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The governing role of board gender diversity on conditional accounting conservatism and executive remuneration: performance-based versus equity-based remunerations

Reem Essam Bedeir[1*]

Abstract

This study examines the governing role of gender diversity on the board of directors on conditional accounting conservatism and executive remuneration. Using proprietary data about women representation on the board of directors to investigate the impact on the choice between accounting methods and the structure of executives remuneration. A sample of listed firms on the London Stock Exchange from 2019 to 2022 is used. The results first document that firms exhibit a higher level of conditional accounting conservatism when women represent a larger fraction of the board. The analyses further establish different relationships between performance-based versus equity-based remunerations and conditional accounting conservatism. Last, the results show that women representation is related to pay out policy and its impact on conditional accounting conservatism. The findings also offer novel insights on the governing role and consequences of gender diversity of woman chairperson and/or woman CEO. Overall, contrary to notions of opportunistic behavior of executives, the results find that boards achieve more level of governance with more women representation.

Keywords Corporate governance, Gender diversity, Boards structure, Women directors, Accounting conservatism, Executives remuneration, Stock option

Introduction

Recently, one of the key aspects of corporate governance can be identified as board gender diversity. As far as board gender diversity is concerned, market regulators and policy makers start to formulate guidelines about how the board gender diversity would be applied in real forms [26]. Corporate governance tends to be more concerned with the present of women on the board of directors, which can result in enhancing firm performance and achieving competitive edge. Board gender diversity is one of the leading causes of creativity and innovation in the process of decision making [61]. Supporters of the gender socialization theory agree that women and men differ not only in the physical attributes but also in the way in which they manage corporates. For instance, firms with women representation on the board of directors are less likely to manipulate securities, earnings and involve in tax avoidance [14, 46, 57]. Furthermore, women tend to perform better than men in taking together the interests of stockholders well as the interests of managers [32]. There are similarities between the attitudes expressed by women which are described by

*Correspondence:
Reem Essam Bedeir
Reem.bedeir@foc.cu.edu.eg
[1] Accounting Department, Faculty of Commerce, Cairo University, Giza, Egypt

sociology, psychology and economics literatures. Women are less overconfident, less aggressive and less assertive than men; however, they are more ethical and determined [51, 63]. Therefore, women have the qualities to be conservative and are less likely to commit fraud [4].

In the new global effort, gender equality has become a central issue for the United Nations (UN). In September 2015, the UN popularizes the term '2030 Agenda' to describe a worldwide agenda of achieving humanitarian and environmental welfare and prosperity. This agenda is designed to work on 17 Sustainable and Development Goals (SDGs) in 169 worldwide zones [62]. This study will give an account of SDG No. 5 "Achieve gender equality and empower all women and girls". Along with this growth in the UN efforts toward humanitarian and environmental welfare, however, there is increasing concern over gender equality. Gender discrimination in many developing and even in developed countries is reflected in unequal access to education, healthcare and equal pay, in addition to lower representation in social and political life along with business leadership. More recent attention has focused on the provision of SDG No. 5, which contributes to global equality and welfare of women worldwide. SDG No. 5 is structured in 9 approaches designed to be adjusted to fit with most of the special circumstances of each level of society in order to achieve SD goals of ending gender discriminations [1], [62]). Along with the growth in gender equality, there is increasing concern over women representation on corporates board of directors. Board gender diversity is a major area of interest within the field of exploring the impact of board characteristics on different aspects of corporate. Previous studies have examined the impact of board gender diversity on firm performance, firm value, corporate governance and corporate culture. There is a number of regulations enforcing greater representation of women on corporate boards. In recent years, many governments have enacted a variety of legislation of women representation on corporate board of directors. However, generally these legislations are range from 33 to 50% of women representation, also from 3 to 5 years of tenure frame. Noteworthy, governments have issued penalties for any violation of these legislations. For instance, in February 2010, the SEC has issued "*Report of the New York Stock Exchange Commission on Corporate Governance*", in which SEC requires public firms to disclose about the implementation and the evaluation of gender diversity of board members. Similarly, in October 2012, the British government has issued "*The UK Corporate Governance Code*", in which it is highlighted the compliance of disclosure about the policy which each board adopts about gender diversity in the corporate management [2]. Recently, in 2021 the Financial Regulatory Authority, Egypt, has amended the rules of women representation on board of listed firms to increase it to be 25% of board members [18]. Gender equality may have contributed to the increase in the number of scholars exploring the role of board gender diversity of women representation on distinct aspects of corporate. Levi et al. [48] explore the relationship between gender of corporate directors and mergers and acquisitions (M&A) decisions. Evgeniou and Vermaelen [17] investigate gender diversity and stock repurchasing. McGuinness et al. [52] suggest a link may exist between board gender and CSR performance. Baker et al. [4] comprehensively investigate the impact of board gender diversity on wide range of corporate characteristics. Furthermore, the main motivations behind board gender diversity are documented on different levels of economy. For instance, with macro economy scholars analyze the laws and the culture of a corporate society and its gender diversity. On firm level, empirical evidence is found about the impact of firm size, industry type and corporate strategy on board gender diversity. From individual level, gender diversity in executives recruiting and individuals networking are also investigated [44].

There have been a number of empirical studies involving board gender diversity have studied women representation on board structure. Most studies in the field of board gender diversity have only focused on investigating the impact on firm outputs [8, 14, 19, 22, 25, 26, 32]. However, few writers have been able to draw on any systematic research into the impact of board gender diversity on firm inputs. Researchers have been investigating the differences in corporate decision making when the person in charge is female rather than male. More recently, literature has emerged that offers contradictory findings about the impact of gender diversity on accounting corporate decisions. For instance, increase representation of women on corporate board decreases the likelihood of earnings management using discretionary accruals [5, 56]. In contrast to earlier findings, however, no evidence is detected of the impact of gender diversity on tax avoidance [15] and on earnings management using discretionary accruals [27]. Thus, further work is required to establish a greater degree of accuracy on this matter. Drawing upon these two stands of research into the impact of board gender diversity on different accounting aspects, this study attempts to in-depth analyze the relationship between women representation on board of directors and conditional accounting conservatism.

Conditional accounting conservatism is an important component in corporate investment decisions and plays a key role in reducing investments and withdrawing from projects with negative NPV and with poor performance

[23]. According to a definition provided by Basu in 1997, conditional accounting conservatism is a faster recognition of economic losses than economic gains. Most studies in the field of conditional accounting conservatism have only focused on investigating the consequences of adopting conservative accounting methods. For instance, debt financing [55] earnings management [24], litigation risk [45]. Therefore, a greater focus on board structure and corporate governance mechanisms could produce interesting findings that account more for increasing conditional accounting conservatism. It is found that as levels of conservatism in investment decisions rise the agency problem is mitigated. Several studies thus far have linked accounting conservatism with corporate governance [42]. As it is hypothesized that if the board structure is highly diversified, the CEOs are more likely to adopt more conservative accounting methods. Thus, more accounting conservatism would help CEOs to establish a greater degree of accuracy in investment decisions. A key policy priority should therefore be to plan for adopting conditional accounting conservatism to create long-term firm value [36]. Therefore, given prior literature linking conservatism to increased investment efficiency the arguments in this paper would lead to investigate the impact of gender diversity of women representation on board of directors on conditional accounting conservatism.

In accordance with agency theory, owners assign executives to take over firm management and to be responsible for different corporate decisions of operations, investments and finance. Accordingly, executives use their authority over firm management and choose between accounting methods that reflect the real financial position of firms. There are, however, other possible fact that executives may have opportunistic behavior in using accounting methods to maximize their benefits against owners`. In the same vein, the optimal contracting theory indicates that executives best utilize firm strategies to meet their benefits. Also, with much knowledge about the role of board of directors in hoarding bad news [6], manipulated reported earnings and maximize their benefits against stockholder's [60], board structure would lead to less conditional accounting conservatism. The agency theory holds the view that managers work to maximize their own benefits against shareholders'. Agency theory distinguishes two different types of agency problems which arise due to information asymmetry. These two divergent and often interdependent types are internal and external approaches of agency problem. The first one, the external, emerges from information asymmetry between firm executives and stakeholders. The second one, the internal, emerges from information asymmetry between firm executives and shareholders [35]. Corporate failures and executives' fraudulent behavior have heightened the need for corporate governance. Thus, corporate governance mechanisms are considered as important components in governing corporate system and play a key role mitigating the opportunistic behavior of managers. Effective mechanisms of corporate governance could mitigate agency cost and increase firm value [33]. One of the most significant current discussions in the legal and moral philosophy of corporate governance is about gender diversity and executive remunerations [22, 49]. Therefore, further in this paper, an additional aspect of a relationship is added to the investigation to describe corporate governance which is executive remuneration. This aspect seeks to develop an understanding of the interdependencies between corporate governance mechanics (i.e., board gender diversity and executive remunerations) and their impact on conditional accounting conservatism. With successive increases in the conflict of interest between managers and shareholders, the remuneration structure moved further to adopt a new approach. This payment approach was specifically designed to evaluate factors related to managers' performance. As a result, executive remuneration is considered as a performance-based pay policy. Also, executive remuneration is an increasingly important area in applying corporate governance. A considerable amount of literature has been studied on the different components of executive remunerations (e.g., cash payments, stock options and benefits schemes). Therefore, literature has emerged that links executive remunerations to most firm performance indicators. In broad theoretical terms, executive remuneration is probably the best-known mechanism of the agency theory. Therefore, there are two basic approaches currently being adopted in research into corporate governance. One is the internal mechanisms approach, and the other is external mechanisms. The board gender diversity and executive remuneration methods are one of the more internal practical ways of governing corporate and mitigate information asymmetry. It is also worth noting that conditional accounting conservatism is significantly more affected by how board gender diversity affects executive remuneration. Prior literature has been documented the relationship between board gender diversity and executive remuneration [2, 22]. In the same way, a number of researchers have reported a relationship between board gender diversity and conditional accounting conservatism [19, 26]. Previous evidence in accounting conservatism investigates the relationship with wide range of firm-specific characteristics Based upon these empirical studies this paper expands the investigation to cover some attributes of board of directors of gender diversity, executives remuneration and conditional accounting conservatism.

Recent literature has investigated and documented a negative relationship between executive remunerations and conditional accounting conservatism. The observed negative correlation between executive remunerations and conditional accounting conservatism might be explained in several ways. The most significant is that managers behave in an opportunistic way to overestimate accounting values (e.g., net income and net assets) to increase their remuneration when firms adopt performance-based pay policy [59]. However, such explanations tend to overlook the fact that there are other factors that have to be considered when investigating the relationship between executive remunerations and conditional accounting conservatism. Thus, this study provides an exciting opportunity to advance the knowledge of the relationship between executive remunerations and conditional accounting conservatism while providing additional evidence with respect to board gender diversity. As it is expected to reduce the negative relationship between executive remunerations and conditional accounting conservatism by incorporating into the analysis board gender diversity of women representation on the board of directors. This analysis is checked when initially performed the model of the relationship of executive remunerations and conditional accounting conservatism and then checked again at the end of the empirical model with representing the role of women in the board of directors.

This study aims to contribute to this growing area of research in several aspects. It provides evidence about to the continuance debate of women representation on corporate boards in which has gained fresh prominence with many arguing that it enhances corporate governance. If the debate is to be moved forward, a better understanding of the role of women representation needs to be developed. The study offers some important insights into the impact of women representation on the board of directors on the conditional accounting conservatism. Furthermore, this study extends prior literature and intends to determine the extent to which and whether the relationship between executive remunerations and conditional accounting conservatism varies according to women representation on the board of directors. This investigation has important implications to be developed, as literature provides evidence about the impact of board gender diversity on conditional accounting conservatism [26]. This study supports previous research into this brain area which links board gender diversity and conditional accounting conservatism on one hand and between board gender diversity, executive remuneration and conditional accounting conservatism on the other hand. Using tool from accounting perspective, this paper contributes to this latter line of literature by investigating the role of women representation on corporate board in one coherent model of firm-level characteristics (i.e., conditional accounting conservatism). Furthermore, this study adds to the model of executive remuneration to investigate the effect of the board gender diversity of firms which has not been analyzed previously. In addition, the author introduces a new and convenient classification of executive remuneration. As it is classified into three categories based on the payment driver of fixed, performance-based and equity-based remunerations. The analysis provides additional evidence regarding the relationship between executive remuneration and conditional accounting conservatism with respect to performance-based versus equity-based remunerations. A further analysis with more focus on woman chairperson and/or woman CEO is therefore investigated in the additional test. Collectively, this study outlines a critical linkage between board gender diversity, executive remuneration and conditional accounting conservatism. Next section reviews the literature and develops hypothesis. Sections III and IV present research design and empirical results, respectively. Section V provides additional test and section VI discuses main results and VII concludes the study.

Related literature and hypothesis development

Board gender diversity—the women representation

Women empowerment is now considered a worldwide demand and is associated with gender diversity. Women representation on the board of directors is generally seen as a factor strongly related to corporate governance to reduce information asymmetry and increase the alignment of interests between managers and stockholders. The literature of gender diversity on board of directors, with respect to risk management, provides additional evidence of differences between women and men. Agency theory suggests that the problem of risk management may have been caused by the weak link that exists between the agent (the manager) and the principal (the owner) which results in variation in risk management decisions. Generally, women and men differ in their way of risk management. Women tend to be more risk averse, therefore, they are less risk-takers than men and avoiding making challenging decisions. Also, executive women are slower than men at certain precision decisions, such as adopting aggressive strategies and making challenging investment decisions. Therefore, executive women are more likely to decrease the financial failure and promote firm stability than executive men [12]. According to the frequency of attending board meeting, women make more presence than men in board meeting which emphasis on their effective role of controlling over men. Women tend to perform better than men on teamwork due to their abilities to manage teams and listen to all team members [58]. Therefore, gender diversity of women representation on the board of directors enriches board meeting with different attitude of increasing monitoring role. On the other hand, executive women could lower the overconfidence of executive men of making risky decisions. Women's participation in board meetings often reveals a competitive spirit that may influence the direction of board decisions, especially when male executives deliberately seek to reach complete agreement on a particular decision which might be in their favor [12]. Recently, Lefley and Janecek [47] challenge the effectiveness of women representation on board of directors using critical mass theory. They highlight the importance of board structure in overcoming the decrease in the number of women on board as a measure of women's effectiveness.

Previous research has indicated that women representation on the board of directors has a positive impact in different aspects of firm performance. For instance, gender diversity on the board of directors is linked to achieving more independence on the board and achieving more profitability [11]. These results are consistent with those of Bennouri et al. [8] with evidence of French sample and Salloum et al. [58] with a sample from MENA region. Similarly, however, with sample of banking firms, Pathan and Faff [54] prior SOX Act in 2002, Owen and Temesvary [53] with US-banking firms and García-Meca et al. [25] with Spanish banking firms, find a positive relationship between bank performance and women representation on the board of directors. Corporate governance tends to be more concerned with the present of women on the board of directors, which can result in enhancing firm performance and achieving competitive edge. More specifically, prior observations suggest that there is a link between board gender diversity and financial reporting quality. Peni and Vahamaa [56] find that women representation on the board of directors positively affects accounting quality measured by conservatism and risk avoidance. Srinidhi et al. [60] indicate that board gender diversity has a positive impact on earnings quality. Gul et al. [31] find that representation of women on the board of directors has positive relationship with ethical conduct and negative relationship with information asymmetry. Ho et al. [34] argue that more diversity on the board of directors emphasizes on sound internal control system and maintains reporting quality. Githaiga [28] finds evidence about the synthesized role of board gender diversity and sustainability reporting in mitigating earnings management.

Much of the current literature on corporate governance literature pays particular attention to conditional accounting conservatism. This could be attributed to the role of conditional accounting conservatism in promoting firm governance. In addition, conservative accounting methods are one of the more practical ways of eliminating managerial opportunistic behavior and reducing information asymmetry between managers and stockholders. Research has consistently shown that accounting conservatism can result in enhancing the information content of earnings and mitigating earnings manipulation [3].

There has been little quantitative analysis to investigate the relationship between board gender diversity and conditional accounting conservatism. However, García Lara et al. [24] find that firms with strong corporate governance are making more sound corporate decisions measured by accounting conservatism. In addition, [35] confirm that a board of directors with more representation of outsider executives is less likely to report earnings restatements. The results obtained from reviewing prior literature of board gender diversity seem to provide some evidence to indicate that women are more risk averse than men. While board of directors are responsible for making and monitoring financial decisions align with women representation on board of directors, this results in faster recognition of economic losses than economic gains. The recognition and measurement therefore would be exercised with more caution. As discussed above, women on the board of directors are likely to make more conservative decisions. Executive women tend to be more conservative than executive men on choosing between accounting methods. Conditional accounting conservatism varies with the structure of board of directors. As it varies with the level of gender diversity of women representation on the board structure. On one hand accounting conservatism align with the interest of regulators and policy makers, leading to better risk avoidance and/or risk management. This better risk management reduce the likelihood of corporate failure. On the other hand, the decreased risk taking created by accounting conservatism can lead to higher level of corporate governance to sustain expectations [13]. Therefore, drawing on critical mass theory, this study uses the percentage of women representation on the board of directors as indication of board gender diversity, this leads to the first hypothesis as follows:

Hypothesis$_1$ Gender diversity of women representation on the board of directors is positively associated with conditional accounting conservatism.

Executive remuneration: performance-based versus *equity-based remunerations*

A conceptual theoretical framework of agency problem is based on that managers and shareholders have different interests. Therefore, managers may behave in an opportunistic way to maximize their benefit and work against shareholders' favor. Debate continues about the best strategy for managing the conflict of interest between managers and shareholders. Many scholars hold the view that executive remuneration as an internal mechanism of corporate governance has been successfully able to control agency problem. Prior literature generally classifies executive remuneration according to its base of payment into two schemes: 1- non-performance-based pay (e.g., fixed salary) and 2- performance-based pay (e.g., bonus). Non-performance-based pay has the advantage that executives are certain of receiving their payment. While performance-based pay depends on the executive performance in the short term. Performance-based pay is used to motivate managers to achieve corporate goals in a one-year period. However, executives might incorporate in performance manipulation to affect their performance-based pay [56, 64]. In addition to these two main schemes of remuneration and in order to maintain current executives and/or to attract new capable ones, firms pay executives additionally different types of remuneration such as fringe benefits, stock, stock options and other deferred compensation. Fringe benefits are non-cash benefits paid for executives in the form of car, food and/or medical services. Stocks are granted to executives in the form of their remuneration. Granted stocks to executives reduce the cash outflow of the company. In the event that executives retain the ownership of stocks this leads to the creation of incentive to enhance stock performance in the long term. While stock option is to give executives the right to purchase a predetermined number of stocks at a predetermined price for a predetermined period. Finally with other deferred compensation which has commonly been assumed that executives receive deferred compensation after retirement in the form of a pension scheme [33]. It is beyond the scope of this study to examine all these types of executive remuneration separately. This paper will give an account of executive remuneration according to its relationship to board gender diversity of women representation and conditional accounting conservatism.

Factors thought to be influencing the scheme of executive remuneration have been explored in several studies. In particular, two main approaches to understand how executive remuneration are designed. The first approach: the "Optimal Scheme" in which the executive remunerations scheme is developed to reflect the equilibrium price in the fair executives' market. The second approach: the "Executive Power Scheme" in which executives receive their remunerations depends on their power and control over payment policy in their firms [30]. Most studies in the field of executive remunerations have only focused on the executive power scheme to explain the structure of executive remunerations. Prior studies have noted the importance of executives' power to address different characteristics of board of directors such as overconfidence [38] and choices between accounting methods such as accounting conservatism [36]. Much of literature on executive remunerations pays particular attention to the attributes of executive remunerations. Li et al. [49] reveal the various components of executive remuneration schemes and the weight of equity-based remuneration in each scheme. Carberry et al. [10] have also determined other attributes of executive remuneration depending on the distance between executive interest and stockholders interest measured by sensitivity to stock price. Gao et al. [21] identify distinct important attribute of executive remuneration in which it is linked to risk management proxied by the sensitivity to stock volatility. Khan et al. [43] find a significant linkage between the existence of remuneration committee and the CEOs payment and tenure. Another perspective could be added to the growing body of literature of executive remuneration that links performance evaluation to the timescale of their payment. Gopalan et al. [29] investigate how the performance evaluation shapes the contract timescale of executives. Evans et al. [16] find that short term contracts of executive remuneration are assigned for less experienced executives.

Prior literature outlines a critical role for conditional accounting conservatism in setting agency problem. Scholars prove that choosing between accounting methods to achieve conditional accounting conservatism contributes to revoke agency problem between managers and owners. García Lara et al. [23] illustrate that accounting conservatism is generally seen as a factor strongly related to corporate governance. As in the process of financial reporting, conditional accounting conservatism emphasizes on early recognition of losses rather than profits. Such accounting application facilities the monitoring role of debt issuers and creditors over debt contracting processes. Kronenberger and Laux [45] provide strong evidence that corporate dept contracting is improved in the long term due to practicing conditional accounting conservatism. Also, Hui et al. [37] find that conditional accounting conservatism may have played a vital role in weaken the levels of information asymmetry. Also, in reviewing the literature about the relationship between executive remuneration and choice of accounting methods, strong evidence of a relationship is found. Shalev et al. [59] suggest that there is a link between goodwill overpricing and executive bonus. Friedman [20] finds evidence that CEOs force CFOs to increase accounting estimates which may have contributed to the increase in their compensations. More specifically, previous studies have revealed the link between executive remuneration and conditional accounting conservatism. Conditional accounting conservatism controls the managerial opportunistic behavior of maximizing their remunerations and achieving their benefits over the shareholders wealth and benefits. Conditional accounting conservatism reduces managerial ability to manipulate income in the case of performance-based pay policy. Iyengar and Zampelli [40] find that unconditional accounting conservatism increases the linkage between CEOs compensation and reported earnings. This view is supported by Hui et al. [37] who write that applying accounting conservatism is more likely to reduce the connection between CEOs cash remuneration and accounting results. On the other hand, in spite of much knowledge about the relationship between executive remuneration and accounting conservatism some research has been carried out to reach different conclusions. Iyengar and Zampelli [40] show that unconditional accounting conservatism tends to have greater impact to increase executive remuneration sensitivity to accounting reporting. Iwasaki et al. [39] find a positive correlation between asymmetric reporting of earnings and extra payment of managers. Also, a positive relationship between accounting conservation and performance-based pay has been provided using a sample of Chinese listed firms [64] and with equity-based compensation using US data [41], also, with executive remuneration in Japanese firms [39]. In the end, conditional accounting conservatism is selected as a tool for the stockholders to control over managerial opportunistic behavior and enhance the reliability of financial reporting. On this basis, it is expected to find negative relationship between executive remuneration and conditional accounting conservatism. The previous discussion leads to the second hypothesis as follows:

Hypothesis$_2$ Executive remuneration is negatively associated with conditional accounting conservatism.

Prior literature limits executive remuneration into two classifications of non-performance-based and performance-based remunerations. Since 1990s, executive remunerations have experienced an increase in term of equity-based pay policy. During the past 30 years, many more executives have become owners in their firms through using stock options to align executives interest with stockholders interest. In this study, the author proposes a new classification of executive remuneration into three main categories based on the payment driver. The first category is fixed remuneration which consists of fixed cash salary, benefits, and pension contribution. The second category is performance-based remuneration which is paid depending on executive performance on short term (one year). The third category is equity-based remuneration which is paid in the form of stocks on long term (3–5 years). Along with this investigation into executive remuneration, however, there is increasing concern over equity-based pay as a part of executive remuneration scheme. In accordance with this concern, previous studies have demonstrated that managers are more likely to take risky projects to overestimate stock prices when their remuneration is equity-based [50]. The findings of prior literature tend to overlook the fact that there are limits to how far the executives can affect stock price. Stock prices are less likely to be manipulated by executives as stocks are less controllable. In addition, equity-based remuneration increases executive ownership which may be linked to managerial behavior of risk aversion. Therefore, executives may avoid risky projects and be more conservative in choosing between accounting methods when their remunerations are paid in the form of equity-based. In the literature on executive remuneration, the relative importance of equity-based remuneration has been subject to considerable debate. Therefore, in this study the investigations are developed to find a negative relationship between performance-based remuneration and conditional accounting conservatism. While this relationship turns to be positive when adopting equity-based remuneration. This discussion leads to subdivide the second hypothesis into the following sub-hypotheses:

Hypothesis$_{2a}$ Performance-based executive remuneration is negatively associated with conditional accounting conservatism.

Hypothesis$_{2b}$ Equity-based executive remuneration is positively associated with conditional accounting conservatism.

One source of corporate governance in this study driven by board gender diversity which could have affected the levels of conditional accounting conservatism is executive remuneration. Literature observations suggest that there is a link between board gender diversity and conditional accounting conservatism, this study expands literature by expecting the effect of board gender diversity on executive remuneration to affect conditional accounting conservatism. Firms with women representation on board are conditionally accounting conservative which is tested on H_1 above. If executives manipulate real firm performance and reported earnings this would be risky and costly [24]. However, this assumption works for firms which benefits from such manipulation to affect executive remuneration. Firms with such executive pay policy are more likely to have less conditional accounting conservatism. Therefore, this study`s argument relies too heavily on qualitative analysis of the role of gender diversity of women representation on the board of directors on a relationship exists between executive remuneration and conditional accounting conservatism. The present study provides additional evidence with respect to gender diversity, executive renumeration and accounting decisions. One question that needs to be asked, however, is whether women executives and executive renumeration have different effect on the choices of accounting methods. Given that a more women representation on the board of directors can also trigger more conditional accounting conservatism. Therefore, this study further hypothesizes that the women representation on the board of directors is likely to decrease the negative relationship between executive remuneration and conditional accounting conservatism. This leads to the 3rd hypothesis as follows:

$Hypothesis_3$ The negative relationship between executive remuneration and conditional accounting conservatism is weaker in firms with more women representation on the board of directors.

Data and methodology

Data and sample selection

Generally, compliance with women representation on board of directors is applied though two distinct approaches: the voluntary approach and the quota-based approach. The late approach is adopted in many developed and developing jurisdiction. For instance, in Belgium, Finland, France, Germany, Italy and Kenya, where the percentage of women representation on the board of directors is identified by state legislation. In contrast, the voluntary approach, which is adopted in the UK, the women representation on the board of directors is identified depending on each corporate structure and culture. Using sample from the UK, the author is able to indicate strong evidence of the governing role of board gender diversity on conditional accounting conservatism and executive remuneration [9]. To investigate the relationships among board gender diversity, executive remuneration and conditional accounting conservatism data are obtained from different sources. Data about women representation in the board of directors, executive remuneration and conditional accounting conservatism are obtained from BoardEx, ExecComp and COMPUSTAT, respectively. The initial sample consists of all listed firms on the London Stock Exchange from 2019 to 2022. Following prior literature firms from financial sectors and firms with missing data about the main variable from the baseline model are excluded from the final sample. A reasonable approach which is taken to tackle the issue of outlier is to remove the 1st and 99th percentile of each variable (except dummy variable). The final sample consists of (551) firm-year observations.

Empirical measures

The measure of board gender diversity is widely available and has been used in many investigational studies. Board gender diversity of women representation is measured drawing on critical mass theory. Depending on critical mass theory this study uses the ratio of the number of women in the board of directors to total board size ($WOMEN_{i,t}$) as a measure for board gender diversity [47].

In reviewing the literature about measures of executive remuneration (e.g., [37, 49]) this study uses six sets of remuneration schemes that executives commonly receive as compensation for their work. First set: fixed remuneration ($FIX\_REM_{i,t}$) which consists of basic salary, benefits and pension contributions. Second set: performance-based remuneration ($PERFORMANCE\_REM_{i,t}$) which is paid depending on executive performance on short term (one year). Third set: equity-based remuneration ($EQUITY\_REM_{i,t}$) which is paid in the form of stocks on long-term (3–5 years). Fourth set: pensions ($PEN\_REM_{i,t}$) which are paid at the time of executives retirement and commonly paid as a percentage of fixed salary. Fifth set: executive benefits ($BEN\_REM_{i,t}$) which are used to attract and retain capable executives such as car allowance and/or health insurance. Sixth set: total executive remunerations.

($REMUNERATION_{i,t}$) which is the sum of all sorts of executive remunerations, see Table 1 for variable definitions.

The methodological approach taken in this study to measure conditional accounting conservatism is based on three key aspects which are used in Hui et al. [37]. These key three aspects can be listed as: the firm size, the firm leverage and the market-to-book ratio. Initially, the following regression model is developed and then the accounting conservatism is measured:

Table 1 Variables definition

Variable	Definition
Main variables	
$\boldsymbol{WOMEN_{i,t}}$	Women representation on the board of directors, equals the ratio of the number of women in the board of directors to total board size for firm i at year t
$\boldsymbol{CONSERVATISM_{i,t}}$	The Conditional Accounting Conservatism score for firm i at year t, see model (1) and (2)
$\boldsymbol{REMUNERATION_{i,t}}$	Executive Remuneration for firm i at year t, includes: i. Fixed Remuneration ($FIX\_REM_{i,t}$) equals to the natural logarithm of the sum of cash salary, benefits, and pension contribution ii. Performance-based Remuneration ($PERFORMANCE\_REM_{i,t}$) equals to the natural logarithm of what is paid depending on executives performance in one year iii. Equity-based Remuneration ($EQUITY\_REM_{i,t}$) equals to the natural logarithm of what is paid in the form of stocks on long-term (3–5 years) iv. Pensions ($PEN\_REM_{i,t}$) equals to the natural logarithm of what is paid at the time of executives retirement and commonly paid as a percentage of fixed salary v. Benefits ($BEN\_REM_{i,t}$) equals to the natural logarithm of what is paid to attract and retain capable executives such as car allowance and/or health insurance vi. Total Executive Remunerations ($REMUNERATION_{i,t}$) equals to the natural logarithm of the sum of all five sorts of executive remunerations. (after avoiding duplicates)
$\boldsymbol{F\_Controls_{i,t-1}}$	Control variables- firm characteristics
$\boldsymbol{SIZE_{i,t-1}}$	Firm Size, equals to the natural logarithm of total assets for firm i at the end of year t-1
$\boldsymbol{M_{i,t-1}/B_{i,t-1}}$	Market to Book Value, equals to market value to the book value of equity for firm i at the end of year t-1
$\boldsymbol{Lev_{i,t-1}}$	Leverage, equals to the ratio of total debt to total equity for firm i at the end of year t-1
$\boldsymbol{B\_Controls_{i,t}}$	Control variables- board characteristics
$\boldsymbol{B.MEETs_{i,t}}$	Board Meetings, equals to the natural logarithm of total number of board meeting for firm i during year t
$\boldsymbol{B.SIZE_{i,t}}$	Board Size, equals to the natural logarithm of total number of directors on the board for firm i during year t
$\boldsymbol{DUALITY_{i,t}}$	CEOs Duality, indicator variable equals one if CEOs functions as chairman, and zero otherwise for firm i at year t
$\boldsymbol{TENURE_{i,t}}$	CEOs Tenure, equals to the natural logarithm of average number of years of CEO tenure for firm i at year t
Additional analyses variables	
$\boldsymbol{WOMAN\_CHAIR_{i,t}}$	Woman serves as a chairperson of the board of directors, indicator variable equals to one if chairperson is woman, and zero otherwise for firm i at year t
$\boldsymbol{WOMAN\_CEO_{i,t}}$	Woman serves as a CEO of the board of directors, indicator variable equals to one if CEO is woman, and zero otherwise for firm i at year t

$$\begin{aligned} X_i =& \beta_1 + \beta_2 D_i + R_i(\mu_1 + \mu_2 Size_i + \mu_3 M_i/B_i + \mu_4 Lev_i) \\ &+ D_i R_i(\lambda_1 + \lambda_2 Size_i + \lambda_3 M_i/B_i + \lambda_4 Lev_i) \\ &+ (\delta_1 Size_i + \delta_2 M_i/B_i + \delta_3 Lev_i + \delta_4 D_i Size_i \\ &+ \delta_5 D_i M_i/B_i + \delta_6 D_i Lev_i) + \varepsilon_i \end{aligned} \tag{1}$$

where R_i is the stock return, D_i is indicator variable equal 1 if R_i is less than zero and zero otherwise, $Size_i$ is the natural algorithm of total assets, M_i/B_i is the market to book ratio, Lev_i is the financial leverage. To calculate the conservatism score the following regression model is used:

$$\begin{aligned} CONSERVATISM_{i,t} = \lambda_{1,t} + \lambda_{2,t} Size_{i,t} \\ + \lambda_{3,t} M_{i,t}/B_{i,t} + \lambda_{4,t} Lev_{i,t} \end{aligned} \tag{2}$$

where $\left(Conservatism_{\ i,t}\right)$ is the conditional accounting conservatism score for firm i in year t. Along with growth in $\left(Conservatism_{\ i,t}\right)$, there is increasing in accounting conservatism [37].

Empirical models

The main purpose of this study is to identify means of better associating corporate governance mechanisms with corporate decisions. It begins by examining the significance of gender diversity of women representation on the board of directors in the rise of conditional accounting conservatism. The following baseline model is estimated to test the 1st hypothesis that gender diversity of women representation on the board of directors is positively associated with conditional accounting conservatism:

$$\begin{aligned} CONSERVATISM_{i,t} = \beta_0 + \beta_1 WOMEN_{i,t} \\ + \beta_2 \sum F\_Controls_{i,t-1} \\ + \beta_3 \sum B\_Controls_{i,t} + \varepsilon_t \end{aligned} \tag{3}$$

This study uses a set of control variables to avoid the problem of biased results. Therefore, the baseline model controls for two groups of firm-level characteristics.

Table 2 Descriptive statistics

	Mean	Median	SD	25%	75%
Main variables					
$WOMEN_{i,t}$	0.26	0.22	0.82	0.14	0.27
$CONSERVATISM_{i,t}$	0.07	0.06	0.08	0.04	0.08
$REMUNERATION_{i,t}$	14.86	14.79	0.65	14.45	15.18
$PERFORMANCE\_REM_{i,t}$	12.06	13.23	3.94	12.60	13.74
$EQUITY\_REM_{i,t}$	13.13	13.94	3.71	13.49	14.47
Control variables- firm characteristics					
$SIZE_{i,t-1}$	8.05	7.88	1.43	7.09	8.69
$M_{i,t-1}/B_{i,t-1}$	1.39	0.98	1.37	0.61	1.72
$Lev_{i,t-1}$	0.96	0.54	1.65	0.22	1.04
Control variables- board characteristics					
$B.MEETs_{i,t}$	2.03	2	0.26	2	2
$B.SIZE_{i,t}$	2.07	2	0.26	2	2
$DUALITY_{i,t}$	0.02	0.00	0.14	0.00	0.00
$TENURE_{i,t}$	1.38	1.49	1.07	0.69	2.20
Obs	551	551	551	551	551

The first group is to control for firm characteristics $(F\_Controls_{i,t-1})$ of firm size, market to book ratio and leverage [37]. The effect of causality is taken into account and controlled with the lagged effect for one year. Therefore, firm characteristics include the lagged value of firm size $\left(SIZE_{i,t-1}\right)$, market to book ratio $(M_{i,t-1}/B_{i,t-1})$ and leverage $(Lev_{i,t-1})$. While the second group is to control for board characteristics $\left(B\_Controls_{i,t}\right)$ which include board meetings $\left(B.MEETs_{i,t}\right)$, board size $\left(B.SIZE_{i,t}\right)$, CEOs duality $(DUALITY_{i,t})$ and CEOs tenure $\left(TENURE_{i,t}\right)$ [7], see Table 1 for variables definition. It is predicted that women tend to perform more than men on demonstrating conditional accounting conservatism. Therefore, the coefficient estimates of β_1 in model (3) is predicted to be positive and significant that firms with more gender diversity of women representation on the board of directors apply more conservatism accounting methods. From the model (3) above it can be seen that conditional accounting conservatism is regressed on women representation on the board of director and the predetermined set of controls. This study initially investigates the relationship between board gender diversity of women representation and conditional accounting conservatism in order to restructure a base to investigate and confirm about the role of gender diversity of women representation on the board of directors on such relationship between executive remuneration and conditional accounting conservatism (H_3). Therefore, to test the 2nd hypothesis that executive remuneration is negatively associated with conditional accounting conservatism the following models are estimated:

$$\begin{aligned} CONSERVATISM_{i,t} = \beta_0 + \beta_1 REMUNERATION_{i,t} \\ + \beta_2 \sum F\_Controls_{i,t-1} \\ + \beta_3 \sum B\_Controls_{i,t} + \varepsilon_t \end{aligned} \quad (4)$$

$$\begin{aligned} CONSERVATISM_{i,t} = \beta_0 + \beta_1 PERFORMANCE\_REM_{i,t} \\ + \beta_2 \sum F\_Controls_{i,t-1} \\ + \beta_3 \sum B\_Controls_{i,t} + \varepsilon_t \end{aligned} \quad (5)$$

$$\begin{aligned} CONSERVATISM_{i,t} = \beta_0 + \beta_1 EQUITY\_REM_{i,t} \\ + \beta_2 \sum F\_Controls_{i,t-1} \\ + \beta_3 \sum B\_Controls_{i,t} + \varepsilon_t \end{aligned} \quad (6)$$

It can be seen from the models (4, 5 & 6) above that conditional accounting conservatism is regressed on different types of executive remuneration and the predetermined set of controls. Due to executive remunerations, managers are more likely to make corporate decisions that align with their benefits such as being less conservative. Therefore, it is predicted that the coefficient estimates of β_1 in model (4) is to be negative and significant. However, the breakdown of executive remuneration according to its new classification into performance-based and equity-based remuneration, gives deep analysis of the relationship with conditional accounting conservatism. Therefore, it is expected that β_1 in model (5) to negative while in model (6) to be positive. In addition, to better understand the mechanisms of women representation on the board of directors and its effects, this study analyses the role of women representation on the board of directors on the relationship between executive remuneration and conditional accounting conservatism. The following model is estimated to text the 3rd hypothesis.

$$\begin{aligned} CONSERVATISM_{i,t} = \beta_0 + \beta_1 WOMEN_{i,t} \\ + \beta_2 REMUNERATION_{i,t} \\ + \beta_3 WOMEN_{i,t} * REMUNERATION_{i,t} \\ + \beta_4 \sum F\_Controls_{i,t-1} + \beta_5 \sum B\_Controls_{i,t} + \varepsilon_t \end{aligned} \quad (7)$$

Finally, question is asked as the role of women representation on the board of directors in model (7). As shown in model (7) above conditional accounting conservatism is regressed on the following: women representation on the board of directors, total executive remuneration, the interaction between them and the two sets of control variables. It is predicted that the coefficient estimates of β_3 is to be lower-negative (higher-positive) value than the coefficient β_1 in model (4). Therefore, that the negative relationship between executive remuneration and conditional accounting conservatism is weaker in firms with more women representation on the board of directors.

Main results

Descriptive statistics

The results of descriptive statistics of the main variables are shown in Table 2. These results seem to be consistent with those of prior studies in gender diversity, executive remuneration and conditional accounting conservatism. Table 2 provides information on women representation on the board of directors, the mean (median) for the $WOMEN_{i,t}$ is 0.26 (0.22), and the standard deviation is (0.82). The average of women representation in this study reveals that there has been a significant increase in the number of women in board of directors than what observed in García-Sánchez et al. [26] with average of (10.22%). It seems possible these results are due to the fact that the sample of this study is more recent and reflects the updated regulations of women representation and empowerment in corporate management.

Table 2 shows descriptive statistics of the different sets of executive remuneration. For the most widely used proxy of executive remuneration; the mean (median) for $REMUNERATION_{i,t}$ are 14.86 (14.79), and the standard deviation is (0.65). Compared to Graham et al. [30] the average score of total remunerations is 2218 (7.70 natural logarithm) which is less than what observed in this study. Table 2 also reports descriptive statistics on conditional accounting conservatism score, the mean (median) for the $CONSERVATISM_{i,t}$ is 0.07 (0.06), and the standard deviation is (0.08). Previous research of Li et al. [49] has reported less average of conservatism of score (1%).

Results of the empirical models

Table 3 shows the results obtained from the preliminary analysis of the governing role of women representation on the board of director. The regression results of the empirical analysis of model (3), which examine the relationship between gender diversity of women representation on the board of directors and conditional accounting conservatism indicates that the coefficient estimates of β_1 has a positive and significant sign of (0.046). This indicates that one percent increase in women representation on the board of directors leads to (4.6) percent increase in applying conditional conservative accounting methods.

Table 3 Effect of Women Representation on Conditional Accounting Conservatism

Dependent variable	**Conservatism$_{i,t}$**
Model (3)	
Independent variable	
(Constant)	0.069 (0.105)
WOMEN$_{i,t}$	0.046 (0.004)
Control variables	
SIZE$_{i,t-1}$	0.146 (0.005)
M$_{i,t-1}$/B$_{i,t-1}$	0.052 (0.275)
Lev$_{i,t-1}$	-0.034 (0.435)
B.MEETs$_{i,t}$	0.068 (0.110)
B.SIZE$_{i,t}$	0.035 (0.456)
DUALITY$_{i,t}$	-0.074 (0.085)
TENURE$_{i,t}$	–0.004 (0.930)
Obs	551
AdjR^2	0.019

Table 4 Relationship between executive remuneration and conditional accounting conservatism

Dependent variable	***CONSERVATISM$_{i,t}$***		
	Model (4)	**Model (5)**	**Model (6)**
Independent variables			
(Constant)	0.002 (0.988)	– 0.051 (0.236)	– 0.061 (0.155)
REMUNERATION$_{i,t}$	– 0.047 (0.005)		
PERFORMANCE_REM$_{i,t}$		– 0.071 (0.001)	
EQUITY_REM$_{i,t}$			– 0.038 (0.401)
Control variables			
SIZE$_{i,t-1}$	0.190 (0.011)	0.165 (0.002)	0.162 (0.002)
M$_{i,t-1}$/B$_{i,t-1}$	0.067 (0.198)	0.059 (0.217)	0.055 (0.248)
Lev$_{i,t-1}$	– 0.036 (0.405)	– 0.032 (0.461)	– 0.039 (0.376)
B.MEETs$_{i,t}$	0.070 (0.100)	0.063 (0.143)	0.075 (0.083)
B.SIZE$_{i,t}$	0.026 (0.577)	0.023 (0.610)	0.019 (0.680)
DUALITY$_{i,t}$	– 0.073 (0.090)	– 0.075 (0.081)	– 0.080 (0.066)
TENURE$_{i,t}$	– 0.001 (0.985)	0.005 (0.915)	0.000 (0.993)
Obs	551	551	551
AdjR^2	0.019	0.022	0.018

Table 5 Governing Role of Board Gender Diversity of Women Representation

Dependent variable	***CONSERVATISM$_{i,t}$***
Model (7)	
Independent variables	
(Constant)	– 0.012 (0.910)
WOMEN$_{i,t}$	6.003 (0.001)
REMUNERATION$_{i,t}$	– 0.040 (0.002)
WOMEN$_{i,t}$ ∗ REMUNERATION$_{i,t}$	– 0.044 (0.001)
Control Variables	
SIZE$_{i,t-1}$	0.180 (0.018)
M$_{i,t-1}$/B$_{i,t-1}$	0.065 (0.213)
Lev$_{i,t-1}$	– 0.036 (0.407)
B.MEETs$_{i,t}$	0.069 (0.103)
B.SIZE$_{i,t}$	0.037 (0.432)
DUALITY$_{i,t}$	– 0.073 (0.089)
TENURE$_{i,t}$	– 0.005 (0.906)
Obs	551
AdjR^2	0.018

This result supports the idea that women tend to apply more conservative accounting methods than men on the process of financial reporting; therefore, this study finds support for the 1st hypothesis.

Table 4 provides an overview of the regression results of models (4), (5) and (6) which test the association between different schemes of executive remuneration and conditional accounting conservatism. The breakdown of executive remunerations according to whether it is a performance-based remuneration, or an equity-based remuneration is summarized in Table 4. The coefficient estimates of $\left(REMUNERATION_{i,t}\right)$ and $(PERFORMANCE\_REM_{i,t})$ have negative and significant sign of (– 0.047) and (– 0.071), respectively. These results indicate that there is negative relationship between performance-based remuneration and conditional accounting conservatism (H_{2a}). The coefficient estimates of $(EQUITY\_REM_{i,t})$ has a negative however insignificant sing of (– 0.038). Contrary to expectations, this study did not find a significant positive relationship between equity-based executive remuneration and conditional accounting conservatism (H_{2b}). Overall, the result indicates that there is negative relationship between executive remuneration and conditional accounting conservatism (H_2).

Further analysis investigates the role of women representation on the board of directors in the relationship between executive remuneration and conditional accounting conservatism. As shown in Table 5 the interaction coefficient estimates of β_3 in model (7) has a lower-negative value than the coefficient estimates of β_1 in model (4). These findings further support the idea of the role of gender diversity of women representation on the board of directors on mitigating the negative relationship between executive remuneration and conditional accounting conservatism. For the controls of firm characteristics $(F\_Controls_{i,t-1})$: the results indicate that the coefficient estimates of firm size, market to book ratio and leverage are (0.180), (0.065) and (– 0.036), respectively. These indicate that big, growing and low leveraged firms are more conservative in applying accounting methods. Also, for the controls of board characteristics $(B\_Controls_{i,t})$: the analysis shows that the coefficient estimates of board meetings and board size have positive sign of (0.069) and (0.037), respectively. While CEO duality and CEO tenure have negative coefficient estimates of (– 0.073) and (– 0.005), respectively. The control findings seem to be consistent with prior research of accounting conservatism (e.g., [24, 34]).

Additional analyses

If board gender diversity of women representation on the board of directors has a positive effect on executive remuneration impact on conditional accounting conservatism, do woman chairperson and/or woman CEO have higher effect on such relationship? This section of additional analyses provides an important opportunity to advance the confirmation of those findings observed in the main analysis of this study. To further support the idea of the governing role of board gender diversity of women representation on the board of directors, additional tests is developed into two dimensions. The first dimension is about investigating the effect of woman representation on the board of directors as chairperson on the relationship between executive remuneration and conditional accounting conservatism. The additional analyses use qualitative analysis in order to gain new insights into women representation on the board of directors in case of woman chairperson. Initially the baseline regression of model (3) is modified with woman chairperson into model (8) to validate the main hypothesis of positive relationship between woman chairperson and conditional accounting conservatism. Then, the main analysis model (7) is modified to model (9) to test whether the negative relationship between executive remuneration and conditional accounting conservatism is much weaker in firms with woman chairperson.

$$CONSERVATISM_{i,t} = \beta_0 + \beta_1 WOMAN\_CHAIR_{i,t} + \beta_2 \sum F\_Controls_{i,t-1} + \beta_3 \sum B\_Controls_{i,t} + \varepsilon_t \tag{8}$$

has identified as chairperson or CEO therefore assists in the understanding of the role of women representation on the board of directors in governing corporates through oversighting executive remuneration and acting in conservative way when it comes to choose between accounting methods.

Discussion

To better understand the governing mechanism of gender diversity of women representation on the board of directors, drawing on agency theory and critical mass theory

$$\begin{aligned} CONSERVATISM_{i,t} = &\beta_0 + \beta_1 WOMAN\_CHAIR_{i,t} \\ &+ \beta_2 REMUNERATION_{i,t} \\ &+ \beta_3 WOMAN\_CHAIR_{i,t} * REMUNERATION_{i,t} \\ &+ \beta_4 \sum F\_Controls_{i,t-1} \\ &+ \beta_5 \sum B\_Controls_{i,t} + \varepsilon_t \end{aligned} \tag{9}$$

The second dimension of the additional analyses is about investigating the effect of board gender diversity of woman representation as CEO on the relationship between executive remuneration and conditional accounting conservatism. Similarly, models (10) and (11) are developed to test whether the negative relationship between executive remuneration and conditional accounting conservatism is much weaker in firms with woman CEO.

$$CONSERVATISM_{i,t} = \beta_0 + \beta_1 WOMAN\_CEO_{i,t} + \beta_2 \sum F\_Controls_{i,t-1} + \beta_3 \sum B\_Controls_{i,t} + \varepsilon_t (10) \tag{10}$$

to measure board gender diversity, a series of relationships are tested in this study. These investigations indicate a need to understand the various aspects of gender diversity of women representation on board of directors that enhance corporate governance. The investigation, initially, is developed to examine the role of women representation on board of directors in choosing between accounting methods. The results indicate the governing role of women representation on the board of directors, noting a positive relationship with conditional accounting conservatism. This finding is in agreement with prior studies findings (e.g., [24],Hoitash and Mkrtchyan, 2022; [28, 47]) which show board gender diversity is more likely to increase board conservatism and promote corporate governance. In addition, the analysis is developed

$$\begin{aligned} CONSERVATISM_{i,t} = &\beta_0 + \beta_1 WOMAN\_CEO_{i,t} \\ &+ \beta_2 REMUNERATION_{i,t} \\ &+ \beta_3 WOMAN\_CEO_{i,t} * REMUNERATION_{i,t} \\ &+ \beta_4 \sum F\_Controls_{i,t-1} \\ &+ \beta_5 \sum B\_Controls_{i,t} + \varepsilon_t \end{aligned} \tag{11}$$

Table 6 shows the interaction coefficient estimates of β_3 in model (9) at panel (A) and coefficient estimates of β_3 in model (11) at panel (B). The results indicate that the effect is much lower-negative (higher-positive) than the values of model (7); however, the results are insignificant. The additional analyses of woman chairperson and woman CEO presented thus far provide additional evidence. The woman representation that it to rule out the relationships between executive remuneration and conditional accounting conservatism, noting a negative relationship. With in-depth analysis of executive remuneration schemes, the empirical results find a significant negative impact of performance-based remuneration on conditional accounting conservatism; while, a negative, weak and insignificant impact of equity-based remuneration is found. This finding corroborates the

Table 6 Additional Analyses of Women Representation as Chairperson and/or CEO

Panel A		
Dependent variable	$CONSERVATISM_{i,t}$	
	Model (8)	**Model (9)**
Independent variable		
(Constant)	0.065 (0.126)	0.002 (0.981)
$WOMAN\_CHAIR_{i,t}$	0.013 (0.001)	1.173 (0.008)
$REMUNERATION_{i,t}$		− 0.048 (0.007)
$WOMAN\_CHAIR_{i,t} * REMUNERATION_{i,t}$		− 0.017 (0.006)
Control variables		
$SIZE_{i,t-1}$	0.152 (0.003)	0.196 (0.009)
$M_{i,t-1}/B_{i,t-1}$	0.053 (0.269)	0.067 (0.197)
$Lev_{i,t-1}$	− 0.034 (0.429)	− 0.037 (0.389)
$B.MEETs_{i,t}$	0.068 (0.109)	0.070 (0.101)
$B.SIZE_{i,t}$	0.022 (0.630)	0.024 (0.611)
$DUALITY_{i,t}$	− 0.074 (0.085)	− 0.073 (0.090)
$TENURE_{i,t}$	0.001 (0.986)	0.000 (0.991)
Obs	551	551
$AdjR^2$	0.017	0.016
Panel B		
	Model (10)	**Model (11)**
(Constant)	0.063 (0.137)	0.038 (0.716)
$WOMAN\_CEO_{i,t}$	0.021 (0.005)	2.411 (0.002)
$REMUNERATION_{i,t}$		− 0.020 (0.009)
$WOMAN\_CEO_{i,t} * REMUNERATION_{i,t}$		− 0.003 (0.049)
Control variables		
$SIZE_{i,t-1}$	0.150 (0.004)	0.176 (0.020)
$M_{i,t-1}/B_{i,t-1}$	0.051 (0.282)	0.064 (0.216)
$Lev_{i,t-1}$	− 0.033 (0.447)	− 0.038 (0.377)
$B.MEETs_{i,t}$	0.068 (0.111)	0.069 (0.106)
$B.SIZE_{i,t}$	0.022 (0.638)	0.020 (0.664)
$DUALITY_{i,t}$	− 0.075 (0.083)	− 0.074 (0.083)
$TENURE_{i,t}$	0.001 (0.984)	0.001 (0.976)

Table 6 (continued)

Panel B		
	Model (10)	**Model (11)**
Obs	551	551
AdjR^2	0.018	0.022

ideas of Iwasaki et al. [39], Zhang et al. [64] and Hui et al. [37] who suggest that executives might incorporate in performance manipulation to affect their performance-based pay. In addition, these results support the initial argument defended in hypotheses development section that equity-based remuneration is linked to managerial behavior of risk aversion and executives become more conservative in choosing between accounting methods when their remunerations are paid in the form of equity-based.

Finally, question is asked as to the governing role of gender diversity of women representation on board of directors on the relationship between executive remuneration and conditional accounting conservatism. The findings suggest that the negative relationship between executive remuneration and conditional accounting conservatism is weaker in firms with more women representation on the board of directors. The combination of these findings provides an empirical support for the conceptual premise about the role of gender diversity of women representation on the board of directors on controlling executive opportunistic behavior and governing corporates. The present study provides additional evidence with respect to women representation on the board of directors when woman functions as chairperson and/or CEO. The additional analysis confirms previous findings and contributes additional evidence that suggests woman chairperson and/or woman CEO support the view that women have more governing role over corporates than men. This role increases when women function as board chairperson or board CEO. Overall, contrary to notions of opportunistic behavior of executives, the results find that boards achieve more level of governance with more women representation.

Conclusions

The debate about women representation on corporate boards has gained fresh prominence with many arguing that it enhances corporate governance. One question that needs to be asked, however, is whether gender diversity of women representation on the board of directors affects the structure of executive remuneration and the choice between accounting methods. This study provides empirical evidence on how women representation on the board of directors is used as a tool for corporate governance in many aspects. A sample of listed firms on the London Stock Exchange from 2019 to 2022 is used to support the assumption that the negative relationship between executive remuneration and conditional accounting conservatism is weaker in firms with more women representation on the board of directors. The results support the idea of the role of gender diversity of women representation on the board of directors on governing executive opportunistic behavior.

The present study makes several noteworthy contributions to literature. The study offers some important insights into the impact of gender diversity of women representation on the board of directors on the conditional accounting conservatism with respect to executive remuneration. Prior literature provides evidence about the impact of board gender diversity on conditional accounting conservatism. This study supports previous research into this brain area which links board gender diversity and conditional accounting conservatism on one hand and links board gender diversity, executive remuneration and conditional accounting conservatism on the other hand. As this study adds to the base model executive remuneration to investigate the effect of the board gender diversity and executive remuneration on conditional accounting conservatism which has not been analyzed previously. Furthermore, the author introduces a new and convenient classification of executive remunerations. As it is classified into three categories based on the payment driver of fixed, performance-based and equity-based remunerations. This study extends prior literature and intends to determine the extent to which and whether the relationship between executive remunerations and conditional accounting conservatism varies according to remuneration scheme of performance-based versus equity-based remunerations. The analysis provides additional evidence regarding the relationship between executive remuneration and conditional accounting conservatism with respect to performance-based versus equity-based remunerations. A further investigation with more focus on woman representation as chairperson and/or CEO is therefore tested in the additional analyses.

This study has several practical applications. Firstly, it points to stockholders since they need to control the opportunistic behavior of executives over remuneration structure and/or choosing between accounting methods. Therefore, the most important and relevant implication of gender diversity of women representation on the board of directors is the governing role over opportunistic behavior of executives. Secondly, the regulators could control over the power of board of directors through regulating gender diversity of women representation on the board of directors, woman chairperson and woman CEO. Thirdly, the implications of this study align with the agenda of the supporters of gender equality and women empowerment. It is beyond the scope of this study to examine all types of executive remuneration separately. The analyses in this study have only focused on performance-based versus equity-based remuneration. Also, a major limitation of this study is that the examination of corporate governance is limited to the internal mechanisms of gender diversity, executive remuneration and conditional accounting conservatism. The external mechanisms of corporate governance (e.g., external auditor) are not addressed in this study. For instance, more research is required to determine the role of external auditors, auditing quality, audit partners and/or auditor independence on the associations among gender diversity, executive remuneration and conditional accounting conservatism.

Abbreviations

CSR	Corporate Social Responsibility
MENA region	The Region of Middle East and North Africa
NPV	Net Present Value
SEC	The Stock Exchange Commission- USA
SOX Act	The Sarbanes–Oxley Act

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