Journal of International Accounting, Auditing and Taxation 30 (2018) 85–105

Contents lists available at ScienceDirect

Journal of International Accounting, Auditing and Taxation

journal homepage: www.elsevier.com/locate/intaat

Earnings management in islamic and conventional banks: Does ownership structure matter? Evidence from the MENA region

Naima Lassoued[a,*], Mouna Ben Rejeb Attia[b], Houda Sassi[c]

[a] Higher School of Business, Manouba University, Manouba, Tunisia
[b] Higher Institute of Accountancy and Entrepreneurial Administration, Manouba University, Manouba, Tunisia
[c] Institute of High Business Studies, Carthage University, Tunis, Tunisia

ARTICLE INFO

Keywords:
Earning management
Conventional banks
Islamic banks
MENA countries ownership structure

ABSTRACT

The aim of this paper is to compare earnings management between conventional and Islamic banks and to examine whether ownership structure affects earnings management in the banking industry of emerging markets. Using a sample of Conventional and Islamic banks from Middle Eastern and North African (MENA) countries, we first found evidence that Islamic bank manage less their earnings than conventional banks. Second, both Islamic and conventional banks with more concentrated ownership use discretionary loan loss provisions to manage their earnings. Third, institutional owners encourage earnings management in Islamic banks and State participation increases earnings management in conventional banks. Finally, family owners reduce this practice in both types of banks.

1. Introduction

The subject of bank earnings management in the accounting literature had drawn the attention of academic researchers and regulators during the last decade. A growing body of empirical research theoretically and empirically investigates different hypotheses related to earnings management in banks. Some researchers provide evidence of earnings management and the tools used by managers to manage earnings (Beatty, Chamberlain, & Magliolo, 1995; Beaver & Engel 1996), others examine the motivation of managers to manipulate bank earnings (Anandarajan, Hasan, & Lozano-Vivas, 2005; Kanagaretnam, Lobo, & Mathieu, 2004; Kim and Kross, 1989). The rising interest in this theme relates to the unique position of the banking sector in financial intermediation and the payment system. More specifically, opacity of banks and high leverage level stimulate excessive risk taking[1] putting the entire economy at a greater risk as shown after the 2008 recession. In this regard, earnings management increases accounting disclosure problems in the banking sector and reduces the financial system stability(Quttainah, Song, & Wu, 2013).

Like in non-financial firms, ethics appear to enhance accounting numbers quality by reducing unethical business activities like opportunistic earnings management, (Brief, Dukerich, Brown & Brett, 1996). Indeed, ethics norms are assimilated to monitoring mechanism constraining opportunistic manager behavior. An important source of ethical behavior is the religion, In fact, well-established branch of the literature advances that religion has an important role in shaping the economic behavior of organizations (Weaver & Agle, 2002; Callen & Fang, 2013). Regarding accounting studies, many studies established an association between religious social norms of the firms' environment and earnings management practices. For instance, Dyreng and Mayew (2012) add to the evidence that US firms with higher levels of religious adherence report high earnings quality and have less risk of fraud. In an

* Corresponding author.
E-mail address: naima.lassoued@sesame.com.tn (N. Lassoued).

[1] By relying on depositors for their funding and by the presence of the central bank as a last resort lender.

https://doi.org/10.1016/j.intaccaudtax.2017.12.003

Available online 20 December 2017
1061-9518/ © 2017 Elsevier Inc. All rights reserved.

international level McGuire et al. (2012) show that US firms being headquartered in areas with strong religious are more likely to manipulate earnings. Against this background, Islamic banks based on Islamic principles presents relevant features providing a peculiar and interesting setting to test the role of religiosity on accounting reliability. Indeed, earnings management practice seems to contradict Sharia law in Islamic banks because of the ethical and moral values which should discourage any opportunistic behavior and restrict any unethical practices.

Recently, literature related to bank earnings management pay particular attention to internal governance mechanisms since earnings management is assimilated to an agency problem arising from the separation of ownership and control (Lambert, 1984). To limit opportunistic behavior and ensure reliable and complete financial reporting, managerial decisions should be monitored (Bushman & Smith, 2003). Previous studies documented the effectiveness of internal corporate governance mechanisms in a context of diffused ownership (like in developed countries). However, in the presence of large shareholders, agency problems are shifted to conflicts between controlling owners and minority shareholders rather than between owners and managers. Therefore, internal corporate governance mechanisms are less likely to limit such agency problems as large investors may elect representatives to the board of directors who will act in their interest (Bouvatier, Lepetit, & Strobel, 2014). The self-dealing behavior of controlling shareholder is more astute in poorly developed legal systems when shareholders and creditor rights are less protected like in developing countries (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998).

In the present study, our objective is twofold. First, we examine whether there is a difference in earnings management between conventional and Islamic banks. Second, we test whether ownership structure affects earnings management similarly in Islamic and conventional banks. We focus on banking system in the Middle East and North Africa (MENA) for many reasons. *First*, the banking system is characterized by the coexistence of conventional and Islamic banking. *Second*, policy makers in these countries embrace a series of reforms to establish a legal and an institutional framework aiming at attracting foreign investments and increasing investor protection (Kamla, 2007). More specifically, reforms are undertaken to improve regulation and supervision of banks and increase transparency by imposing provisions for disclosure and require corporate governance codes in line with international standards (Turk-Ariss, 2009). *Third*, the shareholding structure of MENA countries banks is highly concentrated (Turk-Ariss, 2009 and Lassoued, Sassi, & Attia, 2016) and dominated by influential ruling families and States. In light of these peculiarities, the MENA banking system seems to be torn between a historically secretive culture and the increased requirement to enhance the level of disclosure imposed by liberalization policy (Kamla, 2007).

Using a sample of 134 commercial banks from 12 MENA countries over the period 2006–2012, we assess earnings management by isolating the discretionary component of loss loan provision (Kanagaretnam et al., 2004). We firstly compare earnings management between conventional and Islamic banks to explore if Islamic principles reduce effectively earnings management. Secondly, we examine the effect ownership structure on earnings management for separately Islamic and conventional banks. Our findings indicate that Islamic banks manage less their earnings than conventional banks through loss loan provision. Furthermore, conventional banks with concentrated ownership or state ownership encourage earnings management via discretionary loss loan provision. For Islamic banks sample, concentrated and institutional ownership stimulate earnings management. Family ownership seems to mitigate this practice in both conventional and Islamic banks. We find that bloc holder and institutional owners encourage income decreasing earnings management through overstating provision. However, state ownership (family) encourages (discourage) earnings management upward.

This paper extends in many ways the existing bank accounting literature and contributes to the corporate governance literature as well as the particular comparative literature of Islamic and conventional banking. *First*, we notice, that only a few studies (Taktak, Zouari, & Boudrigua, 2010; Ben Othman & Mersni, 2014) examined earnings management in the banking sector in MENA countries and focused on Islamic banks using a very small sample. Furthermore, Lassoued et al. (2017) studied the effect of ownership structure in MENA countries without distinguishing between Islamic and conventional banks. Unlike these studies, we conduct comparative analysis of a comprehensive sample of banks in MENA countries. *Second,* many recent studies explored the role of board of directors and audit mechanisms in mitigating earnings management in Islamic banks and reached mixed results (eg. Quttainah et al., 2013; Taktak & Mbarki 2014; Ben Othman & Mersni, 2016). We contribute to this line of research by exploring the role of ownership structure while comparing Islamic and conventional banks. Indeed, in a country with a concentrated ownership structure it seems essential to take into account the owner's attitude which may weaken other governance aspects. *Third*, prior studies provided comparisons of the two banking sectors in the context of financial stability, efficiency and risk (e.g. Zoubi & Al-Khazali, 2007; Srairi, 2013). Our study represents the first empirical attempt to compare the impact of ownership structure on earnings management practice in both sectors. *Finally*, our study contributes to the broad literature established on the effects of religions or national cultures on corporate accounting decision making like Dyreng and Mayew, 2012; McGuire, Omer, & Sharp, 2012). Indeed, these studies focused on US non-financial firms. However the organization religiosity could be more effective in developing countries with weak institutional monitoring and enforcement devices like MENA countries

The rest of this paper is structured as follows. In Section 2, we present the study framework. In Section 3, we review the relevant literature and develop our main hypothesis. In Section 4, we describe our data and present our econometric approach. In Section 5, we present and discuss our results and in the last section, we conclude and suggest possible future research extensions.

2. The study framework

The MENA countries share several economic and institutional similarities driven by cultural and social factors that distinguish them from other developing countries. The first factor affecting the cultural, social and even the economic environment is Islam, the common religion practiced in the region (Kamla, 2007). Second, all of these countries have been under Western powers control and

when they obtained their independence their legislative and institutional framework was highly influenced by the British or the French model. Third, many MENA countries remained monarchies (Morocco, Jordan, Saudi Arabia, Kuwait, Bahrain, Qatar, the United Arab Emirates, and Oman) ruled by the same families that dominated the business environment (OECD, 2009).[2] Others countries opted for a republican regime after their independence. In both cases (republic or monarchies), the State owned enterprises in the vital segments of economies.

Recently, the political background of this region is characterized by political instability known as the Arab Spring. Indeed, several countries were experienced to a revolutionary wave of protests starting from Tunisia and propagated to several MENA countries. The consequences of Arab Spring vary greatly from countries to others. For instance, in Egypt and Tunisia, the existing regimes were ousted and replaced. In Morocco, discontent has been channeled into a political movement, but not the overthrow of political regime. However, Libya, Yemen and Syria, failed to stop the protests entirely and instead ended up in civil war.[3] In the other countries, protestors have called for some reforms, but not led to any change (eg. Jordan, Bahrain). Kuwait, Qatar, and the United Arab Emirates (UAE) have not witnessed protests.

Despite the similarities cited above, many studies comparatively examined the banking sector in non-oil and oil countries (the Gulf Corporation Countries–GCC) and investigated the impact of institutions, regulations and financial reforms on bank performance (Ben Naceur & Omran, 2011). The results showed that restructuring initiatives in the MENA region, in particular the GCC countries, had an impact on the banking sector; it became well-developed, profitable, and more efficient. Ishak and Al-Ebel (2013) argue that the banking sector in the GCC countries is one of the largest and rapid growing sectors in the region.

2.1. The banking sector in non-oil-based countries

For many decades, state-owned banks financed government needs and priority sectors. However, most of MENA governments have gradually undertaken a comprehensive financial reform under the auspices of the International Monetary Fund (IMF)[4]aimed at reviving stock markets and limiting the role of the State by promoting the private sector. Even after undertaking a series of reforms, the banking sector is still dominated by the financial institutions that hold most financial assets (e.g. Ben Naceur, Omran, & Ghazouani, 2007; Ben Naceur & Omran, 2011). Therefore, banks have taken up many initiatives to enhance their soundness to a point they could jeopardize the entire economy. Indeed, the deep change came with a privatization process and an entry of foreign institutions as owners of large shares of the banking systems. Such changes took place in the form of a privatization of state-owned banks and an alleviation of barriers to foreign entry, in line with the WTO membership requirements.

This policy of financial openness and liberalization induced policy makers in these countries to establish a legal and an institutional framework aiming at attracting foreign investment and increasing investor protection (Ben Naceur et al., 2007). Indeed, governments have accelerated domestic measures that would improve regulation and supervision and increase transparency. More specifically, most monetary authorities have adopted bank laws which impose provisions for disclosure and transparency in the central bank's activities and require corporate governance codes in line with international standards.

Banks in these countries are monitored by central banks, which introduce and implement the main regulatory reforms; it is also the supervisory authority for deposit-taking banks, with wide powers vested in it by the banking law.

Banks present mixed ownership structure, in these countries with the presence of foreign owners, domestic private owners (including families) and States (Lassoued et al., 2016). Lebanon and Morocco had a more liberalized financial sector compared to the rest of the region (Ben Naceur and Omran, 2008).

2.2. The banking sector in oil-based countries (GCC)

The GCC countries have a fairly large number of banks with an extensive network of branches. Banks in the GCC countries are financially strong and well capitalized (Jbili, Galbis, & Bisat., 1996). Most banks in GCC are family-owned, with a modest state ownership, although a large number of specialized banks are fully state-owned. Moreover, the GCC countries have an open economic system with free movement of capital and exchange rate regimes, which are pegged to the US dollar. This institutional setting has implications for the conduct and the effectiveness of monetary policy, which is geared towards maintaining stability of the local currency against the US dollar.

Kuwait is considered, on average, less competitive than the U.A.E, Saudi Arabia, and Bahrain and more competitive than Oman and Qatar, based on average assets, average return on assets, average net profit, average number of branches per bank and average number of employees. Although it is difficult to homogenize even the services that are offered across the various banking institutions except in broad terms, techniques and measures like market concentration can contain some of the required data. In terms of competitiveness, again relying on market concentration ratio, the United Arab Emirates has the most competitive (least monopolized) banking sector, followed by Saudi Arabia, Bahrain, Kuwait, Oman, and Qatar (Jabsheh, 2002).

Some GCC members have already had years of experience conducting business with foreign banks. Oman, for example, already has 13 foreign banks, Qatar has ten foreign, Arab, and Islamic banks, and Bahrain has an extensive off-shore banking sector. This kind of exposure and experience raises these countries‘ trust levels.

[2] Policy brief on improving corporate governance of banks in the middle east and north africa region.

[3] These countries are excluded from our sample.

[4] Involvement of these countries in these structural reforms varies from one country to another.

2.3. Islamic banks in the MENA region

MENA countries (especially GCC countries) are characterized by the coexistence of Islamic and conventional banks. The growing sector of Islamic banks is mainly concentrated in the MENA region. According to Young (2013), the assets of Islamic banks grew at an average rate of 17% per year between 2008 and 2012. This is two to three times faster than the rate at which conventional banks grew at the same time. Besides, Islamic banking system total assets are $ 1.334 trillion in 2011 and are expected to reach more than $ 3.4 trillion in 2018 (Young, 2013).

The distribution of Islamic banks may substantially vary across the MENA countries. Their presence is particularly important in the GCC countries: in Saudi Arabia, Kuwait, and Bahrain their market share is 48.9%, 44.6%, and 27.7%, respectively (Young, 2013).

Sharia principles in Islamic banks focus more on following ethical and moral values in the banking industry rather than investment activity (Hamdi & Zarai, 2012). In fact, interest payment and receiving are prohibited in Islamic banking because money should not produce money (Hamdi & Zarai, 2012). Consequently, the profit sharing concept replaces the interest gain and Islamic banks become partners who share risk both with depositors and shareholders (Farouk, Hassan, & Clinch., 2012). Islamic banking, must also avoid uncertainty and gambling. (Al-Gamal, 2006).

According to Quttainah et al. (2013) Islamic banks like conventional banks are required to comply with international banking standards. For instance, Islamic banks are also subject to the Basel requirements that emphasize capital adequacy, risk management, internal controls, and external audits. Furthermore public Islamic banks should also follow the country's financial reporting standards, which could be the local GAPP or the International Financial Reporting Standard (IFRS).

3. Related literature and research hypothesis

3.1. Earnings management in banks: conventional vs islamic banks

The issue of earnings management has been addressed around the world and it is shown that banks manage their earnings (Beatty et al., 1995; Collins, Shackelford, & Wahlen, 1995; Wahlen 1994; Beaver & Engel 1996; Anandarajan et al., 2005). Earnings management in banks is more problematic than in non-financial firms since banks are highly leveraged and their managers have incentives to even take more risks by relying on depositors for their funding and on the central bank as a last resort lender. This excessive risk taking may lead to economic downturns (Andres & Vallelado 2008).

Besides the conventional motivation for earnings management identified for non-financial firms, it is found to be valuable for banks.[5] Banks manage their earnings to comply with the regulatory requirements of the banking activity. Indeed, Beatty et al. (1995) state that incentives for earnings management become real because regulator monitoring is based on capital accounting measures. Therefore, banks adjust their reported numbers to display a suitable capital adequate to regulators and to look less risky (Beaver & Engel, 1996; Kim and Kross, 1989; Ahmed, Takeda, & Thomas, 1999).

A growing stand of literature discusses if Islamic banks have less motivations to manage less their earnings since Islamic banks are expected in principle to embed ethics and social responsibility in their business model (Elnahass, Izzeldin, & Abdelsalam, 2014). Furthermore, Islamic banks may be less risky since their credit criteria are more conservative and they are prohibited from investing in high risk investments or structured products as a result of Shari'a constraints on speculation and gambling (Farouk et al., 2014). Therefore, manager in Islamic banks may not have the incentive to conceal the excessive risk taking like conventional counterparts.

Taktak et al. (2010) argue that Islamic institutions use FAS 11[6] to determine provisions and reserves. This standard "requires an adequate level of provisions and therefore, leaves little discretion to Islamic banks to manage their earnings".

However, findings show that Islamic banks like conventional banks have incentives to manage earnings (Ismail, Shaharudin, & Samudhram, 2005; Zoubi & Al-Khazali, 2007; Quttainah et al., 2013; Elnahass et al., 2014) for many reasons: *first*, to keep investment account holders from losing trust in Islamic banks, *second* to hide asset substitution behavior through earnings management (Shen & Chih 2005) or to avoid violating regulations like capital adequacy ratio and liquidity ratio (Shen & Chih 2005).

It's commonly recognized that LLPs are the main tool to manage earnings of banks. In Islamic and conventional banks, LLPs are estimated to absorb expected credit losses which constitute the main business activity (Fonseca & Gonzalez 2008). Bank managers use their subjective judgment to determinate LLPs (Cavallo & Majnoni 2001). This assessment of expected loan losses may naturally involve a significant degree of subjectivity. Thus, LLPs represent an obscuring component of net income that is used subjectively by bank managers to achieve discretionary management objectives (Collins et al., 1995, Cavallo & Majnoni 2001).

To measure earnings management, LLPs are split into discretionary (DLLP) and non-discretionary (NLLP) components (Wahlen 1994). DLLP refers to the component of LLP that is subject to bank managers' manipulation, given underlying earnings management motives. NLLP represents information related to defaults risk and bad debts, which cannot be controlled by bank managers (Wahlen 1994; Beaver & Engle, 1996).

Empirically, Zoubi and Al-Khazali (2007) point to the use of LLPs to smooth earnings ina sample of 65 conventional and Islamic banks operating in the Gulf Cooperation Council (GCC) over the period 2002–2003. However, Ismail et al. (2005) add to the evidence that bank manager's use obtained security gains rather than LLPs for earnings management purposes in a sample of ten Malaysian

[5] Political costs (Watts and Zimmerman, 1986) debt contract (DeFond and Jiambalvo, 1994), compensation contract (Gaver, Gaver, & Austin, 1995) and capital market incentives earnings forecasts meeting.

[6] Financial Accounting Standards.

commercial banks offering Islamic banking services from 1998 to 2001.

Recently, Quttainah et al. (2013) found that Islamic banks are less likely to manage their earnings than conventional banks by both earnings loss avoidance and abnormal LLPs in a sample of 164 conventional and Islamic banks from 15 countries. Moreover, earnings management behaviors between Islamic banks with and without Shari'ah Supervisory Boards are not significantly different. Differently, Ben Othman and Mersni (2014) pointed out that managers in both Islamic and conventional banks, in 7 MENA countries, manage their provisions to enable banks to avoid violating minimum requirements. Indeed, there is no substantial difference in the use of DLLP by managers of Islamic banks, and conventional banks.

Finally, Farouk et al. (2014) examined a sample of 234 Islamic and conventional banks from 14 countries between 1992 and 2005. They found that Islamic banks manage their loan loss provisions, considering their levels of earnings and profit distributions and Islamic banks consistently report lower provisions than conventional banks. Further results suggest that Islamic banks also use Islamic banks for earnings management, by increasing such provisions when earnings are high, and vice versa. By contrast, conventional banks reduce their provisions when earnings are high, and inversely.

Overall, previous studies show that both Islamic and conventional banks manage their results through the provisions. However, they don't confirm all that Islamic banks manage less their earnings. The mixed results may be due to the sample size or composition. In fact, small sample used by many authors (like Ben Othman and Mersni, 2014) are not representative and may conduct to biased results. Besides, the heterogeneity of sample composed by banks from country that differs economically and institutionally may also biased the results. For example, Quttainah et al. (2013) use a sample from MENA countries and others different countries like Malaysia, Bangladesh, Indonesia and Pakistan having different economics and socials features.

In our present hypothesis, we suppose that Islamic principles (Shari'ah) should contribute to shaping the ethical behaviors of managers and incite manager to avoid earnings management

H1. Islamic banks manage less their earnings compared to conventional banks.

3.2. Corporate governance and earnings management

The influence of corporate governance on earnings management emerges from the conflict between managers' and owners' interests, generated by separating ownership and control. This gap in managers' and shareholders' objectives could encourage managers to use flexibility of accounting standards to manage income. More specifically, managers might use earnings management opportunistically to maximize their own wealth, perhaps at the expense of owners and interests. Corporate governance provides a framework to limit this opportunistic behavior and protect owners by ensuring compliance with financial accounting systems and credibility of financial statements (Bushman & Smith 2003). After the collapse of well-respected American firms induced by earnings manipulation, new provisions on managers, board of directors and auditors were required to ensure reliability of financial reporting. An abundant literature was conducted to investigate the effectiveness of these provisions on mitigating earnings management, in particular in non-financial firms (Dechow, Sloan, & Sweeney, 1996; Jiang, Lee, & Anandarajan, 2008).

Regarding banking industry, less attention was given to this issue despite governance specificities induced by the multiplicity of stakeholders, a high information asymmetry that complicates the monitoring of managers' decisions (Morgan 2002) and the intense regulation (Andres & Vallelado 2008).

The few empirical studies on the relationship between corporate governance and earnings management in banking industries focused on developed countries. They investigated the effect of conflict of interest between outside shareholders and managers under a diffused ownership structure on earnings management (Cornett, McNutt, & Tehranian, 2009, Leventis & Dimitropoulos, 2012).

As for emerging markets, Quttainah et al. (2013) investigate the effect of corporate governance on earnings management in Islamic banks from 15 countries. They found that large boards monitor managers and reduce earnings management practices more effectively. In addition, empirical results show that banks with a professional member in their Shari'ah Supervisory Board are less likely to manage earnings than other banks. Ben Othmen and Mersni (2016) explore the same research question in a sample of Islamic banks from the MENA countries. Unlike Quttainah et al. (2013), they found that small sharia supervisory boards are more effective than larger ones and this negatively affects earnings management. The existence of scholars with accounting knowledge sitting on the sharia board deters earnings management, confirming the finding of Quttainah et al. (2013). However, Taktak and Mbarki (2014) found that a co-audit belonging to the BIG 4 gives incentives to manage earnings in Tunisian banks.

The mixed results may result from sample size or structure. In fact, the small samples used by many authors (like Ben Othman & Mersni, 2016) are not representative and may lead to biased results. Moreover, the heterogeneity of samples consisting of banks from a country that differs economically and institutionally may also bias the results. For example, Quttainah et al. (2013) use a sample from the MENA countries and other different countries like Malaysia, Bangladesh, Indonesia and Pakistan, with different economics and institutional features.

Another plausible explanation could be the irrelevance of corporate mechanisms that attempt to monitor manager's decision in a context of concentrated ownership structure (Davies, 2000). Indeed, controlling shareholders can elect their representatives to the board of directors, which will nominate a manager acting in their interests (Bouvatier et al., 2014). The conflict of interest is between managers and shareholders but between controlling owners and minority shareholders. This agency conflict could be worse when shareholder rights are poorly protected. Thus, it is important to investigate ownership effects in detail in emerging markets.

3.3. Ownership structure and earnings management

3.3.1. Ownership concentration

The literature provides two hypotheses explaining the effect of block ownership on earnings management: the alignment of interest and entrenchment hypotheses. The hypothesis of alignment stipulates that block holders have a strong incentive to monitor efficiently and influence firm management in order to protect their interests. Therefore, controlling shareholders constitute an effective governance mechanism that alleviates agency costs by increasing monitoring and preserving the interest of all shareholders (Jensen & Meckling, 1976). Therefore, large shareholders are expected to monitor managerial discretion including the scope of managerial opportunism to engage in fraudulent financial reporting (Dechow et al., 1996).

However, under the entrenchment hypothesis, controlling shareholders could create another type of agency conflicts between controlling owners and minority shareholders. Indeed, controlling shareholders could have the incentive and the ability to impose decisions allowing them to obtain private benefits at the expense of small shareholders (Shleifer & Vishny, 1997). Thus, they may intervene in the firm's management, and encourage managers to manipulate earnings when this practice satisfies their interest (Jaggi & Tsui, 2007).

Previous studies investigated the relationship between ownership concentration and earnings management in emerging market for non-financial firms. For instance Al-Fayoumi et al. (2010) do not find a significant effect on earnings management in a sample of Jordanian industrial firms over 2001–2005. Farooq and El-Jai (2012) show that the largest shareholders engage in a significant lower earnings management than other firms in a sample of Moroccan firms over 2001–2007. However, Klai and Omri (2011) add evidence indicating that ownership concentration is negatively associated with financial reporting quality in a sample of Tunisian firms over 1997–2007. In a related study, Samaha et al. (2012) find that Egyptian companies with higher ownership concentration have low level of disclosure.

For banks, Bouvatier et al. (2014) find that European banks with more concentrated ownership use discretionary loan loss provisions to smooth their income. Regarding Islamic banks, Taktak and Mbarki (2014) pointed out that banks with a concentrated ownership manipulate their discretionary provisions in Tunisian Islamic banks (10 banks). However, Ben Othman and Mersni (2016) explore the relationship for 20 Islamic banks from the MENA region and could not find a significant relationship. We attribute the mixed results to the very small samples used in the two last studies.

In light of the above discussion, our second hypothesis is:

H.2. There is a positive relationship between ownership concentration and earnings management in both conventional and Islamic banks.

3.3.2. Institutional ownership

Under the efficient monitoring hypothesis, institutional investors are more aware and well-informed than other shareholders because of their expertise, professionalism and resources allowing them to optimize their monitoring. Therefore, large institutional investors may have incentives to limit managerial use of earnings management (Roychowdhury, 2006)

In contrast, institutional investors who do not hold a large stake focus on short-term results, therefore encouraging managers to gain short-term benefits at the expense of long-term gains. Indeed, institutional investors focus on current rather than long-term earnings in determining stock prices when taking investment portfolio decisions (Koh, 2003).

Duggal and Millar (1999) argue that institutional investors are passive investors and when investor-owned firms perform poorly they will sell their holdings instead to expend their resources in monitoring.

The impact of institutional ownership on earnings management in the MENA countries was rarely studied for individual markets and non-financial firms. Farooq and El-Jai (2012) confirm the efficient monitoring of institutional investors in Moroccan firms. In fact, firms with Institutional ownership engage in a significant lower earnings management than other firms. Similarly, Klai and Omri (2011) add evidence indicating that financial institutions ownership has a positive and a significant effect on reporting quality. Hessayri and Saihi (2015) find that institutional investors are effective in constraining earnings management when holding large stakes, in a sample of firms from four emerging markets.[7] By contrast, Al-Fayoumi et al. (2010) find that institutional ownership has no significant effect on earnings management in a sample of 39 Jordanian companies and they do not monitor effectively.

Banks are known by a high presence of institutional ownerships considered to be the most important players in the MENA region in Islamic and conventional banks (Grassa & Chakroun, 2016). We anticipate that they exercise effective monitoring and mitigate earnings management since they are present in banks with large stakes.

H.3. There is a negative relationship between institutional ownership and earnings management in both conventional and Islamic banks.

3.3.3. Family ownership

Family owners seem to be less incited to engage in earnings manipulation. Wang (2006) explains that this practice can harm family reputation and wealth. In addition, Jiraporn and DaDalt, (2009) add that families are pressured to meet earnings expectations. However, family owners may be incited to expropriate others particularly when they own more than 33% (Wang, 2006). Fan and

[7] United Arab Emirates, Morocco, South Africa and the Philippines.

Wong (2002) argue that family ownership concentration limits the dissemination of accounting information to external investors. Siregar and Utama (2008) show that firms with a high proportion of family ownership are more inclined to choose efficient earnings management than other types of firms.

Evidence in the MENA region documented by prior studies illustrates the disciplinary effect of family ownership. For instance, Habbash, Hussainey and Awad-Elsayed (2016) find that family ownership affects positively voluntary disclosure in Saudi firms. Adıgüze (2013) compares earnings management in family-owned than in non-family-owned firms in a sample of 410 Turkish firms over 2006–2010. The results indicate that total accruals management is lower in family-owned than in non-family-owned firms. However, Klai and Omri (2011) find the opposite relationship in Tunisian firms.

For the banking industry, to our knowledge, there is no a study that examines the effect of family ownership on earnings management. However, Arouri et al. (2014) investigate the effect of family ownership on bank performance. They find that the extent of family ownership has a significantly positive association with bank performance for GCC banks. Similarly, Srairi (2013) documents that family owned banks take less risk in a sample of Islamic and conventional banks. These latter findings support that family owners exhibit efficient monitoring of banks. This result seems plausible insofar as owner and merchant families are ruling and they will be more careful of their reputation than other types of families (especially in monarchies). Therefore, we assume that family ownership mitigates earnings manipulation in banks. Based on these arguments, we formulate the following hypothesis:

H.4. There is a negative relationship between family ownership and earnings management in both conventional and Islamic banks

3.3.4. State ownership

State-owned banks are more specific than private banks. First, lending policy of state-owned banks may follow social than financial objectives. For instance, it is possible that these banks finance unprofitable projects just for social objectives like those undertaken by state-owned firms (Dong, Meng, Firth, & Hou, 2014). In the MENA region in particular, state-owned banks play a crucial role in granting loans to industrial SOEs, often not on arm's length terms. This practice generates the accumulation of high non-performing loans (OECD, 2012)[8]

Second, control of these banks by politicians could present two problems. These politicians do not have the necessary qualifications to control banks. Moreover, they may follow their personal goals rather than social ones like transferring resources to their supporters (Iannota, Giacomo, & Sironi, 2013).

Consequently, state-owned banks contribute to finance projects with high social and political goals and possibly with low profitability. To conceal this expropriation, managers could be incited to manage earnings.

Most studies, conducted in emerging markets, investigate the effect of state ownership on earnings management in Chinese banks and some find positive effect (eg. Liu, SaIdi, & Bazaz, 2014) and others documented negative effect (eg. Wang & Campbell 2012)

With regard to the MENA region, Srairi (2013) find that state ownership in Islamic and conventional banks increases risk-taking and displays greater proportions of non-performing loans than other banks. Similarly, Lassoued et al. (2016) add evidence indicating that state ownership positively affects insolvency risk and capital adequacy ratio. It seems that state-owned banks manage their earnings through their LLPs to comply with the required minimum level of capital adequacy and to be perceived less risky. Therefore, we assume that high state ownership encourages earnings management. Based on these arguments, we set our last hypothesis as follows:

H.5. There is a positive relationship between state ownership and earnings management in both conventional and Islamic banks

4. The research design

4.1. Sample selection

The original sample includes 16 MENA countries collected from the Bankscope database. We apply some filtering rules on unavailable data on the main variables, such as loss loan provisions, ownership structure. Banks with less than three consecutive yearly observations were deleted. We also excluded acquisition and bankruptcy cases in our sample period because such banks may be more likely to inflate their earnings. We also excluded banks in which the main shareholder has changed because such change may alter the effect of ownership structure on earnings management. We ended up with an unbalanced panel of 134 banks totaling 898 banks-year observations distributed over the 2006–2012 period.

As for data sources, financial data and ownership structure, they are taken from the Bankscope database. Institutional indexes, developed by Barth et al. (2013) to proxy for bank regulation, and macroeconomic indicators are provided from the World Bank's websites

Table 1 displays the distribution of banks by country and the number of conventional and Islamic banks. We see that Turkey has the highest number of banks (22 banks) and Tunisia has the lowest number of banks/observations (4 banks). Our sample includes 89 conventional banks and 49 Islamic banks.

[8] Towards a New Arrangements for State Ownership in the Middle East and North Africa.

Table 1
Sample distribution by country.

	Number of Banks	Pourcentage	Conventional bank	Islamic bank
Bahrain	10	7.46%	3	7
Egypt	13	9.70%	9	4
Jordan	11	8.21%	7	4
Kuwait	6	4.48%	3	3
Lebanon	21	15.67%	16	5
Morocco	6	4.48%	6	0
Oman	7	5.22%	3	4
Qatar	8	5.97%	4	4
Saudi Arabia	10	7.46%	6	4
Tunisia	4	2.99%	3	1
Turkey	22	16.42%	18	4
UAE	16	11.94%	11	5
Total	134	100%	89	45

4.2. The econometric approach

To examine whether ownership structure affects banking earnings management and if this relationship is similar across Islamic and conventional banks, we use a two-stage approach. In the first, we determine the discretionary component of LLPs and in the second, we test the relationship between ownership structure proxies and earnings management.

4.2.1. Discretionary loan loss provisions

To measure earnings management, we use LLPs. Indeed, many studies show that the main accrual in the banking sector is LLPs. This proxy is divided into two components; discretionary and non-discretionary (noted respectively: DLLP and NDLLP) (e.g. Beaver & Engel 1996; Ahmed et al., 1999). Non-discretionary NLLP report the portion of total accruals because of changes in bank business conditions and DLLP is induced by managerial discretion.

Following Kanagaretnam et al. (2010), we estimate the non-discretionary component (NDLLP) by the following regression:

$$LLP_{it} = \alpha_0 + \alpha_1 LLA + \alpha_2 NCO + \alpha_3 CHLOANS + \alpha_4 LOANS + \alpha_5 NPL + (LOANCATEGORIES) + (COUNTRY\ CONTROLS) + (YEAR\ CONTROLS) + \varepsilon_{it} \quad (1)$$

Where

LLP: Provisions for loan losses divided by beginning total assets

LLA: Beginning loan loss allowance divided by beginning total assets

NCO: Net loan charge-offs for a bank divided by beginning total assets

CHLOANS: Change in outstanding total loans divided by beginning total assets

LOANS: Outstanding total loans divided by beginning total assets

NPL: Nonperforming loans for a bank divided by beginning total assets

LOAN CATEGORIES: Loans to municipalities/government (MUN), mortgages (MORT), hire-purchase/lease (LEASE), other loans (OTH), loans to group companies/associates (GRP), loans to other corporate (OCORP) and loans to banks (BK) all divided by beginning total assets

DLLP is estimated through the residual obtained from Eq. (1). We use absolute value of DLLP as a proxy of earnings management. In fact, a large absolute value for the discretionary components indicates more use of DLLP to increase or to decrease earnings.

4.2.2. DLLP and ownership structure in islamic and conventional banks

In the second stage, we examine first if Islamic manage less their earnings next we investigate the relationship between proxies for ownership structure and the earnings management. We include a set of control variables that previous research found they relate to discretionary accruals. Our models are presented as follows:

$$|DLLP| = \beta_0 + \beta_1 ISLAMIC + \beta_2 BBPT + \beta_3 CAR + \beta_4 GRASS + \beta_5 LAGLLP + \beta_6 LOAN + \beta_7 SIZE + \beta_8 BIG4 + \beta_9 BANACC + \beta_{10} ENTBAN + \beta_{11} MONIEXT + \beta_{12} STRAUD + \beta_{13} GOVIND + \beta_{14} IFRS + (YEARCONTROLS) + V \quad (2)$$

$$|DLLP| = \lambda_0 + \lambda_1 OWNER + \lambda_2 BBPT + \lambda_3 CAR + \lambda_4 GRASS + \lambda_5 LAGLLP + \lambda_6 LOAN + \lambda_7 SIZE + \lambda_8 BIG4 + \lambda_9 BANACC + \lambda_{10} ENTBAN + \lambda_{11} MONIEXT + \lambda_{12} STRAUD + \lambda_{13} GOVIND + \lambda_{14} IFRS + (YEARCONTROLS) + \mu \quad (3)$$

Where

|DLLP|: Absolute value of discretionary loss loan provision

OWNER: Ownership variables which represent the proportion of equity held by the first block holder (BLOC_OWN), families (FAM_OWN), institutional owner (INST_OWNER) and State (STAT_OWN).

BBPT: Earnings before taxes and loan loss provisions divided by total assets at the beginning of the year

CAR: Capital adequacy ratio for a bank i at a year t, measured by average total equity over average total assets
GR_ASS: Growth in total assets from the beginning to the end of the year
LAG_LLP: Past year's LLP divided by total assets at the beginning of the year
LOAN: Total loans scaled by total assets at the beginning of the year
SIZE: The log of total assets at the beginning of the year
BAN_ACC: Bank Accounting informativeness from Barth et al. (2013)
ENT_BAN: Regulatory restrictions on entry into banking from Barth et al. (2013)
MONI_EXT: External ratings and creditor monitoring from Barth et al. (2013)
STR_AUD: Quality of external audits from Barth et al. (2013)
IFRS: Dummy variable takes one if the country adopts the International Financial Reporting Standard, and zero otherwise
GOV_IN: Governance index

Through Eq. (2), applied for whole sample, we investigate if Islamic bank manage less their earnings when the coefficient of ISLAMIC is negative and significant. Eq. (3) is estimates for Islamic and conventional banks separately because these two kinds of banks could have different incentives from their abilities and/or need to manage earnings. The coefficients of interest are the coefficients of the ownership structure proxies: BLOC_OWN, FAM_OWN, INST_OWNER and STAT_OWN.

We include several bank characteristics that could affect bank earnings management (BBPT, CAR, GR_ASS, LAG_LLP, LOAN, SIZE and BIG4). As suggested by Fonseca and González (2008) and Kanagaretnam et al. (2010), bank regulation may force companies to increase disclosure and improve accounting quality by reducing the extent of earnings management. Therefore, we include a set of bank regulation proxies from Barth et al. (2013). We use BANK_ACC to indicate whether the income statement includes accrued or unpaid interest or principal on nonperforming loans and whether banks are required to produce consolidated financial statements. ENT_BAN measures whether various types of legal submissions are required to obtain a banking license. MON_EXT refers to assessment by external rating agencies and incentives for creditors of the bank to monitor bank performance. STR_AUD indicates quality of external audits and IFRS refers to the adoption of the International Financial Reporting Standard enhancing accounting informativeness. In fact, Anandarajan and Hasan (2010) report that the firms that have adopted IFRS have higher value relevance than those in MENA countries adapting to local standards.

Following Quttainah et al. (2013), we use also country-level Governance Index, from Kaufmann et al. (2010), as a control variable.

5. The results and interpretation

5.1. Data description

Table 2 presents the descriptive statistics of our variables on all 898 bank-year observations. The mean (median) value for |DLLP| is 0.0083 (0.0046), however, the mean (median) value for DLLP is −0.0001 (0.0005), indicating that, on average, banks underestimate provisions to manage upwards their results.

With respect to the ownership variable, the mean (median) value of BLOC_OWN is 0.587 (0.326) with a minimum of 5% and a maximum of 100%. Banks in the MENA region seem to be dominated by block holders. Institutional owners hold the largest share percentage with a mean (median) of 0.222 (0.063) followed by states where the mean (median) of STAT_OWN is 0.143 (0.021) and families mean (median) 0.074(0.012). As for bank characteristics, the mean (median) value of BBPT is 0.022 (0.017). The mean (median) value of CAR is0.140 (0.114), GR_ASS is 0.232 (0.124), LAG_LLP is 0.009(0.004), LOANS is 0.495 (0.517), and SIZE is 21.889 (21.894).Around 36.78% banks adopt IFRS and 60.83% of our sample banks are audited by an external auditor belonging to one of the BIG 4 groups.

Table 3 reports the mean differences of our main variables between Islamic and conventional banks, along with the *t*-test results. The mean of |DLLP| for conventional banks is 0.0092 while the mean for Islamic banks is 0.0049. The difference is statistically significant suggesting that conventional banks manage more their earnings. The results also show that blockholders (BLOC_OWN) own on average 62.88% of conventional banks and 41.77% of Islamic banks. The difference is also statistically significant. Similarly, families own (FAM_OWN) 3.6% of conventional banks and 0.3% of Islamic banks. The difference is significant. However, institutional investors (INST_OWN) own on average 22.56% of conventional banks and 19.46% of Islamic banks but the difference is not significant. For state ownership (STATE_OWN), state seems to be present more in Islamic banks with 18.33% and 13.34% in conventional banks. This difference is significant.

The results show that earnings management variable and ownership variables are significantly different across the two subsamples, indicating the importance of exploring if the difference in earnings management is induced by ownership structure between Islamic and conventional banks.

5.2. The main evidence

5.2.1. Earnings management between islamic banks and non-Islamic banks

Table 4 presents ordinary least square (OLS).[9] regression on the effect of Islamic banks on bank earnings management (Eq. (2)).

[9] Residuals recuperated from Eq. (1) may be serially and/or cross-sectionally correlated. So, we used OLS regressions with clustered robust errors to take into account for serial and cross-sectional correlations.

Table 2
Descriptive statistics.

Variable	Mean	Median	Std. Dev.	Min	Max
Dependant variable					
|DLLP|	0.0083	0.0046	0.0141	0.00004	0.1859
DLLP	−0.0001	0.0005	0.0016	−0.0862	0.1859
Ownership variable					
BLOC_OWN	0.587	0.326	0.300	0.050	1
FAM_OWN	0.074	0.012	0.218	0	1
INST_OWN	0.222	0.063	0.306	0	1
STAT_OWN	0.143	0.021	0.288	0	1
Bank characteristics					
BBPT	0.022	0.017	0.043	−0.100	0.667
CAR	0.140	0.114	0.179	0.003	0.997
GR_ASS	0.232	0.124	1.237	−8.306	31.208
LAG_LLP	0.009	0.004	0.027	−0.032	0.315
LOANS	0.495	0.517	0.187	0.002	0.954
SIZE	21.889	21.894	2.076	13.172	28.269
Country-level variable					
BAN_ACC	3.547	4	0.711	2	4
ENT_BAN	7.921	8	0.416	4	9
MONI_EXT	2.031	2	0.999	0	4
STR_AUD	6.845	7	0.362	6	7
GOV_IN	3.569	3.479	0.447	2.625	4.402
Dummy variables proportion					
	Proportion				
BIG4	60.83%				
IFRS	36.78%				

This table reports descriptive statistics for the data used in our analysis. The data set is comprised of 898 observations for the period 2006–2012 |DLLP| Absolute value of discretionary loss loan provision; DLLP discretionary loss loan provision; the proportion of equity held by the first blockholder (BLOC_OWN), families (FAM_OWN), institutional owner (INST_OWNER) and State (STAT_OWN), BBPT Earnings before taxes and loan loss provisions divided by total assets at the beginning of the year; CAR Capital adequacy ratio at a year t, measured by average total equity over average total assets. GR_ASS Growth in total assets from the beginning to the end of the year; LAG_LLP Past year's LLP divided by total assets at the beginning of the year; LOAN Total loans scaled by total assets at the beginning of the year; SIZE The log of total assets at the beginning of the year; BAN_ACC Bank accounting informativeness from Barth et al. (2013); ENT_BAN Regulatory restrictions on entry into banking from Barth et al. (2013); MONI_EXT External Ratings and Creditor Monitoring from Barth et al. (2013); STR_AUD Quality of external audits from Barth et al. (2013); GOV_IN Governance Index from Kaufmann et al. (2010); BIG4 Dummy variable equals one if the auditor is a Big 4 auditor zero otherwise; IFRS Dummy variable equals one if the country adopts International Financial Reporting Standard, and zero otherwise.

Table 3
Means comparisons tests between Islamic and conventional banks.

	Conventional banks	Islamic banks	Difference	t-value
|DLLP|	0.0092	0.0049	0.0043	(3.779)***
BLOC_OWN	62.88%	41.77%	21.11%	(9.530)***
FAM_OWN	3.60%	0.30%	3.30%	(3.271)***
INST_OWN	22.56%	19.46%	03.10%	(1.252)
STAT_OWN	13.34%	18.33%	−4.98%	(−2.251)**

This table provides univariate tests between Islamic banks and conventional banks |DLLP| Absolute value of discretionary loss loan provision; DLLP discretionary loss loan provision; the proportion of equity held by the first blockholder (BLOC_OWN), families (FAM_OWN), institutional owner (INST_OWNER) and State (STAT_OWN); Significance at the 10%, 5%, and 1% levels is indicated by *, **, and ***, respectively.

We report the results for the dependent variable |DLLP|, which is the absolute value of the discretionary loan loss provision (residuals calculated from Eq. (1))[10]

The regression result in Table 4, Column (1) displays the effect of Islamic banks on earnings management without controlling variables. The coefficient of ISLAMIC is −0.004 and is significant at the 1% level. On average, the absolute value of |DLLP| for Islamic banks is about 0.004 lower than that of conventional banks.

Column (2) indicates that when we add other explanatory variables. The model exhibits significant explanatory power (0.43) and the estimated coefficient of Islamic is still −0.004 and is significant at the 1% level. Results reported in Column (3) add year effects are similar to those of column (2). Indeed, the model displays significant explanatory power (0.53) and the estimated coefficient of ISLAMIC is still −0.003 and is significant at the 1% level these findings confirm Hypothesis1 indicating that Islamic banks are less likely to manage earnings compared conventional banks. Besides, Quttainah et al. (2013) and Ben Othman and Mersni (2014) find similar results.

[10] Results of the first stage are not reported for brevity reasons.

Table 4
Earnings Management between Islamic Banks and Non-Islamic Banks.

	(1) |DLLP|	(2) |DLLP|	(3) |DLLP|
ISLAMIC	−0.004	−0.004	−0.003
	(−3.17)***	(−2.88)***	(−2.86)***
BBPT		0.099	0.099
		(2.91)***	(2.90)***
CAR		0.009	0.009
		(3.16)***	(3.13)***
GR_ASS		0.004	0.004
		(2.05)**	(1.77)*
LAGLP		0.003	0.003
		(5.99)***	(5.96)***
LOANS		−0.004	−0.005
		(−1.27)	(−1.30)
SIZE		−0.0001	−0.0001
		(−2.06)**	(−2.09)**
BIG4		−0.002	−0.002
		(1.22)	(1.22)
BAN_ACC		0.001	0.001
		(0.84)	(0.81)
ENT_BAN		0.001	0.001
		(1.33)	(1.22)
MONI_EXT		0.0001	0.0001
		(0.78)	(0.76)
STR_AUD		0.001	0.001
		(1.12)	(1.02)
GOV_IN		−0.003	−0.003
		(−2.03)**	(−2.17)**
IFRS		0.001	0.001
		(0.62)	(0.48)
YEAR EFFECTS	NO	NO	YES
R^2	0.03	0.43	0.53
N	903	891	891

For controlling variables, bank earnings management seems to be explained by banks characteristic more than country level variables. The coefficient of the earnings before taxes and loan loss provisions ratio (BBPT) is positive and significant (at 1% level) indicating that BBPT is an important factor that can influences the use of direction by managers when reporting LLP. Moreover, the coefficient of capital adequacy ratio (CAR) is positive and significant (at 1% level) implying that banks in MENA region use discretionary LLP to display a suitable capital adequate to regulators requirement. These findings corroborate those of Ben Othman and Mersni (2014). However, Kanagaretnam et al. (2010) don't report significant coefficient of BBPT. The coefficients of GR_ASS are positive and significant in two specifications suggesting that banks with high growth rate tend to manage more their earnings. This result was being found in prior studies (Kanagaretnam, Lim, & Lobo, 2010; Quttainah et al., 2013). The coefficients of LAG_LLP are positive and significant in two specifications, which suggest that the use of discretionary LLP depends on past provisions. SIZE coefficient is negative and significant implying that large banks manage less their earnings. Finally, GOV_IN loads negative and significant coefficients indicating that the effective institutional environment reduces earnings management practice in banks.

5.2.2. Impact of ownership structure on earnings management

Table 5 reports ordinary least square (OLS).[11] regression on the effect of ownership structure on bank earnings management for conventional and Islamic banks separately (Eq. (3)). The dependent variable |DLLP|, which is the absolute value of the discretionary loan loss provisions (residuals calculated from Eq. (1))[12]In columns (1), (2), (3) and (4), we run regressions with ownership variables for conventional banks and for Islamic banks in other columns.

In Columns (1) and (5), the results indicate that there is a positive and a significant (at 5% level) relationship between BLOC_OWN and |DLLP| respectively in conventional and Islamic banks. This result supports hypothesis H.2. indicating that earnings management via discretionary LLPs is significantly more important for banks with concentrated ownership in both conventional and Islamic banks. This result confirms the entrenchment hypothesis according to which block holders are able to intervene in the firm's management and to alter accounting information to conceal their private control in MENA countries banks. In column (2), the coefficient of INST_OWN is negative but insignificant implying that institutional investors do not affect earnings management in conventional banks. However in column (6), the coefficient is positive and significant at the 5% level positively. These results indicate that

[11] Residuals recuperated from Eq. (1) may be serially and/or cross-sectionally correlated. So, we used OLS regressions with clustered robust errors to take into account for serial and cross-sectional correlations.

[12] Results of the first stage are not reported for brevity reasons.

Table 5
Earnings management and ownership structure in conventional and Islamic banks.

	Conventional banks				Islamic banks			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
BLOC_OWN	0.001				0.002			
	(2.12)**				(1.96)**			
INST_OWN		−0.001				0.002		
		(−0.93)				(2.40)**		
FAM_OWN			−0.001				−0.012	
			(−1.99)**				(−2.20)**	
STAT_OWN				0.001				0.004
				(2.77)***				(0.61)
BBPT	0.012	0.012	0.011	0.022	0.013	0.015	0.013	0.014
	(3.65)***	(3.53)***	(3.24)***	(3.58)***	(1.29)	(1.34)	(1.33)	(1.30)
CAR	0.009	0.009	0.009	0.009	0.003	0.003	0.002	0.005
	(1.23)	(2.19)**	(2.14)**	(1. 83)*	(3.48)***	(3.34)***	(3.14)***	(3.42)***
GR_ASS	0.005	0.005	0.005	0.005	0.006	0.005	0.004	0.005
	(2.01)**	(1.90)*	(1.87)*	(1.99)**	(1.99)**	(1.93)*	(1.67)*	(1.91)*
LAG_LLP	0.002	0.002	0.002	0.002	0.006	0.006	0.006	0.006
	(2.81)***	(2.75)***	(2.84)***	(2.72)***	(2.54)***	(3.44)***	(3.53)***	(3.34)***
LOANS	−0.005	−0.005	−0.005	−0.005	0.016	0.015	0.011	0.015
	(−1.25)	(−1.28)	(−1.31)	(−1.20)	(1.74)*	(1.96)**	(1.71)*	(1.77)*
SIZE	−0.0002	−0.0002	−0.0001	−0.0001	−0.001	−0.001	−0.001	−0.001
	(−1.97)**	(−1.84)*	(−1.72)*	(−1.64)*	(−1.71)*	(−2.16)**	(−1.89)*	(−2.06)**
BIG4	−0.002	−0.002	−0.002	−0.002	−0.012	−0.012	−0.012	0.013
	(−1.30)	(−1.24)	(−1.17)	(−1.31)	(−2.23)**	(−2.37)**	(−2.83)***	(−2.31)**
BAN_ACC	0.001	0.001	0.001	0.001	0.0002	0.0001	0.001	0.0003
	(0.63)	(0.50)	(0.62)	(0.53)	(0.50)	(0.60)	(0.92)	(0.27)
ENT_BAN	−0.0002	−0.0002	0.001	−0.001	−0.0003	−0.0001	−0.0001	−0.0002
	(−0.16)	(−0.07)	(−0.70)	(−0.21)	(−0.15)	(−0.14)	(−0.13)	(−0.07)
MONI_EXT	0.001	0.001	0.001	0.001	0.0001	0.0002	−0.0002	0.0002
	(0.67)	(0.59)	(0.68)	(0.69)	(0.12)	(0.47)	(0.10)	(0.93)
STR_AUD	0.001	0.001	0.001	0.0002	−0.001	−0.0002	−0.0002	−0.0002
	(0.27)	(0.28)	(0.52)	(0.22)	(−0.79)	(−0.40)	(−0.65)	(−0.39)
GOV_IN	0.003	0.003	0.004	0.003	−0.003	−0.002	−0.002	−0.003
	(1.34)	(1.45)	(1.57)	(1.32)	(−0.76)	(−0.63)	(−0.86)	(−0.93)
IFRS	0.001	0.001	0.002	0.001	−0.005	−0.005	−0.007	−0.005
	(0.30)	(0.34)	(0.20)	(0.41)	(−2.67)***	(−2.54)***	(−5.70)***	(−3.07)***
YEAR EFFECTS	YES	YES	YES	YES	YES	YES	YES	YES
COUNTRY EFFECTS	YES	YES	YES	YES	YES	YES	YES	YES
R^2	0.55	0.55	0.54	0.55	0.48	0.50	0.47	0.48
N	597	597	597	597	301	301	301	301

The table displays the regression results on the effect of ownership structure on earnings management for conventional and Islamic banks. |DLLP| Absolute value of discretionary loss loan provision; the proportion of equity held by the first blockholder (BLOC_OWN), families (FAM_OWN), institutional owner (INST_OWNER) and State (STAT_OWN),; BBPT Earnings before taxes and loan loss provisions divided by total assets at the beginning of the year; CAR Capital adequacy ratio for at a year t, measured by average total equity over average total assets. GR_ASS Growth in total assets from the beginning to the end of the year; LAG_LLP Past year's LLP divided by total assets at the beginning of the year; LOAN Total loans scaled by total assets at the beginning of the year; SIZE The log of total assets at the beginning of the year; BIG4 Dummy variable equals one if the auditor is a Big 4 auditor zero otherwise; BAN_ACC Bank accounting informativeness from Barth et al. (2013); ENT_BAN Regulatory restrictions on entry into banking from Barth et al. (2013); MONI_EXT External Ratings and Creditor Monitoring from Barth et al. (2013); STR_AUD Quality of external audits from Barth et al. (2013); GOV_IN Governance Index from Kaufmann et al. (2010); IFRS Dummy variable equals one if the country adopts International Financial Reporting Standard, and zero otherwise. We estimate the regression clustered by bank, For each variable, we report the regression coefficient, followed by the t-statistic in parentheses. Significance at the 10%, 5%, and 1% levels is indicated by *, **, and ***, respectively.

institutional investors encourage earnings management in Islamic banks. Therefore, we reject our Hypothesis.3. Our findings are different from those reported by previous studies examining non-financial firms in many MENA countries, and indicating that institutional investors mitigate earnings management and improve accounting reporting (Farooq and El-Jai, 2012; Klai & Omri 2011; Hessayri and Saihi, 2015). In light of our findings, we conclude that institutional investors owning banks in the MENA region do not exercise effective monitoring constraining managerial earnings management practice. They seem to be short-term oriented and create incentives for managers of their portfolio firms to manage earnings (Koh, 2003).

In columns (3) and (7) the coefficient of FAM_OWN is negative and statistically significant at the 5% level suggesting that earnings management via DLLPs is significantly lower for banks with higher family ownership in both conventional and Islamic banks. Our findings confirm Hypothesis.4. and are in line with the alignment effect hypothesis which indicates that families have less incentive to engage in earnings manipulation because this practice can harm family reputation and wealth (Wang, 2006). These results highlight that influential ruling and merchant families in the MENA region are careful about their reputation and credibility.

In columns (4), we report positive and significant coefficients for STAT_OWN at the 1% level, suggesting that a greater state ownership is associated with more use of DLLPs in conventional banks. Our findings confirm our hypothesis.5. and corroborate those

Table 6
Signed discretionary LLP and ownership structure.

Panel A : Conventional banks								
	Income increasing				Income decreasing			
BLOC_OWN	0.004				0.002			
	(0.71)				(2.57)***			
INST_OWN		0.002				0.001		
		(0.56)				(0.78)		
FAM_OWN			−0.004				−0.005	
			(−1.85)*				(−0.51)	
STAT_OWN				0.001				0.003
				(3.04)***				(1.24)
BBPT	0.128	0.166	0.162	0.137	0.132	0.132	0.127	0.137
	(1.35)	(1.44)	(1.17)	(1.41)	(3.57)***	(3.49)***	(3.40)***	(3.82)***
CAR	0.002	0.005	0.005	0.003	0.011	0.011	0.011	0.011
	(4.76)***	(4.37)***	(4.16)***	(5.04)***	(0.41)	(0.73)	(1.02)	(1.31)
GR_ASS	0.007	0.009	0.009	0.007	−0.009	−0.009	−0.01	−0.009
	(3.54)***	(3.39)***	(3.57)***	(3.55)***	(−1.14)	(−1.41)	(−1.57)	(−1.09)
LAG_LLP	−0.002	−0.002	−0.002	−0.002	0.002	0.002	0.003	0.002
	(−1.54)	(−1.53)	(−1.52)	(−1.51)	(3.95)***	(3.88)***	(4.35)***	(3.93)***
LOANS	0.003	0.003	0.005	0.004	-0.004	−0.005	−0.004	−0.003
	(0.45)	(0.39)	(0.67)	(0.52)	(−1.41)	(−1.49)	(−1.28)	(−1.05)
SIZE	−0.001	−0.001	−0.001	−0.001	−0.0002	−0.0002	−0.0002	−0.001
	(−1.85)*	(−1.91)*	(−2.24)**	(−2.31)**	(−1.54)	(−1.36)	(−1.18)	(−1.22)
BIG4	0.001	0.001	0.002	0.001	−0.001	−0.001	−0.002	−0.001
	(0.49)	(0.43)	(0.53)	(0.53)	(−1.84)*	(−1.77)*	(−1.65)*	(−1.94)**
BAN_ACC	−0.002	−0.002	−0.001	−0.001	−0.001	−0.001	−0.0001	−0.001
	(-1.11)	(−1.01)	(−0.86)	(0.66)	(−1.38)	(−1.37)	(−0.69)	(−1.17)
ENT_BAN	−0.003	−0.003	−0.003	−0.002	−0.005	−0.004	−0.003	−0.005
	(−0.63)	(−0.53)	(−0.85)	(−0.35)	(−1.44)	(1.51)	(−1.06)	(−1.17)
MONI_EXT	0.0001	0.0001	0.0002	0.0003	0.001	0.001	0.001	0.001
	(0.06)	(0.12)	(0.15)	(0.24)	(1.22)	(1.11)	(1.38)	(1.38)
STR_AUD	−0.003	−0.003	−0.003	−0.004	−0.001	−0.001	−0.003	−0.002
	(−0.96)	(−0.88)	(−0.95)	(−1.11)	(−0.82)	(−0.71)	(−0.17)	(−1.04)
GOV_IN	−0.005	−0.005	−0.006	−0.004	−0.001	−0.001	−0.001	−0.001
	(−1.86)*	(−2.22)**	(−2.39)**	(−1.98)**	(−1.04)	(−0.91)	(−1.15)	(−0.78)
IFRS	−0.002	−0.001	−0.001	−0.002	−0.002	−0.001	−0.001	−0.001
	0.14	0.29	0.38	0.56	(−2.01)**	(−1.98)**	(−2.88)***	(−2.16)**
YEAR EFFECTS	YES	YES	YES	YES	YES	YES	YES	YES
COUNTRY EFFECTS	YES	YES	YES	YES	YES	YES	YES	YES
R^2	0.29	0.29	0.31	0.31	0.48	0.48	0.48	0.48
N	309	309	309	309	288	288	288	288
Panel B : Islamic bank								
	Income increasing				Income decreasing			
BLOC_OWN	−0.011				0.001			
	(−1.32)				(1.92)*			
INST_OWN		0.003				−0.008		
		(2.11)**				(−0.18)		
FAM_OWN			−0.005				−0.016	
			(−2.54)***				(−0.74)	
STAT_OWN				0.009				0.005
				(1.47)				(1.35)
BBPT	0.02	0.013	−0.01	−0.008	0.061	0.062	0.035	0.054
	0.34	0.25	−0.23	−0.14	(1.82)*	(1.80)*	(2.57)***	(1.71)*
CAR	−0.018	−0.014	−0.006	−0.001	0.005	0.008	0.014	0.011
	(−2.35)**	(−2.44)**	(−2.81)***	(−2.59)***	(1.23)	(0.98)	(0.78)	(1.02)
GR_ASS	−0.009	−0.007	−0.005	−0.005	−0.001	−0.001	−0.002	−0.002
	(−1.55)	(−1.14)	(−1.05)	(−1.00)	(−0.56)	(−0.49)	(−0.69)	(−0.56)
LAGLP	−0.006	−0.007	−0.007	−0.007	0.005	0.005	0.005	0.005
	(−3.27)***	(−3.61)***	(−3.98)***	(−3.46)***	(2.83)***	(2.69)***	(2.71)***	(2.77)***
LOANS	−0.039	−0.033	−0.032	−0.029	0.007	0.009	0.006	0.011
	(−1.57)	(−1.60)	(−1.11)	(−1.32)	(1.42)	(1.45)	(1.41)	(1.14)
SIZE	-0.001	−0.001	−0.001	−0.001	−0.0008	−0.0007	−0.0008	−0.0007
	(−2.14)**	(−1.77)*	(−2.00)**	(−2.09)**	(−0.09)	(−0.12)	(−0.26)	(−0.13)
BIG4	−0.001	−0.001	−0.012	−0.016	0.013	0.012	0.012	0.011
	(−2.21)**	(−1.97)**	(−2.22)**	(−1.99)*	(0.89)	(0.93)	(1.16)	(1.13)
BAN_ACC	0.0005	0.0004	0.0004	0.001	−0.0001	−0.001	−0.0001	−0.001
	(0.24)	(0.12)	(0.17)	(0.62)	(−0.43)	(−0.78)	(−0.45)	(−0.98)
ENT_BAN	−0.001	−0.003	−0.001	−0.002	−0.002	−0.003	−0.004	−0.002
	(−0.94)	(−0.25)	(−1.02)	(−0.35)	(−0.06)	(−0.01)	(−0.13)	(−0.08)

(*continued on next page*)

Table 6 (*continued*)

Panel A : Conventional banks

	Income increasing				Income decreasing			
MONI_EXT	−0.001	−0.001	−0.002	−0.002	−0.001	−0.003	−0.001	−0.002
	(−0.83)	(−0.95)	(−1.47)	(−1.51)	(−0.06)	(−0.12)	(−0.12)	(−0.28)
STR_AUD	0.002	0.001	0.002	0.001	−0.001	−0.001	−0.002	−0.002
	(1.12)	(0.68)	(1.17)	(0.14)	(−0.8)	(−0.86)	(−0.26)	(−1.3))
GOV_IN	0.011	0.007	0.007	0.008	−0.004	−0.002	−0.001	−0.002
	(1.24)	(0.91)	(1.02)	(1.04)	(−0.03)	(−0.11)	(−0.47)	(−0.04)
IFRS	−0.016	−0.012	−0.018	−0.021	−0.006	−0.006	−0.008	−0.006
	(−1.23)	(−0.98)	(−1.33)	(−1.48)	(−4.11)***	(−3.98)***	(−4.28)***	(−4.16)***
YEAR EFFECTS	YES	YES	YES	YES	YES	YES	YES	YES
COUNTRY EFFECTS	YES	YES	YES	YES	YES	YES	YES	YES
R^2	0.22	0.22	0.19	0.21	0.35	0.35	0.34	0.36
N	167	167	167	167	134	134	134	134

The table displays the regression results on the effect of ownership structure on earnings management for the sample of income − increasing and income-decreasing earnings management. Results for conventional and Islamic banks are presented in respectively Panel A and B. In all models, we use the |DLLP| Absolute value of discretionary loss loan provision as a proxy for earnings management.; the proportion of equity held by the first blockholder (BLOC_OWN), families (FAM_OWN), institutional owner (INST_OWNER) and State (STAT_OWN),; BBPT Earnings before taxes and loan loss provisions divided by total assets at the beginning of the year; CAR Capital adequacy ratio for at a year t, measured by average total equity over average total assets. GR_ASS Growth in total assets from the beginning to the end of the year; LAG_LLP Past year's LLP divided by total assets at the beginning of the year; LOAN Total loans scaled by total assets at the beginning of the year; SIZE The log of total assets at the beginning of the year; BIG4 Dummy variable equals one if the auditor is a Big 4 auditor zero otherwise; BAN_ACC Bank accounting informativeness from Barth et al. (2013); ENT_BAN Regulatory restrictions on entry into banking from Barth et al. (2013); MONI_EXT External Ratings and Creditor Monitoring from Barth et al. (2013); STR_AUD Quality of external audits from Barth et al. (2013); GOV_IN Governance Index from Kaufmann et al. (2010); IFRS Dummy variable equals one if the country adopts International Financial Reporting Standard, and zero otherwise. We estimate the regression clustered by bank, For each variable, we report the regression coefficient, followed by the t-statistic in parentheses. Significance at the 10%, 5%, and 1% levels is indicated by *, **, and ***, respectively

of Ding et al. (2007) and Liu et al. (2014) in Chinese banks. The poor governance quality in state-owned banks and the social and political objectives pursued by controlling politicians encourage managers to manipulate earnings. Indeed, politicians use these banks to finance projects that create more jobs especially when these projects could not obtain private financing. Another plausible explanation for this result lies in the fact that state ownership in Islamic and conventional banks display greater proportions of non-performing loans than other banks, thus state-owned banks manage their earnings through their LLPs to comply with the required minimum level of capital adequacy and to be perceived less risky (Srairi, 2013; Lassoued et al., 2016). However, the coefficient for Islamic banks regressions is insignificant (Column 8)

Eventually, for the control variables, bank earnings management seems to be explained by banks' characteristic more than country variables. The coefficients of BBPT are positive and significant (insignificant) for conventional (Islamic) banks. The coefficients of CAR are positive and significant in 7 specifications (expect column (1)). These findings indicate that conventional banks use DLLP to manage earnings for capital management and earnings purpose. Furthermore, both conventional and Islamic banks, in the MENA region, use discretionary LLPs to display a suitable capital adequate to regulators' requirement. These findings corroborate those of Ben Othman and Mersni (2014).

Coefficients of GR_ASS and LAG_LLP are positive and significant in all specifications implying that conventional and Islamic banks with growth opportunities manage more their earnings. This result was found in previous studies (Kanagaretnam et al., 2010; Quttainah et al., 2013). Furthermore, the use of DLLP depends on previous cumulated LLP. The coefficients of LOANS are positive and significant only for Islamic bank, which indicates that DLLP increases with loans. SIZE coefficients are significant in all specifications confirming the use of DLLP in small banks more than large banks.

The coefficients of BIG4 and IFRS are negative and significant in columns (5), (6), (7) and (8). These findings indicate that auditor reputation and IFRS adoption reduce earnings management practice in Islamic banks (Quttainah et al., 2013).

5.2.3. Impact of ownership structure on signed DLLP

We extend our previous analysis by separately examining the impact of ownership structure on income-increasing earnings management (DLLP $<$ 0) and income-decreasing earnings management (DLLP $>$ 0). We split our sample into two sub-samples based on the sign of the bank's DLLP and we rerun our regressions for conventional and Islamic banks. The results are reported in Table 6 in panels A and B respectively for conventional and Islamic banks.

Columns (1), (2), (3) and (4) of panel A report the results for the income-increasing sample. In column (3), the FAM_OWN coefficient is negative and statistically significant (at the 10% level). This finding is consistent with the thesis that there is less income-increasing earnings management when family ownership is high. Besides, we find a positive coefficient and significant (at 1% level) for state for banks that overstate earnings, suggesting that state ownership is encourage income-increasing earnings management. This finding supports that state owners have greater incentives to inflate the bank's reported earnings, probably to hide the expropriation of corporate resources for political purposes.

The coefficients of BLOC_OWN and INST_OWN are not significant (columns (1) and (2)).

For the income-decreasing sample, we find that BLOC_OWN coefficient is positive and significant in columns (5). This finding

Table 7
Earnings management and ownership structure in Islamic banks by group1 and group2.

GROUP 1					GROUP 2			
BLOC_OWN	0.002				0.001			
	(0.58)				(1.86)*			
INST_OWN		0.002				0.001		
		(2.38)**				(1.75)*		
FAM_OWN			−0.018				−0.007	
			(−2.18)**				(−2.01)**	
STAT_OWN				0.002				0.001
				(1.19)				(1.58)
BBPT	−0.107	−0.098	−0.102	−0.122	0.101	0.100	0.093	0.101
	(1.70)*	(1.46)	(−1.77)*	(2.01)**	(2.06)**	(1.98)**	(2.10)**	(2.01)**
CAR	0.002	0.001	0.001	0.001	0.008	0.007	0.007	0.008
	(0.02)	(0.22)	(0.17)	(0.08)	(3.01)***	(2.91)***	(2.71)***	(2.93)***
GR_ASS	0.004	0.004	0.003	0.004	0.002	0.002	0.002	0.002
	(0.79)	(0.74)	(0.64)	(0.75)	(1.22)	(1.19)	(1.13)	(1.24)
LAG_LLP	0.004	0.004	0.004	0.004	0.003	0.003	0.003	0.003
	(3.80)***	(3.00)***	(3.18)***	(3.09)***	(3.05)***	(3.02)***	(3.16)***	(3.04)***
LOANS	0.013	0.014	0.013	0.012	−0.006	−0.006	−0.006	−0.006
	(1.03)	(1.09)	(1.14)	(1.00)	(−1.78)*	(−1.74)*	(−1.85)*	(−1.74)*
SIZE	−0.002	−0.002	−0.002	−0.002	−0.0001	−0.0003	−0.0008	−0.0002
	(−1.28)	(−1.31)	(−1.40)	(−1.33)	(−1.99)**	(−1.91)*	(−1.93)*	(−1.84)*
BIG4	0.004	−0.004	−0.004	−0.004	−0.005	−0.005	−0.004	−0.005
	(1.36)	(−1.66)*	(−1.65)*	(−1.66)*	(−1.96)**	(−1.87)*	(−1.95)*	(−1.96)**
BAN_ACC	−0.007	−0.008	−0.005	−0.008	0.001	0.001	0.001	0.001
	(1.27)	(1.37)	(1.21)	(1.30)	(0.82)	(0.78)	(0.80)	(0.76)
ENT_BAN	0.004	0.004	0.002	0.004	0.000	0.001	0.001	0.000
	(1.35)	(1.39)	(0.88)	(1.35)	(0.29)	(0.51)	(1.39)	(0.29)
MONI_EXT	0.005	0.004	0.005	0.005	0.000	0.000	0.001	0.000
	(1.02)	(1.08)	(0.16)	(1.06)	(0.77)	(0.67)	(0.86)	(0.66)
STR_AUD	0.003	0.003	0.001	0.003	0.001	0.001	0.001	0.001
	(0.95)	(1.05)	(0.35)	(0.93)	(0.42)	(0.42)	(0.87)	(0.45)
GOV_IN	−0.001	−0.004	0.004	−0.001	−0.004	−0.004	−0.004	−0.004
	(−0.08)	(−0.34)	(−0.41)	(−0.12)	(−2.05)**	(−2.14)**	(−2.43)**	(−2.05)**
IFRS	0.003	0.002	−0.004	0.003	−0.001	−0.001	−0.001	−0.001
	(1.15)	(1.01)	(1.16)	(1.21)	(−0.55)	−(0.55)	(−0.60)	(−0.40)
YEAR EFFECTS	YES	YES	YES	YES	YES	YES	YES	YES
COUNTRY EFFECTS	YES	YES	YES	YES	YES	YES	YES	YES
R^2	0.29	0.30	0.29	0.28	0.53	0.54	0.52	0.54
N	99	99	99	99	202	202	202	202

The table displays the regression results on the effect of ownership structure on earnings management for Islamic banks for respectively group 1 (bank operating in Jordan, Bahrain and Qatar) and group 2 (other countries). |DLLP| Absolute value of discretionary loss loan provision; the proportion of equity held by the first blockholder (BLOC_OWN), families (FAM_OWN), institutional owner (INST_OWNER) and State (STAT_OWN); BBPT Earnings before taxes and loan loss provisions divided by total assets at the beginning of the year; CAR Capital adequacy ratio for at a year t, measured by average total equity over average total assets. GR_ASS Growth in total assets from the beginning to the end of the year; LAG_LLP Past year's LLP divided by total assets at the beginning of the year; LOAN Total loans scaled by total assets at the beginning of the year; SIZE The log of total assets at the beginning of the year; BIG4 Dummy variable equals one if the auditor is a Big 4 auditor zero otherwise; BAN_ACC Bank accounting informativeness from Barth et al. (2013); ENT_BAN Regulatory restrictions on entry into banking from Barth et al. (2013); MONI_EXT External Ratings and Creditor Monitoring from Barth et al. (2013); STR_AUD Quality of external audits from Barth et al. (2013); GOV_IN Governance Index from Kaufmann et al. (2010); IFRS Dummy variable equals one if the country adopts International Financial Reporting Standard, and zero otherwise. We estimate the regression clustered by bank, For each variable, we report the regression coefficient, followed by the t-statistic in parentheses. Significance at the 10%, 5%, and 1% levels is indicated by *, **, and ***, respectively.

indicates that blockholders have greater incentives to reduce the banks' reported earnings. The motivation to decrease earnings may differ from one owner to another. Indeed, block holders manage earnings upward to be less visible and avoid political costs, potentially to hide expropriation of bank resources or to comply with regulatory requirements (Lassoued et al., 2016).

For institutional investors, we found no significant coefficient for the two subsamples. One plausible explanation for these findings lies in the passivity of this type of owners, not involved in monitoring of bank managers.

For the income-increasing sample of conventional banks, we find that the coefficient CAR is positive and significant in four specifications implying that banks overstate their earnings for regulatory purpose. Furthermore, the coefficients of GR_ASS are positive in the four models indicating that banks with growth opportunities seem to manage upward their earnings. The negative coefficients of SIZE suggest that earnings management is less extensive in larger banks. Finally, BIG4 and GOV_IN negatively affect income increasing supporting thus auditor reputation and good institutional environment mitigates income overstatement.

Regarding income-decreasing sample of conventional banks, we find that the coefficients of BBPT and CAR are positive in columns (5), (6), (7) and (8). These findings support the fact that banks understate their earnings to comply with regulatory requirements. Moreover the coefficients of LAG_LLP are positive and significant implying important previous LLPs induce earnings decreasing. Similarly, IFRS adoption seems to mitigate downward earnings management.

Table 8
Ownership structure and earnings management through discretionary realized securities on gain and loss (DRSGL).

	Conventional banks				Islamic banks			
BLOC_OWN	0.030				0.003			
	(2.18)**				(0.79)			
INST_OWN		0.007				0.005		
		(2.15)**				(1.80)*		
FAM_OWN			−0.014				−0.012	
			(−1.69)*				(−1.57)	
STAT_OWN				0.003				−0.003
				(0.97)				(−0.91)
BBPT	0.048	0.033	0.045	0.039	0.049	0.043	0.037	0.036
	(1.72)*	(1.90)*	(1.92)*	(2.04)**	(1.98)**	(2.03)**	(1.88)*	(1.97)**
CAR	0.009	0.001	0.004	0.003	0.007	0.026	0.009	0.009
	(1.29)	(0.24)	(0.76)	(0.62)	(0.55)	(1.09)	(0.58)	(0.71)
GR_ASS	0.0001	0.001	0.001	0.001	0.001	0.001	0.001	0.002
	(0.88)	(2.37)**	(2.52)***	(2.29)**	(0.30)	(0.79)	(0.58)	(0.28)
LAG_LLP	−0.001	−0.001	−0.001	−0.001	0.001	0.001	0.001	0.001
	(−0.86)	(−0.77)	(−0.68)	(−0.81)	(0.50)	(0.79)	(0.47)	(0.59)
LOANS	−0.015	−0.017	−0.014	−0.017	−0.003	−0.009	−0.009	−0.007
	(−0.67)	(−0.69)	(−0.60)	(−0.68)	(−0.46)	(−1.05)	(−1.13)	(−0.06)
SIZE	0.004	0.002	0.002	0.002	0.001	0.001	0.001	0.001
	(1.98)**	(1.88)*	(1.75)*	(2.02)**	(1.74)*	(2.22)**	(1.76)*	(2.01)**
BIG4	−0.005	−0.005	−0.004	−0.005	−0.004	−0.003	−0.001	−0.007
	(−0.71)	(−0.64)	(−0.56)	(−0.67)	(−1.60)	(−1.46)	(−1.20)	(−1.17)
BAN_ACC	0.005	0.004	0.005	0.004	−0.001	−0.001	−0.001	−0.002
	(1.29)	(1.15)	(1.50)	(1.23)	(−0.47)	(−0.15)	(−0.47)	(−0.09)
ENT_BAN	−0.006	−0.004	−0.006	−0.004	−0.001	−0.001	−0.002	−0.001
	(−2.37)**	(−2.38)**	(−2.46)**	(−2.27)**	(−1.91)*	(−1.84)*	(−2.94)***	(−1.09)
MONI_EXT	0.004	0.006	0.006	0.005	−0.003	−0.0003	−0.002	−0.001
	(1.33)	(1.06)	(1.45)	(1.13)	(−0.21)	(−0.32)	(−0.60)	(−0.39)
STR_AUD	0.002	0.001	0.003	0.001	0.002	0.002	0.003	0.001
	(0.79)	(0.32)	(1.06)	(0.49)	(1.43)	(1.31)	(1.50)	(0.89)
GOV_IN	0.004	0.011	0.013	0.011	0.001	0.003	0.004	0.002
	(0.63)	(0.92)	(1.11)	(0.97)	(0.23)	(0.14)	(0.04)	(0.51)
IFRS	−0.016	−0.014	−0.015	−0.014	−0.003	−0.003	−0.002	−0.003
	(−1.66)*	(−1.68)*	(−1.67)*	(−1.44)	(−1.87)*	(−2.11)**	(−2.31)**	(−1.80)*
YEAR EFFECTS	YES	YES	YES	YES	YES	YES	YES	YES
COUNTRY EFFECTS	YES	YES	YES	YES	YES	YES	YES	YES
R^2	0.15	0.16	0.14	0.14	0.19	0.25	0.20	0.20
N	597	597	597	597	301	301	301	301

The table displays the regression results on the effect of ownership structure on earnings management for conventional and Islamic banks. DRSGL discretionary realized securities on gain and loss; the proportion of equity held by the first blockholder (BLOC_OWN), families (FAM_OWN), institutional owner (INST_OWNER) and State (STAT_OWN); BBPT Earnings before taxes and loan loss provisions divided by total assets at the beginning of the year; CAR Capital adequacy ratio for at a year t, measured by average total equity over average total assets. GR_ASS Growth in total assets from the beginning to the end of the year; LAG_LLP Past year's LLP divided by total assets at the beginning of the year; LOAN Total loans scaled by total assets at the beginning of the year; SIZE The log of total assets at the beginning of the year; BIG4 Dummy variable equals one if the auditor is a Big 4 auditor zero otherwise; BAN_ACC Bank accounting informativeness from Barth et al. (2013); ENT_BAN Regulatory restrictions on entry into banking from Barth et al. (2013); MONI_EXT External Ratings and Creditor Monitoring from Barth et al. (2013); STR_AUD Quality of external audits from Barth et al. (2013); GOV_IN Governance Index from Kaufmann et al. (2010); IFRS Dummy variable equals one if the country adopts International Financial Reporting Standard, and zero otherwise. We estimate the regression clustered by bank, For each variable, we report the regression coefficient, followed by the t-statistic in parentheses. Significance at the 10%, 5%, and 1% levels is indicated by *, **, and ***, respectively.

For Islamic banks, the results displayed in Panel B indicate that in the income increasing sample, INST_OWN ownership encourages earnings overstatement and FAM_OWN decreases this practice. Moreover, in the income-decreasing sample, we find that BLOC_OWN coefficient is positive and significant in columns (5) similar to conventional banks. This finding indicates that blockholders have greater incentives to understate the banks' reported earnings. The coefficients of STAT_OWN fail to gain significance in column (4) and (8).

The control variables coefficients in Islamic banks regression are similar to those of conventional banks. Indeed, CAR, LAG_LLP and BIG4 affect negatively income increasing. However, BBPT and LAG_LLP exhibit positive effects on income decreasing.

5.3. Robustness analysis

As a robustness check, we conducted several sensitivity tests.

First, we examine whatever the use of expected loan losses or incurred loan loss to estimate LLP by some Islamic banks affects our

Table 9
The impact of the crisis on the relationship between ownership structure and earnings management.

Panel A: Conventional banks								
	Before crisis				After crisis			
BLOC_OWN	0.001				−0.001			
	(2.68)***				(−0.30)			
INST_OWN		0.002				0.001		
		(1.92)*				(0.40)		
FAM_OWN			−0.006				−0.003	
			(−2.06)**				(−0.77)	
STAT_OWN				0.002				0.003
				(1.85)*				(2.11)**
BBPT	0.014	0.014	0.013	0.014	0.013	0.013	0.013	0.012
	(3.41)***	(3.33)***	(3.04)***	(3.47)***	(2.22)**	(2.14)**	(2.21)**	(2.04)**
CAR	0.035	0.038	0.039	0.034	0.008	0.008	0.008	0.008
	(2.46)*	(2.63)***	(2.93)***	(2.36)*	(2.75)***	(2.58)***	(2.46)**	(2.45)**
GR_ASS	0.012	0.011	0.010	0.011	−0.003	−0.002	−0.002	−0.003
	(3.10)**	(2.99)***	(3.06)***	(2.98)***	(−0.44)	(−0.39)	(−0.39)	(−0.48)
LAG_LLP	0.001	0.001	0.002	0.001	0.003	0.003	0.003	0.003
	(2.13)*	(2.08)*	(2.42)*	(2.16)*	(2.00)**	(2.00)**	(2.95)***	(1.98)**
LOANS	0.002	0.002	0.001	0.002	−0.007	0.007	0.007	0.007
	(0.39)	(0.40)	(0.17)	(0.47)	(−1.15)	(1.44)	(1.50)	(1.21)
SIZE	−0.001	−0.001	−0.001	−0.001	−0.0001	−0.002	−0.001	−0.005
	(−1.56)	(−1.73)*	(−1.53)	(−1.69)*	(−1.29)	(−1.75)*	(−1.88)*	(−1.80)*
BIG4	−0.001	−0.001	−0.002	−0.002	−0.002	−0.002	−0.002	−0.002
	(−0.82)	(−0.80)	(−0.81)	(−0.87)	(−1.96)**	(−1.90)*	(−1.88)*	(−2.01)**
BAN_ACC	−0.002	−0.002	−0.001	−0.002	0.002	0.002	0.002	0.001
	(−1.23)	(−1.27)	(−1.10)	(−1.22)	(1.58)	(1.42)	(1.78)*	(1.25)
ENT_BAN	−0.001	−0.001	0.001	−0.001	−0.003	−0.003	−0.003	−0.003
	(−0.55)	(−0.33)	(0.73)	(−0.59)	(−1.01)	(−0.98)	(−0.93)	(−1.04)
MONI_EXT	0.002	0.001	0.001	0.002	0.0001	0.0003	0.0003	0.0002
	(0.98)	(0.85)	(0.79)	(1.30)	(0.17)	(0.14)	(0.25)	(0.14)
STR_AUD	−0.001	−0.001	0.001	−0.001	0.001	0.001	0.001	0.001
	(0.32)	(0.26)	(0.29)	(−0.45)	(0.64)	(0.62)	(0.66)	(0.69)
GOV_IN	0.002	0.002	0.004	0.002	−0.003	−0.003	−0.004	−0.003
	(0.66)	(0.53)	(1.19)	(0.53)	(−1.64)*	(−1.69)*	(−1.65)*	(−1.72)*
IFRS	−0.003	−0.003	−0.002	−0.002	0.003	0.001	−0.001	0.001
	(−0.06)	(−0.03)	(−0.18)	(−0.18)	(0.20)	(0.26)	(−0.01)	(0.39)
YEAR EFFECTS	YES	YES	YES	YES	YES	YES	YES	YES
COUNTRY EFFECTS	YES	YES	YES	YES	YES	YES	YES	YES
R^2	0.53	0.51	0.51	0.50	0.40	0.42	0.39	0.41
N	170	170	170	170	255	255	255	255
Panel B: Islamic banks								
	Before crisis				After crisis			
BLOC_OWN	0.003				0.002			
	(0.26)				(0.63)			
INST_OWN		0.001				0.004		
		(1.81)*				(2.18)**		
FAM_OWN			−0.011				−0.029	
			(−1.90)*				(−3.21)**	
STAT_OWN				0.001				0.007
				(1.16)				(1.09)
BBPT	−0.024	−0.024	−0.016	−0.024	−0.018	−0.010	−0.058	−0.014
	(−0.57)	(−0.62)	(−0.60)	(−0.58)	(0.26)	(0.13)	(0.86)	(0.17)
CAR	0.009	0.007	0.015	−0.007	0.014	0.012	0.006	0.015
	(1.57)	(2.22)**	(1.96)**	(−0.59)	(1.98)**	(1.68)*	(0.35)	(1.78)*
GR_ASS	0.001	0.005	0.002	0.002	0.006	0.005	0.007	0.005
	(1.72)*	(1.84)*	(2.21)**	(2.04)**	(1.06)	(0.99)	(1.29)	(0.86)
LAG_LLP	0.007	0.007	0.006	0.007	0.004	0.004	0.004	0.004
	(2.12)**	(2.60)***	(1.89)*	(2.11)**	(2.52)***	(2.06)**	(2.17)**	(1.98)*
LOANS	0.004	0.004	−0.001	0.004	0.026	0.028	0.025	0.027
	(0.42)	(0.35)	(−0.19)	(0.43)	(0.73)	(0.78)	(1.13)	(0.97)
SIZE	−0.001	−0.001	−0.001	−0.001	−0.001	−0.001	−0.001	−0.001
	(1.48)	(−1.81)*	(−2.62)*	(−2.41)*	(−1.44)	(−1.61)	(−1.35)	(−1.72)*
BIG4	0.019	0.017	0.004	0.019	0.016	0.018	0.020	0.020
	(1.18)	(0.93)	(1.51)	(1.23)	(1.27)	(1.37)	(1.56)	(1.42)
BAN_ACC	−0.001	−0.003	−0.003	−0.001	0.002	0.002	0.003	0.002
	(−0.67)	(−0.63)	(−0.69)	(−0.76)	(1.17)	(1.21)	(1.48)	(1.06)
ENT_BAN	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.002
	(0.71)	(0.44)	(1.05)	(0.75)	(0.46)	(0.38)	(0.44)	(0.17)

(*continued on next page*)

Table 9 (*continued*)

Panel A: Conventional banks

	Before crisis				After crisis			
MONI_EXT	0.002	0.003	0.001	0.008	0.001	0.002	0.001	0.006
	(0.11)	(0.03)	(0.33)	(0.32)	(0.47)	(0.41)	(1.12)	(0.00)
STR_AUD	−0.002	−0.001	−0.001	−0.002	0.0001	0.001	0.0001	0.0002
	(1.40)	(1.38)	(−1.79)*	(−1.46)	(0.01)	(0.35)	(0.21)	(0.03)
GOV_IN	0.001	0.002	0.003	0.001	−0.006	−0.006	−0.009	−0.008
	(0.34)	(0.50)	(1.04)	(0.46)	(−1.90)*	(−2.17)**	(−2.16)**	(−2.04)**
IFRS	0.004	0.004	0.024	0.005	−0.006	−0.005	−0.009	−0.005
	(1.33)	(1.19)	(1.71)*	(1.51)	(−2.05)**	(−1.97)**	(−3.10)***	(−2.31)**
YEAR EFFECTS	YES	YES	YES	YES	YES	YES	YES	YES
COUNTRY EFFECTS	YES	YES	YES	YES	YES	YES	YES	YES
R^2	0.79	0.79	0.67	0.79	0.41	0.44	0.44	0.43
N	84	84	84	84	131	131	131	131

The table displays the regression results on the effect of ownership structure |DLLP| before and after crisis. Results for conventional and Islamic banks are presented in respectively Panel A and B |DLLP| Absolute value of discretionary loss loan provision; the proportion of equity held by the first blockholder (BLOC_OWN), families (FAM_OWN), institutional owner (INST_OWNER) and State (STAT_OWN),; BBPT Earnings before taxes and loan loss provisions divided by total assets at the beginning of the year; CAR Capital adequacy ratio for at a year t, measured by average total equity over average total assets. GR_ASS Growth in total assets from the beginning to the end of the year; LAG_LLP Past year's LLP divided by total assets at the beginning of the year; LOAN Total loans scaled by total assets at the beginning of the year; SIZE The log of total assets at the beginning of the year; BIG4 Dummy variable equals one if the auditor is a Big 4 auditor zero otherwise; BAN_ACC Bank accounting informativeness from Barth et al. (2013); ENT_BAN Regulatory restrictions on entry into banking from Barth et al. (2013); MONI_EXT External Ratings and Creditor Monitoring from Barth et al. (2013); STR_AUD Quality of external audits from Barth et al. (2013); GOV_IN Governance Index from Kaufmann et al. (2010).; IFRS Dummy variable equals one if the country adopts International Financial Reporting Standard, and zero otherwise. We estimate the regression clustered by bank, For each variable, we report the regression coefficient, followed by the t-statistic in parentheses. Significance at the 10%, 5%, and 1% levels is indicated by *, **, and ***, respectively.

results.[13] In fact, Islamic and conventional banks apply the incurred loss model to ensure that LLPs comply with IASB 39.[14] However, Islamic banks in Jordan, Bahrain and Qatar comply with the Islamic accounting rules set by the AAOIFI[15]stipulating that LLP estimation is based on expected loan losses (Elnahass et al., 2014). Therefore, we rerun the regression for two groups of Islamic banks: group 1 (Jordan, Bahrain and Qatar) and group 2 (final sample without Bahrain, Jordan and Qatar).

The results, reported in Table 7, indicate that the coefficient of BLOC_OWN is positive and significant for group 2 (column (5)). However, FAM_OWN exhibits a negative effect for group 1 and group 2 (column (3) and (7)). For INST_OWN, the coefficient is positive and significant for group 2 (column (7)). Finally, STAT_OWN coefficients are insignificant for group 1 and group 2.

These results support our earlier evidence on the significant effect of ownership structure on earnings management in 6 > Islamic banking using the incurred or excepted loss loan model.

Second, we use an alternative measure of earnings management to check the robustness of our finding. According to Beatty et al. (1995), banks could manage reported earnings via the obtained security gains and losses (RSGL)[16] because security gains and losses are an unregulated and un-audited discretionary management action unlike LLP. We determine the discretionary component of (RSGL) which is the error term of regression (4)

$$RSGL = a_1 + b_2 SIZE + c_3 URSGL + \eta \quad (4)$$

Table 8 reports the results of the regression of discretionary RSGL on the ownership variable. We find that the coefficient of BLOC_OWN is positive and significant only for conventional banks (column (1)). The coefficients of INST_OWN are positive and significant for conventional and Islamic banks (Column (2) and (6)). This latter finding allows us to conclude that institutional investors in conventional banks encourage earnings management through discretionary LLPs obtained from security gains and losses than discretionary LLPs (see Table 5).However, they stimulate earnings management through two tools in Islamic banks.

The coefficients of FAM_OWN are negative and significant for conventional and Islamic banks (Column (3) and (7)). Therefore, we confirm that family owners mitigate earnings management by manipulating LLP or RSGL. For STAT_OWN, the coefficients are insignificant in two specifications (Columns (4) and (8)).

Third, we examine whether the impact of ownership structure on earnings management was affected by the 2008 financial crisis. To investigate this issue, we separately rerun the models before and after 2008–2009. The results of conventional banks, reported in panel A of Table 9, indicate that the coefficient of BLOC_OWN is positive and significant just before the crisis (column (1)). For INST_OWN, the coefficient is positive and significant before the crisis (column (2)). However, FAM_OWN exhibits a negative effect during the two sub-periods (column (3) and (7)). Finally, STAT_OWN has a positive and significant effect on |DLLP| during the two sub-periods.

[13] We thank the referee for proposing this test.
[14] International Accounting Standard 39 Financial Instruments: Recognition and Measurement.
[15] Accounting and Auditing Organization for Islamic Financial Institutions.
[16] We thank the referee for suggesting this test.

For Islamic banks, the coefficients of BLOC_OWN and STAT_OWN are insignificant. However, for INST_OWN, we confirm the positive effect on earnings management during the two sub-periods and we find negative and significant coefficients for FAM_ OWN.

6. Conclusion

The purpose of this paper was twofold. The first was to compare earnings management between conventional and Islamic banks. The second was to test whether ownership structure influences earnings management in conventional and Islamic banks. Using a sample of 134 commercial banks from 12 MENA countries, we proceed on two stage approach by determining discretionary component of LLP in the first stage and explaining earnings management in the second stage.

We found evidence that Islamic bank manage less their earnings than conventional banks. This result confirms the importance of organizational religiosity on corporate decision making since the religious orientation of Islamic banks enhance financial reporting reliability.

Besides, blockholder ownership is associated with great discretionary loss loan provisions in both conventional and Islamic banks. This result confirms that controlling shareholders may intervene in the firm's management, and encourage managers to manipulate earnings when this practice maximizes their private benefits. Moreover, we reported evidence indicating that institutional ownership encourages earnings manipulation only in Islamic banks but don't have significant effect on earnings management for conventional bank. These results rejects the effective monitoring hypothesis of institutional owners probably for reasons of poor institutional environment giving opportunities to expropriate other shareholders or focus on short-term benefits. We also found that family ownership mitigates earnings management practice in conventional and Islamic banks. This finding supports the alignment effect hypothesis which assumes that family owners especially ruling ask for a higher earnings quality to preserve their reputation.

Finally, our finding that state ownership encourages earnings management, in conventional banks, supports the assumption that the state has greater incentives to manipulate earnings for political and social objectives.

Our findings could be expanded by examining the effect of others culture and social aspects on earnings quality and exploring others disparities between Islamic and conventional banks.

References

Adıgüze, H. (2013). Corporate governance, family ownership and earnings management: Emerging market evidence. *Accounting and Finance Research, 2*(4), 17–32.

Ahmed, A., Takeda, C., & Thomas, S. (1999). Bank loan loss provisions: A reexamination of capital management, earnings management and signaling effects. *Journal of Accounting and Economics, 28*(1), 1–26.

Al-Fayoumi, N., Abuzayed, B., & Alexander, D. (2010). Ownership structure and earnings management in emerging markets: The case of Jordan. *International Research Journal of Finance and Economics, 38*(1), 28–47.

Al-Gamal, M. (2006). *Islamic finance law, economics, and practice.* New York: Cambridge University Press.

Anandarajan, A., & Hasan, I. (2010). Value relevance of earnings: Evidence from middle eastern and north african countries. *Advances in Accounting, 26*(2), 270–279.

Anandarajan, A., Hasan, I., & Lozano-Vivas, A. (2005). Loan loss provisions decisions: An empirical analysis of the Spanish depository institutions. *Journal of International Accounting Auditing and Taxation, 14*(1), 55–77.

Andres, P., & Vallelado, E. (2008). Corporate governance in banking: The role of the board of directors. *Journal of Banking and Finance, 32*(12), 2570–2580.

Arouri, H., Hossain, M., & Muttakin, M. B. (2014). Effects of board and ownership structure on corporate performance: Evidence from GCC countries. *Journal of Accounting in Emerging Economies, 4*(1), 117–130.

Barth, J. R., Caprio, J., & Levine, R. (2013). *Bank regulation and supervision in 180 countries from 1999 to 2011. National bureau of economic research working paper* 18733.

Beatty, A., Chamberlain, S., & Magliolo, J. (1995). Managing financial reports of commercial banks: The influence of taxes, regulatory capital, and earnings. *Journal of Accounting Research, 33*(2), 231–261.

Beaver, W., & Engel, E. (1996). Discretionary behaviour with respect to allowances for loan losses and the behaviour of security prices. *Journal of Accounting and Economics, 22*(1–3), 177—206.

Ben Naceur, S., & Omran, M. (2008). *The effects of bank regulations, competition and financial reforms on MENA banks' profitability. working papers 449.* Economic Research Forum [revised Oct 2008. Retrieved from http://www.erf.org.eg/CMS/getFile.php?id=1345].

Ben Naceur, S., & Omran, M. (2011). The effects of bank regulations, competition, and financial reforms on banks' performance. *Emerging Markets Review, 12*(1), 1–20.

Ben Naceur, S., Omran, M., & Ghazouani, S. (2007). The determinants of the Stock Market development in the MENA countries. *Managerial Finance, 33*(7), 477–489.

Ben Othman, H., & Mersni, H. (2014). The use of discretionary loan loss provisions by Islamic banks and conventional banks in the Middle East region: A comparative study. *Studies in Economics and Finance, 31*(1), 106–128.

Ben Othman, H., & Mersni, H. (2016). The impact of corporate governance mechanisms on earnings management in Islamic banks in the Middle East region. *Journal of Islamic Accounting and Business Research* [forthcoming].

Bouvatier, V., Lepetit, L., & Strobel, F. (2014). Bank income smoothing, ownership concentration and the regulatory environment. *Journal of Banking and Finance, 41*(1), 253–270.

Brief, A. P., Dukerich, J. M., Brown, P. R., & Brett, J. F. (1996). What's wrong with the Treadway Commission report? Experimental analyses of the effects of personal values and codes of conduct on fraudulent financial reporting. *Journal of Business Ethics, 15*(2), 183–198.

Bushman, R., & Smith, A. (2003). Transparency, financial accounting information, and corporate governance. *Economic Policy Review Federal Reserve Bank of New York, 9*(1), 65–87.

Callen, J., & Fang, X. (2013). Religion and stock price crash risk. *Journal of Financial Quatitative Analysis, 50*, 169–195.

Cavallo, M., & Majnoni, G. (2001). *Do banks provision for bad loans in good times? Empirical evidence and policy implications. World bank policy research working paper No. 2619.*

Collins, J., Shackelford, D., & Wahlen, J. (1995). Bank differences in the coordination of regulatory capital, earnings and taxes. *Journal of Accounting Research, 33*(2), 263–292.

Cornett, M., McNutt, J., & Tehranian, H. (2009). Corporate governance and earnings management at large U. S. bank holding companies. *Journal of Corporate Finance, 15*(4), 412–430.

Davies, P. L. (2000). *The board of directors: composition, structure, duties and powers. Paper on company law reform in OECD countries: A Comparative outlook of current trends.*

DeFond, M. L., & Jiambalvo, J. (1994). Debt covenant violation and manipulations of accruals. *Journal of Accounting and Economics, 17*(1–2), 145–176.

Dechow, P., Sloan, R., & Sweeney, A. (1996). Causes and consequences of earnings manipulation: an analysis of firms subject to enforcement actions by SEC. *Contemporary Accounting Research, 13*(1), 1–36.

Dong, Y., Meng, C., Firth, M., & Hou, W. (2014). Ownership structure and risk-taking: Comparative evidence from private and state-controlled banks in China.

International Review of Financial Analysis, 36, 120–130.
Duggal, R., & Millar, J. A. (1999). Institutional ownership and firm performance: The case of bidder returns. *Journal of Corporate Finance, 5*(2), 103–117.
Dyreng, S., Mayew, W. J., & Williams, C. D. (2012). Religious social norms and corporate financial reporting. *Journal of Business. Finance and Accounting, 39*, 845–875.
Elnahass, M., Izzeldin, M., & Abdelsalam, O. (2014). Loan loss provisions, bank valuations and discretion: A comparative study between conventional and Islamic banks. *Journal of Economic Behavior and Organization, 103*, 160–173 [S].
Fan, J., & Wong, T. (2002). Corporate ownership structure and the informativeness of accounting earnings in East Asia. *Journal of Accounting and Economics, 33*(3), 401–425.
Farooq, O., & El-Jai, H. (2012). Ownership structure and earnings management: evidence from the Casablanca Stock Exchange. *International Research Journal of Finance and Economics, 84*, 95–105.
Farouk, S., Hassan, K., & Clinch, G. (2012). Profit distribution management by Islamic banks: An empirical investigation. *The Review of Economics and Finance, Vol. 52*, 333–347.
Farouk, S., Hassan, K., & Clinch, G. (2014). Islamic bank incentives and discretionary loan loss provisions. *Pacific-Basin Finance Journal, 28*, 152–174.
Fonseca, A. R., & Gonzalez, F. (2008). Cross-country determinants of bank income smoothing by managing loan-loss provisions. *Journal of Banking and Finance, 32*(2), 217–228.
Gaver, J., Gaver, M., & Austin, R. (1995). additional evidence on bonus plans and income management. *Journal of Accounting and Economics, 19*(1), 3–28.
Grassa, R., & Chakroun, R. (2016). Ownership structure, board's characteristics and corporate governance disclosure in GCC Banks: What about Islamic banks? *International Journal of Accounting, Auditing and Performance Evaluation, 12*(4), 360–395.
Habbash, M., Hussainey, K., & Awad-Elsayed, A. (2016). The determinants of voluntary disclosure in Saudi Arabia: an empirical study. *International Journal of Accounting, Auditing and Performance Evaluation, 12*(3), 213–236.
Hamdi, M. F., & Zarai, M. A. (2012). Earnings management to avoid earnings decreases and losses: Empirical evidence from Islamic banking industry. *Research Journal of Finance and Accounting, 3*(3), 88–107.
Hessayri, M., & Saihi, M. (2015). Monitoring earnings management in emerging markets: IFRS adoption and ownership structure. *Journal of Economic and Administrative Sciences, 31*(2), 86–108.
Iannota, G., Giacomo, N., & Sironi, A. (2013). The impact of government ownership on bank risk. *Journal of Financial Intermediation, 22*(2), 152–176.
Ishak, Z., & Al-Ebel, A. (2013). Board of directors, information asymmetry, and intellectual capital disclosure among banks in Gulf co-operation council. *Jurnal Pengurusan, 37*, 33–43.
Ismail, A. G., Shaharudin, R. S., & Samudhram, A. R. (2005). Do Malaysian banks manage earnings through loan loss provisions? *Journal of Financial Reporting and Accounting, 3*(1), 41–47.
Jabsheh, F. Y. (2002). The GATS agreement and liberalizing the Kuwaiti banking sector. *ERF, 8th Annual Conference*.
Jaggi, B., & Tsui, J. (2007). Insider trading, earnings management and corporate governance: Empirical evidence based on Hong Kong firms. *Journal of International Financial Management and Accounting, 18*(3), 192–222.
Jbili, A., Galbis, V., & Bisat, A. (1996). *Financial systems and reform in the gulf cooperation council countries. Financial market development, Arab monetary fund and the economic research forum for the Arab Countries*25–27 [Iran and Turkey, Abu Dhabi, UAE, (May)].
Jensen, M., & Meckling, W. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305–360.
Jiang, W., Lee, P., & Anandarajan, A. (2008). The association between corporate governance and earnings quality: Further evidence using the GOV-score. *Advances in Accounting, 24*(2), 191–201.
Jiraporn, P., & DaDalt, P. J. (2009). Does founding family control affect earnings management? *Applied Economics Letters, 16*(2), 113–119.
Kamla, R. (2007). Critically appreciating social accounting and reporting in the Arab Middle East: A postcolonial perspective. *Advances In International Accounting, 20*, 105–177.
Kanagaretnam, K., Lobo, G. J., & Mathieu, R. (2004). Earnings management to reduce earnings variability: evidence from bank loan loss provisions. *Review of Accounting and Finance, 3*(1), 128–148.
Kanagaretnam, K., Lim, C., & Lobo, G. J. (2010). Auditor reputation and earnings management: International evidence from the banking industry. *Journal of Banking and Finance, 34*(10), 2318–2327.
Kaufmann, D., Kraay, A., & Mastruzzi, M. (2010). *The Worldwide Governance Indicator: a summary of methodology, data, and analytical issues. World bank policy research working paper, No. 5430*.
Kim, M., & Kross, W. (1989). The impact of the change in bank capital standards on loan loss provisions and loan write-offs. *Journal of Accounting and Economics, 25*(1), 69–100.
Klai, N., & Omri, A. (2011). Corporate governance and financial reporting quality: The case of Tunisian firms. *International Business Research, 4*(1), 158–166.
Koh, P. S. (2003). On the association between institutional ownership and aggressive corporate earnings management in Australia. *The British Accounting Review, 35*(2), 105–128.
La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *The Journal of Political Economy, 106*, 1113–1155.
Lambert, R. A. (1984). Income smoothing as rational equilibrium behavior. *The Accounting Review, 59*(4), 604–618.
Lassoued, N., Sassi, H., & Attia, M. B. R. (2016). The impact of state and foreign ownership on banking risk: Evidence from the MENA countries. *Research in International Business and Finance, 36*(4), 167–178.
Lassoued, N., Attia, M. B. R., & Sassi, H. (2017). *Earnings management and ownership structure in Emerging Market: Evidence from banking industry Managerial Finance*, *43*, 1117–1136.
Leventis, S., & Dimitropoulos, P. (2012). The role of corporate governance in earnings management: Experience from US banks. *Journal of Applied Accounting Research, 13*(2), 161–177.
Liu, X., SaIdi, R., & Bazaz, M. (2014). Institutional incentives and earnings quality: The influence of government ownership in China. *Journal of Contemporary Accounting and Economics, 10*(3), 248–261.
McGuire, S. T., Omer, T. C., & Sharp, N. Y. (2012). The impact of religion on financial reporting irregularities. *Accounting Review, 87*, 645–673.
Morgan, D. (2002). Rating banks: Risk and uncertainty in an opaque industry. *The American Economic Review, 92*(4), 874–888.
OECD (2009). *Policy brief on improving corporate governance of banks in the middle east and north africa region*.
OECD (2012). *Towards a New Arrangements for State Ownership in the Middle East and North Africa*.
Quttainah, M. A., Song, L., & Wu, Q. (2013). Do Islamic banks employ less earnings management? *Journal of International Financial Management and Accounting, 2*(3), 203–233.
Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics, 42*(3), 335–370.
Samaha, K., Dahawy, K., Hussainey, K., & Stapleton, P. (2012). The extent of corporate governance disclosure and its determinants in a developing market: The case of Egypt. *Advances in Accounting, 28*(1), 168–178.
Shen, C. H., & Chih, H. L. (2005). Investor protection, prospect theory, and earnings management: An international comparison of the banking industry. *Journal of Banking and Finance, 29*(10), 2675–2697.
Shleifer, A., & Vishny, R. (1997). A survey of corporate governance. *The Journal of Finance, 52*(10), 737–783.
Siregar, S., & Utama, S. (2008). Type of earnings management and the effect of ownership structure, firm size, and corporate-governance practices: Evidence from Indonesia. *The International Journal of Accounting, 43*(1), 1–27.
Srairi, S. (2013). Ownership structure and risk-taking behavior in conventional and Islamic banks: Evidence for MENA countries. *Borsa Istanbul Review, 13*(4), 115–127.
Taktak, N. B., & Mbarki, I. (2014). Board characteristics, external auditing quality and earnings management. *Journal of Accounting in Emerging Economies, 4*(1), 79–96.
Taktak, N., Zouari, S., & Boudrigua, A. (2010). Do Islamic banks use loan loss provisions to smooth their results? *Journal of Islamic Accounting and Business Research, 1*(2), 114–127.

Turk-Ariss, R. (2009). Competitive behavior in middle east and north africa banking systems. *The Quarterly Review of Economics and Finance, 49*(2), 693–710.
Wahlen, J. M. (1994). The nature of information in commercial bank loan disclosures. *The Accounting Review, 69*(3), 455–478.
Wang, Y., & Campbell, M. (2012). Corporate governance, earnings management, and IFRS: Empirical evidence from Chinese domestically listed companies? *Advances in Accounting, 28*(1), 189–192.
Wang, D. (2006). Founding family ownership and earnings quality. *Journal of Accounting Research, 44*(3), 619–656.
Watts, R., & Zimmerman, J. (1986). *Positive accounting theory*. prentice Hall.
Weaver, G. R., & Agle, B. R. (2002). Religiosity and ethical behaviour in organizations: A symbolic interactionist perspective. *Academy of Management Review, 27*, 77–97.
Young, E. (2014). *World islamic banking competitiveness report, 2013–2014*.
Zoubi, T. A., & Al-Khazali, O. (2007). Empirical testing of the loss provisions of banks in the GCC Region. *Managerial Finance, 33*(7), 200–511.

Dr. Naima Lassoued is an Associate Professor of Accounting and Finance at Higher School of Business Tunisia. She holds a Habilitation in Finance from University of Manouba. Her main research interests include corporate governance, financial reporting, Islamic finance, risk management, and earnings management, and firm performance. She has published in Research in international business and finance (Elsevier); Journal of Accounting Auditing and Performance Evaluation (Inderscience), corporate governance: The international journal of business in society, Research in Accounting in Emerging Economies (Emerald Publishing).

Dr. Mouna Ben Rejeb Attia is an Associate Professor of accounting at Higher Institute of Accountancy and Entrepreneurial Administration, Tunisia. She holds a Habilitation in Accounting from University of Manouba. Her main research interests include audit quality, corporate governance, financial reporting, earnings management, and corporate disclosure. She has published in Research in international business and finance (Elsevier); Journal of Accounting Auditing and Performance Evaluation (Inderscience), corporate governance: The international journal of business in society, Economics bulletins, Research in Accounting in Emerging Economies (Emerald Publishing).

Houda Sassi is a Teaching Assistant She is a PhD student at IHEC, and member of LEFA, University of Carthage. Her research interests are in corporate governance, banking institutions, earnings management and Islamic finance. She has published in Research in international business and finance (Elsevier), Economics bulletins.