

Article

The influence of institutional owners on strengthening banks' boards oversight roles in curbing managerial opportunistic behaviors

Alaa Alqudah^{1,*}, Ayman Abu-Haija², Mohammad Azzam¹, Laith Aryan³

¹ Accounting Department, Faculty of Business, Yarmouk University, Irbid 21163, Jordan

² Accounting Department, School of Business, Jadara University, Irbid 21163, Jordan

³ Accounting Department, College of Business, Ajloun National University, Ajloun 26810, Jordan

* Corresponding author: Alaa Alqudah, alaa.alqudah@yu.edu.jo

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Abstract: The aim of this study was to elucidate the expected moderating effect exerted by institutional owners on the intricate correlation between the characteristics of boards of directors and the issue of earnings management, as gauged by the loan loss provisions. The sample encompassed all the banks listed on the Amman Stock Exchange (ASE) over the period between 2010 and 2022, representing a total of 182 observations. The results derived from the examination clearly demonstrate that the institutional owners have a key impact on augmenting the monitoring tasks and responsibilities of the boards of directors across the study sample. The results revealed the fundamental role of such owners in strengthening the supervisory tasks carried out by boards of directors in Jordan. A panel data model has been used in the analysis. The results of this study show that the presence of the owner of an institution has a discernible moderating role in the banks' monitoring landscape. Indeed, their presence strengthens the monitoring tasks of the banks' boards by underscoring the quest to restrict the EM decisions. Interestingly, the results support the monitoring proposition outlined by agency theory, which introduced CG recommendations as a deterrent tool to reduce the expectation gap between banks' owners and their representatives.

Keywords: loan loss provisions; gender diversity; institutional ownership and political background

1. Introduction

The continuity and success of corporations have lain in their ability to operate under the suggested umbrella of laws and regulations to protect shareholders' investments (AlQudah, Azzam, Haija, & AlSmadi, 2020). Among these regulations, corporate governance (CG) stand appears as one of the most noticeable regulatory frameworks to align the interests between corporations' interested users (Chen & Zhang, 2014). The active presence of activating CG recommendations is expected to govern the relationships between the team of decision makers and a corporation's shareholders, who aim to gain satisfactory profits at the end of the year. Indeed, CG plays a key role in safeguarding the investments made by shareholders, as well as a leading role in enhancing the corporation's integrity, transparency and performance (AlQudah, Azzam, Aleqab, & Shakatreh, 2019).

Interestingly, considering the diverse landscape of the business environment and the appearance of several challenges that may threaten the continuity of corporations, CG has appeared as a compass that can be driven by managers to protect shareholders' interests as well as increasing corporations' willingness with regard to ethical and other issues, such as sustainability (AlQudah et al., 2019; Chatterjee & Rakshit, 2023;

Eleimat, Ebbini, Aryan, & Al-Hawary, 2023; Mensah & Boachie, 2023). Noticeably, CG has been classified as a keystone of corporation integrity, which is expected to impose the adherence to ethical and transparency matters on managers. For instance, the professional and diligent performance of managerial tasks is expected to constrain the appearance of unethical practices and misconduct, which may otherwise erode shareholders' trust and tarnish the effective image of a corporation's managers (Githaiga, Muturi Kabete, & Caroline Bonareri, 2022).

Additionally, previous studies have introduced active boards as fiduciary members who are willing to boost shareholders' benefits and minimize the risk of falling on the pool of opportunistic behavior; for instance, earnings management (Chen & Zhang, 2014; Khuong et al., 2022; Mensah & Boachie, 2023). Indeed, their noticeable role stems from their experience, knowledge, and willingness to restrict any pass of opportunistic decisions has introduced them as trusted and experienced board to guarantee the smooth operation of corporations' tasks (Abu-Dawleh, Lybaert, Steijvers, & Jans, 2022; Ideh, Jeroh, & Ebiaghan, 2021). To illustrate, independent members have played an objective role in monitoring corporations' activities, in which they played a key role in minimizing EM practices that may harm shareholders' expectations (Goel & Kapoor, 2022). Indeed, their beliefs, experience and ethics will direct them to challenge EM practices and constrain such practices to the minimum (J. Z. Zhang & Yu, 2016). Furthermore, independent members are willing to maintain an attractive social acceptance in their societies, which in turn may achieve some social goals for them (Brinette, Sonmez, & Tournus, 2023; Wasiuzzaman & Subramaniam, 2023).

Furthermore, hiring active members with political ties is expected to adjust the monitoring map of a corporation, since such members are experienced in several regulatory matters which can help them to constrain EM practices. On top of that, politically connected members have a noticeable consideration regarding their reputation in their societies; thus, they may be keen to appear as active directors in constraining EM (Bliss, Gul, & Majid, 2011; Firmansyah et al., 2022).

On the other hand, the ownership map will be a bedrock in enhancing the monitoring tasks of corporations' boards. Indeed, active, and experienced owners may use their enforcement power to adjust any unfavorable decision that could be taken by corporation's boards to deviate from their main task, which is maximizing shareholders benefits (AlQudah et al., 2020; Le & Nguyen, 2023). Impressively, institutional owners who own a large stake in shares will not accept any decision that may influence their investments, since such owners may be mutual funds or other large corporations (Alshirah, Rahman, & Mustapa, 2020; Shakhathreh & Alsmadi, 2021). They will appear as unnegotiable defenders, especially when their profits are under the opportunistic attacks that may be launched by the management. For example, Ramalingegowda, Utke, and Yu (2021) presented institutional owners as unapproachable members who could be affected by opportunistic managers.

Hence, this study aims to investigate whether the presence of institutional owners has strengthened the monitoring roles of banks boards within the Jordanian context or not. This investigation is expected to add to the current literature for several reasons: firstly, the overall institutional ownership has reached more than 80% of the ownership map within the Jordanian banks listed on the Amman Stock Exchange (ASE) and this

remarkable percentage is expected to introduce them as industrious owners who are aware and responsible enough to protect their investments. Secondly, a high percentage of the institutional owners in Jordan are foreigners, who will be very aggressive and conservative in protecting their investments from being expropriated by greedy managers (Alrabba, Haija, AlQudah, & Azzam, 2018).

In a nutshell, it is expected that this study will answer the following inquiry:

Do institutional owners have a moderating role in the correlation between boards of directors' characteristics and earnings management estimated the loan loss provisions?

2. Literature review and hypotheses development

2.1. Agency theory and earnings management

The business environment presents several challenges and obstacles that may affect the appearance of corporations in the markets. The key challenge appears from delegating the monitoring authorities from corporations' shareholders to a specific board that manages and controls the overall operations in the corporation (AlQudah et al., 2020; Fama & Jensen, 1983). Indeed, such a theory is presented in the realms of business and markets which delves into the relationship among corporation's owners and their representatives in corporations' boards (Yami, Poletti-Hughes, & Hussainey, 2023). The theoretical fabric of agency theory aims to unravel the complicated management position that manifests among the various groups within a corporation paradigm in which a clear separation in tasks and responsibilities is clear and dissociated (Githaiga et al., 2022).

Indeed, in the complicated tapestry of the modern corporation, the agents have emerged as the owners who are willing to infuse their corporations with the necessary financial resources that guarantee a stable financial position to sustain the continuity of their corporations (Fama & Jensen, 1983). Interestingly, the entanglement of corporations' activities and their imbrication usually award the authority to make the necessary decisions to managers who appear in the business environment as duly vested directors who practice their tasks under the fiduciary umbrella to maximize shareholders' benefits. However, the transition indecision-making power may present a milieu in which a noticeable disagreement over goals is expected to harm the harmony among the different groups in the corporation, which in turn may cause a conflict of interest (Chen & Zhang, 2014).

Most importantly, the cardinal tenet of this theory appears clearly in different ways, such as the challenge of information asymmetry in which shareholders may fall into a labyrinth, which may constrain their ability of oversee daily decisions as well as restrict any opportunistic attitude that could be adopted by corporations' directors (Kapoor & Goel, 2019). This dichotomy is expected to create a noticeable opportunistic scenario where the directors will have priority when grappling with other groups, such as the shareholders. Indeed, such shareholders are not expected to be aware of the directors' actions and decisions (Hutchinson, Percy, & Erkurtoglu, 2008).

Hence, to restrict the challenges of agency theory, a stable fulcrum is required to limit the presence of any problems associated with the agency issue (Ideh et al., 2021). For example, active independent members have a remarkably salient task in protecting

shareholders' interests by acting as the custodians of shareholders investments, since they will not accept any opportunistic behaviour that may affect the investments in their corporations (Bansal, 2022; Kapoor & Goel, 2019). Their reputation will be enhanced by their panoramic vantage point, from which they are able to constrain earnings management practices (AlQudah et al., 2019). Additionally, their objectivity and experience in examining the financial statements of their corporations will encourage the adoption of objective methods for maintaining the integrity of the prepared financial statements. For instance, independent directors are more inclined and aware regarding earnings management practices, and they are qualified to restrict such behavior within the Chinese context (Chen & Zhang, 2014; Elnahass, Salama, & Yusuf, 2022).

In synthesis, the boards rooms in corporations are considered a linchpin in monitoring directors' activities, since they can help align and constrain any conflict in preferences, which in turn will achieve the key target of the shareholders by maximizing their benefits. Interestingly, active boards play a key role in restricting the dominant paradigm of opportunistic directors.

2.2. Board independence and earnings management

Active boards play a notable role in enhancing monitoring in corporations. Board independence (BI) has exerted profundo monitoring roles in the intricate business environment (Le & Nguyen, 2023). Some boards are inclined to manipulate the reported earnings to maximize their personal benefits at the expense of corporations' goals (Khuong et al., 2022). Indeed, the presence of qualified and independent directors may draw a distinct road map to monitor the overall decision-making process in a corporation, since they are untethered to directors' preferences. Consequently, they will augment the monitoring actions through which they ensure the integrity and accountability of the prepared financial statements (Goel & Kapoor, 2022). They will be objective and unburdened by directors' opportunistic behavior (Zhang & Yu, 2016). This will increase the vigilance to restrict any unfavorable behavior that may affect the continuity of the corporations by practicing covert maneuvers to enhance the quality of the financial statements (Ideh et al., 2021). Their scrutiny over the directors' behavior will help corporations to achieve their long-term vitality and continuity goals. Moreover, the reputation consideration will motivate them to catalyze the ethical framework in their corporation, in which EM will be restricted significantly (Kapoor & Goel, 2019). In other words, they will discourage the engagement in opportunistic entanglements which may affect the ethical considerations of their corporations.

Along these lines, Chen and Zhang (2014) documented a noticeable monitoring role for independent members in reducing the engagement in EM activities. Additionally, Githaiga et al. (2022); Usman, Nwachukwu, and Ezeani (2022) found that independent directors were highly committed and aware in terms of their monitoring tasks in reducing EM prevalence. In contrast, Goel and Kapoor (2022) asserted that independent directors do not exhibit a noticeable commitment to carrying out their monitoring roles professionally.

Meanwhile, several studies have introduced a complementary role of the ownership map in enhancing the boards' function of reducing the occurrence of EM. Their voting power, combined with their knowledge in creating effective communication channels with other directors and related parties, are expected to support the noble goal of the independent members in which their presence is expected to heighten their monitoring role to constrain EM techniques. Hence, this study assumes the following hypothesis:

H₁: Institutional owners are expected to strengthen the monitoring role of independent directors in constraining EM techniques in Jordanian banks listed on the ASE.

2.3. Gender diversity and earnings management

The presence of diverse directors' teams over corporations' boards in terms of gender is expected to introduce potentially effective restrictions in constraining EM behaviors (Alves, 2023). Such changes will enhance the accuracy and scrutiny of the financial statements introduced by a corporation's board, since this diversity will introduce a wide array of experienced directors who hold different points of view, thus the monitoring map will be controlled effectively (Wasiuzzaman & Subramaniam, 2023; Zalata, Ntim, Alsohagy, & Malagila, 2022; Zhu, Husnain, Ullah, Khan, & Ali, 2022). Under such boards, there will be rigorous revision of the decisions that directors aim to adopt. Additionally, diverse boards will heighten the probability of creating effective communication channels between board directors (Zalata et al., 2022). Hence, opportunistic behavior will not so easily be overlooked during the discussions undertaken in board rooms. Furthermore, the leadership in diverse boards will encompass skilled directors, who will be able to navigate the overall monitoring process and financial statements preparation; consequently, they will bolster the process of curbing EM decisions (Gull, Nekhili, Nagati, & Chtioui, 2018).

Noticeably, corporations aim to introduce their entities as highly committed to the main ethical issues – such as equity, transparency and integrity –in which such characteristics will be applied to the process of preparing financial statements (Gull et al., 2018; Nekhili, Gull, Chtioui, & Radhouane, 2020; Umer, Abbas, Hussain, & Naveed, 2020). Hence, this will create an ethical protective shield against opportunistic directors' tactics. Additionally, such boards will be likely to adopt the recommendations of several laws and regulations (e.g., Corporate Governance) effectively, in comparison with boards, by sending various questions and requests for clarification regarding any issues under suspicion, such as EM. Sanad, Shiwakoti, and Al-Sartawi (2022) documented the minimal presence of EM incorporations which were monitored by female directors. Furthermore, female directors exhibited a noticeable efficacy in hindering managers from being opportunistic when preparing financial statements (Anh & Khuong, 2022). Moreover, Zalata et al. (2022) claimed that experienced, seasoned females presented a conservative propensity in accepting and endorsing EM decisions. In fact, they were overcommitting regarding their monitoring roles. Moreover, the monitoring voices for the diverse boards were higher than other less diverse boards in terms of hindering the prevalence of EM decisions (Alves, 2023). Consequently, Yami et al. (2023) showed that female directors employed astute governance and displayed a noticeable aptitude for restricting EM decisions

efficaciously, which in turn augmented the accuracy and veracity of the financial statements prepared by the board rooms.

On the other hand, active institutional owners with clear monitoring vision will support the conservative role of females in restricting EM practices (Saleh, Afifa, & Alkhawaja, 2023). Thus, the combination of active institutional owners and female directors is expected to amplify their monitoring role. Therefore, the earnings management issue will not be a questionable one.

In summary, the conservative road map adopted by females may impose more restrictions and explanations regarding the decisions and operations that will be taken by the boards (Mensah & Boachie, 2023). Thus, diverse boards will guarantee at least the constraining of EM behavior. Females are noticeably more inclined to have constant and steady growth in terms of their corporation's earnings, rather than presenting inflated results that may threaten the continuity of the corporations where they perform their monitoring roles. Hence, this study assumes the following hypothesis:

H₂: Institutional owners are expected to strengthen the monitoring role of female directors in constraining EM techniques in Jordanian banks listed on the ASE.

2.4. Directors with political background and earnings management

In the general tapestry of board of director characteristics and corporations' stewardship, board members with political ties have a noteworthy monitoring role in enhancing the overall corporations' monitoring roles of such diverse boards. Indeed, such politically affiliated directors have a key role in restricting the nuanced behavior of opportunistic directors who are willing to maximize their benefits. This monitoring discourse appears to the stakeholders from their political acumen, which is expected to be connected with their financial experience. They are expected to have the upper hand when it comes to overseeing the decisions that will be taken and which may affect the reported profits negatively. Additionally, they will create a general umbrella that covers the ethical issues within the difficult realm of EM. In other words, they will be a noticeable bulwark against any surreptitious techniques which may affect the reported earnings.

In general, their political sagacity and financial experience will motivate them to protect their social and economic reputation from being harmed by opportunistic directors. Furthermore, they have a clear path of access to the necessary financial and information resources under the political ecosystem they have known (Khwaja & Mian, 2005). One of the remarkable fields of their experience is represented by their ability to reach the regulatory bodies and other stakeholders easily, due to their work experience. They will leverage from their political positions to facilitate, for instance, the securing of the information needed to restrict EM, as well as to enhance the quality of the financial statements, since they have the experience to take a favorable treatment to streamline their monitoring tasks and they can easily reach the regulatory bodies to report any unfavorable behavior so it can be restricted effectively (AlQudah et al., 2019; Khwaja & Mian, 2005). Also, they can foster the process of enhancing the quality of the monitoring regulations, such as CG, by sending effective feedback to the regulator to make the alterations necessary to protect shareholders' interests

(Agrawal & Knoeber, 2001; Shen, Lin, & Wang, 2015). They can affect the monitoring map efficiently by suggesting reductions of tax incentives or other remunerations of corporation boards (AlQudah et al., 2019).

Regarding their reputation, such members will act as conduits to increase corporations' commitment to ethical issues, through which they can gain social acceptance more easily. Besides, their monitoring attitudes are expected to send a remarkable monitoring signal to a corporation's shareholders and other interested users that their corporations are operating within a stable environment, and they have a noticeable political elite that will support their monitoring tasks. Thus, this promising monitoring position is expected to create public trust within the societies where they are carrying out their monitoring tasks. Thereby, they are expected to behave as an effective safeguard to protect shareholders' investments.

On the other hand, a contradictory premise of politically-tied directors assumes that they may respond to the pressures imposed by the government or the regulatory bodies, implying that they will be inclined to prioritize their benefits, rather than achieving the traditional goals of their corporations (Gul & Zhang, 2016).

Noticeably, based on the reputation perspective, directors with apolitical background are expected to enhance the financial positions of their corporations in order to gain personal achievements, as well as to be presented as delegated directors who are willing to protect shareholders' investments. Additionally, active institutional owners who are practicing their roles are expected to enhance the monitoring roles of such directors. Therefore, the following hypothesis will be tested in this study:

H₃: Institutional owners are expected to strengthen the monitoring role of directors with political backgrounds in constraining EM techniques in Jordanian banks listed on the ASE.

2.5. Financial certificates and earnings management

The monitoring realm within the business markets has obviously been affected by several instruments, such as financial expertise or certificates. Indeed, such a characteristic of a corporation's directors has garnered importance, due to its noticeable role in curtailing EM techniques. These financial certificates introduced such managers as efficacy directors in their domain, since they have the necessary information to restrict EM methods that could be applied over financial statements. In this vein, holding financial certificates is expected to introduce such individuals as experienced and knowledgeable directors who can detect EM. They will be taking on their tasks as endowed directors who will have a paramount effect on the overall monitoring map. Indeed, this noticeable role appears from the multifaceted interactions between their accumulated field experience and theoretical background, through which they will have the upper handover monitoring to deal with the prevalence of EM.

Armed with financial qualifications, directors will have a more discerning understanding of the prepared financial statements that will be reported to the interested users. The diverse experience gained from financial reporting topics and auditing materials will introduce them as effective tools to restrict EM. As custodians of the quality of financial statements, experienced directors will behave as sentinels to

guarantee the quality as well as the integrity of the profit numbers. Indeed, they will decipher the conflict of interests among the corporations' different parties, as well as restrict any attempts that might be made by directors to manipulate earnings.

In this connection, fortified with the knowledge and experience in financial issues gained from their certificates, they will behave as monitoring vanguards to enhance the truthfulness of financial statements and to guarantee the balance of following the ethical issues that are expected to reduce EM. Their experience in financial issues – such as documentation, accounting policies and moral commitment – is expected to protect the validity and accuracy of the financial statements under a dynamic monitoring framework in which the adoption of EM techniques will be curtailed noticeably. Furthermore, their acumen on several issues, such as financial topics, will help directors to practice their monitoring role and form a formidable monitoring bulwark from which they can protect a corporation's profits from being altered. Thus, they will help introduce steady fast monitoring settings, characterized by noticeable accountability and transparency in terms of the corporation's profits.

Supporting the previous perspective, Xie, Davidson III, and DaDalt (2003) noticed a noteworthy important conclusion regarding the effect of financial expertise on EM levels. Indeed, they documented a discernible inverse correlation between discretionary accruals and the number of board directors armed with financial proficiency. Interestingly, they played a key role in restricting the prevalence of intricate issues such as EM. Furthermore, Gounopoulos and Pham (2018) claimed that those directors endowed with significant financial knowledge and skills were inclined to partake a noticeable monitoring position to reduce EM. Moreover, the financial acumen that has been introduced by the members of board of directors has significantly diminished the probability of engaging in EM decisions within the Jordanian context (Aleqab & Ighnaim, 2021). Additionally, the efficacious structure of corporations' boards and their financial experience have augmented the transparency of the financial statements by fostering the monitoring roles of such members, thus countering the threat from the adoption of EM techniques. In contrast, the inquiry presented by Alkebeise, Tian, Garefalakis, Koutoupis, and Kyriakogkonas (2022) showed a weak conclusion regarding the effect of constraining EM by boards' directors, stemming from the ineffectiveness of their financial skills and proficiency.

Henceforth, an active ownership map represented by skillful institutional owners is expected to support the monitoring roles of the directors who are armed with financial expertise. Hence, the following hypothesis will be tested in this study:

H₄: Institutional owners are expected to strengthen the monitoring role of directors with a financial background in constraining EM techniques in Jordanian listed banks at ASE.

3. Methodology

This section presents the research sample selection criteria, the process of collecting the data and a definition of the variables. A set of secondary data has been collected manually to answer the research questions of this study. The interaction of human behavior has been enacted to the utmost degree and this has yielded an accurate

interpretation of the study's results(Hair, 2009).All the banks covered in this study had to meet the following conditions:

1. All listed banks on the ASE must disclose all the necessary information regarding all the variables covered in this study.
2. All banks must have been listed on the ASE between 2010 and 2022.
3. Banks with limited and missing data have been removed from the final sample in this study.

4. Data and sampling

The study endeavors to explore the extent to which the institutional owners may strengthen the monitoring role of corporations' boards in restricting the deliberative prevalence of LLP decisions over a sample of Jordanian banks listed on the ASE between 2010 and 2022. All the data needed to answer the previous question has been extracted manually by using various websites, such as the Jordan Securities Commission (JSC) and corporations' websites. The following table reports the study population and the study sample as well.

Table 1 shows that the final number of banks that achieved the selection criteria was fourteen.

Table 1. Study Population and Sample.

The total number of banks operating in the Jordanian market	24
Banks listed on the ASE	15
Banks with limited disclosures	1
Final Sample	14

4.1. Dependent Variable Estimation (Loan Loss Provisions).

To estimate the LLP as an index of earnings management in the Jordanian banks, this study adopts the model suggested by several investigations in which the LLP model was applied to the collected data. However, the current literature in terms of EM has introduced several techniques, such as discretionary accruals, to estimate EM. These models – such as the Jones model or the modified versions of this model – have been used within the non-financial sectors, since the uniqueness of these models is appropriate for such sectors. Therefore, this study adopted the LLP as an index for EM since such a model is appropriate for the financial sectors (Alhadab & Al-Own, 2017; AlQudah et al., 2020).

4.2. Independent variables estimation

The examination of boards of directors' characteristics constitutes a significant tool to estimate the monitoring roles of such directors in restructuring the monitoring map in any corporation. The intricate evaluation may cover several characteristics in order to draw a clear conclusion about the ability of boards members to maximize shareholders' expectations. Indeed, this study has covered the following characteristics to evaluate the monitoring roles of the Jordanian banks' boards listed on the ASE between 2010 and 2022. Board independence (BI) is calculated by the percentage of independent directors within the bank's boards. Board diversity (BD) is calculated by

the percentage of female directors on the bank's boards. Political background (PB) is calculated by the percentage of board directors with a political background. Financial certificates (FC) are calculated by the percentage of board directors with financial expertise.

4.3. Moderating variable estimation

The concentration of owners is expected to enhance the monitoring roles of corporations' boards by strengthening the application of other tools, such as CG. In this study the institutional owners have been selected as a moderator variable since their presence will noticeably affect the monitoring, by adding a comprehensive experience and understanding of intricate correlations that may govern the decisions that could be taken to manipulate banks earnings. Indeed, institutional ownership (IO) has been estimated by dividing the total number of shares by the number of shares owned by institutional owners.

4.4. Control variables estimation

A set of three control variables has been selected to govern the expected correlation between the abovementioned variables. Bank age (BA) is calculated by the length of time banks' shares have been listed on the ASE. Return on assets (ROA) is calculated by dividing the net income over the total assets. Leverage (LEV) is calculated by dividing the total liabilities over the total assets. The following table summarizes the measurements of the previous variable in detail. Table 2 provides a summary of the measurement instruments for the variables under investigation.

Table 2. Variables Measurements.

Variable Name	Abbreviation	Variable Definition	Reference
Dependent Variable (DV)			
Discretionary Loan Loss Provisions	DLLP	Discretionary Loan Loss Provisions	(Alhadab & Al-Own, 2017; AlQudah et al., 2020).
Independent Variables (IV)			
Board Independence	BI	The percentage of independent directors within the bank's boards.	(AlQudah et al., 2019; Chen & Zhang, 2014).
Board Diversity	BD	The percentage of female directors on banks' boards.	(Alves, 2023; Wasiuzzaman & Subramaniam, 2023)
Political Background	PB	The percentage of board directors with political background.	(Ahmad, Bradbury, & Habib, 2022; Firmansyah et al., 2022).
Financial Certificates	FC	The percentage of board directors with financial expertise.	(Alkebsee et al., 2022).
Moderating Variable			
Institutional Owners	IO	The number of shares owned by institutional owners is divided into total shares.	(Wu, Li, Du, & Li, 2022).
Control Variables			
Bank Age	BA	The length of time banks' shares have been listed on the ASE.	(AlQudah et al., 2019).
Return on Assets	ROA	Net income divided by total assets.	(Alrabba et al., 2018).
Leverage	LEV	Total liabilities divided by total assets.	(Wu et al., 2022).

4.5. Regression models

To examine the moderating role of the institutional owners on the relationship between board of directors' characteristics and loan loss provision decisions within the Jordanian banking sector, a set of three models has been applied to the collected data.

Model (1):

$$A. DLLP_{it} = \alpha_0 + \alpha_1 BA_{it} + \alpha_2 ROA_{it} + \alpha_3 LEV_{it}$$

Model (2):

$$A. DLLP_{it} = \alpha_0 + \alpha_1 BA_{it} + \alpha_2 ROA_{it} + \alpha_3 LEV_{it} + \alpha_4 BI_{it} + \alpha_5 BD_{it} + \alpha_6 PB_{it} + \alpha_7 FC_{it} + \alpha_8 IO_{it}$$

Model (3):

$$A. DLLP_{it} = \alpha_0 + \alpha_1 BA_{it} + \alpha_2 ROA_{it} + \alpha_3 LEV_{it} + \alpha_4 BI_{it} + \alpha_5 BD_{it} + \alpha_6 PB_{it} + \alpha_7 FC_{it} + \alpha_8 IO_{it} + \alpha_9 BI*IO_{it} + \alpha_{10} BD*IO_{it} + \alpha_{11} PB*IO_{it} + \alpha_{12} FC*IO_{it}$$

Where: **A. DLLP** is the absolute value of the Discretionary Loan Loss Provisions; **BI**: Board Independence; **BD**: refers to Board Diversity; **PC**: refers to Political Connection; **FC**: refers to Financial Certificates, **IO**: refers to Institutional Owners, **BA**: is the Bank Age; **ROA**: is the Return on Assets and **Lev**: refers to the leverage.

5. Results and discussion

5.1. Descriptive statistics

Table 3 shows the main descriptive statistics extracted from the collected data to answer the research questions mentioned earlier. The overall mean of the A. DLLP was 1% with a maximum amount of 3% and a minimum amount equal to zero. This indicates that, the Jordanian banks listed on the ASE have practised earnings management techniques via the provision of loans losses and at least one bank has not been inclined to adopt such techniques to alter the reported earnings. This conclusion could be explained by the lack of experience of banks' boards in applying DLLP tools' toothier provisions or they are not motivated to adjust their earnings due to the absence of a real motivation, such as tax avoidance or directors' bounce plane. Additionally, most of the investors mentioned in the ownership map of the listed banks were institutional owners, family owners or (most probably) foreign investors, and such owners appear as fortified players in protecting banks' earnings from being altered. This conservative monitoring level (1% of A.DLLP) is less pronounced in Jordan when compared to other contexts, such as the U.S. market, since the mean of loan loss provisions manipulations has reached 0.6% of the total loans (Leventis & Dimitropoulos, 2012). However, the A.DLLP has reached 41.3% within the Indian market (Mangala & Singla, 2023) and this key mean of DLLP may indicate a weak monitoring role of the Indian regulations tools, such as CG.

Regarding the independence of banks' boards, **Table 3** shows a moderate independence level by reporting a mean of 41.6% of board size. One of the banks listed on the ASE was noticeably more inclined to adopt the regulations of CG code in Jordan by hiring 72.7% of the bank's directors as independent members. The lowest compliance rate in terms of independence requirements was 23% of the bank's board size. Indeed, the reported independence mean in Jordan is very close to twice the independence rate in the Nigerian market (Musa, Abdul Latif, & Abdul Majid, 2023).

This significant variance in the compliance rate can be attributed to the strength of law enforcement in each context.

In terms of the political ties of bank directors, **Table 3** shows that 60% of bank director shave been tied to a political position within the Jordanian context. Interestingly, the non-politician directors' rate has reached 8% of board size for a Jordanian bank. This means that 92% of the directors in Jordan have previously served in a political position. Basri, Salleh, Yusoff, Jotey, and Barzinji (2023) showed that the political affiliation of the board's members in Pakistan reached 67.5% of board size, which indicates that politicians have the upper hand when monitoring and controlling Pakistani firms.

Regarding the financial certificates, **Table 3** shows that 42.7% of bank directors were armed with financial experience, which makes them qualified directors within the banking sector in Jordan. Indeed, in the preminent board from the study's sample, financial experience and certificate searched a representation rate of 72%. The noticeable attendance of such directors signifies the importance of the monitoring roles of such directors to oversee the critical matters that may affect the continuity of Jordanian banks.

Indeed, **Table 3** shows that the aggregate mean of IO within the study's sample was 86.6% of the total shares available for trading on the ASE. Initially, this remarkable proportion of IO recommends such banks as seasoned and reliable investment destinations to earn satisfactory earnings. The zenith of IO has reached 91.4% of the bank's overall shares. In contrast, the lowest record for IO touched 82%. Evidently, such ownership may be presented as a leading and dominant category in comparison with other types of owners within the Jordanian ownership map in the banking sector, as delineated in the descriptive statistics section (**Table 3**).

Table 3. Descriptive Statistics.

Variable	Mean	Median	SD	Min	Max	Skewness	Kurtosis
A. DLLP	0.0105496	0.007313	0.0089043	0.000652	0.0313444	0.868414	2.700736
BI	0.4167355	0.3636364	0.1110314	0.2307692	0.7272727	0.530977	2.505104
BD	0.1045515	0.0909091	0.0879519	0	0.2857143	0.430260	2.14585
PC	0.6009208	0.6153846	0.1339036	0.2222222	0.9230769	-0.015366	2.566488
FC	0.4271452	0.4018182	0.0928181	0.3369231	0.7285714	0.566381	2.750608
IO	86.60359	86.242	2.521458	82.811	91.492	0.3469636	2.152395
BA	43.20459	0.40	16.52603	19	85	0.052176	1.810472
ROA	1.191138	1.22	0.4392211	0.48	1.86	-0.16174	1.979812
LEV	0.8711935	0.86881	2.788411	0.82693	0.91683	0.881619	2.59422

Where: **A. DLLP** is the absolute value of the Discretionary Loan Loss Provisions; **BI**: Board Independence; **BD**: refers to Board Diversity; **PC**: refers to Political Connection; **FC**: refers to Financial Certificates, **IO**: refers to Institutional Owners, **BA**: is the Bank Age; **ROA**: is the Return on Assets and **Lev** refers to the leverage.

5.2. Correlation matrix coefficients

An invaluable statistical tool for drawing up a table that summarises the correlation coefficients among the set of variables in this study, the correlation matrix represented by the Pearson test must be applied to the collected data to elucidate the strength and the direction between the variables selected. The coefficients recorded by such a test meticulously assess the power of the relationship between the variables, as well as predicting and summarising the direction.

According to Hair (2009), the critical threshold of the Pearson test necessitates forthright attention to avoid any issue related to multicollinearity is stipulated above 70%. Hence, the reported values in **Table 4** are less than the pivotal threshold. Therefore, the presence of multicollinearity is not an issue that must be solved.

Table 4. Correlation Matrix Coefficients.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
A. DLLP(1)	1.000								
BI (2)	-0.080	1.000							
BD (3)	-0.046	-0.175	1.000						
PC (4)	0.056	0.251	-0.263	1.000					
FC (5)	-0.170	0.189	0.227	-0.042	1.000				
IO (6)	0.103	-0.092	0.438	-0.066	0.250	1.000			
Lev (7)	-0.304	0.220	-0.135	-0.043	0.407	0.002	1.000		
ROA (8)	0.001	0.126	-0.113	0.265	-0.237	-0.196	-0.433	1.000	
BA (9)	-0.133	0.056	0.045	0.505	0.059	-0.121	-0.126	0.203	1.000

Where: **A. DLLP** is the absolute value of the Discretionary Loan Loss Provisions; **BI**: Board Independence; **BD**: refers to Board Diversity; **PC**: refers to Political Connection; **FC**: refers to Financial Certificates, **IO**: refers to Institutional Owners, **BA**: is the Bank Age; **ROA**: is the Return on Assets and **Lev** refers to the leverage.

5.3. Variance Inflation Factor (VIF)

One of the main statistical metrics that must be applied to the collected data to test the degree of multicollinearity among the selected variables is VIF. Indeed, VIF estimates the degree of the variance between the study's variables and to what extent this correlation is inflated between the variables. According to Hair (2009), the recorded values of the VIF are considered within the normal and accepted values if such values are less than 10. Based on **Table 5**, none of the extracted values is more than the critical value suggested by Hair (2009). Indeed, the VIF values do not indicate the potential appearance of the multicollinearity issue in this study.

Table 5. Variance Inflation Factor (VIF).

Variable Name	VIF	Tolerance
LEV	1.73	0.57630
PC	1.68	0.594020
BD	1.55	0.645343
BA	1.52	0.655824
ROA	1.50	0.666937

FC	1.45	0.688039
IO	1.40	0.714807
BI	1.26	0.796135
Total	1.46	

Where: A. DLLP is the absolute value of the Discretionary Loan Loss Provisions; **BI**: Board Independence; **BD**: refers to Board Diversity; **PC**: refers to Political Connection; **FC**: refers to Financial Certificates, **IO**: refers to Institutional Owners, **BA**: is the Bank Age; **ROA**: is the Return on Assets and **Lev** refers to the leverage.

5.4. Regression results

The following table shows the main results of the regression models that have been used in this study to answer the main research question mentioned previously.

Based on **Table 6**, the ownership map represented by the presence of institutional owners has witnessed a noticeable transformation signalled by the enhancement of the controlling and monitoring tasks wielded by the bank boards over a sample of Jordanian banks listed on the ASE. This has been significant when assessing the moderating role of the institutional owners on the nexus between the board of directors 'characteristics and loan loss provisions. For instance, the independence of bank directors has been enhanced noticeably based on **Table 6** in restricting the conflict-of-interest gaps between banks' shareholders and the banks' directors. Indeed, IO has played a key role in raising the adoption of corporate governance regulations, as well as increasing the accountability of the annual reports of Jordanian banks.

Table 6. Regression Results.

Variable	Model (1)	Model (2)	Model (3)
BI		-0.0005466	-0.001266***
		0.136	0.000
BD		-0.0102811	-0.0010782**
		0.280	0.047
FC		-0.0016222	-0.0032291
		0.788	0.093*
PC		0.0156095	-0.0000216
		0.099*	0.363
IO		0.0152959	-0.0183658
		0.093*	0.031**
Lev	-0.0012129***	-0.0013292***	-0.0006569
	0.000	0.000	0.803
ROA	-0.0025478	-0.0027444	-.0032945*
	0.150	0.144	0.084
BA	-0.0000833**	-0.0000719*	-0.0001135**
	0.049	0.090	0.030
Constant	0.1227335	0.1828775	0.176286
	0.000	0.048	0.061
BI*IO			-0.0037514**
			0.045

BD*IO			0.0012874**
			0.037
FC*IO			-0.1649992***
			0.010
PC*IO			-0.0001024
			0.335
Observations	182	182	182
R-squared	0.3336	0.3532	0.3766

Where: **A**. **DLLP** is the absolute value of the Discretionary Loan Loss Provisions; **BI**: Board Independence; **BD**: refers to Board Diversity; **PC**: refers to Political Connection; **FC**: refers to Financial Certificates, **IO**: refers to Institutional Owners, **BA**: is the Bank Age; **ROA**: is the Return on Assets and **Lev** refers to the leverage.

Interestingly, independent directors were skilled and capable of scrutinising the decisions that had been taken by Jordanian banks, empowered by the unlimited support of institutional owners to carry out their monitoring tasks efficiently. This conclusion is in line with Ideh et al. (2021); Usman et al. (2022); Z. Zhang and Yang (2024), who found that the presence of the independent directors on the monitoring map had increased the accuracy and transparency of the financial statements by restricting the potential occurrence of EM decisions.

Additionally, the board rooms of the Jordanian banks have witnessed the appearance of gender diversity on a marked level. Additionally, the IO have influenced their monitoring roles by enhancing their awareness of the importance of minimising the free zones to make unfavourable decisions in terms of manipulating loan loss provisions within the Jordanian banks. The key delegations for women in boardrooms within the Jordanian banks has been noticeably broadened, along with the experience and skills needed to shed light on the decision to restrict any actions that could be taken in which banks profits can be manipulated. Indeed, such a diversification is expected to send a clear signal to interested users regarding the global trend in adopting CG recommendations, as well as supporting the boards monitoring role to behave as catalyst directors and to protects banks' profits from being manipulated by opportunistic managers.

Furthermore, the prior conclusion may support previous study findings, which concluded that diverse boards are expected to present several points of view on boardroom tables and to restrict the likelihood of inequilateral decisions regarding banks' profits (Alves, 2023; Zalata et al., 2022). **Table 6** provides statistical evidence which supports the moderating effect of the IO on the monitoring role of gender diversity by reducing the prevalence of loan loss provision decisions.

In terms of the monitoring role of bank directors who have been armed with financial certificates, **Table 6** shows that their monitoring roles have been heightened by the support provided by institutional owners. Indeed, financial knowledge, as well as acumen in financial issues, have introduced them as deterrent monitoring tools with regard to corporations' strategic issues. This layer of experience has revealed such directors as efficient representatives to reinforce the quality and transparency of the annual reports published by the boards of directors, as well as enhancing the interested users' confidence in the banks listed on the ASE. Indeed, previous studies by Alkebeese

et al. (2022); Gounopoulos and Pham (2018) provided evidence that the knowledge and financial backgrounds of a firm's directors are expected to prove such boards are efficient in restricting any unfavourable decisions related to banks' earnings.

In terms of the control variables, both ROA and BA have been negatively and significantly correlated with loan loss provisions decisions within the Jordanian banks listed at ASE. Indeed, banks with effective ROA ratio may be more aware in controlling and utilizing their assets markedly to earn profits levels that achieve shareholders expectations regarding profits maximization. Additionally, this result sends a clear signal that the board of directors of the Jordanian banks as well as the institutional investors are understanding the investment environment within the Jordanian context and have a valid vision in controlling their operational activities in a rational way in which they will be able to restrict any opportunistic behaviors around the profits figures.

In the banking sector, financial institutions, such as banks, are subject to regulatory scrutiny by oversight bodies in any context. This regulatory oversight compels these banks to ensure a sustainable level of earnings. Furthermore, the accumulated experience and knowledge regarding the market conditions in which they operate are expected to exert significant pressure on bank boards to mitigate earnings manipulation. Additionally, a bank's reputation is a critical factor that guides the management of listed banks in refraining from any unfavourable actions impacting profits. Moreover, the maturity of banks is anticipated to play a significant role in improving the quality of reported earnings by reducing the prevalence of earnings management techniques. Mature banks are willing to increase transparency to attract more investors, which, in turn, may influence share prices. However, the intricacies of banks operations and the timing of recognizing revenue may be noticeable factors that affect Lev form constraining loan loss provisions within the banking sector.

6. Conclusion and limitations

The main goal of this study was to explore whether institutional owners have the power to strengthen the oversight role of banks' boards in curbing opportunistic managerial behaviour. After careful consideration of the main statistical tests and assumptions, the study yielded results indicating that, individually, the mechanisms of CG were not significant in reducing the decisions around loan loss provisions within the Jordanian banks listed on the ASE between 2010 and 2022. Consequently, and after controlling the moderating effect of the institutional owners on the relationship between earnings management and board of directors' characteristics, the results supported the hypotheses of this study in which the institutional owners have a clear impact on the overall monitoring map within the Jordanian banking sector. Indeed, such a conclusion has shown institutional owners to be cautious about protecting shareholder rights, as well as enhancing the quality of the annual reports of Jordanian banks.

Interestingly, this study made a theoretical contribution by exploring the monitoring behaviour of the institutional owners and how their presence might strengthen the monitoring tasks of the board of directors within the banking industry between 2010 and 2022. This conclusion recalls the monitoring proportion of active

institutional owners in enhancing the overall controlling tasks and guarantees an efficient adoption of several regulations, such as CG (Ramalingegowda et al., 2021). Indeed, the Jordanian regulators may be motivated to provide tax reductions to such owners, to motivate them to invest their money in Jordanian banks, which in turn will guarantee the availability of a stable and safe investment environment within the Jordanian market.

However, the main limitation of this study was related to the sample size constraints. Indeed, the banking sector in Jordan is very small and only fifteen banks are listed on the ASE. Extracting data from larger samples would facilitate the process of generalising the results, as well as enabling the extraction of accurate results from such data.

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