THE IMPACT OF CORPORATE GOVERNANCE ON EARNINGS MANAGEMENT IN ISLAMIC AND CONVENTIONAL BANKS

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THE IMPACT OF CORPORATE GOVERNANCE ON EARNINGS MANAGEMENT IN ISLAMIC AND CONVENTIONAL BANKS

Abstract

Purpose – This paper aims to examine the association between internal corporate governance and earnings management and to compare earnings management practices in Islamic banks versus conventional banks in the MENA region.

Design/methodology/approach – This paper uses an unbalanced panel data of 20 Islamic banks and 100 conventional banks, from eleven countries in the MENA region over the period 2012-2017. Discretionary accruals are used to measure earnings management by estimating loan loss provision. Regression analysis is used to test the hypotheses.

Findings – The results indicate that Islamic banks provide fewer earnings management practices compared to conventional banks. Besides, the results show that among the six corporate governance mechanisms studied in this paper only board meetings, board size, and board independence can help in mitigating earnings management for conventional banks. Whereas, for the case of Islamic banks, corporate governance mechanisms have no impact on reducing earnings management.

Practical implications – This paper could offer some recommendations for policymakers, regulators, and users of financial statements. The results of this study could assist in improving the monitoring role of the board of directors and understanding the relationship between corporate governance mechanisms and earnings management.

Originality/value – This paper contributes by investigating the effect of new mechanisms on earnings management, and by examining earnings management practices in Islamic banks compared to conventional banks in unexamined countries and periods.

Keywords Earnings management, Earnings quality, Islamic banks, Conventional banks, Corporate governance mechanisms, Annual reports, MENA region.

Paper type Research paper

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1. INTRODUCTION

Earnings management has been receiving increasing attention after the bankruptcy of leading companies such as Enron and WorldCom. This bankruptcy is caused by manipulating financial statements, result in the loss of billions of dollars because investors rely on manipulated financial statements to make their decisions (Healy & Palepu, 2003). Therefore, earnings management is considered one of the financial reporting problems. Earnings management occurs when managers use the choices available to them within the boundaries of GAAP to manage earnings for their benefit. Consequently, earnings management practices are considered a threat to the reliability and credibility of financial reporting and have been stated by Levitt (1998) as “the numbers game”.

A large amount of literature has addressed earnings management practices in the banking sector. Some of this literature found that banks tend to manage their earnings to decrease earnings volatility over the years (Shen & Chih, 2005). However, studies related to earnings management in Islamic banks are very limited and present mixed results. Some studies contend that the idea of earnings manipulation in Islamic banking appears to be inconsistent with the moral and ethical values on which Islamic banks are based (Hamdi & Zarai, 2012; Quttainah et al., 2013). On the other hand, other studies found that Islamic banks are similar to conventional banks, are challenged with information asymmetry and conflicts of interest that can prompt opportunistic practices that are conflicting to Islamic standards (Shamsuddin & Ismail, 2013). Literature also provides mixed results about the factors that may restrain earnings management in the banking industry. One of these factors is corporate governance mechanisms such as board size, board independence, and role duality. However, other important mechanisms such as foreign directors, female directors, and board meetings are not widely studied in the literature (Rahman & Bremer, 2016).

In the Middle East and North Africa region (MENA), limited research has been done in the earnings management area in the banking industry (Ben Othman & Mersni, 2016). Therefore, this study aims to address this gap by comparing the engagement level in earnings management in Islamic banks and conventional banks and examining how corporate governance mechanisms particularly foreign directors, female directors, board meetings, board size, board independence, and role duality may influence earnings management in both Islamic and conventional banks for a sample of banks in eleven MENA region countries over the period 2012-2017. This paper attempts to answer the two following research questions:

- **RQ1: Do Islamic banks provide different earnings management practices compared to conventional banks in the MENA region?**
- **RQ2: What is the effect of corporate governance mechanisms on earnings management of Islamic and conventional banks in the MENA region?**

The paper organized as follows: After the introduction, the second section gives a theoretical framework. Section three presents the literature review and hypotheses development. Section four discusses the research design and methodology. Section five devoted to statistical analysis and discussion of the findings. Section six provides the research conclusion, contribution, recommendations, limitations, and suggestions for future research.

2. THEORETICAL FRAMEWORK

2.1 Earnings Management

Management can utilize their information about the business to enhance the usefulness of financial reporting. Therefore, management practice judgment in financial reporting (Xiong, 2006). Although that managements’ judgment has a positive side, it additionally generates a possibility for management to manage financial statements in a manner that usually benefits them. Healy and Wahlen (1999, p. 368) state that “Earnings management occur when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholder about the underlying economic performance of the company or to influence contractual outcomes that depend on reported
accounting numbers.”. This is the most common explanation of earnings management recognized in the relevant literature. However, Ronen and Yaari (2008) categorize earnings management as white, gray, or black. Beneficial (white) earnings management improves the transparency of financial reports; the pernicious (black) includes absolute misrepresentation and fraud; whereas the gray is the manipulation of financial reports within the boundaries of GAAP, which could be either opportunistic or efficiency-enhancing (Ronen & Yaari, 2008). This research focuses on opportunistic earnings management that aims to maximize the private benefits of managers. Earnings management can be done by using different methods which are accrual earnings management, real earnings management, and classification earnings management. This study focuses on accrual earnings management which deals with using the manager’s discretion to change estimations and accounting strategies including loan loss provisions. This study uses loan loss provisions to measure earnings management since it is the major accrual in the banking sector.

2.2 Loan Loss Provisioning in Banks

The major accrual in the banking sector is loan loss provisions (LLPs) (Ben Othman & Mersni, 2014; Taktak et al., 2010). Loan loss provisions (LLPs) are a relatively major accrual for banks and consequently have a significant impact on earnings and regulatory capital of banks (Bouvatier & Lepetit, 2008). The purpose of these provisions is to adjust banks’ loan loss reserves to reflect expected future losses on their loan portfolios. Bouvatier and Lepetit (2008) differentiate between non-discretionary and discretionary loan loss provisioning. Non-discretionary loan loss provisioning is intended to cover the anticipated losses of the loan in the loan portfolio of the bank due to changes in the bank’s business condition. However, discretionary accruals, as defined by Ronen and Yaari (2008, p. 372), are “accruals that arise from transactions made or accounting treatments chosen to manage earnings”. Therefore, managers use discretionary loan loss provisions to achieve private benefits. This study focuses on discretionary loan loss provisions since it provides managers with greater discretion to manipulate earnings.

2.3 Characteristics of Islamic Banks

Islamic banking is primarily based on the sharia regulation, which originates from the explanation of the Quran, Sunnah, and other secondary sources of Islamic rational (El-Gamal, 2006). Therefore, Islamic banks have some specific characteristics in comparison to conventional banks. Islamic banking, by adopting Islamic sharia, concentrates more on moral and ethical norms in their operations instead of monetary value (Hamdi & Zarai, 2012). Islamic banks are required to finance activities that are sharia-compliant only (Ben Othman & Mersni, 2014). The differentiating characteristic of Islamic banks is forbidden of interest (riba) (Hamdi & Zarai, 2012). The profit-sharing principle is utilized as an alternative to interest. Accordingly, Islamic banks progress toward becoming partners with depositors and shareholders, and they have to share risk with them (Farouk et al., 2012). The prohibiting of interest and the actuating of profit-loss sharing principle make the Islamic banks adopt a unique investment approach that differs from conventional banks (Hamdi & Zarai, 2012; Taktak et al., 2010). Based on profit-loss sharing principles, Islamic banks have a diverse loan portfolio that contains Mudharabah, Musharakah, Murabahah, and Qard al-Hassan (Ben Othman & Mersni, 2014). In general, Islamic banks face the risk of uncollected investments in murabaha, musharakah, or mudarabah (Hanif, 2011). Consequently, alike to conventional banks, Islamic banks need to absorb the expected possible future losses by creating an allowance for loan loss provisions (Quttainah et al., 2013). Therefore, Islamic banks as same as conventional banks may also engage in earnings management to meet the banking regulations.
3. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

This section presents a critical review of the literature related to earnings management practices in Islamic and conventional banks and the impact of corporate governance mechanisms on EM practices. Based on this literature, a set of hypotheses to address the research questions are constructed.

3.1 Earnings Management in Islamic Banks Vs. Conventional Banks

Notably, earnings manipulation in the banking sector is riskier than in other sectors. This is because the banking sector has a critical function in supporting economic growth, stability, and the welfare of society (Hamdi & Zarai, 2012; Quttainah et al., 2013). Literature related to earnings manipulation in the Islamic banking sector is very limited and provide mixed results (Ben Othman & Mersni, 2014; Quttainah et al., 2013). There are two different arguments regarding bank type and earnings management. The first argument, considers Islamic banks like conventional banks engage in earning management. Under this argument, the major goal of banks, regardless of Islamic banks or conventional banks, is to attract deposits and to use those deposits to invest and to generate profits (Zoubi & Al-Khazali, 2007). Thus, Hamdi and Zarai (2012) find that Islamic banks have motivations to manipulate earnings to prevent reporting losses and earnings diminishations to keep confidence in Islamic banks. Also, Islamic banks, similar to conventional banks, may practice earnings management to prevent violating the banking requirements such as achieving a specific liquidity ratio and capital adequacy ratio (Ben Othman & Mersni, 2014; Shen & Chih, 2005). However, the second argument, consider that Islamic banks provide different earnings management practices as compared to a conventional one. Islamic banking is established based on the article of incorporation that states that business operations and transactions of Islamic banks should comply with the Islamic Sharia. Islamic Sharia involves the thought of protecting the interest of all stakeholders (Hasan, 2009). Islamic ethical values maintain that the board of directors should disclose fair and reliable information in their bank’s financial statement to allow stakeholders to take the appropriate decision making and to avoid any injustice loss due to manipulating earnings. Therefore, Sharia act as a vital part of forming the ethical practices of managers. In this regard, Lassoued et al. (2018), Vania et al. (2018), and Quttainah et al. (2013) find found Islamic banks are less possible to exercise earnings management than conventional banks. Besides, Rahman et al. (2018) find that Muslim CEO and Muslim Chairman have a significant negative relationship with earnings management. In the same manner, Zainuldin et al. (2018) found that Islamic banks place higher considerations for ethical values in their business activities than conventional banks. Consequently, agency problems and earnings management in Islamic banks are likely to be less severe relative to their conventional counterparts. Besides, Ashraf et al. (2015) found that Islamic banks show lower indications of earning management than conventional banks since Islamic banks have sharia supervisory boards that audit the behavior of the bank and ensure the conformity of Islamic ethics. According to those arguments, earnings management from the Islamic banking perspective is immoral behavior and prohibited in Islam. Therefore, the following hypothesis is formulated:

H1: There is a significant difference in earnings management practices between Islamic and conventional banks.

3.2 Earnings Management and Corporate Governance Mechanisms

Agency theory argues that corporate governance is an effective mechanism for mitigating management opportunistic behavior (Miller et al., 2008). This research focuses on some mechanisms of corporate governance that may reduce earnings manipulation in Islamic and conventional banks discussed as follows:
3.2.1 Foreign members of the board of directors

Appointing a foreign director on the board may influence the board’s capability to improve financial statements quality (Adams et al., 2010). There are two contending points of view to clarify the expected impact of foreign directors on earnings manipulation. On one hand, foreign directors may enhance the effectiveness of the board and, accordingly aid to diminish earnings management (Ruigrok et al., 2007). The presence of foreign directors may assist in avoiding the very high range of cohesiveness of directors on the board by showing independent reasoning (Hooghiemstra et al., 2016). This will improve discussions and possibly lead to effective monitoring (Srinidhi et al., 2011). Adams et al. (2010) contend that the presence of foreign members on the board could improve and expand advisory abilities, monitoring skills, and observing the duty of the boards, by bringing the knowledge and awareness of the foreign market and as a result, decreasing earnings management. On the other hand, foreign directors may be less effective in their monitoring process for two reasons. First, foreign directors are probably less familiar with local regulations, governance standards, and manager’s techniques, making it more problematic for them to assess management choices and behaviors (Masulis et al., 2012). Second, language barriers may weaken the capability of the foreign directors to effectively contribute to debates in the board’s meeting room (Piekkari et al., 2015; Tenzer et al., 2014). These reasons may result in more agency issues between shareholders and managers that lead to more earnings management practices. Based on the previous discussion, the existence of foreign directors on the board contributes to more critical monitoring of the manager, and therefore, lower levels of earnings management. Consequently, the succeeding hypotheses are made:

\[ H_{26}: \text{There is a significant negative association between the number of foreign directors and the level of earnings management in Islamic banks.} \]

\[ H_{29}: \text{There is a significant negative association between the number of foreign directors and the level of earnings management in conventional banks.} \]

3.2.2 Gender diversity

During the past three decades, growing attention has been given to gender diversity in top positions, especially the board of directors (Adams & Ferreira, 2009). Examining the impact of board gender diversity on earnings management is limited, and the findings are mixed. One stream of literature indicates a negative relationship between female directors and earnings management. Based on a theoretical behavioral perspective, earlier studies show that women directors are more sensitive to moral and ethical matters in decision making (Gull et al., 2018), less tolerance to engage in opportunistic practices, call for a higher earnings quality from men managers, and assign less significance on self-interest (Krishnan & Parsons, 2008). Prior studies suggest that female directors have higher board meetings attendance than male directors (Adams & Ferreira, 2009), this assists in more accountability for management choices (Damak, 2018). Besides, Selahudin et al. (2018) and Nielsen and Huse (2010) found that females tend to deliver better control for financial reporting irregularities. Also, from an agency theoretical perspective, gender diversity decreases agency problems, mainly conflict of interest among shareholders and managers (Terjesen et al., 2009). More notably, Srinidhi et al. (2011) show that women executives enhance the environment of information through more concentrated oversight, which decreases information asymmetry. On the contrary, Osemene et al. (2018), Elghuweel et al. (2017), and Sun et al. (2011) fail to recognize a relationship among women directors on the board and the level of accrual-based earnings management. Based on agency and behavioral theoretical theories, female executives are considered as a good corporate governance mechanism that prompts more earnings management reduction. The previous discussion ends in the below hypotheses:
**H₃a:** There is a significant negative association between a female director and earnings management in Islamic banks.

**H₃b:** There is a significant negative association between a female director and earnings management in conventional banks.

### 3.2.3 Board meeting frequency

Consistent with agency theory, corporate governance is important to align the interests of managers and shareholders by providing powerful monitoring strategies and enhancing the reliability of financial information (Vafeas, 1999). One important perspective of corporate governance that is not sufficiently explored is board effectiveness and commitment. The number of board meetings is a signal of board effectiveness and commitment (Xie et al., 2003). The lack of time to finish obligations and duties can be a critical weakness to the effectiveness of the board (Al-Musali & Ku Ismail, 2015). Board meetings are the crucial mechanism for boards of directors to meet their corporate governance commitments, especially to control manager’s opportunistic behavior, and to ensure transparent and high-quality financial reporting and consequently reducing earnings management practices (Kent & Stewart, 2008). In this regard, some studies contend that the board can practice its supervisory role more effectively when they meet regularly (Adams & Mehran, 2003). Moreover, Chouaibi et al. (2018) found a negative relationship between earnings management and board meetings. Besides, Xie et al. (2003) claim that earnings management issues are not considered in a board with infrequent meetings. In contrast, Jensen (2010) and Vafeas (1999) show that board meetings have no impact on board effectiveness. They propose that routine duties and responsibilities absorb a significant part of the meetings, limiting chances for directors to practice meaningful control over the managers’ team. Nevertheless, to the best of the researchers’ knowledge, few studies have investigated the effect of board meeting frequency on earnings management (Chouaibi et al., 2018). This study suggests that boards that meet regularly ought to offer more time in monitoring and ensuring the reliability of financial reporting, and subsequently, more probably to restrain earnings management. According to these arguments, the following hypotheses are formulated:

**H₄a:** There is a significant negative association between board meeting frequency and earnings management in Islamic banks.

**H₄b:** There is a significant negative association between board meeting frequency and earnings management in conventional banks.

### 3.2.4 Board of directors’ size

The board of directors is a crucial mechanism of corporate governance (Christensen et al., 2010). Accounting research highlights board size as a mechanism to reduce agency problems and assess the board’s effectiveness in reducing earnings management practices (Aljifri & Moustafa, 2007; Larcker et al., 2007). There are two points of view regarding board size and earnings management. The first point of view, suggests a negative association between large board size and earnings management (Alareeni, 2018; Alves, 2012). Large board size is an effective mechanism in controlling and monitoring the opportunistic behaviors of managers (Epps & Ismail, 2009). Klein (2002) suggests that organizations with larger boards are more likely to have the capability to detect financial reporting irregularities. In a similar regard, Farag and Mallin (2019), Peasnell et al. (2005), and Berghe and Levrau (2004) provide evidence that a large board of directors is connected with better knowledge and skills that reinforcing its ability to supervise and control managers’ behaviors. In contrast, the second point of view, suggests a negative association between small board size and earnings management (Jensen, 2010).
Small board size is more effective than large board size and consequently, they can decrease the opportunistic practices of managers (Andres et al., 2005). Orozco et al. (2018) argue that small board size is more effective in monitoring and controlling managers’ opportunistic behavior. Besides, González and García-Meca (2014) demonstrated that when the number of directors is large, members of the board are less probable to be held accountable, thus they tend in the direction of more discretion in getting higher compensation (Beasley, 1996), and are more inclined to information asymmetry (Bergstresser & Philippon, 2006). However, other investigations do not find any evidence that board size has any significant relationship with the extent of earnings management (Osemene et al., 2018; Elghuweel et al., 2017). Based on the above discussions, it is expected that board size is an essential component in board characteristics that could have an impact on earnings manipulation behaviors. Though, given the mixed findings in the literature, the direction of the association between board size and earnings management cannot be determined. Consequently, the following hypotheses are formulated:

**H₅ₐ:** There is a significant association between board size and earnings management in Islamic banks.

**H₅₉:** There is a significant association between board size and earnings management in conventional banks.

### 3.2.5 Board of directors’ independence

The main role of the board of directors is to monitor the management team (Nicholson & Newton, 2010). For more effective monitoring, the board of directors should comprise independent directors who are expected to behave independently in their supervision and monitoring process (Jouber & Fahkhfakh, 2011; Moscariello et al., 2019). Independent directors are board members who have no material relationship with the organization (He & Sommer, 2010). Prior literature has provided mixed findings concerning board composition. Some research, based on agency theory, supports a negative relationship between independent directors and earnings management (Chouaibi et al., 2018; Kolsi & Grassa, 2017; Peasnell et al., 2005). This stream of literature argues that the perfect solution to improve internal control within the organization is to have independent directors on the board. Also, the independent directors have an effective role in reducing conflict of interest between managers and shareholders as well as improving the transparency and compliance of financial reports (Christensen et al., 2010). Therefore, a board with a majority of independent directors will better oversee the managers and decrease the probability of managing earnings (Uzun et al., 2004). However, some studies do not recognize any association between independent directors and earnings management (Abdul Rahman & Haneem Mohamed Ali, 2006; Saleh et al., 2007). Conversely, other studies found a positive relationship between independent directors and earnings management (Alareeni, 2018; Osma & Noguer, 2007). Liu (2012) and Taktak and Mbarki (2014) found that boards that consist of dependent directors are observed to be an effective control mechanism. Dependent directors have access to information that assists them to be more effective in assessing managers’ choices and to mitigate earnings management (Liu et al., 2015). After the above discussions, this paper expects that board independence is associated with a lower incidence of earnings management. Consequently, the hypotheses are as follows:

**H₆ₐ:** There is a significant negative association between board independence and earnings management in Islamic banks.

**H₆₉:** There is a significant negative association between board independence and earnings management in conventional banks.
3.2.6 Role duality

When CEO duality occurs, there is an absence of separation between decision management and decision control (Krause et al., 2014). There are two streams of literature that studied the relationship between role duality and earnings management. One stream of literature supports a positive association between CEO duality and earnings manipulation (Ge & Kim, 2014; Nuanpradit, 2019). This stream is based on agency theory that contends that the chairman and the CEO should have two separate roles. This separation is to ensure that the CEO would not be in a position with excessive power over board matters to easily manipulate earnings (Klein, 2002). Besides, the board of directors will have less motivation to oversee the activities of the firm’s managers when combined leadership exists, since the leader of managers is also the leader of the board of directors. This may increase information asymmetry and consequently more earnings management practices (Wang et al., 2014). In contrast, the second stream of literature supports a negative association between CEO duality and earnings manipulations (Faleye, 2007; Weir et al., 2002). Proponents of the stewardship theory, argue that this role duality enhances the functioning of the board (Tuggle et al., 2010). Jouber and Fakhfakh (2011) find that a CEO can control the information to other board members effectively in a dual leadership structure. Moreover, Dalton (2012) and Dahya et al. (2009) argue that duality is crucial to achieving centralization of authority, unity of command to reduce any potential conflict between CEO and chairperson. On the other hand, some researcher does not recognize any association between CEO duality and earnings management (Alareeni, 2018; Chouaibi et al., 2018; Bradbury et al., 2006). Based on the above arguments, this research assumes that the dual structure may increase earnings manipulation. Thus, it is hypothesized that:

\[ H_{7a}: \text{There is a significant positive association between role duality and earnings management in Islamic banks.} \]

\[ H_{7b}: \text{There is a significant positive association between role duality and earnings management in conventional banks.} \]

4. RESEARCH DESIGN

4.1 Population and Sample

The population of the current study consists of 309 banks operated in eleven countries of the MENA region. One hundred eighty-nine banks are excluded because of data unavailability. Therefore, the sample of this research consists of 20 Islamic banks and 100 conventional banks in eleven MENA region countries which are Lebanon, Bahrain, Egypt, Jordan, Kuwait, Oman, Qatar, Saudi Arabia, the United Arab Emirates, Morocco, and Tunisia for six consecutive years 2012-2017. These MENA countries were chosen because the banking sector of these countries is well developed, efficient, and profitable (Ben Othman & Mersni, 2016; Quttainah et al., 2013).

4.2 Measurement of Earnings Management

To detect earnings management of Islamic and conventional banks in the MENA region, this study focuses on the accrual-based earnings management approach. More specifically, this research uses a major accrual in the banking sector; loan loss provisions (LLPs) (Ben Othman & Mersni, 2014; Taktak et al., 2010). This study follows the approach of Ben Othman and Mersni (2014), therefore, the basic model takes the following form:

\[
\text{Loan loss provisions} = \text{Non-discretionary LLP} + \text{Discretionary LLP}
\]

Non-Discretionary LLP is predicted by using variables demonstrating the level of losses in the loan portfolio since it cannot be directly observed. Similar to Ben Othman and Mersni (2014), the non-discretionary LLP component is expected using the beginning balance of non-performing loans, change in non-performing loans, and change in total
loans. Discretionary LLP is estimated by the residual obtained from equation (1). This study uses the discretionary component LLP as the dependent variable, which reflects earnings management. Therefore, equation (1) is presented below:

$$LLP_{it} = \beta_0 + \beta_1 NPL_{it-1} + \beta_2 \Delta NPL_{it} + \beta_3 \Delta TL_{it} + \varepsilon_{it}$$

(Eq. 1)

where:

- **LLP$_{it}$**: Total LLP for bank $i$ at the year $t$, deflated by loans at the beginning of the year.
- **NPL$_{it-1}$**: The beginning balance of the non-performing loan for bank $i$ at the year $t$ deflated by beginning loans.
- **$\Delta$NPL$_{it}$**: Change in the value of the non-performing loan for bank $i$ at the year $t$, deflated by beginning loans.
- **$\Delta$TL$_{it}$**: Change in the value of the total loan, for bank $i$ at the year $t$, deflated by beginning loans.
- **$\beta_0$**: Regression constant.
- **$\beta_1$, $\beta_2$, and $\beta_3$**: Regression coefficients.
- **$\varepsilon_{it}$**: Residuals.

4.3 Regression model

This study employs regression analysis to examine the relationship between corporate governance mechanisms and earnings management. Besides, this study used the absolute value when measuring earnings management because the focus of this research was on the analysis of earnings management practices, regardless of whether earnings management practices were income-increasing or income-decreasing (Ben Othman & Mersni, 2014). Also, the below equation contains independent variables that show factors hypothesized to impact earnings management (EM) and control variables that must be held constant. The independent variables were chosen based on the criteria that these variables are available in the annual reports, and not widely studied before in the MENA region. Therefore, equation (2) is presented below:

$$|EM_{it}| = \beta_0 + \beta_1 \text{BANK TYPE}_{it} + \beta_2 \text{FOREIGN DIRECTOR}_{it} + \beta_3 \text{FEMALE DIRECTOR}_{it} + \beta_4 \text{BOARD MEETING}_{it} + \beta_5 \text{BOARD SIZE}_{it} + \beta_6 \text{BOARD INDEPENDENCE}_{it} + \beta_7 \text{ROLE DUALITY}_{it} + \beta_8 \text{PROFITABILITY}_{it} + \beta_9 \text{BANK SIZE}_{it} + \beta_{10} \text{COUNTRY}_{it} + \beta_{11} \text{YEAR}_{it} + \varepsilon_{it}$$

(Eq. 2)

where:

- Dependent variable: $|EM_{it}|$: Discretionary loss provisions for loans for bank $i$ in year $t$.

Independent variables:

- **BANK TYPE**: Dummy variable that takes 1 if the bank is a conventional bank, 0 if the bank is an Islamic bank (Ben Othman & Mersni, 2014).
- **FOREIGN DIRECTOR**: The number of a foreign director on the board for bank $i$ in year $t$ (Chiu et al., 2010).
- **FEMALE DIRECTOR**: The number of female directors on the board for bank $i$ in year $t$ (Nielsen & Huse, 2010).
- **BOARD MEETING**: Board meeting is measured by a number of the board meeting held during the year (Eluyela et al., 2018).
- **BOARD SIZE**: Board size for bank $i$ at the year $t$, expressed as a number of board directors (Ben Othman & Mersni, 2016).
BOARD INDEPENDENCE: The number of independent directors on the board for bank i in year t (Kolsi & Grassa, 2017).

ROLE DUALITY: Dummy variable that takes 1 if the bank has role duality, 0 otherwise (Bradbury et al., 2006).

Control variables:

PROFITABILITY: Measured by ROA as the net income divided by total assets (Elghuweel et al., 2017).

BANK SIZE: Measured as the natural logarithm of total assets (Taktak et al., 2010).

COUNTRY: A set of country dummies used to control specific differences across countries (Ben Othman & Mersni, 2016).

YEAR: A set of dummies used to control for time-specific factors (Quttainah et al., 2013).

5. RESULTS AND DISCUSSION
5.1 Descriptive Statistics

Table (1) present descriptive statistics for the dependent variable used in this study. On average, in Islamic banks during the period 2012 to 2017, EM is 0.0057, and SD is 0.00650 with a range of 0.04 as a maximum and 0.00 as a minimum. While the descriptive statistics for conventional banks indicate that the average and SD of EM respectively were found to be 0.0137 and 0.01386 with a range of 0.09 as a maximum and 0.00 as a minimum. Overall, the average and SD of EM for the full data set was found to be 0.0123 and 0.01326 with a range of 0.09 as a maximum and 0.00 as a minimum. Consequently, it is worth mentioning that the results of the descriptive statistics of EM are not consistent between different types of the bank; that is the average EM for a conventional bank was higher than the average EM for Islamic banks; this indicates that all the sampled conventional banks in the selected MENA countries engaged more in earnings management than Islamic banks.

There are six independent variables related to corporate governance mechanisms in this study that are foreign director, female director, board meeting, the board size, independent director, and role duality. From table (1), the mean level of foreign director on the board in Islamic banks is about 0.0588, SD 0.23629, the minimum is zero, and the maximum is 1 board member. However, the mean level of foreign directors on the board in conventional banks is around 0.6830, SD 1.25229, the minimum is zero, and the maximum is 7 board members. This means that conventional banks encourage the appointment of foreign directors more than Islamic banks. Regarding the presentation of females on the board, the descriptive indicates that the average and SD of females members in Islamic banks respectively were found to be 0.2185 and 0.43491 with a range of 2 as a maximum and zero as a minimum, while in conventional banks, the average and SD of females member was found to be 0.5666 and 0.76629 with a range of 3 as a maximum and zero as a minimum. This means that conventional banks and Islamic banks have a small number of female directors on the board. On average, in Islamic banks during the period 2012 to 2017, board meetings are 7.3866 and SD is 3.36258 with a range of 18 as a maximum and 3 as a minimum meeting. While the descriptive statistics for conventional banks indicate that the average and SD of board meetings respectively were found to be 6.1180 and 2.64758 with a range of 28 as a maximum and zero as a minimum meeting. This means that conventional banks and Islamic banks meet regularly.

Besides, the average board of director’s size in Islamic banks is 9.9580 board members, SD 1.81983, with a minimum of 7 and a maximum of 14 board members, while the average board of director’s size in conventional banks is 9.9595 board members, SD 2.04718, with a minimum of 6 and a maximum of 16 board members. This means that both conventional banks and Islamic have a similar policy regarding the number of directors on the board.
The mean level of board independence in Islamic banks is around 3.5546, SD 2.77610, the minimum is zero, and the maximum is 10 board members. On the other hand, the mean level of board independence in conventional banks is around 3.0860, SD 2.55236, the minimum is zero, and the maximum is 11 board members. This means that both conventional banks and Islamic have a similar policy regarding the number of independent directors on the board. Concerning leadership structure, in Islamic banks, there is a separation of the role of CEO and the chairman, the average and SD of role duality is zero, while in conventional banks the average role duality is .2799, SD 0.44934, with a minimum of zero in case of separation and a maximum of 1 in case the CEO is also the chairman of the board. This means that only conventional banks accept a dual role on the board.

This study includes four control variables, which are profitability, bank size, countries included 11 different countries and years various between 6 consecutive years. However, the descriptive statistics in the table (1) indicate only two control variables: Profitability is measured by return on assets (ROA), in Islamic banks, it ranges from -0.05 to 0.11, with a mean of 0.0108 and SD 0.01586, while in conventional banks it ranges from -0.07 to 8.89, with a mean of 0.0302 and SD 0.36655. This means that on average conventional banks in the MENA region are more profitable than Islamic banks. In addition to bank size which is measured as the natural logarithm of the firm’s total assets, in Islamic banks, it ranges from USD 82.5 million to USD 91,500 million with a mean of USD 17,065 million and SD USD 20,515 million. However, bank size in conventional banks ranges from USD 0.9052 million to USD 223,000 million, with a mean of USD 18,175 million and SD USD 27,210 million. This means that on average conventional banks and Islamic banks in the MENA region have a relatively same bank size. Other control variables such as countries and years were eliminated from the descriptive statistics analysis since they are measured by dummy variables.

Table 1: Descriptive Statistics for all the Variables Included in the Regression Model

<table>
<thead>
<tr>
<th>Variables</th>
<th>Islamic banks</th>
<th>Conventional Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min.</td>
<td>Max.</td>
</tr>
<tr>
<td>Earnings management</td>
<td>0</td>
<td>0.04</td>
</tr>
<tr>
<td>Foreign director</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Female director</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Board meeting</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>Board size</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Board independence</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Role duality</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Profitability</td>
<td>-0.1</td>
<td>0.11</td>
</tr>
<tr>
<td>Bank size in USD million</td>
<td>82.5</td>
<td>91,500</td>
</tr>
</tbody>
</table>

5.2 Panel Regression Analysis

After checking the regression assumptions, the table (2) represents the findings of the regression model tested over the sampled MENA region banks.
### Table 2: Regression Model Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Islamic banks Unstandardized Coefficients</th>
<th>Conventional Banks Unstandardized Coefficients</th>
<th>Both bank type Unstandardized Coefficients</th>
<th>Sig.</th>
<th>Sig.</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-0.002</td>
<td>0.022</td>
<td>0.000***</td>
<td>0.016</td>
<td>0.000***</td>
<td>0.000***</td>
</tr>
<tr>
<td>Bank type</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign director</td>
<td>-0.003</td>
<td>0.276</td>
<td>0.445</td>
<td>0.000</td>
<td>0.276</td>
<td></td>
</tr>
<tr>
<td>Female director</td>
<td>0.002</td>
<td>0.285</td>
<td>0.546</td>
<td>0.001</td>
<td>0.299</td>
<td></td>
</tr>
<tr>
<td>Board meeting</td>
<td>0.000</td>
<td>0.381</td>
<td>0.026**</td>
<td>0.000</td>
<td>0.041**</td>
<td></td>
</tr>
<tr>
<td>Board size</td>
<td>0.001</td>
<td>0.260</td>
<td>0.097*</td>
<td>0.001</td>
<td>0.072*</td>
<td></td>
</tr>
<tr>
<td>Board Independence</td>
<td>0.000</td>
<td>0.619</td>
<td>0.011**</td>
<td>-0.001</td>
<td>0.177**</td>
<td></td>
</tr>
<tr>
<td>Role Duality</td>
<td></td>
<td></td>
<td></td>
<td>0.000</td>
<td>0.771</td>
<td>0.000</td>
</tr>
<tr>
<td>Profitability</td>
<td>-0.077</td>
<td>0.092*</td>
<td>0.708</td>
<td>0.003</td>
<td>0.282</td>
<td></td>
</tr>
<tr>
<td>Bank size</td>
<td>8.69275E-15</td>
<td>0.783</td>
<td>-5.92852E-14</td>
<td>0.007**</td>
<td>0.768</td>
<td></td>
</tr>
<tr>
<td>Country Bahrain</td>
<td>0.006</td>
<td>0.005***</td>
<td>-0.005</td>
<td>0.145</td>
<td>0.0153</td>
<td></td>
</tr>
<tr>
<td>Country Egypt</td>
<td>0.006</td>
<td>0.121</td>
<td>-0.007</td>
<td>0.010**</td>
<td>0.004***</td>
<td></td>
</tr>
<tr>
<td>Country Jordan</td>
<td>-0.003</td>
<td>0.260</td>
<td>-0.010</td>
<td>0.000***</td>
<td>0.000***</td>
<td></td>
</tr>
<tr>
<td>Country Kuwait</td>
<td></td>
<td></td>
<td></td>
<td>-0.007</td>
<td>0.017**</td>
<td></td>
</tr>
<tr>
<td>Country Lebanon</td>
<td>-0.005</td>
<td>0.213</td>
<td>-0.006</td>
<td>0.095*</td>
<td>0.016**</td>
<td></td>
</tr>
<tr>
<td>Country Oman</td>
<td>0.001</td>
<td>0.852</td>
<td>-0.007</td>
<td>0.054**</td>
<td>0.033**</td>
<td></td>
</tr>
<tr>
<td>Country Qatar</td>
<td>-0.002</td>
<td>0.286</td>
<td>-0.013</td>
<td>0.000***</td>
<td>0.000***</td>
<td></td>
</tr>
<tr>
<td>Country Saudi Arabia</td>
<td>-0.002</td>
<td>0.504</td>
<td>-0.015</td>
<td>0.000***</td>
<td>0.000***</td>
<td></td>
</tr>
<tr>
<td>Country UAE</td>
<td>0.007</td>
<td>0.007***</td>
<td>-0.003</td>
<td>0.223</td>
<td>0.223</td>
<td></td>
</tr>
<tr>
<td>Year 2013</td>
<td>-0.001</td>
<td>0.436</td>
<td>0.562</td>
<td>0.001</td>
<td>0.689</td>
<td></td>
</tr>
<tr>
<td>Year 2014</td>
<td>-0.002</td>
<td>0.378</td>
<td>-0.001</td>
<td>0.582</td>
<td>0.472</td>
<td></td>
</tr>
<tr>
<td>Year 2015</td>
<td>-0.002</td>
<td>0.242</td>
<td>-0.001</td>
<td>0.670</td>
<td>0.497</td>
<td></td>
</tr>
<tr>
<td>Year 2016</td>
<td>-0.001</td>
<td>0.622</td>
<td>-0.001</td>
<td>0.591</td>
<td>0.490</td>
<td></td>
</tr>
<tr>
<td>Year 2017</td>
<td>0.001</td>
<td>0.623</td>
<td>0.816</td>
<td>0.001</td>
<td>0.621</td>
<td></td>
</tr>
</tbody>
</table>

Significance at the 1%, 5%, and 10% levels is indicated by ***, **, and * respectively.

The results report a significant positive association between bank type (being Islamic or conventional bank) and earnings management (p < 0.01) (Table 2). This means that conventional banks engage in more earnings management practices compared to Islamic banks; hence, H1 is supported. These results confirm the argument of agency theory that Islamic sharia plays an effective role in restricting the manager’s opportunistic behavior (Zainuldin et al., 2018). This result is consistent with that of Lassoued et al. (2018), Vania et al. (2018), and Quttainah et al. (2013). However, the result is inconsistent with that of Ben Othman and Mersni (2014), Hamdi and Zarai (2012), and Shen and Chih (2005).
Moreover, to test that Islamic banks differ from conventional banks in earnings management practices, an independent-samples T-test was applied using the absolute value of residual as an indicator of earnings manipulation (Islamic versus conventional). The t value is 9.718 resulted in a Sig. value of 0.000 (p < 0.05). Thus, the results indicate that Islamic banks and conventional banks differed significantly on EM practices. By examining the group means for this sample of subjects (Table 1), the results indicate that conventional banks (with a mean of 0.0137) have significantly higher EM practices than Islamic banks (with a mean of 0.0057).

Also, the results indicate a non-significant association between foreign directors and earnings management in both Islamic and conventional banks (p > 0.10) (Table 2). This means that the attendance of a foreign director on the board has no impact in reducing the level of earnings management; hence, H2a and H2b are not supported. These results may be justified for two reasons. First, foreign directors are probably less familiar with local regulations, which weaken their ability to assess management behaviors and diminish earnings manipulation. The second problem is the language where local directors do not feel comfortable using the English language, and this is possibly going to impose heavier loads on foreign directors than on national directors, therefore, weaken the foreign directors monitoring ability to deduct earnings management. These results are consistent with that of Piekkari et al. (2015) and Masulis et al. (2012) while contradicting that of Ruigrok et al. (2007).

Moreover, the results indicate a non-significant association between female directors and earnings management in both Islamic and conventional banks (p > 0.10) (Table 2). This means that the participation of a female director on the board has no impact in reducing the level of earnings management; hence, H3a and H3b are not supported. This results may violate the concept of agency theory in which the presence of women on boards enhances board independence, improve the effectiveness of the board, and improve the transparency and accuracy of financial reports which result in reducing earnings management. These results may be justified for two reasons. First, the presence of female directors on the board is relatively small compared to men, this may cause a bias in the results due to the domination of men directors. Second, the appointment criteria of female directors in some of the sampled MENA region banks are based on the continuity of the family member and not on education and qualifications. This may reduce the effectiveness of women's role in restricting earnings management. The appointment of qualified women directors based on their academic qualifications, certifications, and experiences tend to deliver better control for manipulated financial reports and encourage corporate ethical values. These results are consistent with that of Osemene et al. (2018) and Elghuweel et al. (2017). However, this result is inconsistent with that of Selahudin et al. (2018) and Nielsen and Huse (2010).

Furthermore, the results indicate a non-significant association between board meeting frequency and earnings management in Islamic banks (p > 0.10) (Table 2). This means that board meetings of the board have no impact on reducing the level of earnings management in the case of Islamic banking; therefore, H4a is not supported. Besides, the results indicate a significant negative association between board meeting frequency and earnings management in conventional banks (p < 0.05) (Table 2). This means that board meetings are a crucial mechanism for reducing the level of earnings management in conventional banking; hence, H4b is supported. These results are consistent with agency theory which argues that a number of board meetings are a signal of board effectiveness and commitment and gives powerful monitoring to align managers’ interest with those of shareholders and to enhance the reliability of financial information. These results are in line with that of Chouaibi et al. (2018) and Xie et al. (2003). However, the results are contradicting with that of Jensen (2010) and Vafeas (1999).

Besides, the results indicate a non-significant association between the board of director’s size and earnings management in Islamic banks (p > 0.10) (Table 2). This means that the board of director’s size does not influence the level of earnings management in the case of Islamic banking and though H5a is not supported. Besides, the results indicate a
significant positive association between the board of director’s size and earnings management in conventional banks (p < 0.10) (Table 2).

This means that banks with larger boards are more likely to have the capability to detect financial reporting irregularities, and therefore H5b is supported. These results confirm the concept of agency theory that highlights the board size as a mechanism to reduce agency problems and can be used to assess the board’s effectiveness in ensuring the quality of financial reporting. These results are consistent with that of Farag and Mallin (2019) and Alareeni (2018) while contradicting that of Orozco et al. (2018) and Osemene et al. (2018).

Further, the results indicate a non-significant association between the board of director’s independence and earnings management in Islamic banks (p > 0.10) (Table 2). This means that the board of director’s independence does not influence the level of earnings management in the case of Islamic banking and though H6a is not supported. Besides, the results indicate a significant negative association between the board of director’s size and earnings management in conventional banks (p < 0.05) (Table 2). This means that independent directors are more effective in monitoring tasks than dependent directors, which results in reducing the level of earnings management, and hence, H6b is supported. These results are consistent with agency theory, which supports the concept that the perfect solution to improve internal control within the organization is to have an independent board. These results are consistent with that of Chouaibi et al. (2018) and Kolsi and Grassa (2017). However, the results are inconsistent with that of Alareeni (2018) and Saleh et al. (2007).

Regarding role duality, in the case of the selected Islamic banks in this research, there is no role duality detected. Therefore, the regression analysis fails to show any result related to role duality and Islamic banks (Table 2); hence, H7a is not supported. Also, the results indicate a non-significant association between role duality and earnings management in conventional banks (p > 0.10) (Table 2). This means that role duality has no impact on the level of earnings management in the case of conventional banking, and though H7b is not supported. These results are consistent with that of Alareeni (2018) and Chouaibi et al. (2018) while contradicting that of Nuanpradit (2019) and Faleye (2007).

6. CONCLUSION

The purpose of this research was to provide a comparison between Islamic banks and conventional banks in their practices of managing earnings and to investigate earnings management and its corporate governance determinations for a sample of conventional and Islamic banks in eleven MENA region countries including Lebanon, Bahrain, Egypt, Jordan, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, Morocco, and Tunisia over the period 2012-2017.

The results of this research demonstrated that Islamic banks provide fewer earnings management practices than conventional banks in the MENA region due to Islamic ethical framework and Islamic Sharia which is an effective monitoring tool in mitigating opportunistic behavior in managing results, thereby enhancing the quality of reported earnings. Moreover, the results show that among the six corporate governance mechanisms studied in this research, only board meetings, the board size, and board independence can help in mitigating earnings management for conventional banks in the MENA region. Whereas, for the case of Islamic banks, corporate governance mechanisms have no impact in reducing earnings management for two reasons. First, earnings management is very low in Islamic banks, and the second reason is due to the domination of sharia law and sharia supervisory board in eliminating any unethical behavior such as earnings management. However, even though the research findings answer the two research questions, earnings management needs to be more investigated in the MENA region.

This research may contribute to the existing literature by investigating the effect of three mechanisms which are the presence of female directors on the board, foreign members on the board, and the board of directors meeting frequency on earnings management in both Islamic
and conventional banks in the MENA region. Besides, this research is one of the few studies to examine earnings management practices in Islamic banks compared to conventional banks in Lebanon, Bahrain, Egypt, Jordan, Oman, Qatar, and the United Arab Emirates during the period range from 2012 to 2017 (Ben Othman & Mersni, 2016; Ben Othman & Mersni, 2014).

Moreover, this study could be beneficial for regulators, shareholders, and users of financial statements. Regulators and shareholders could use the results of this paper to reinforce their monitoring strategy of the board of directors and restrict the discretionary practices of management. Based on the research findings, this paper provides some recommendations. First, regulators should force conventional banks with ethical standards that they should follow to limit the practice of earnings management. Second, the board of directors should encourage the appointment of local directors because they are more aware of local language and policies so they can better assess the manager’s decisions. Third, the board of directors should encourage the appointment of qualified women directors based on their academic qualifications, certifications, and experiences. Fourth, the board of directors should attempt to make frequent meetings. Fifth, banks should have a larger board size to empower the capability of detecting earnings management. Sixth, the board of directors should recommend the appointment of independent directors. Seventh, a board of directors that suffers from a conflict of interest between the CEO and the chairperson should have a dual leadership structure.

This research has some limitations. First, this research uses a small sample size of Islamic banks, which may cause a bias in the results due to the domination of conventional banks. Second, the research excludes Algeria, Iraq, Libya, Palestine, Syria, and Yemen due to their political issues or the undeveloped banking sector. Therefore, the results cannot be generalized to all countries in the MENA region. Third, this research includes only a few banks in Morocco and Tunisia who publish their annual reports in English or Arabic. Thus, the results cannot be generalized to all banks in Morocco and Tunisia.

This research highlights several avenues for future research. First, samples in future studies need to be expanded to cover more Islamic banks in the MENA region. Second, future studies may focus on other countries such as Algeria, Iraq, Libya, Palestine, Syria, and Yemen. Third, future research may examine other corporate governance mechanisms that may impact earnings management, for example, ownership concentration, CEO experience, CEO profession, board committees.

References


Glossary:

Gender diversity in this research refers to the representation of female directors on the board.