. Therefore, μ_k and γ_k vary over time within firms, but are constant across firms.

Regression models are not themselves shown in equations (2) and (3). Therefore, it has been substituted an estimate of μ_k and γ_k derived from equation (4). The G-Score and C-Score are derived by plugging in equations (4) into these equations along with the firm-specific variables for that year. Accordingly, C-Score is a proxy for conservatism over a firm-year period, with conservatism increasing in C-Score.

Further, the annual cross-section regression model used to estimate the parameters is:

$$Earn_i = \beta_0 + \beta_1 Neg_i + Ret_i (\mu_1 + \mu_2 Size_i + \mu_3 MTB_i + \mu_4 Lev_i) + Neg_i \times Ret_i (\gamma_1 + \gamma_2 Size_i + \gamma_3 MTB_i + \gamma_4 Lev_i) + (\delta_2 Size_i + \delta_3 MTB_i (2.4) + \delta_4 Lev_i + \delta_2 Neg_i \times Size_i + \delta_3 Neg_i \times MTB_i + \delta_4 Neg_i \times Lev_i) + \epsilon_i \dots\dots\dots(4)$$

$$ACCCON = \beta_0 + \beta_1 BSIZE + \beta_2 SIZE + \beta_3 PROF + \beta_4 SALEGR + \beta_5 LEV + \varepsilon$$

Where *ACCCON* is accounting conservatism, *BFSIZE* is the board diversity, *SIZE* is the firm size, *PROF* is profitability, *SALEGR* is sales growth, *LEV* is leverage, and where ε = error term.

Independent variable: Board Gender Diversity

The board gender diversity can be determined by the percentage of female boards directors. It means the variety of the gender in the boards of directors in the firms. In addition, the diversity can be based on the information or tasks on the one hand and can also be related to person as well. The diversity of a team input, containing company directories, can mean to the foundation of the information collected. Gender diversity affect accounting conservatism due to many aspects, first, females are more accurate than men in interpreting facial expressions, female directors are significantly more risk-averse and less prone to overconfidence than male directors in decision-making, second, larger boards allow for specialization within the board because of better allocation of duties based on expertise, thus enhancing monitoring. Third, Diversification of the board of directors improves the alternatives available or considered by the company, so the difference in the cognitive framework that executives have is related to the effectiveness of strategic decisions. In addition, due to the importance of women on boards of directors, numerous countries have enacted sex share legislation requiring women to be appointed to sheets of chiefs. The inspection of board gender diversity has been encouraged throughout the increasing in female's numbers in the boards of directors.

Furthermore, even though much research have shown that men and women are physically and psychologically completely different, the leadership characteristics of female CEOs in the boards of directors have not been explored to a large extent. Two of the characteristics, risk aversion and moral sensitivity, are related to key accounting issues, such as conservatism in financial reporting and backlash against fraud. Thus, the higher moral sensitivity of female executives on the company's board of directors keeps them away from unethical and aggressive profit management practices, thereby improving the quality of earnings reporting such as accounting conservatism. Furthermore, there is a link connecting the variables of gender diversity to the accounting conservatism. Furthermore, they stated that female directors increase board oversight (Boussaid et al., 2015). Thus, the gender of the CEO must be taken into consideration when deciding. For instance, when analyzing financial statements, they should keep in mind that the CEO may report more conservative earnings data.

Control variables

In this research, there are four control variables which have been identified that influence the regression model such as firm size, leverage, sales growth, and profitability. The first control variable is the firm size, which measured by the natural logarithm of market capitalization, and it is usually log of total assets it is also may impact decisions on the earnings management, especially, large firms are often required to give higher disclosure in their financial reports and manipulate their earnings than small firms. Furthermore, Larger firms are more complex to run and place higher demands on governance structures (Demsetz and Lehn, 1985). Second control variable is leverage which measured by long term debt divided by total assets in addition, the financial leverage has a direct impact on the firm's performance and profitability. Profitability is the ability of the firm to earn profit from sales, assets, and certain capital stock. (Husnan, 2015).

Third control variable is profitability which calculated as net income divided by total assets. Forth control variable is the sales growth which measured by the percentage of change in sales in different time periods, sales growth has an impact on the financial reports and decision. Moreover, "Sales growth is a measure of effectiveness because it is closely related to business development, and is more likely to be directly and more directly affected by the choice of business relationships between companies, rather than efficiency measures such as profitability" (Stuart, 2000)

Regression models

The regression model can be written as:

$$ACCCON = \beta_0 + \beta_1 BDIV + \beta_2 FSIZE + \beta_3 PROF + \beta_4 SALEGR + \beta_5 LEV + \varepsilon$$

Where:

ACCCON = Accounting Conservatism

BDIV = Board Gender Diversity

FSIZE = Firm Size

PROF = Profitability

SALEGR = Sale Growth

LEV = Leverage

Where ε = error term, all the variables are defined earlier in the *Table 3.2* definitions of the variables.

Regression models make it possible to isolate the relationship between the results and the explanatory variables, while the other variables remain unchanged. Regression analysis has been used extensively in data analysis and empirical model development. Therefore, after a regression model is provided sufficiently fitted to the data that has been found, people continue to use the model for prediction or control, or to understand the data generation mechanism. However, most people will agree that before using the model, there should be some checks on its validity (Snee, 1977). Thus, it has been determined the data and sample selection, variable definition, and econometric consideration. Furthermore, a quantitative approach was adopted in this research to investigate the formulated hypotheses by examining huge information from UK, the sample selection been conducted from the FTSE 100 list of UK's 100 companies with a sample period 11 years starting from 2009 until 2020 which it meets the criteria of variables. In addition, it has been excluded all firms with missing values and outliers. Moreover, the regression models have been mentioned. Furthermore, the research methodologies involved the use of STATA software in analyzing the data collected from FTSE 100 list which contains several industries, these industries for the data collections involved are financials, basic materials, industrials, consumer staples, health care, technology, consumer discretionary, energy, real estate, telecommunications, and utilities. The outline of sample selection was highlighted.

Moreover, in this research, after data selection from the sample, the data undergoes the process of cleaning, recoding missing values in STATA, and classification to produce descriptive and statistics. To sum up, this examination and editing process is referred to as statistical data editing (De Waal, 2008).

IV. RESULT AND DISCUSSION**Descriptive Statistics**

Descriptive statistics refers to such measures which have been used to summarize and describe the important features and characteristics of the set of data for the research [(Hafner, 1998), (Mendenhall et al., 2012)]. There can be various methods to describe descriptive statistics of the data such as bar charts, pie charts, line charts and numeric tables. But, in this study, the method of numeric table has been opted to describe the main characteristics of the selected dataset for 100 UK based companies, listed on FTSE100.

The descriptive statistics of the selected dependent; accounting conservatism and independent variable; board gender diversity along with the selected control variables; firm size, leverage, sales growth, and profitability for the whole sample have been mentioned in table 4. This table shows the statistics of

total observations which have been used in this study. Further, mean, median, standard deviation, skewness, kurtosis, Jarque Bera, and probability of the variables have been stated in table 4. One of the most famous tests for normality of regression residuals is the test of (Jarque and Bera, 1987), which has gained great acceptance among econometricians. The test statistic Jarque Bera is a function of the measures of skewness (S) and kurtosis (K) computed from the sample. Using skewness and kurtosis tests to investigate the normality of the dependent and independent variables. Skewness measures the degree of skewness of the statistical distribution around the mean, while kurtosis measures the normality of the distribution (Čisar and Čisar, 2010). Skewness has three cases, 1) positively skewed, 2) negatively skewed, and 3) symmetrically skewed (Bulmer, 1979).

Table 4: Descriptive Statistics

Variable	N	Mean	Median	Std. Dev.	Skewness	Kurtosis	Jarque Bera	Probability
ACCCON	997	-0.015	-0.053	0.5940	5.0837	58.4339	8.1799	0.010
BDV	997	3.1191	3.2189	0.4647	-0.5834	2.58959	9.2134	0.000
FSIZE	997	2.7723	2.7634	0.0783	0.0549	2.86308	11.2214	0.000
LEV	997	0.225	0.2142	0.1518	0.7088	3.3987	12.1511	0.010
PROF	997	0.0977	0.0785	0.1034	1.6809	8.01133	7.0779	0.020
SALEGR	997	0.0712	0.0425	0.3016	3.4514	24.5925	12.4021	0.000

First, the mean value of profitability is 0.0977 whereas it shows a standard deviation of 0.1034 that indicates lower dispersion. Also, the mean values of accounting conservatism, board gender diversity and sale growth are 0.0148, 3.1190 and 0.0712 respectively. The data of mean values shown the lower dispersion. Furthermore, the mean value of firm size is 2.7723, while the standard deviations is 0.078. Larger firms are more likely to be mature and to have a high rich information environment such as more analyst scrutiny and reduce both overall uncertainty and information asymmetries about the expected earnings' viability. However, the larger firms have more complicated business operations and various segments, which may increase the information asymmetry. In general, the empirical evidence in the literature shows that the net effect is that large firms on average have less information asymmetries than the small firms. Furthermore, this suggests less demand for conservatism from large corporations. In addition, Leverage has a mean value of 0.2250, while the Standard Deviation is about 0.1517, which indicates that the higher leveraged firms face the conflict of the agency theory between the managers and the shareholders along with higher demand for conservatism of leveraged firms in United Kingdom.

The lowest skew is accounting conservatism (- 0.92) and the highest skew is sales growth (1.11). It is also indicated that all variables are positively skewed and show satisfactory skewness statistics expect accounting conservatism.

Correlation Matrix

The correlation matrix of the variables elaborates the strength of the relationship among the variables that how they are connected with each other (Steiger, 1980). Further, this matrix of the correlation represents a table which display the relation coefficient of the various variables. Table 5 presents the results of correlation matrix of all the selected dependent, independent and control variables of this study for United Kingdom based companies during the period from year 2009 to year 2020. The correlation matrix indicates the positive correlation between accounting conservatism, board gender diversity, profitability and sale growth. It also indicates that accounting conservatism and board gender diversity are positively correlated with each other. On the other hand, negative correlation exists between accounting conservatism, leverage and firm size. Moreover, it is also evident that multicollinearity issue does not exist in the selected sample of this study.

Table 5: Correlation Matrix

Variable		(1)	(2)	(3)	(4)	(5)	(6)
Accounting Conservatism	(1)	1					
Board Gender Diversity	(2)	0.044	1				
FIRM Size	(3)	-0.0503	0.1885*	1			
Leverage	(4)	-0.0078	0.0215	-0.1037*	1		
Profitability	(5)	0.1357*	0.0578	-0.0995*	0.1633*	1	
Sale Growth	(6)	0.0243	-0.0791*	-0.0256	-0.0578	0.1043*	1

Note: The table displays pairwise correlation coefficients between the variables in the sample. * Denotes statistical significance at the 5% significance level.

Pooled OLS Regression

To test the impact of board gender diversity on accounting conservatism of UK based FTSE100 companies, initially pooled ordinary least squares regression (OLS) model has been used for the selected panel data from year 2009 to year 2020.

Table 6 presents the findings of Pooled Ordinary Least Squares (OLS) for the selected dependent variable; accounting conservatism, independent variable; board gender diversity and other selected control variables which are firm size, leverage, profitability and sale growth of UK based FTSE 100 companies for the period from year 2009 to year 2020.

Note: This table presents results from pooled OLS regressions of dependent and independent variables for a sample of FTSE 100 companies over the period 2009 to 2020. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

Table 6. Pooled OLS Regression

Dependent variable: Accounting conservatism (AC)		
Independent Variables	Coefficient	P-Value
BDIV	0.0053	0.016*
FSIZE	-0.2187	0.000***
LEV	-2.5634	0.000***
PROF	-1.3438	0.004**
SALEGR	-0.0520	0.695
Intercept	6.0701	0.000***
Adj R-squared	0.126	
F (5, 905)	27.16	
Prob > F	0.000***	
No. Obs.	997	
R-Squared	0.131	

As per the findings of table 6, the value of R-squared and adjusted R-Squared are 0.1305 and 0.1257. The value of R-squared indicates that around 13.05% variance in dependent variable has been efficiently predicted by the selected independent variable. Furthermore, the value of F is 27.16 along with probability value of 0.0000 which implies that the prediction of selected dependent variable; accounting conservatism through the selected independent variable; board gender diversity is reliable. It is clearly indicated that board gender diversity can be reliably used to predict accounting conservatism in the selected companies of this study.

The coefficient value of board gender diversity is 0.0052 with the significance value of 0.016. moreover, the coefficient values of firm size and leverage are -0.2186 and -2.5633 with significance value of 0.000. The profitability has the negative coefficient value of 1.3438 with the p-value of 0.004 which indicates that the significance level of profitability at 5%. Moreover, the findings of pooled OLS regression analysis indicate that accounting conservatism is significantly and positively linked with board gender diversity.

On the other hand, this study found significant but negative influence of firm size, leverage and profitability on accounting conservatism which is consistent with the findings of Aguilera & Judge & Terjesen, 2018. As per the findings of pooled OLS regression, there is no significant relationship exist between the accounting conservatism and sale growth of the selected companies. The value of intercept is 6.0701 which is significant and indicates the predicted value of accounting conservatism while assuming all other variables are zero. To conclude the findings of pooled OLS regression model, there is significant and positive impact of board gender diversity on accounting conservatism of the selected UK based FTSE100 companies during the period from year 2009 to year 2020. These findings are consistent with the study of Ahmed and Henry (2012), which also found the positive relationship between gender diversity and accounting conservatism. Furthermore, the study of Aguilera et al. (2018) also found a positive correlation between board diversity and accounting conservatism. Furthermore, a study conducted by Shaw et al. (2021) looked at how the board gender diversity and the firm's performance and audit committee affect the accounting conservatism. This study suggested that institutions with more diversified female board and experienced board members of audit committee have a lower differential of recognizing profit reductions

Random effects Panel Regression Results

After the pooled ordinary least square regression model, the next step is to choose between the fixed effects panel regression model and random effects panel regression model. As this study is based on panel data, so the usage of panel data related regression techniques is more preferable to get more reliable results regarding the impact of board gender diversity on accounting conservatism of UK based FTSE100 during the period from year 2009 to year 2020. To finalize between the fixed effects panel regression and random effects panel regression analysis, Hausman test has been done. The null hypothesis of Hausman test is that random effects panel regression model is suitable while the alternative hypothesis is fixed effects panel regression is suitable to conduct the study analysis (Sheytanova, 2015). The values of Hausman test are mentioned in table 6, the value of Hausman - Chi-squared statistic is 9.03 with the Hausman - P-value of 0.1281 which is clearly not significant. It implies that null hypothesis is accepted which clearly shows that random effects panel regression analysis model is more suitable to test the impact of board gender diversity on accounting conservatism of UK based FTSE 100 firms during the period from year 2009 to year 2020.

Table 6 presents the findings of random effects panel regression model. For the explanations of the significance's test, the consideration is generally on p- value. As per the findings of *Table 4.4*, the value of R-squared is 0.1280. The value of R-squared indicates that around 12.80% variance in dependent variable has been efficiently predicted by the selected independent variable. Generally, the value of R-squared is very important to investigate the variations in a variable that is attributable to changes in another variable. Furthermore, the value of wald chi2 is 69.54 with the p-value of 0.000 which indicates that the null hypothesis has been rejected and at least one of the selected predictors or variables of this study is not equal to zero.

The coefficient value of board gender diversity is 0.0088 with the p-value of 0.032 which is significant at the level of 10%. It indicates that the board gender diversity has an exist positive link with the accounting conservatism and this relationship is significant. Moreover, the coefficient values of firm size and leverage are -0.1955 and -2.3585 with significance value of 0.000. The profitability has the negative coefficient value of 1.7763 with the p-value of 0.001 which indicates that the significance level of profitability at 5%. The coefficient value of sale growth is -0.0862 with the p-value of 0.494 which is not significant.

Table 6. Fixed Effects Panel Regression.

Dependent Variable: C_Score		
Independent Variables	Coefficient	P-Value
BDIV	0.0089	0.032*
FSIZE	-0.1955	0.000***
LEV	-2.3586	0.000***
PROF	-1.7764	0.001**
SALEGR	-0.0862	0.494
Intercept	5.6069	0.000***
No. Obs.	997	
R-Squared	0.027	
Wald chi2(5)	69.54	
Prob > chi2	0.000***	
Hausman-Chi-squared statistic	9.03	
Hausman - P-value	0.1081	
Note: This table presents results from Random effects panel regressions of dependent and independent variables for a sample of FTSE 100 companies over the period 2009 to 2020. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.		

Moreover, the findings of random effects panel regression analysis indicate that accounting conservatism is significantly and positively linked with board gender diversity. On the basis of these findings, it is concluded that this study hypothesis is accepted which states that there is significant and positive relationship exist between board gender diversity and accounting conservatism of the sample of selected UK based FTSE100 companies during the period from year 2009 to year 2020. On the other hand, this study also found firm size, leverage and profitability are significantly but negatively linked with the dependent variable, accounting conservatism of the selected companies in this study. As per the findings of random effects panel regression model, there is no significant relationship exist between the accounting conservatism and sale growth of the selected companies. The value of intercept is 5.6068 which is significant with the p-value of 0.000 and indicates the predicted value of accounting conservatism while assuming all other variables are zero.

To conclude the findings of random effects panel regression model, there is significant and positive impact of board gender diversity on accounting conservatism of the selected UK based FTSE100 companies during the period from year 2009 to year 2020. These findings are consistent with Boussaid et al. (2015) which suggested that board gender diversity is significantly and positively linked with the accounting conservatism. This study also examined that higher proportion of female board directors tend to increase board oversight within the company.

However, the results are not consistent with the findings of Liu et al. (2014) which is not withstanding the projected importance of gender diversity, it is still uncertain that female employees affect accounting decisions. These findings are still not cleared and contradicted. In addition, Conservatism is a cautiously reaction to vagueness. Moreover, if there is no uncertainty, conservatism is not necessary. The more risk and vagueness, the more conservatism is required. The role of conservatism is important to understand the importance of financial reporting, to recognize the importance of conformability and asymmetry conformability, and to minimize the associated issues such as agency problems (Meyabadi and Javid).

Based on the literature studies, board gender diversity is linked with accounting conservatism (Ahmed and Duellman, 2007). In addition, voluntary audit committee formation, increasing board independence, and decreasing board size are positively associated with unconditional accounting conservatism and negatively associated with the degree of conditional conservatism. On the other hand, conflicting evidence found with respect to conditional conservatism based on firms of smaller boards and independent board audit committees are more likely to recognize good news. These results were found after the acceptance of other relevant determinants of accounting conservatism, corporate

governance and ownership influences, unobserved firm heterogeneity and accounting for possible endogeneity between governance structuring and conservative accounting practices.

On the other hand, the relationship between board characteristics and conservatism in accounting has also been examined by Abbas (2020) and suggested that the degree of board independence and ownership of outside directors are positively influenced conditional and unconditional conservatism in accounting of the United States' companies. It is also suggested that there is no significant gender difference between actual and self-assessed (EQ) emotion quotient (Lim, 2011). However, both men and women believe that the level of EQ is higher in men than in women, which explains seven main themes, such as (emotion, cognition/thinking, personality/traits, biology, self-control, culture/beliefs, and research findings). It also indicates a common problem with large boards that if the board is comprised of more than ten persons, the members are found to be indulged in expressing their own ideas instead of discussing those opinions that can be beneficial for the firms in board meetings, but this attitude reduces the managerial inclination to employ conservatism (Lipton and Lorsch, 1992). It is also argued that the larger the board, the less efficient it is based on agency theory (Mohammed et al., 2017).

Moreover, larger boards have a pool of expertise and knowledge, problems such as delayed decision making, free riders, etc. diminish the efficiency of large boards. Such a board is less likely to question the decision-making process of top managers and therefore does not need conservatism. Based on this argument, numerous researchers have empirically demonstrated that there is a negative relation between the size of the board and the accounting conservatism. Consequently, in this research, the findings will show a slight impact of the board gender diversity on the accounting conservatism in the United Kingdom's firms.

The main findings of this study suggested positive and significant relationship existence between accounting conservatism and board gender diversity for the selected sample of United Kingdom based 100 companies which are currently listed on FTSE 100 during the period from year 2009 to year 2020. It is also suggested that board gender diversity does not only increase the investment level in the country, but also improve economic performance of the country, and indirect effects of board gender diversity of the firms tend to increase the accounting conservatism and create employment opportunities in United Kingdom's firms. As well as, based on the finding of this research, the government and policymakers should encourage the inflow of corporate governance and board diversity in country. However, according to the findings of Mohammed et al. (2017), there is no evidence that government-owned firms are more conservative.

One possible reason is that the link between government ownership and accounting conservatism is negligible, because government-owned companies have competitive incentives for financial reporting. Furthermore, the results of this research are consistent with previous studies of Aguilera et al. (2018) which also suggested a positive correlation between board gender diversity and accounting conservatism. Thus, the result has been contributed to the previous studies through reporting an estimation of accounting conservatism among United Kingdom's firms in the time period 2009- until 2020.

Thus, in light of this research's findings, the government and policymakers should promote accounting conservatism and board gender diversity in their country. If the government adopts the suggested recommendations, it will be able to have a positive impact on the accounting conservatism and board gender diversity at UK firms. Especially that representation of women on boards has received a considerable amount of attention in recent years in many firms.

V. CONCLUSION

Decades ago, the effect of gender diversity on the accounting conservatism has been attracted great attention from researchers. However, an overall literature reviews led to a result that there is an effect of the board gender diversity on the level of accounting conservatism. Furthermore, this research empirically examined the relation between the board gender diversity and the accounting conservatism for United Kingdom based 100 companies which are listed on FTSE100 during the period from year 2009 to year 2020. The sample period has been selected from year 2009 to year 2020 after the global financial crisis of year 2008.

To investigate the effects of board gender diversity, this study has initially done descriptive statistics and correlation matrix for the selected data. Descriptive statistics show the total observations which have been used in this study, mean, median, standard deviation, Jarque Bera, and probability of the variables. As per the results of descriptive statistics, the mean values of accounting conservatism, board gender diversity, profitability, leverage and sale growth are 0.0148, 3.1190, 0.0977, 2.7723 and 0.0712 respectively. The data of mean values show the lower dispersion. It implies that larger firms are more likely to be mature and to have a high rich information environment such as more analyst scrutiny and reduce both overall uncertainty and information asymmetries about the expected earnings' viability. However, the larger firms have more complicated business operations and various segments, which may increase the information asymmetry. In general, the empirical evidence in the literature shows that the net effect is that large firms on average have less information asymmetries than the small firms. Furthermore, this suggests less demand for conservatism from large corporations. In addition, it also implies that the higher leveraged firms face the conflict of the agency theory between the managers and the shareholders along with higher demand for conservatism of leveraged firms in United Kingdom. Correlation matrix also indicates that accounting conservatism and board gender diversity are positively correlated with each other. It also shows the positive correlation between accounting conservatism, board gender diversity, profitability and sale growth. On the other hand, negative correlation exists between accounting conservatism, leverage and firm size.

After this, pooled ordinary least square regression analysis has been done to examine the effects of board gender diversity on accounting conservatism of the selected data. As per the findings, the value of R-squared indicates that around 13.05% variance in accounting conservatism has been efficiently predicted by the board gender diversity. Furthermore, the value of F implies that board gender diversity can be reliably used to predict accounting conservatism in the selected companies of this study. Moreover, the findings of pooled OLS regression analysis indicate that accounting conservatism is significantly and positively linked with board gender diversity. On the other hand, this study found significant but negative influence of firm size, leverage and profitability on accounting conservatism which is consistent with the findings of Aguilera & Judge & Terjesen, 2018. As per the findings of pooled OLS regression, there is no significant relationship exist between the accounting conservatism and sale growth of the selected companies. To conclude the findings of pooled OLS regression model, there is significant and positive impact of board gender diversity on accounting conservatism of the selected UK based FTSE100 companies during the period from year 2009 to year 2020.

After the pooled ordinary least square regression model, the next step is to choose between the fixed effects panel regression model and random effects panel regression model which has been selected on the basis of Hausman test. The value of Hausman - Chi-squared statistic is 9.03 with the Hausman - P-value of 0.1281 which is clearly not significant and accept the null hypothesis in the favor of random effect panel regression analysis.

As per the findings of random effect panel regression analysis, the value of R-squared is 0.1280. The value of R-squared indicates that around 12.80% variance in dependent variable has been efficiently predicted by the selected independent variable. Moreover, the findings of random effects panel

regression analysis indicate that accounting conservatism is significantly and positively linked with board gender diversity. On the basis of these findings, it is concluded that this study hypothesis is accepted which states that there is significant there is significant and positive relationship exist between board gender diversity and accounting conservatism of the sample of selected UK based FTSE100 companies during the period from year 2009 to year 2020. On the other hand, this study also found firm size, leverage and profitability are significantly but negatively linked with the dependent variable, accounting conservatism of the selected companies in this study. As per the findings of random effects panel regression model, there is no significant relationship exist between the accounting conservatism and sale growth of the selected companies.

To conclude the findings of all empirical statistical analysis, there is significant and positive impact of board gender diversity on accounting conservatism of the selected UK based FTSE100 companies during the period from year 2009 to year 2020. Additionally, accounting conservatism is significantly but negatively linked with leverage, firm size and profitability. These findings are consistent with Boussaid et al. (2015) which suggested that board gender diversity is significantly and positively linked with the accounting conservatism. This study does not find any significant evidence of the relationship existence between accounting conservatism and sale growth of the selected companies.

Implications

There are some practical implications of this study analysis. The findings of this study will facilitate policy makers to establish more efficient rules and policies regarding the board structure, accounting process in the firms by consider the overall firm performance along with higher returns. Furthermore, it will enable the managers, expertise and decision makers to take more reliable, authentic and efficient decisions. In addition, it will also facilitate analysts to analyze firm's financial performance, help government regulators and authorities to implement policies, help stakeholders to get clear picture regarding the financial performance of the firm.

In addition, the findings of this research are important for auditors as well to enhance the reliability of financial statements during their checking process internally in their organizations. Moreover, the research findings are important for investors, stakeholders, and managers to avoid the agency theory. Thus, this research can be used to develop strategies which can improve the quality of the financial reporting and the quality for the decision making in the boards regarding the diversity. These findings are important for government and authorities to ensure friendly environment for business, improvement in educational sector, improvement in industrial sector, ensure political stability, and improvement in quality of financial reporting.

Limitations and suggestion for future research

Like other studies, this research also some study limitations. The first limitation is concerned with the limited sample size (i.e., 100 companies only) which may be insufficient to represent the population that having board gender diversity and the accounting conservatism in UK, thereby affecting the reliability of the research. Moreover, the second limitation relates certain sectors of the population are excluded, which may be significant for the research. Furthermore, the third research limitation is limited time period which is only 12 years starting from 2009 until 2020, thus the research can't generalize the result of UK firms. Thus, the fourth limitation is related to the factors of this research, in which the data may have other factors that may impact.

Future research should consider a bigger research sample, including firms with different backgrounds, geographic locations not only UK, and different time series. Thus, it can achieve the positive impact of board gender diversity on UK firms' accounting conservatism. Furthermore, future research should examine other factors that they might effect on the accounting conservatism with different industries.

Conflict of interest: The authors declare that they have no conflict of interest.

Ethical statement: The authors declare that they have followed ethical responsibilities.

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