Board gender diversity and real earnings management: the moderating role of auditor reputation

Sameh Halaoua, Sonia Boukattaya

Board gender diversity and real earnings management: the moderating role of auditor reputation

Sameh Halaoua and Sonia Boukattaya*

High Institute of Management,
University of Tunis,
ISG-Tunis, GEF2A Lab, Tunis, Tunisia
ORCID: https://orcid.org/0000-0003-2223-7650
Email: halaoua.ahmed@gmail.com
Email: sonia.boukattaya@icloud.com
*Corresponding author

Abstract: The present work aimed to shed light on the effect of board gender diversity (BGD) on real earnings management (REM) as well as the moderating role of auditor reputation in the association between BGD and REM using panel data of 1162 French non-financial firm-year observations from the SBF120 index during the period 2005–2019. Our findings show that BGD is negatively related to REM. Furthermore, we found that this relationship is more prominent in firms with higher auditor reputation mainly because highly reputable auditors aim to preserve their image and are more likely to detect earnings management activities.

Biographical notes: Sameh Halaoua is an Assistant Professor in Accounting and a member of GEF-2A Lab. Her research interests include corporate governance, earnings management, and corporate social responsibility.

Sonia Boukattaya is a Researcher in Finance at ISG Tunis and a member of GEF-2A Lab. Her research interests include corporate governance, social, environmental and voluntary corporate disclosures, corporate social responsibility and corporate finance.

1   Introduction

The latest governance reform proposals in several countries have emphasised the importance of recruiting women on corporate boards. After Norway in 2003 and Spain and Iceland in 2007, the code of good governance of professional organisations Afep-MEDEF in France was revised in 2010 to encourage companies to promote gender

diversity in their boards. Up to 2010, and using the voluntary approach, the number of women directors serving French boards had not improved. Therefore, in January 2011, the French national assembly and the French Congress came up with the Copé-Zimmermann law, which aims at raising women representation on corporate boards gradually by providing explicit quotas of women directors to be applied by both listed firms on a regulated market and non-listed firms having revenues or total assets over 50 million Euros or employing at least 500 persons for the last three years. This law stipulated that a minimum of 20% of the board members had to be women by January 2014, and this rate had to reach 40% by January 2017. Quota policies consider gender diversity not only an ethical requirement but also a priority to contribute to the dissemination of 'best practices' in governance. From a theoretical perspective, many theories, such as the agency, the resource dependency, the behavioural, and the social role theories, stressed the benefits of increased women directors on corporate boards. Empirically, previous studies show that women's presence on the board strengthens its efficiency and the quality of its decisions (Damak and Ben Hamad, 2019), enhances the firm's financial performance (Carter et al., 2003; Campbell and Mínguez-Vera, 2008; Terjesen et al., 2016; Reguera-Alvarado et al., 2017; Boukattaya and Omri, 2018) and improves the earnings quality (Peni and Vähämaa, 2010; Srinidhi et al., 2011; Gul et al., 2011; Gao, 2018). Consequently, women directors are more likely to reduce managerial opportunism by constraining earnings management (EM) practices. The association between board gender diversity (BGD) and EM is a recent issue (Lakhal et al., 2015; Luo et al., 2017; Damak, 2018; Gull et al., 2018; Kouaib and Almulhim, 2019; Zalata et al., 2019) based on the implicit hypothesis that EM is most often considered unethical (Mersni and Ben Othman, 2016; Tian and Peterson, 2016; Mukhibad and Nurkhin, 2019) and corresponds to an inverse measure of earnings quality (Ahmed et al., 2013). It is worth noting that previous studies focused primarily on accrual earnings management (AEM) activities. Unlike AEM, real earnings management (REM) has begun to receive attention only recently with the studies of Graham et al. (2005) and Roychowdhury (2006) and remains an unexplored field (Zang, 2012; Talbi et al., 2015). Besides, studies on REM in the French context are not as extensive as those on AEM. Hence, the present work aimed to fill this gap in EM research by investigating the effect of BGD on REM to examine the monitoring role of female directors on the corporate board and their ability to constrain REM in France. It also aims to investigate the moderating role of auditor's reputation in this relationship.

In addition to the regulatory effort to improve women directors' representation on corporate boards, it is worthwhile to note the growing movement towards enhancing external audit quality since companies' failures that occurred in the early 2000s, such as Enron and WorldCom in the US and France Telecom and Vivendi Universal in France. These scandals have caused a lack of confidence in financial markets and the removal of Arthur Anderson Group as one of the Big 5 network auditors. Subsequently, numerous legislative reforms have taken place at the international level in the area of corporate governance to enhance external audit quality. The financial security law (2003) in the French context is among the most pertinent laws putting lots of emphasis on the external auditor's independence, auditor rotation, and the inexistence of interests with customers and other stakeholders (Articles L. 822-11 to 822-14 of the French Commercial Code). Moreover, it established the High Council of Statutory Auditors (H3C), which "contributes to a better transparency of the police function auditors and strengthens its

control" (Azibi et al., 2017, p.105). Based on the assumption that Big 4 auditors provide higher audit quality than other audit firms (De Angelo, 1981; DeFond and Zhang, 2014; Che et al., 2020; Alexeyeva, 2019) and given the provisions implemented by the French financial security act of 2003, we assume that Big4 auditing acts as a device to constrain managerial discretion. As women directors generally require better audit quality, we investigate the moderating role of auditor reputation on the relationship between BGD and REM. To the best of our knowledge, this is the first study that examines this role in the French context.

Overall, our findings highlight the importance of female directors in constraining REM activities and the moderating role of auditor reputation in this relationship. We also deduced that the negative effect of female directors on REM is higher when firms are audited by two Big4 auditors.

Our study contributes to the extant literature on the linkage between female directors on the board and EM in at least three ways. Firstly, REM-related studies are scarce in the French context. Indeed, to the best of our knowledge, only the works of Sellami and Adjaoud (2010) and Adjaoud (2018) investigated this issue. Consequently, our study contributes to enriching the REM literature in France by examining the effect of women directors on REM. Secondly, as the moderating role of auditor's reputation in the relationship between BGD and REM has not been adequately studied and needs more focus, this research extended the existing literature by examining whether auditor reputation moderates this effect in the French context. Thirdly, previous EM-related research works were conducted in contexts where appointing women as directors on the board is voluntary. Our study complements existing EM literature by examining REM in the French context, which is characterised by mandatory women appointments on the board of directors. Our findings then provide quasi-natural experimental results of the mandatory quota of female representation on boards of directors of French listed companies established by the Copé-Zimmermann law.

The remainder of the paper is structured as follows. Section 2 discusses and highlights the value of studying the French institutional background. The theoretical framework is presented in Section 3. Section 4 examines the relevant literature and presents our research hypotheses. In Section 5, we develop the adopted research methodology. Section 6 presents the results and discussion. The final section provides the main conclusions of the paper.

2 The French institutional setting

The French context is conducive to our research question because it presents several particularities related mainly to investor protection level, ownership structure, mandatory quotas law of women on corporate boards, and joint audit.

As noted by Hamdi et al. (2018), the French background offers a weaker investor protection extent (Azibi et al., 2017) compared to Anglo-Saxon settings because of France's civil law system (La Porta et al., 1998; Nekhili et al., 2020; Burunciuc and Gonenc, 2021),which increases managerial discretion(Gull et al., 2018) and thereby EM (Leuz et al., 2003).

Furthermore, several previous studies found that the French shareholding is characterised by a high concentration of ownership in the hands of dominant shareholders

and a strong presence of family shareholders who actively participate in the firm management (Faccio and Lang, 2002). This ownership concentration is considered by Shleifer and Vishny (1986) as a governance device that can control and discipline managers. However, it is problematic (Shleifer and Vishny, 1997; Adelopo et al., 2019) because it offers a favourable context to expropriations by major shareholders at the expense of minority ones (Djankov et al., 2008; Ntim, 2013; Gull et al., 2018). In this context, the board of directors should monitor managers to avoid such expropriations that may lead to financial statement manipulations and EM activities. It is argued that BGD usually contributes to improving the board of directors' role in protecting shareholder interests (Konrad and Kramer, 2006; Gul et al., 2011; Gull et al., 2018; Wang, 2020). This contribution is essential regarding EM since the board of directors should supervise managers (Boubaker et al., 2014). Because of the growing theoretical and empirical arguments in favour of women directors as good monitors of management (Adams and Ferreira, 2009) and their lower tolerance to EM, the issue related to BGD and REM is a vital area of study, especially after the implementation of the Copé-Zimmermann Law in 2011. This mandatory gender quota law requires all listed and non-listed firms with revenues or total assets higher than 50 million Euros or employing more than 500 persons for three consecutive years to attain a female proportion of 40 % by 2017, with a first step of 20% by 2014 (Zenou et al., 2017).

In addition to BGD, external audit plays a crucial role in ensuring financial reporting quality (Francis and Wang, 2008; Iatridis, 2012) and reducing agency costs derived from managerial opportunism. The audit profession in France is supervised by the H3C, which was established after the enactment of the financial security law in 2003. It is worth noting that auditor independence is more robust in France because the mandatory joint audit system (Piot and Janin, 2007; Deng et al., 2014) constitutes a real constraint to managerial opportunism. Indeed, France is the only European country where joint audit has become mandatory since 1966. Its implementation aimed to enhance auditor independence by resisting managerial pressure (Fremeaux and Noël, 2009; Bédard and Schatt, 2020). It is recognised that joint audit increases audit quality because joint auditors can satisfy the two auditing principles: competence and independence. The latter may be superior in joint audit as joint auditors can disprove aggressive accounting manipulations and, therefore, EM activities.

In short, the above analysis confirms the particularity of the French environment that is appropriate for the study of the effect of BGD on REM and whether auditor reputation moderates it.

3   Theoretical framework

Several theories have supported the benefits of including women on the board. According to the agency theory, female directors help align managers' and shareholders' interests. Indeed, female representation in the board enhances effective monitoring (Adams and Ferreira, 2009; Post and Byron, 2015; Byoun et al., 2016), increases transparency (Gul et al., 2011; Gul et al., 2013), provides various perspectives on executive actions (Anderson et al., 2011), and resolves conflict situations (Nielsen and Huse, 2010). Besides, women's presence can stimulate positive mentorship and networking effects (Terjesen et al., 2009) and improve strategic decision making (Nielsen and Huse, 2010). In other words, agency costs and managerial opportunistic behaviour can be reduced

significantly if the board includes women directors (Jurkus et al., 2011; Pucheta-Martínez and Bel-Oms, 2016). More specifically, Zalata et al. (2019) highlight that women having monitoring roles on the board mitigate managerial opportunism measured by discretionary accruals.

In line with the behavioural theory (Al-Dhamari et al., 2016), academic researchers provide evidence that women are more risk-averse than men (Croson and Gneezy, 2009; Arano et al., 2010; Post and Byron, 2015; Faccio et al., 2016; Reguera-Alvarado et al., 2017) as they tend to offer less aggressive and more sustainable investment strategies. Besides, female directors are often found to be cautious and less aggressive in many contexts of decision-making when compared to men (Byrnes et al., 1999; Peni and Vähämaa, 2010).

The resource dependence theory, developed by Pfeffer (1972) and Pfeffer and Salancik (1978), considers a firm as an open system that depends on external environment contingencies. It suggests that the presence of women directors on corporate boards helps firms maximise access to critical resources through their skills, competences, and knowledge. Hillman et al. (2007, p.948) found that female representation contributes to "the three categories of benefits accrued to firms through boards: advice and counsel, legitimacy, and access to resources/channels of communication". According to Srinidhi et al. (2011, p. 1613), female directors "can improve the depth and breadth of board discussions by challenging traditional practices and policies". Thus, women directors will provide different points of view and well-informed decisions (Rose, 2007), which is very important for effective management monitoring (Hillman and Dalziel, 2003).

Besides, the social role theory (Eagly, 2009) illustrates the importance of stereotypical perceptions that men and women are expected to have in society. Indeed, men engage in more 'agentic' behaviour, so they care more for self-interest values, such as accomplishment, power (Adams and Funk, 2012), control, and financial position, whereas women are more likely to suit a communal attitude leading them to be more concerned with interpersonal relationships, caretaking activities, and others' welfare (Chizema et al., 2015; Zalata et al., 2019). There is strong empirical evidence that women act more ethically than men (Lund, 2008; Ibrahim and Angelidis, 2009; Zalata et al., 2019). Accordingly, women directors are less likely to work together with insiders to expropriate outside investors and more likely to reduce managerial opportunism by constraining EM practices.

4   Literature review and hypotheses development

4.1   *Women directors and real earnings management*

A higher women's representation on the board is increasingly considered to be advantageous (Srinidhi et al., 2011). From a theoretical point of view, it should contribute to enhancing the corporate board controlling power since female directors are generally considered as more conservative, risk-averse, and less tolerant to aggressive decision-making. Taken together, and as noted by Lakhal et al. (2015), Luo et al. (2017) and Kouaib and Almulhim (2019), these arguments suggest that the presence of female directors is related to higher earnings quality. Empirically, the findings of the existing studies suggest that female directors' representation on boards tends to increase firm

value (Carter et al., 2003; Campbell and Mínguez-Vera, 2008; Luckerath-Rovers, 2013; Kiliç and Kuzey, 2016; Boukattaya and Omri, 2018). Regarding EM, Ahmed et al. (2013) consider it an inverse measure of earnings quality. It is generally defined as managerial manipulations aiming to either mislead the investors about the underlying economic firm performance or affect the contractual benefits (Healy and Wahlen, 1999; Leuz et al., 2003; Callao et al., 2014; Ghaleb and Kamardin, 2018). Consequently, EM is perceived as unethical as it can delude shareholders on the firm's underlying performance.

Previous studies argue that women are less permissive to opportunism in decision-making contexts (Gul et al., 2013; Cumming et al., 2015; Zalata et al., 2019). Thus, if women's representation on the board increases its effectiveness, it is likely to penalise managers for opportunistic EM. In the same vein, using EM thresholds and discretionary accruals quality as proxies for earnings quality, Srinidhi et al. (2011) found a negative (positive) association between female participation on the boards and EM thresholds (accruals quality). Regarding the French context, Lakhal et al. (2015) and Damak (2018) confirm that BGD has a negative effect on AEM. This finding shows the crucial role exerted by women directors in constraining managerial discretion and corroborating their usefulness as a governance mechanism. With reference to the legal system, Djankov et al. (2008) classified French firms as strongly favouring the expropriating of minority shareholders. Given the legislative efforts devoted to BGD in France, the percentage of women directors has increased since 2011 and reached approximately 44% in 2018 for the largest listed firms (European Commission, 2019). Accordingly, as women's presence on the board should improve its effectiveness, it is thought that REM will likely be lower. Therefore, we can formulate our first hypothesis as follows:

H1: *The percentage of women on the board affects REM negatively.*

4.2   *The moderating role of auditor reputation*

Regarding the BGD, previous literature suggests that female directors are effective in monitoring managerial decisions and consequently require better auditing (Nekhili et al., 2020). Researchers found that the presence of women directors on corporate boards results in contracting with sector specialist auditors (Lai et al., 2017) and increasing the likelihood of using the services of higher quality auditors (Oradi and Izadi, 2019). The idea that Big 4 audit firms provide audits of higher quality than non-Big 4 ones has been confirmed in numerous studies of public firms (DeFond and Zhang, 2014). As women directors are more conservative and risk-averse, they may prefer a Big4 audit firm which focuses more on details to provide an independent and objective audit opinion which, in turn, strengthens the board of directors' monitoring role and improves the financial reporting quality (Srinidhi et al., 2011). In this context, the empirical studies conducted to examine the effect of auditor's reputation on AEM have provided inconclusive results ranging from a non-significant association (Piot and Janin, 2007) to a negative impact (Moeinadin et al., 2013; Reguera-Alvarado et al., 2019).As noted by Sun et al. (2014, p.168), REM is "opaque and hard to detect". Therefore, the question related to the ability of Big 4 auditors to detect REM is interesting and may provide the reasons underlying their superior quality services. Several studies have documented that Big 4 audit firms provide audits with higher quality than other auditors (Che et al., 2020). Indeed, Big4 audit firms use higher quality protocols to provide an independent and objective opinion about clients' financial reporting. Besides, according to Che et al. (2020), they have

better quality control systems, more experts in auditing, accounting, tax, and valuation (Francis, 2011; Knechel et al., 2013), and higher motivations to continually invest in and employ cutting-edge audit methodology for all clients.

In the same context, Francis et al. (2009) highlighted the role of major international auditing firms in controlling managerial discretion. Zisis and Sorros (2015) note that Big 4 audit firms are expected to be more independent because they have lower incentives to reduce audit quality due to the high number of audit clients (DeAngelo, 1981). After performing interviews with experienced auditors, Commerford et al. (2016) find that auditors are attentive to REM and often detect it through deep analytical procedures, discussions with managers, or their knowledge of the business.

The above arguments lead us to assume that Big 4 auditors are more likely to detect and constrain REM for the sake of their reputation. According to Francis and Wang (2008), the Big 4 are required to continually develop and maintain their reputation worldwide using different strategies, such as standardisation of staff training, knowledge sharing practice, and global application of audit methodologies. Hence, Big 4 auditors have to treat their customers through the application of earnings quality and accounting conservatism.

Besides, Ittonen et al. (2010) argue that having females on the audit committee affects the auditor's assessment of audit risk by improving the effectiveness of the internal control activity, which also reduces any inherent risk and lowers the audit fees. In this respect, Damagum et al. (2014) find evidence that audit report credibility improves with women directors on the board. Corporate boards including women directors will prefer highly reputed auditors as they contribute to maintaining financial statement credibility for users by providing an objective and independent opinion. If highly reputed auditors have a moderating role in the relationship between BGD and REM, we should expect their presence to give female directors more opportunities to affirm their monitoring role and higher ability to constraint REM. Consequently, we can state the following hypothesis.

H2: Auditor reputation moderates the relationship between female directors on the board and REM.

5 Research design

5.1 Measurement of real earnings management

In this study, we relied on the Roychowdhury (2006) model to measure REM. This model is based on three proxies of REM activities, namely sales manipulations, decrease in discretionary expenditures, and overproduction. The first proxy is the abnormal operating cash flow (ab-CFO) related to the decrease in operating cash flows due to price reduction and more flexible credit terms to increase sales and subsequently earnings temporarily. It is calculated as the difference between the actual CFO and the normal one based on sales level and changes in sales according to the following regression:

$$\frac{CFO_{it}}{A_{avg}} = \alpha + \alpha_1 \frac{1}{A_{avg}} + \beta_1 \frac{sales_{it}}{A_{avg}} + \beta_2 \frac{\Delta sales_{it}}{A_{avg}} + \varepsilon_{it} \tag{1}$$

where CFO_{it} represents the operating cash flows; $sales_{it}$ is the sales during the year t; $\Delta sales_{it}$ stands for the change in sales compared to last previous year, A_{avg} is the average total assets of the beginning and ending assets in the balance sheet. All variables are scaled by average total assets (A_{avg}) of the beginning and ending assets to mitigate any heteroscedasticity.

The second proxy is the abnormal discretionary expenditures (ab-DISEXP) related to the cut in discretionary expenditures to increase reported earnings. It is obtained by the following regression:

$$\frac{DiscExp_{it}}{A_{avg}} = \alpha' + \alpha'_1 \frac{1}{A_{avg}} + \beta'_1 \frac{sales_{it-1}}{A_{avg}} + \varepsilon'_{it} \tag{2}$$

where $DiscExp_{it}$ corresponds to discretionary expenditures, such as research and development (R&D), advertising, and selling, general, and administrative (SG&A) expenditures; $sales_{it-1}$ represents the sales of the previous year, A_{avg} is the average total assets of the beginning and ending asset balance.

The third proxy is the abnormal production costs (ab-PROD). This proxy denotes the increase in earnings through inventory overproduction to report lower costs of goods sold. It is calculated using the following regression:

$$\frac{Prod_{it}}{A_{avg}} = \alpha'' + \alpha''_1 \frac{1}{A_{avg}} + \beta''_1 \frac{sales_{it}}{A_{avg}} + \beta''_2 \frac{\Delta sales_{it}}{A_{avg}} + \beta''_3 \frac{\Delta sales_{it-1}}{A_{avg}} + \varepsilon''_{it} \tag{3}$$

where $Prod_{it}$ represents the production costs, including the costs of goods sold (COGS) added to the change in inventory (ΔInv) during the period; $sales_{it}$ represents the sales for the current period; $\Delta sales_{it}$ is the change in sales during the current period; $\Delta sales_{it-1}$ measures the change in sales during the previous period; and A_{avg} is the average total assets of the beginning and ending assets balance. The abnormal production costs are calculated as the difference between the actual value and the normal level of production costs determined using equation (3).

Following previous studies (e.g., Talbi et al., 2015; Ghaleb et al., 2020), we constructed the overall REM measure by combining the three individual proxies:

$$REM = (-1) * ab - CFO + (-1) * ab - DISEXP + ab - PROD \tag{4}$$

The ab-CFO and ab-DISEXP are multiplied by −1 to reflect the rising EM. In fact, when managers engage in REM, we expect lower ab-CFO and ab-DISEXP levels, and a higher ab-PROD level. Higher REM measure indicates higher EM.

5.2   *Independent variable: board gender diversity*

We used the percentage of female directors on the board (**FEMD**) as a measure of board gender diversity (Lakhal et al., 2015; Damak, 2018; Kouaib and Almulhim, 2019; Damak and Ben Hamad, 2019). In our regressions, we used the lagged value of female proportion on the board.

5.3 Moderating variable: auditor reputation

Several studies found that Big 4 auditors reflect higher audit quality than non-Big 4 auditors (DeAngelo, 1981; Francis et al., 2009; Bennouri et al., 2015; Wijaya, 2020). The specificity of audit in France is that it is based on joint auditors; so, French firms can be audited by one or two Big 4 auditors. In line with previous studies, our measure of auditor reputation (**AUDIR**) is a dichotomous variable coded 1 if the firm is audited by two Big 4 auditors and 0 otherwise (Francis et al., 2009; Bennouri et al., 2015).

5.4 Control variables

Previous studies have identified specific determinants of EM (Lakhal et al., 2015; Luo et al., 2017; Damak, 2018; Kouaib and Almulhim, 2019) that are added as a series of control variables in our regression models. These determinants are related to the characteristics of the board of directors, the audit committee and the firm.

Prior studies found mixed results on the relationship between EM and CEO duality. CEO duality (**DUAL**) is an indicator variable that equals 1 if the CEO is also the chairman of the board and zero otherwise. From an agency perspective, duality may weaken the board of directors' independence and impede its proper functioning as it could increase managerial discretion and thereby EM (Dechow et al., 1996; Damak, 2018; Gull et al., 2018). However, Bao and Lewellyn (2017) provided evidence that CEO duality is associated with lower AEM. Concerning the board size effect, Mishra and Kapil (2017, p.20) noted that "increased board size has two competing effects: greater monitoring vs. more rigid decision-making". Consistent with the first effect, Kang and Kim (2012) found a negative effect of board size on EM, unlike Talbi et al. (2015), who found that the board of directors' size is positively related to REM. Board size (**BSIZE**) is measured as the total number of directors on the board. Talbi et al. (2015) demonstrated the negative effect of board independence (**INDPB**), calculated as the number of independent directors on the boardroom divided by the board size, on REM. As the number of times the board of directors meets during the year (**BDMET**) measures the degree of board activity, it is expected to decrease EM (Klein, 2002; Gull et al., 2018). Regarding audit committee size (**ACSIZE**) and independence (**INDAC**) measured respectively as the total number of audit committee members and the number of independent directors on the audit committee divided by its size, Hassan and Ibrahim (2014) and Kang and Kim (2012) give evidence of their negative effects on EM. These results are consistent with the monitoring role of the audit committee. Also, the number of meetings held by the audit committee during the year (**ACMET**) is taken into consideration as it indicates its diligence, so it is expected that if the audit committee meets frequently, it is expected to decrease REM. As presented by Ghaleb and Kamardin (2018), unlike Hassan and Ibrahim (2014) and Garven (2015), who found that the increase in audit committee meetings has a negative effect on REM, Abdullah and Wan Hussin (2015) and Visvanathan (2008) failed to find a significant effect of audit committee meeting on REM. firm size (**SIZE**), which is the natural logarithm of total sales, and leverage (**LEV**), which is calculated by dividing the total net debt to common equity, are included as control variables because several studies prove their significant effects on EM activities (Talbi et al., 2015; Anagnostopoulou and Tsekrekos, 2016). Similar to Ghaleb et al. (2020), the market to book ratio was included to control for firm growth opportunities (**GROWTH**).Besides, the return on assets ratio (**ROA**) was used as

a proxy of firm performance (Haw et al., 2004; Anagnostopoulou and Tsekrekos, 2016). Finally, in line with Mollik et al. (2020), we took into account the effect of the global financial crisis. We included a dummy variable (**GFC**) taking the value of 1 for the years 2008 and 2009 and 0 otherwise.

5.5 *Regression model*

This study aimed at examining the effect of BGD and REM and the moderating role of auditor reputation on this relationship. To this end, we proceeded in two steps. We started by estimating the following equation:

$$
\begin{aligned}
REM_{it} = {} & \beta_0 + \beta_1 REM_{it-1} + \beta_2 FEMD_{it-1} + \beta_3 DUAL_{it} + \beta_4 BSIZE_{it} + \beta_5 INDPB_{it} \\
& + \beta_6 BDMET_{it} + \beta_7 ACSIZE_{it} + \beta_8 INDAC_{it} + \beta_9 ACMET_{it} + \beta_{10} SIZE_{it} \\
& + \beta_{11} LEV_{it} + \beta_{12} GROWTH_{it} + \beta_{13} ROA_{it} + \beta_{14} GFC_{it} + \varepsilon_{it}
\end{aligned}
\tag{5}
$$

where ε_{it} is the error term for firm i during the period *t*.

Then, we performed the regression of REM on female directors on the board (FEMD) variable, audit reputation variable (AUDIR), the interaction between the two (FEMD*AUDIR), and the control variables.

$$
\begin{aligned}
REM_{it} = {} & \beta_0' + \beta_1' REM_{it-1} + \beta_2' FEMD_{it-1} + \beta_3' AUDIR_{it} + \beta_4' FEMD_{it-1} * AUDIR_{it} \\
& + \beta_5' DUAL_{it} + \beta_6' BSIZE_{it} + \beta_7' INDPB_{it} + \beta_8' BDMET_{it} + \beta_9' ACSIZE_{it} \\
& + \beta_{10}' INDAC_{it} + \beta_{11}' ACMET_{it} + \beta_{12}' SIZE_{it} + \beta_{13}' LEV_{it} + \beta_{14}' GROWTH_{it} \\
& + \beta_{15}' ROA_{it} + \beta_{16}' GFC_{it} + \varepsilon_{it}'
\end{aligned}
\tag{6}
$$

where ε_{it}' is the error term for firm i during the period *t*.

Regarding the estimation method, we used a dynamic model by including the one-year-lagged value of the dependent variable as a regressor because REM shows a tendency to persist over time (Mellado and Saona, 2019). More specifically, we applied the dynamic panel data procedure proposed by Arellano and Bover (1995) and Blundell and Bond (1998) and used the dynamic panel generalised method of moments (GMM) techniques in estimating equations 1 and 2. The GMM estimators are particularly suitable to address the heterogeneity problem and the potential endogeneity issues arising from the presence of lagged dependent variables (Mellado and Saona, 2019).

Given a persistent REM, our preferred estimator is the two-step System GMM as it helps surmount the weak instrument issue and improve the estimates' efficiency (Arellano and Bond, 1991; Roodman, 2006). This procedure was performed in STATA 13 by applying Roodman's (2006) xtabond2 routine. The consistency of the GMM estimator system depends on both the validity of the instruments (Hansen test) and the validity of the null hypothesis of "no second-order autocorrelation in the disturbance term" (AR (2) test).

5.6 *Sample selection*

Table 1 displays the sample selection procedure.

Table 1 Sample selection procedure

	Firms	*Observations*
Initial sample	120	1800
Financial companies	39	585
	81	1215
Companies with unavailable data	2	30
Missing observations		23
Final sample	79	1162

Our initial sample consisted of 81 firms listed on the SBF 120 index for the period 2005–2019. Following prior studies on EM, we excluded financial and banking industries from the initial sample as accounting regulations significantly differ from those of non-financial ones, which may influence the results (Cohen and Zarowin, 2010; Debnath et al., 2019; Mellado and Saona, 2019; Zalata et al., 2019).Thus, the final sample is an unbalanced panel including 1,162 firm-year observations between 2005 and 2019 (Table 1). Governance data were gathered manually from annual reports. Financial data used to estimate the REM models were gathered from the Datastream database.

Table 2 presents the percentages of observations in each industry.

Table 2 Composition of the sample by industry

Industries	*Observations*	*Percentages*
Basic materials	60	5.164
Consumer goods	240	20.654
Consumer services	240	20.654
Healthcare	75	6.454
Industrials	310	26.678
Oil&gas	48	4.131
Technology	105	9.036
Telecommunications	15	1.291
Utilities	69	5.938
Total	1162	100

The industrial classification provided in Table 2 shows that the industrials, consumer goods, and consumer services sectors are the most represented.

6 Empirical findings and discussions

6.1 Univariate analysis

Descriptive statistics related to all variables of this research are presented in Table 3.

Table 3   Descriptive statistics

Variable	N	Mean	Std. dev.	Min	Max
REM	1162	0.262	0.264	−0.319	1.391
FEMD	1162	0.249	0.168	0	0.833
AUDIR	1162	0.522	0.500	0	1
DUAL	1162	0.502	0.500	0	1
BSIZE	1162	12.947	3.482	4	26
INDPB	1162	0.498	0.211	0	1
BDMET	1162	8.108	3.286	2	24
ACSIZE	1162	3.773	1.278	0	8
INDAC	1162	0.723	0.291	0	1
ACMET	1162	4.904	2.254	0	14
SIZE	1162	8.852	1.380	5.619	12.113
LEV	1162	0.888	1.440	−21.296	12.362
GROWTH	1162	2.168	2.018	−8.980	15.960
ROA	1162	0.038	0.061	-0.450	0.460
GFC	1162	0.131	0.337	0.000	1

Table 3 displays the descriptive statistics for dependent and independent variables used in equations 1 and 2. The REM mean is 26.2%, indicating that managers of French firms are, on average, involved in manipulating earnings through cash-flows. Besides, we can observe that the average female representation on the board is 24.9%.

Moreover, the average of firms that are audited by two Big4 auditors is 52.2%, implying that more than half of sampled firms prefer contracting with highly reputed auditors associated with a higher earnings quality (Gavious et al., 2012).

Regarding CEO duality, about 50% of the selected firms have a CEO that chairs the corporate board. The average board size is about 13, with 49.8% independent directors. Besides, the average audit committee size is between three and four, with an average independence percentage of 72.3%. Overall, the means of the board of directors and audit committee sizes are close to those of Nekhili et al. (2020). The averages of board and audit committee meetings held within a year are about 8 and 5 meetings, respectively.

6.2   Multivariate analysis

This paper investigated the effect of BGD on REM. Before reporting the results of the system GMM estimation model, we checked the existence of multicollinearity problems.

The results of correlations and variance inflation factors are depicted in Table 4.

Table 4 Correlation matrix

Variables	VIFs	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. REM	–	1.000														
2. FEMD	1.07	–0.111*	1.000													
3. AUDIR	1.21	0.233*	–0.013	1.000												
4. DUAL	1.04	0.042	0.037	0.019	1.000											
5. BSIZE	1.75	0.030	0.088*	0.167*	0.127*	1.000										
6. INDPB	1.61	0.092*	0.159*	0.052*	0.001	–0.183*	1.000									
7. BDMET	1.28	–0.025	0.065*	0.153*	0.018	0.067*	–0.032	1.000								
8. ACSIZE	1.54	0.088*	0.155*	0.156*	0.051*	0.429*	0.208*	0.089*	1.000							
9. INDAC	1.40	0.084*	0.175*	0.098*	0.040	–0.023	0.498*	–0.032	0.172*	1.000						
10. ACMET	1.62	0.006	0.077*	0.219*	–0.002	0.239*	0.245*	0.398*	0.415*	0.235*	1.000					
11. SIZE	1.71	0.364*	0.118*	0.358*	0.077*	0.511*	0.140*	0.076*	0.413*	0.128*	0.300*	1.000				
12. LEV	1.17	0.028	0.027	0.059*	–0.011	0.106*	–0.088*	0.076*	0.090*	–0.058*	0.006	0.158*	1.000			
13. GROWTH	1.28	0.035	0.027	–0.083*	–0.114*	–0.087*	–0.055*	–0.038	–0.031	0.010	0.002	–0.042	0.284*	1.000		
14. ROA	1.16	0.094*	0.004	0.041	0.026	–0.038	0.009	–0.135	–0.052*	0.036	–0.078*	–0.049*	–0.033	0.298*	1.000	
15.GFC	1.15	0.035	–0.353*	0.003	–0.073*	–0.037	–0.063*	–0.033	–0.047	–0.087*	–0.032	–0.024	–0.023	–0.033	–0.024	1.000

*represents significance at 5% level.

Table 4 reports the correlation matrix and variance inflation factors (VIF) for all the variables considered in this study. The correlation among all variables is below 0.60, and the variance inflation factor (VIF) coefficients are lower than the threshold of 10, as suggested by Hair et al. (2010). Therefore, the multicollinearity issue cannot influence our results.

Table 5 reports the regression results for GMM estimation method.

Table 5   System GMM regression of gender diversity on REM

	Panel A	Panel B
	Coef.	*Coef.*
	(P-value)	*(P-value)*
L1.REM	0.934***	0.931***
	(0.000)	(0.000)
L1.FEMD	−0.137***	−0.420***
	(0.000)	(0.000)
AUDIR	–	−0.110***
		(0.000)
L1.FEMD*AUDIR	–	0.444***
		(0.000)
DUAL	−0.020***	−0.047***
	(0.000)	(0.000)
BSIZE	−0.001***	−0.001
	(0.001)	(0.206)
INDPB	−0.003	−0.001
	(0.455)	(0.805)
BDMET	−0.001***	−0.001
	(0.001)	(0.206)
ACSIZE	0.001	0.001
	(0.153)	(0.207)
INDAC	−0.009***	−0.006**
	(0.000)	(0.015)
ACMET	−0.001*	−0.001***
	(0.056)	(0.004)
SIZE	0.008***	0.012***
	(0.000)	(0.000)
LEV	−0.008***	−0.010***
	(0.000)	(0.000)
GROWTH	0.010***	0.010***
	(0.000)	(0.000)
ROA	0.129***	0.198***
	(0.000)	(0.000)

Table 5 System GMM regression of gender diversity on REM (continued)

	Panel A	Panel B
	Coef.	*Coef.*
	(P-value)	*(P-value)*
GFC	–0.031***	–0.030***
	(0.000)	(0.000)
Constant	–0.003	0.033**
	(0.731)	(0.037)
F-statistic	66255.57	21319.67
Prob. > *F*	0.000	0.000
Hansen test *p*-value	0.994	0.997
AR(2) test	–0.77	–0.56
AR(2) test *p*-value	0.441	0.574

*, **, *** represent significance at 10%, 5% and 1% levels, respectively.

Table 5 presents the results of the System GMM estimation for equations (5) and (6). The Hansen test allows accepting the hypothesis of the instruments' validity. Furthermore, the AR (2) test suggests the absence of second-order serial correlation in the error term. Given the results of the two tests, the validity of the results obtained with the System GMM estimator is accepted. Besides, we note that the coefficient of the lagged dependent variable, i.e., REM, is positive and significant, thus confirming the dynamic nature of the model specification (Mellado and Saona, 2019).

Panel A highlights the importance of female directors on the board as a governance device to constrain REM activities. Indeed, the coefficient of lagged female directors is negative and significant, which means that female presentation on the board contributes to decreasing REM. This finding is in line with the agency, the behavioural, the resource dependence, and the social role theories. Hence, our first hypothesis is confirmed. This result corroborates previous studies (Luo et al., 2017; Kouaib and Almulhim, 2019) and is consistent with evidence documented in AEM research studies (Lakhal et al., 2015; Damak, 2018; Gull et al., 2018; Kouaib and Almulhim, 2019). It is central in the French context as it provides support to the law of quotas stipulating a percentage of female directors on the board of 40% by the end of 2016.

Concerning the characteristics of the board of directors', duality has a negative and significant effect on REM. While this evidence is contrary to the agency theory and empirical evidence of Gull et al. (2018) and Damak (2018), it is similar to that of Bao and Lewellyn (2017) in the context of AEM. Thus, a CEO who chairs the board in French firms is less likely to manage earnings through cash flows manipulation. This result is in line with Godard and Schatt (2005), who argue that duality allows the chairman to have increased knowledge of the company's environment and a better expertness, thus improving the firm's long-term performance.

The board size has a negative and significant impact on REM. This finding corroborates that of Kang and Kim (2012), indicating that when there are more members on the board, it is easier for the corporate board to monitor the management. Besides, the independent directors' effect on REM is negative but non-significant. The association between the board of directors' meetings and REM is negative and significant. This last

result, which is consistent with Gull et al. (2018) for French firms in the case of AEM, suggests that boards that meet more frequently are more diligent and have more robust monitoring mechanisms, which lead to decreasing REM.

The audit committee size effect is not significant, which is consistent with the results of Sun et al. (2014), Abdullah and Wan Hussin (2015), and Garven (2015). This evidence suggests that this factor is not a pertinent driver of a good audit committee in controlling REM (Ghaleb and Kamardin, 2018). However, audit committee independence has a negative and significant effect, which is consistent with Kang and Kim (2012) and Hassan and Ibrahim (2014).

In line with Hassan and Ibrahim (2014) and Garven (2015), we found negative and significant results regarding audit committee meetings, suggesting that audit committees having more meetings within the year can constrain REM. These results are consistent with the monitoring role of the audit committee.

The same table shows that firm size has a positive and significant effect on REM. This result is consistent with those of Talbi et al. (2015) and Anagnostopoulou and Tsekrekos (2016), suggesting that REMis more widespread among larger French firms. This result can be explained by the greater bargaining power of big firms' managers with auditors, which leads to a higher REM level.

Leverage is negatively and significantly related to REM. This result can be attributed to the high control of banks in the French economy. So, managers of more leveraged firms are not likely to manipulate earnings via real transactions.

With respect to the estimated coefficient related to the market to book ratio, growth opportunities are positively and significantly related to REM. This result, suggesting that REM should be more prevalent among firms with higher growth opportunities, is consistent with Barth et al. (1999) and Xue (2003), who show that EM can be used for signalling purposes. This finding denotes that French firms are more interested in capital markets because they have been using IAS/IFRS since 2005. As explained by Pittroff (2021), the continental system is changing and presents some specificities of the Anglo-Saxon system. The author gives the example of capital market financing as an alternative to bank funding that has been reinforced in many aspects, i.e., requiring greater transparency. Thus, Pittroff (2021, p.8) noted that "it is no longer legitimate to disregard the interests of the capital market in order to maintain the power of other stakeholders".

Ultimately, the ROA has a positive and significant effect at 1% level. Hence, managers are encouraged to practise REM when ROA is higher. Because investors fixate their objectives regarding a firm's historical performance, managers find themselves compelled to exercise more operational discretion as profitability increases. This result is in line with that of Das et al. (2017). In the same vein, Srinidhi et al. (2011) and Gull et al. (2018) concluded that managers in less profitable firms are less likely to engage in AEM. Likewise, Mellado and Saona (2019) found that ROA prompts REM activities. These authors noted that when profitability increases, managers have to prove their ability in at least meeting historical performances. Accordingly, real activities manipulation is considered a device to achieve this anticipated performance measured by ROA.

The effect of GFC is negative and significant. This finding is in line with that of Filip and Raffournier (2014), who prove that EM decreases during crisis periods.

Panel B reports the results of the moderating role of auditor reputation on the relationship between BGD and REM. As depicted in panel A, the coefficient of female

directors is negative and significant. This finding confirms the importance of BGD in strengthening the monitoring role of the board on REM. The auditor reputation has a negative and significant effect, suggesting that auditor reputation is crucial as a REM control device. This result confirms the results of Chen et al. (2006) concerning AEM for Taiwanese firms. According to these authors, this proves the ability of auditors' brand name reputation to restrain EM.

The interaction factor has a positive and significant effect on REM, and the coefficient of female directors remains negative but higher when controlling for auditor reputation (from −0.137 to −0.420).Therefore, the negative effect of BGD on REM is superior when firms use the service of highly reputable auditors. This finding shows that a higher proportion of female directors in boardrooms improves board monitoring that results from hiring highly reputable auditors. Accordingly, it can be concluded that audit service reinforces the relationship between BGD and REM. Thus, our findings support the second hypothesis that auditor reputation moderates the BGD-REM relationship. Besides, these results corroborate those of Kouaib and Almulhim (2019), who found that audit quality has a moderating role in the relationship between BGD and both accrual and real EM activities.

6.3   Robustness checks

6.3.1   Pre-/post Copé-Zimmermann analyses

Table 6 reports the results of GMM regression before and after the Copé-Zimmermann law adoption.

Table 6   System GMM regression of gender diversity on REM (Pré/post Copé Zimmermann law)

	Pre-Copé-Zimmermann		Post Copé-Zimmermann	
	Panel A	Panel B	Panel C	Panel D
	Coef.	Coef.	Coef.	Coef.
	(P-value)	(P-value)	(P-value)	(P-value)
L1.REM	0.903***	0.934***	0.925***	0.917***
	(0.000)	(0.000)	(0.000)	(0.000)
L1.FEMD	−0.102	−0.356**	−0.162***	−0.409***
	(0.250)	(0.037)	(0.000)	(0.000)
AUDIR	–	−0.069*	–	−0.081***
		(0.087)		(0.000)
L1.FEMD*AUDIR	–	0.365**	–	0.407***
		(0.032)		(0.000)
DUAL	−0.012	−0.003	−0.018***	−0.050***
	(0.426)	(0.727)	(0.001)	(0.000)
BSIZE	−0.001	−0.003	−0.002***	−0.001***
	(0.670)	(0.226)	(0.000)	(0.008)
INDPB	0.058	−0.051*	−0.003	−0.016*
	(0.514)	(0.045)	(0.509)	(0.075)

Table 6   System GMM regression of gender diversity on REM (Pré/post Copé Zimmermann law) (continued)

	Pre-Copé-Zimmermann		Post Copé-Zimmermann	
	Panel A	*Panel B*	*Panel C*	*Panel D*
	Coef.	*Coef.*	*Coef.*	*Coef.*
BDMET	–0.034***	–0.011***	–0.001**	–0.001***
	(0.000)	(0.003)	(0.022)	(0.000)
ACSIZE	0.014	–0.002	–0.001	–0.001
	(0.155)	(0.593)	(0.519)	(0.181)
INDAC	–0.075	–0.023	–0.008***	–0.006**
	(0.204)	(0.346)	(0.000)	(0.001)
ACMET	–0.013	0.002	–0.001	–0.001
	(0.266)	(0.445)	(0.494)	(0.136)
SIZE	0.028**	0.020**	0.011***	0.012***
	(0.030)	(0.010)	(0.000)	(0.000)
LEV	–0.040**	–0.029**	–0.006***	–0.006***
	(0.015)	(0.023)	(0.000)	(0.000)
GROWTH	0.001	0.004	0.007***	0.006***
	(0.972)	(0.378)	(0.000)	(0.000)
ROA	0.272	–0.015	0.256***	0.159***
	(0.557)	(0.877)	(0.000)	(0.000)
GFC	–0.022**	–0.042***	–	–
	(0.011)	(0.000)		
Constant	0.148	0.087	–0.009	0.077***
	(0.204)	(0.159)	(0.359)	(0.001)
F-statistic	54.75	167.78	30504.51	12709.37
Prob. > *F*	0.000	0.000	0.000	0.000
Hansen test *p*-value	0.116	0.113	0.891	0.905
AR(2) test	-1.00	-0.81	-1.69	-1.17
AR(2) test *p*-value	0.318	0.420	0.091	0.243

*, **, *** represent significance at 10%, 5% and 1% levels, respectively.

To control the effect of Copé-Zimmermann law adoption, we selected subsamples of French firms observed before and after 2011 to examine whether our results hold before and after the mandatory use of quotas in France. Consequently, we test equations (5) and (6) using the System GMM estimation technique for sub-samples of firm-year observations during the periods 2005–2010 and 2011–2019. It is important to note that our findings are corroborated by this additional test. The effect of BGD was not significant before 2011 as the percentage of women directors was lower than after the Copé-Zimmermann implementation. Moreover, the moderating role of audit reputation is verified.

6.3.2 Alternative measure of BGD

Table 7 displays the results of GMM regression using the Shannon index as another measure of gender diversity.

Table 7 System GMM regression of Shannon index on REM

	Panel A	Panel B
	Coef.	Coef.
	(P-value)	(P-value)
L1.REM	0.919***	0.917***
	(0.000)	(0.000)
L1.SHAN	−0.153***	−0.275***
	(0.000)	(0.000)
AUDIR	–	−0.107***
		(0.000)
L1.SHAN*AUDIR	–	0.200***
		(0.000)
DUAL	−0.020***	−0.019***
	(0.000)	(0.000)
BSIZE	−0.001***	−0.001**
	(0.000)	(0.016)
INDPB	−0.004	−0.002
	(0.439)	(0.693)
BDMET	−0.001	−0.001
	(0.279)	(0.476)
ACSIZE	0.001	0.001
	(0.321)	(0.132)
INDAC	−0.004*	−0.005***
	(0.068)	(0.006)
ACMET	−0.001	−0.001*
	(0.162)	(0.060)
SIZE	0.007***	0.008***
	(0.000)	(0.000)
LEV	−0.011***	−0.013***
	(0.000)	(0.000)
GROWTH	0.012***	0.015***
	(0.000)	(0.000)
ROA	0.187***	0.114***
	(0.000)	(0.008)

Table 7   System GMM regression of Shannon index on REM (continued)

	Panel A	Panel B
	Coef.	Coef.
	(P-value)	(P-value)
GFC	–0.032***	–0.033***
	(0.000)	(0.000)
Constant	0.049***	0.099***
	(0.000)	(0.000)
F-statistic	43433.38	10969.15
Prob. > F	0.000	0.000
Hansen test p-value	0.998	0.998
AR(2) test	–1.63	–1.55
AR(2) test p-value	0.103	0.122

*, **, *** represent significance at 10%, 5% and 1% levels, respectively.

As the percentage of women directors divided by the total number of directors is generally used in several BGD studies, we performed an additional analysis by considering the Shannon index as a comprehensive measure of gender diversity (Guping et al., 2020). This index captures the level of homogeneity on the corporate boards and presents higher values when the number of women and men directors is equal. It is calculated using the formula $-\sum_{1}^{n} Pi\,Ln\,Pi$, where Pi is the percentage of each gender, and n equals 2, showing categories of male and female. Our results are robust for this alternative measure of BGD.

7   Conclusion

The present work aimed to investigate the effect of BGD on REM by focusing on the monitoring role of female directors on the board and their ability to constrain REM. Furthermore, we examined the moderating role of audit quality by considering the effect of auditor reputation on the BGD-REM relationship. We used a sample of 1162 French firm year-observations between 2005 and 2019. Selected non-financial firms are listed on the SBF 120 index.

In conclusion, our evidence highlights the importance of female directors in monitoring REM and the moderating role of auditors' reputation in this relationship. Indeed, the constraining effect of female directors on REM is higher when firms are audited by two Big4 auditors. Our findings complement the existing literature and have important implications for regulatory bodies and stakeholders. Regarding the regulatory bodies, our results corroborate and sustain the French government's efforts in increasing female directors' representation on the board following the enactment of the Copé-Zimmermann law adopted in 2011. This may encourage regulators in other countries to promote the appointment of female directors on boards of directors**.** Besides, in the light of our evidence that female directors enhance the board controlling role of managerial decisions, policymakers are urged to promote women in higher positions.

Also, as the auditor's reputation strengthens female directors' control over REM activities, stakeholders should consider women representation on the corporate board in conjunction with highly reputable auditors as a signal and guarantee of financial reporting reliability. As with any empirical research, the current study has some limitations: Firstly, we selected France, which implemented mandatory quotas law of women representation on the board. This law is not applied in all European countries; thus, we cannot extend our conclusions to other contexts where women are recruited on the board voluntarily. This limitation can be surmounted by selecting samples from different contexts. Besides, we used auditor reputation that constitutes a single measure of auditing quality. Future studies may consider other audit quality proxies, such as auditor tenure and audit fees.

References

Abdullah, N.M. and Wan Hussin, W.N. (2015) 'Related party transactions, audit committees and real earnings management: the moderating impact of family ownership', *Advanced Science Letters*, Vol. 21, No. 6, pp.2033–2037.

Adams, R. and Funk, P. (2012) 'Beyond the glass ceiling: does gender matter?', *Management Science*, Vol. 58, No. 2, pp.219–235.

Adams, R.B. and Ferreira, D. (2009) 'Women in the boardroom and their impact on governance and performance', *Journal of Financial Economics*, Vol. 94, No. 2, pp.291–309.

Adelopo, I., Olumuyiwa, Y.G. and Rufai, I. (2019) 'The impacts of multiple large ownership structure on board independence', *International Journal of Accounting, Auditing and Performance Evaluation*, Vol. 15, No. 1, pp.1–30.

Adjaoud, F. (2018) 'La gestion réelle des résultats: Le cas des entreprises françaises', *International Journal of Scientific and University Research Publication*, Vol. 13, No. 205, pp.1–11.

Ahmed, A.S., Neel, M. and Wang, D. (2013) 'Does mandatory adoption of IFRS improve accounting quality? Preliminary evidence', *Contemporary Accounting Research*, Vol. 30, No. 4, pp.1344–1372.

Al-Dhamari, R.A., Ku Ismail, K.N.I. and Al-Gamrh, B.A. (2016) 'Board diversity and corporate payout policy: do free cash flow and ownership concentration matter?', *Corporate Ownership & Control*, Vol. 14, Nos. 1–2, pp.373–383.

Alexeyeva, I. (2019) 'Individual auditor competences and the pricing of audit services', *International Journal of Accounting, Auditing and Performance Evaluation*, Vol. 15, No. 2, pp.191–218.

Anagnostopoulou, S.C. and Tsekrekos, A.E. (2016) 'The effect of financial leverage on real and accrual-based earnings management', *Accounting and Business Research*, Vol. 4, No. 2, pp.191–236.

Anderson, R.C., Reeb, D.M., Upadhyay, A. and Zhao, W. (2011) 'The economics of director heterogeneity', *Financial Management*, Vol. 40, No. 1, pp.5–38.

Arano, K., Parker, C. and Terry, R. (2010) 'Gender-based risk aversion and retirement asset allocation', *Economic Inquiry*, Vol. 48, No. 1, pp.147–155.

Arellano, M. and Bond, S.R. (1991) 'Some tests of specification for panel data: monte carlo evidence and an application to employment equations', *Review of Economic Studies*, Vol. 58, No. 2, pp.277–297.

Arellano, M. and Bover, O. (1995) 'Another look at the instrumental variables estimation of error component models', *Journal of Econometrics*, Vol. 68, No. 1, pp.29–51.

Azibi, J., Tondeur, H. and Azibi, H. (2017) 'The impact of the H3C on auditor independence in French context', *Journal of Management and Sustainability*, Vol. 7, No. 2, pp.105–115.

Bao, S.R. and Lewellyn, K.B. (2017) 'Ownership structure and earnings management in emerging markets – an institutionalized agency perspective', *International Business Review*, Vol. 26, No. 5, pp.828–838.

Barth, M.E., Elliott, J. and Finn, M. (1999) 'Market rewards associated with patterns of increasing earnings', *Journal of Accounting Research*, Vol. 37, No. 2, pp.387–413.

Bédard, J. and Schatt, A. (2020) 'What are the economic consequences of joint audits?', *The Foundation for Auditing Research*, practice note.

Bennouri, M., Nekhili, M. and Touron, P. (2015) 'Does auditor reputation 'discourage', related-party transactions? The French case', *Auditing: A Journal of Practice & Theory*, Vol. 34, No. 4, pp.1–32.

Blundell, R. and Bond, S. (1998) 'Initial conditions and moment restrictions in dynamic panel data models', *Journal of Econometrics*, Vol. 87, No. 1, pp.115–143.

Boubaker, S., Dang, R. and Nguyen, D.K. (2014) 'Does board gender diversity improve the performance of French listed firms?', *Gestion 2000*, Vol. 31, pp.259–269.

Boukattaya, S. and Omri, A. (2018) 'Gender diversity and firm performance: evidence from French boardrooms', *Euro Med J. of Management*, Vol. 2, No. 4, pp.356–368.

Burunciuc, C. and Gonenc, H. (2021) 'Reforms protecting minority shareholders and firm performance: international evidence', *Journal of Risk and Financial Management*, Vol. 14, No. 1, pp.1–24.

Byoun, S., Chang, K. and Kim, Y.S. (2016) 'Does corporate board diversity affect corporate payout policy?', *Asia Pacific Journal of Financial Studies*, Vol. 45, No. 1, pp.48–101.

Byrnes, J.P., Miller, D.C. and Schafer, W.D. (1999) 'Gender differences in risk taking: a meta-analysis', *Psychological Bulletin*, Vol. 125, No. 3, pp.367–383.

Callao, S., Jarne, J.I. and Wroblewski, D.A. (2014) 'The development of earnings management research: a review of literature from three different perspectives', *ZeszytyTeoretyczneRachunkowosci*, Vol. 79, No. 135, pp.135–178.

Campbell, K. and Mínguez-Vera, A. (2008) 'Gender diversity in the boardroom and firm financial performance', *Journal of Business Ethics*, Vol. 83, No. 3, pp.435–451.

Carter, D.A., Simkins, B.J. and Simpson, W.G. (2003) 'Corporate governance, board diversity, and firm value', *Financial Review*, Vol. 38, No. 1, pp.33–53.

Che, L., Hope, O.K. and Langli, J.C. (2020) 'How big-4 firms improve audit quality', *Management Science*, Vol. 66, No. 10, pp.4552–4572.

Chen, Y.K., Wu, Y.S. and Zhou, J. (2006) 'Auditor brand name, industry specialisation, and earnings management: evidence from Taiwanese companies', *International Journal of Accounting, Auditing and Performance Evaluation*, Vol. 3, No. 2, pp.194–219.

Chizema, A., Kamuriwo, D.S. and Shinozawa, Y. (2015) 'Women on corporate boards around the world: triggers and barriers', *Leadership Quarterly*, Vol. 26, No. 6, pp.1051–1065.

Cohen, D.A. and Zarowin, P. (2010) 'Accrual-based and real earnings management activities around seasoned equity offerings', *Journal of Accounting and Economics*, Vol. 50, No. 1, pp.2–19.

Commerford, B.P., Hermanson, D.R., Houston, R.W. and Peters, M.F. (2016) 'Real earnings management: a threat to auditor comfort?', *AUDITING: A Journal of Practice*, Vol. 35, No. 4, pp.39–56.

Croson, R. and Gneezy, U. (2009) 'Gender differences in preferences', *Journal of Economic Literature*, Vol. 47, No. 2, pp.448–474.

Cumming, D., Leung, T.Y. and Rui, O. (2015) 'Gender diversity and securities fraud', *Academy of Management Journal*, Vol. 58, No. 5, pp.1572–1593.

Damagum, Y.M., Oba, V.C., Chima, E.I. and Ibikunle, J.I.D.E. (2014) 'Women in corporate boards and financial reporting credibility: evidence from Nigeria', *International Journal of Accounting and Financial Management Research*, Vol. 4, No. 1, pp.1–8.

Damak, S.T. (2018) 'Gender diverse board and earnings management: evidence from French listed companies', *Sustainability Accounting, Management and Policy Journal*, Vol. 9, No. 3, pp.289–312.

Damak, S.T. and Ben Hamad, S. (2019) 'Capital structure and earnings management: evidence from recent French corporate governance context', *International Journal of Accounting, Auditing and Performance Evaluation*, Vol. 15, No. 4, pp.313–333.

Das, R.C., Mishra, C.S. and Rajib, P. (2017) 'Real versus accrual-based earnings management', *Paradigm*, Vol. 21, No. 2, pp.156–174.

De Angelo, L. (1981) 'Auditor size and auditor quality', *Journal of Accounting and Economics*, Vol. 3, No. 3, pp.183–199.

Debnath, N.C., Patnaik, B.C.M. and Satpathy, I. (2019) 'Female directorship and real earnings management in Bangladesh: towards an analytical assessment', *Management Science Letters*, Vol. 9, No. 11, pp.1723–1740.

Dechow, P., Sloan, R. and Sweeney, A. (1996) 'Causes and consequences of earnings manipulation: an analysis of firms subject to enforcement actions by the SEC', *Contemporary Accounting Research*, Vol. 13, No. 1, pp.1–36.

DeFond, M. and Zhang, J. (2014) 'A review of archival auditing research', *Journal of Accounting and Economics*, Vol. 58, No. 2, pp.275–326.

Deng, M., Lu, T., Simunic, D.A. and Ye, M. (2014) 'Do joint audits improve or impair audit quality?', *Journal of Accounting Research*, Vol. 52, No. 5, pp.1029–1066.

Djankov, S., La Porta, R., Lopez-de-Silanes, F. and Shleifer, A. (2008) 'The law and economics of self-dealing', *Journal of Financial Economics*, Vol. 88, No. 3, pp.430–465.

Eagly, A.H. (2009) 'The his and hers of prosocialbehaviour: an examination of the social psychology of gender', *American Psychologist*, Vol. 64, No. 8, pp.644–658.

European Commission (2019) 2019 *Report on Equality between Women and Men in the EU*.

Faccio, M. and Lang, L. (2002) 'The ultimate ownership of western European corporations', *Journal of Financial Economics*, Vol. 65, No. 3, pp.365–395.

Faccio, M., Marchica, M.T. and Mura, R. (2016) 'CEO gender, corporate risk-taking, and the efficiency of capital allocation', *Journal of Corporate Finance*, Vol. 39, No. C, pp.193–209.

Filip, A. and Raffournier, B. (2014) 'Financial crisis and earnings management: the European evidence', *The International Journal of Accounting*, Vol. 49, No. 4, pp.455–478.

Francis, J. (2011) 'A framework for understanding and researching audit quality', *Auditing: A Journal of Practice & Theory*, Vol. 30, No. 2, pp.125–152.

Francis, J.R. and Wang, D. (2008) 'The joint effect of investor protection and big 4 audits on earnings quality around the world', *Contemporary Accounting Research*, Vol. 25, No. 1, pp.157–191.

Francis, J.R., Richard, C. and Vanstraelen, A. (2009) 'Assessing France's joint audit requirement: are two heads better than one?', *AUDITING: A Journal of Practice*, Vol. 28, No. 2, pp.35–63.

Fremeaux, S. and Noël, C. (2009) 'Le co-commissariat aux comptes sous le prisme de la sociologie du droit. Des vertus symboliques d'une règle contestée du gouvernement d'entreprise', *Comptabilité Contrôle Audit (Numéro thématique)*, Vol. 15, pp.117–140.

Gao, Y. (2018) 'Board gender diversity, earnings quality and stock price informativeness', *American Journal of Industrial and Business Management*, Vol. 8, No. 2, pp.306–312.

Garven, S. (2015) 'The effects of board and audit committee characteristics on real earnings management: do boards and audit committees play a role in its promotion or constraint?', *Academy of Accounting and Financial Studies Journal*, Vol. 19, No. 1, pp.67–85.

Gavious, I., Segev, E. and Yosef, R. (2012) 'Female directors and earnings management in high-technology firms', *Pacific Accounting Review*, Vol. 24, No. 1, pp.4–32.

Ghaleb, B.A.A. and Kamardin, H. (2018) 'Real earnings management: a review of literature and future research', *Asian Journal of Finance & Accounting*, Vol. 10, No. 1, pp.440–456.

Ghaleb, B.A.A., Kamardin, H. and Tabash, M.I. (2020) 'Family ownership concentration and real earnings management: empirical evidence from an emerging market', *Cogent Economics and Finance*, Vol. 8, No. 1, pp.1–16.

Godard, L. and Schatt, A. (2005) 'Faut-il limiter le cumul des fonctions dans les conseils d'administration ? Le cas Français', *La revue des Sciences de Gestion*, Vol. 213, pp.61–72.

Graham, J.R., Harvey, C.R. and Rajgopal, S. (2005) 'The economic implications of corporate financial reporting', *Journal of Accounting and Economics*, Vol. 40, Nos. 1–3, pp.3–73.

Gul, F.A., Hutchinson, M.R. and Lai, K.M.Y. (2013) 'Gender-diverse boards and properties of analyst earnings forecasts', *Accounting Horizons*, Vol. 27, No. 3, pp.511–538.

Gul, F.A., Srinidhi, B. and Ng, A.C. (2011) 'Does board gender diversity improve the informativeness of stock prices?', *Journal of Accounting and Economics*, Vol. 51, No. 3, pp.314–338.

Gull, A.A., Nekhili, M. Nagati, H. and Chtioui, T. (2018) 'Beyond gender diversity: how specific attributes of female directors affect earnings management', *The British Accounting Review*, Vol. 50, No. 3, pp.255–274.

Guping, C., Safdar, S.M., Wan, P., Badulescu, A., Badulescu, D. and Vianna, B.T. (2020) 'Do board gender diversity and non-executive directors affect CSR reporting? Insight from agency theory perspective', Sustainability, Vol. 12, No. 20, pp.1–25.

Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010) *Multivariate Data Analysis: A Global Perspective*, Prentice Hall, Upper Saddle River, NJ.

Hamdi, B., Mejri, T. and Haloua, S. (2018) 'Gestion des résultats, seuils comptables et gouvernance d'entreprise: le cas des sociétés françaises', *Finance Contrôle Stratégie*, Vol. 21, No. 3, pp.51–77.

Hassan, S.U. and Ibrahim, G. (2014) 'Governance attributes and real activities manipulation of listed manufacturing firms in Nigeria', *International Journal of Accounting and Taxation*, Vol. 2, No. 1, pp.37–62.

Haw, I.M., Hu, B., Hwang, L.S. and Wu, W. (2004) 'Ultimate ownership, income management, and legal and extralegal institutions', *Journal of Accounting Research*, Vol. 42, No. 2, pp.423–462.

Healy, P.M. and Wahlen, J.M. (1999) 'A review of the earnings management literature and its implications for standard setting', *Accounting Horizons*, Vol. 13, No. 4, pp.365–383.

Hillman, A.J. and Dalziel, T. (2003) 'Boards of directors and firm performance: integrating agency and resource dependence theory perspectives', *Academy of Management Review*, Vol. 28, No. 3, pp.383–396.

Hillman, A.J. and Shropshire, C. and Cannella Jr., A.A. (2007) 'Organizational predictors of women on corporate boards', *The Academy of Management Journal*, Vol. 50, No. 4, pp.941–952.

Iatridis, G.E. (2012) 'Audit quality in common-law and code-law emerging markets: evidence on earnings conservatism, agency costs and cost of equity', *Emerging Markets Review*, Vol. 13, No. 2, pp.101–117.

Ibrahim, N. and Angelidis, J. (2009) 'The relative importance of ethics as a selection criterion for entry-level public accountants: does gender make a difference?', *Journal of Business Ethics*, Vol. 85, No. 1, pp.49–58.

Ittonen, K. and Miettinen, J. and Vähämaa, S. (2010) 'Does female representation in audit committees affect audit fees?', *Quarterly Journal of Finance and Accounting*, Vol. 49, Nos. 3–4, pp.113–139.

Jurkus, A.F., Park, J.C. and Woodard, L.S. (2011) 'Women in top management and agency costs', *Journal of Business Research*, Vol. 64, No. 2, pp.180–186.

Kang, S.A. and Kim, Y.S. (2012) 'Effect of corporate governance on real activity-based earnings management: evidence from Korea', *Journal of Business Economics and Management*, Vol. 13, No. 1, pp.29–52.

Kiliç, M. and Kuzey, C. (2016) 'The effect of board gender diversity on firm performance: evidence from Turkey', *Gender in Management*, Vol. 31, No. 7, pp.434–455.

Klein, A. (2002) 'Audit committee, board of director characteristics, and earnings management', *Journal of Accounting and Economics*, Vol. 33, No. 3, pp.375–400.

Knechel, W.R., Niemi, L. and Zerni, M. (2013) 'Empirical evidence on the implicit determinants of compensation in big 4 audit partnerships', *Journal of Accounting Research*, Vol. 51, No. 2, pp.349–387.

Konrad, A. and Kramer, V.W. (2006) 'How many women do boards need?', Harvard Business Review, Vol. 84, No. 12, pp.22–24.

Kouaib, A. and Almulhim, A. (2019) 'Earnings manipulations and board's diversity: the moderating role of audit', *The Journal of High Technology Management Research*, Vol. 30, No. 2, pp.140–160.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R.W. (1998) 'Law and finance', *Journal of Political Economy*, Vol. 106, pp.1113–1155.

Lai, K.M.Y., Srinidhi, B., Gul, F.A. and Tsui, J. (2017) 'Board gender diversity, auditor fees and auditor choice', *Contemporary Accounting Research*, Vol. 34, No. 3, pp.1681–1714.

Lakhal, F., Aguir, A., Lakhal, N. and Malek, A. (2015) 'Do women on boards and in top management reduce earnings management? Evidence in France', *Journal of Applied Business Research*, Vol. 31, No. 3, pp.1107–1118.

Leuz, C., Nanda, D. and Wysocki, P.D. (2003) 'Earnings management and investor protection: an international comparison', *Journal of Financial Economics*, Vol. 69, No. 3, pp.505–527.

Luckerath-Rovers, M. (2013) 'Women on boards and firm performance', *Journal of Management & Governance*, Vol. 17, No. 2, pp.491–509.

Lund, D.B. (2008) 'Gender differences in ethics judgment of marketing professionals in the United States', *Journal of Business Ethics*, Vol. 77, No. 4, pp.501–515.

Luo, J.H., Xiang, Y. and Huang, Z. (2017) 'Female directors and real activities manipulation: evidence from China', *China Journal of Accounting Research*, Vol. 10, No. 2, pp.141–166.

Mellado, C. and Saona, P. (2019) 'Real earnings management and corporate governance: a study of Latin America', *Economic Research-EkonomskaIstraživanja*, Vol. 6, pp.1–40.

Mersni, H. and Ben Othman, H. (2016) 'The impact of corporate governance mechanisms on earnings management in Islamic banks in the middle east region', *Journal of Islamic Accounting and Business Research*, Vol. 7, No. 4, pp.318–348.

Mishra, R.K. and Kapil, S. (2017) 'Study on theories and mechanisms of corporate governance', *International Journal of Accounting, Auditing and Performance Evaluation*, Vol. 13, No. 1, pp.1–41.

Moeinadin, M., Heirany, F. and Moazen, H. (2013) 'Investigating the relationship between auditor tenure and the size of the audit firm with earnings management in pharmaceutical companies listed in Tehran stock exchange', *European Online Journal of Natural and Social Sciences*, Vol. 2, No. 3, pp.2454–2465.

Mollik, A.T., Mir, M., McIver, R. and Bepari, M.K. (2020) 'Effects of audit quality and audit committee characteristics on earnings management during the global financial crisis – evidence from Australia', *Australasian Accounting, Business and Finance Journal*, Vol. 14, No. 4, pp.85–115.

Mukhibad, H. and Nurkhin, A. (2019) 'Islamic business ethics disclosure and earnings management – evidence from Islamic banks in Indonesia', *Journal of Islamic Finance*, Vol. 8, No. 2, pp.31–42.

Nekhili, M., Gull, A.A., Chtioui, T. and Radhouane, I. (2020) 'Gender-diverse boards and audit fees: what difference does gender quota legislation make?', *Journal of Business Finance & Accounting*, Vol. 47, Nos. 1–2, pp.52–99.

Nielsen, S. and Huse, M. (2010) 'The contribution of women on boards of directors: going beyond the surface', *Corporate Governance: An International Review*, Vol. 18, No. 2, pp.136–148.

Ntim, C.G. (2013) 'Corporate ownership and market valuation in South Africa: uncovering the effects of shareholdings by different groups of corporate insiders and outsiders', *International Journal of Business Governance and Ethics*, Vol. 8, No. 3, pp.242–264.

Oradi, J. and Izadi, J. (2019) 'Audit committee gender diversity and financial reporting: evidence from restatements', *Managerial Auditing Journal*, Vol. 35, No. 1, pp.67–92.

Peni, E. and Vähämaa, S. (2010) 'Female executives and earnings management', *Managerial Finance*, Vol. 36, No. 7, pp.629–645.

Pfeffer, J. (1972) 'Size and composition of corporate boards of directors: the organization and its environment', *Administrative Science Quarterly*, Vol. 17, No. 2, pp.218–228.

Pfeffer, J. and Salancik, G.R. (1978) *The External Control of Organizations: A Resource Dependence Perspective*, Harper & Row, New York.

Piot, C. and Janin, R. (2007) 'External auditors, audit committees and earnings management in France', *European Accounting Review*, Vol. 16, No. 2, pp.429–454.

Pittroff, E. (2021) 'The legitimacy of global accounting rules: a note on the challenges from path-dependence theory', *Journal of Management and Governance*, Vol. 25, No. 2, pp.379–396.

Post, C. and Byron, K. (2015) 'Women on boards and firm financial performance: a meta-analysis', *The Academy of Management Journal*, Vol. 58, No. 5, pp.1546–1571.

Pucheta-Martínez, M.C. and Bel-Oms, I. (2016) 'The board of directors and dividend policy: the effect of gender diversity', *Industrial and Corporate Change*, Vol. 25, No. 3, pp.523–547.

Reguera-Alvarado, N., De-Fuentes, P. and Laffarga, J. (2017) 'Does board gender diversity influence financial performance? Evidence from Spain', *Journal of Business Ethics*, Vol. 141, No. 2, pp.337–350.

Reguera-Alvarado, N., De-Fuentes, P. and Laffarga, J. (2019) 'Do auditors mitigate earnings management during economic crisis?', *Revista de Contabilidad Spanish Accounting Review*, Vol. 22, No. 1, pp.6–20.

Roodman, D. (2006) *How to do xtabond2: an introduction to "Difference" and "System" GMM in Stata*, Working Paper N°103, Center for Global Development.

Rose, C. (2007) 'Does female board representation influence firm performance? The Danish evidence', *Corporate Governance*, Vol. 15, No. 2, pp.404–13.

Roychowdhury, S. (2006) 'Earnings management through real activities manipulation', *Journal of Accounting and Economics*, Vol. 42, No. 3, pp.335–370.

Sellami, M. and Adjaoud, F. (2010) *La gestion réelle des résultats: le cas des entreprises françaises*, Working Paper, Crises et nouvelles problématiques de la Valeur, Nice, France.

Shleifer, A. and Vishny, R.W. (1986) 'Large shareholders and corporate control', *Journal of Political Economy*, Vol. 94, No. 3, pp.461–489.

Shleifer, A. and Vishny, R.W. (1997) 'A survey of corporate governance', *Journal of Finance*, Vol. 52, No. 2, pp.737–783.

Srinidhi, B., Gul, F.A. and Tsui, J. (2011) 'Female directors and earnings quality', *Contemporary Accounting Research*, Vol. 28, No. 5, pp.1610–1644.

Sun, J., Lan, G. and Liu, G. (2014) 'Independent audit committee characteristics and real earnings management', *Managerial Auditing Journal*, Vol. 29, No. 2, pp.153–172.

Talbi, D., Omri, M.A. and Guesmi, K. and Ftiti, Z. (2015) 'The role of board characteristics in mitigating management opportunism: the case of real earnings management', *Journal of Applied Business Research*, Vol. 31, No. 2, pp.661–674.

Terjesen, S., Couto, E.B. and Francisco, P.M. (2016) 'Does the presence of independent and female directors impact firm performance? A multi-country study of board diversity', *Journal of Management & Governance*, Vol. 20, No. 3, pp.447–483.

Terjesen, S., Sealy, R. and Singh, V. (2009) 'Women directors on corporate boards: a review and research agenda', *Corporate Governance: An International Review*, Vol. 17, No. 3, pp.320–337.

Tian, Q. and Peterson, D.K. (2016) 'The effects of ethical pressure and power distance orientation on unethical pro-organizational behavior: the case of earnings management', *Business Ethics: A European Review*, Vol. 25, No. 2, pp.159–171.

Visvanathan, G. (2008) 'Corporate governance and real earnings management', *Academy of Accounting & Financial Studies Journal*, Vol. 12, No. 1, pp.9–22.

Wang, Y.H. (2020) 'Does board gender diversity bring better financial and governance performances? An empirical investigation of cases in Taiwan', *Sustainability*, Vol. 12, No. 8, pp.1–10.

Wijaya, A.L. (2020) 'The effect of audit quality on firm value: a case in Indonesian manufacturing firm', *Journal of Accounting, Finance and Auditing Studies*, Vol. 6, No. 1, pp.1–15.

Xue, Y.F. (2003) *Information Content of Earnings Management: Evidence from Managing Earnings to Exceed Thresholds*, Working Paper, University Texas, Austin.

Zalata, A.M., Ntim, C.G., Choudhry, T., Hassanein, A. and Elzahar, H. (2019) 'Female directors and managerial opportunism: monitoring versus advisory female directors', *The Leadership Quarterly*, Vol. 30, No. 5, pp.1–16.

Zang, A.Y. (2012) 'Evidence on the tradeoff between real manipulation and accrual manipulation', *The Accounting Review*, Vol. 87, No. 2, pp.675–703.

Zenou, E., Allemand, I. and Brullebaut, B. (2017) 'Gender diversity on French boards: example of a success from a hard law', in Seierstad, C., Gabaldon, P. and Mensi-Klarbach, H. (Eds): *Gender Diversity in the Boardroom, The Use of Different Quota Regulations*, Palgrave Macmillan, London, Vol. 1, pp.103–124.

Zisis, V. and Sorros, J. (2015) 'Differences in earnings management between audited and non-audited private manufacturing firms: evidence from Greece', *International Journal of Accounting, Auditing and Performance Evaluation*, Vol. 11, No. 1, pp.84–105.