Table of Contents

List of tables

List of figures

List of abbreviation

Serial	Abbreviation	Definition
1	AEM	Absolute value of earnings management.
2	AFS	Available-for-sale securities.
3	BCBS	Basel Committee on Banking Supervision.
4	BOD	Board of directors.
5	BRC	Blue ribbon committee.
6	CBs	Conventional banks.
7	CEOs	Chief executive officers.
8	DCR	Displaced commercial risk.
9	DLLP	Discretionary loan loss provisions.
10	DRSGL	Discretionary realized securities gains and losses.
11	GCC	Gulf countries council.
12	HTM	Held- to- maturity securities.
13	IAHs	Investment account holders.
14	IBs	Islamic banks.
15	IFRS	International financial reporting standards.
16	LLP	Loan loss provisions.
17	LLR	Loan loss reserves.
18	M&A	Merger and acquisition.
19	MENA	Middle East and North Africa.
20	NLLP	Nondiscretionary loan loss provisions.
21	NYSE	New York stock exchange.
22	OECD	Organization for Economic Cooperation and Development.
23	PER	Profit equalization reserve.
24	PLS	Profit-and-losses sharing.
25	RIAHs	Restricted investment account holders.
26	RSGL	Realized securities gains and losses.
27	Sharia	Islamic law.
28	SOX 2002	Sarbanes-Oxley act (2002).
29	SSB	Sharia supervisory board.
30	URIAHs	Unrestricted investment account holders.

Acknowledgments

In the name of Allah, the Beneficent, the Merciful

The years that a PhD student spends in writing his thesis are best to be described as a story. The characters of the story represent the cornerstone of its success or failure. Undeniably, my story would not have been possible without the limitless support of many people who have inspired me throughout my PhD. I am especially indebted to Prof. Dr. Nadine Lybaert for her irreplaceable encouragement and support. A person of myriad skills, Prof. Nadine has eased the writing of my thesis with her valuable and indispensable comments. As my supervisor, she gave me the freedom to do and develop my ideas in the way that I like the most. Such attitudes motivated me to work hard and to do my best to meet her expectations. Prof. Nadine thank you very much from my heart for coaching and believing in everything I have did.

I also wish to express my sincere gratitude to my co-promoter, Prof. Dr. Tensie Steijvers. Prof. Tensie, you were always there any time to answer my urgent questions and queries of minor as well as major concerns. I admit that every single word of your written or verbal comments expanded my knowledge and enriched me with new ideas regarding my writing style, analytical and critical thinking, especially our discussion about the moderation and mediation effects. Prof. Tensie who scrupulously responded to all my myopic questions, my heartfelt thanks.

My deep appreciation extends to Prof. Mieke Jans. Prof. Mieke, your comments and notes also had very significant and positive effect on the quality of my PhD thesis. With this crucial role you also inspired me to work hard.

Overall, when I read the previous versions of the chapters of my thesis, especially the versions from the first and second years of my PhD, my tolerance for my own writing hit bottom and my appreciation for my advisor's patience hit top.

I would also like to express my deep appreciation for the new critical characters that have joined us in writing our story as jury members, namely, Prof. Dr. Raf Orens and Prof. Dr. Mishiel Suwaidan. Prof. Raf, thank you for revising my PhD

thesis and for providing valuable feedback. Prof. Mishiel, in addition to your valuable comments on my thesis, I would like to thank you for the time and efforts that you have devoted for traveling to participate as jury member in my public defence.

In addition to the jury members, other colleagues and friends had inspired me during my PhD. I must say a special thank you to Prof. Dr. Koen Vanhoof, who graciously made available to me to come to Belgium since five years ago to discuss my research proposal with my doctoral committee.

A special thanks also to the best friends from my home country who I have met them four years ago here in Belgium, namely Hamzah and Ahmad. I will never forget the daily coffee break that we have agreed thousand time to last only for fifteen minutes, but with many discussions concerning our stress, fears, and ambitions it was lasted much more. Also Bilal who I have used to call him a little naughty nephew, while he has used to call me uncle, my heartfelt thanks.

I wish also to say "Teşekkür ederim" to Rüveyda for her continuing support and help in answering multidimensional academic and procedural questions, and more recently help in preparing the doodle invitation of my PhD public defence. Most importantly, Bilal and I hired her as a chairman of the Sharia supervisory board to provide us whether the food and drinks in public events are in accordance with the Islamic law or not (Halal food). I must also say a special thank you to Maarten for his help in different academic and technical issues during writing my PhD thesis. My gratitude also goes to Prof. Wim, Prof. Frank, Alana, Ilse, Pieter, Ana, and all colleagues in the RCEF group, the group that I really feel very proud to be one of its staff members.

I dedicate this PhD to the soul of my father who was dreaming to see me holding a PhD degree. During my bachelor study, when someone was asking me how many credit hours do you have, I was telling him I don't know, but you can ask my father. Dad, your dream comes true, may Allah bless and rest your soul in paradise. My mother, the word thank you is not enough to express what your existence in my life is meant to me. I can't describe how much I miss kissing your head, hands, feet, and laying my head in your lap. I promise you that this the last time that I will stay far from you. My eldest brother Nabeel, after Allah's will, you

are the main reason to what I am today. Twenty five years ago, you moved to live in USA in order to assure the dignified life for us. You genuinely have accomplished your mission. I have never seen eldest brother how acts exactly like a father for his siblings like you. My brothers and sisters, Sawsan, Nizar, Mohammad, Suhair, Iman, Maryam, Duha, and a new sister how I met her in Belgium Revathy, thank you all for being part of my life. Without you all I will not have a wonderful life.

Every journey needs a partner, a person how is very close to your heart, shares you with all your fears, stress, happiness, dreams, and ambitions. Literally I mean you Faten, my beloved wife. In the last ten months you have played double roles: the role of a father as well as your role as a mother. I appreciate how much it difficult to manage with four naughty children. Thank you very much for your support, patience, and motivation during my tough times. Without you the life is very difficult in Belgium.

Last but not least, my cutest angels Joud, Gehna, Nabeel, and the newcomer how was born in Belgium, Ibrahim. I will never imagine my life without anyone of you, your images are in my mind every time and everywhere we visited in Belgium. Sometimes I go to Hazelaar school in Hasselt to remember when we were going to school, how we were running, fighting, and laughing. I pray to Allah to enable me to be good Dad, friend, and example for you all.

Ahmad Abu-Dawleh

18 June 2018

Chapter 1 - Introduction

1.1. Objective of the dissertation

Corporate governance in recent years has taken substantial attention by standard-setting bodies, analysts, and many researchers because it balances the interests of the many stakeholders in a company, such as shareholders, management, customers, suppliers, creditors, etc. (Organization for Economic Cooperation and Development [OECD], 2004). Its importance is prevailed specifically after the financial scandals of non-financial firms (e.g. Anicom, HealthSouth, and Enron), which have affected adversely on the credibility of (non)financial information. This evokes an urgent need to reform many regulations and rules to deter or at least mitigate all kinds of material financial misstatement (i.e. earnings management, fraudulent financial reporting, etc.), as the Sarbanes-Oxley act (SOX) 2002. This "one-size-fits-all" restructuring scheme, as indicated by Adams & Mehran (2012), was not able to accommodate the peculiar characteristics of conventional banks (CBs) during the latest subprime financial crisis, 2007-09. Notably, during this crisis Islamic banks (IBs) were phenomenally more resilient (Beck, Demirgüç-Kunt, & Merrouche, 2013; Hasan & Dridi, 2011).

In Islamic parlance, IBs conduct all financial transactions in accordance with the Islamic law (Sharia).[1] They encourage contracting on a profit-and-losses sharing principle (PLS) and the allocation of associated risks. While these contracts enable investment accounts holders (IAHs) – they resemble depositors in CBs– and IBs to adhere to the Sharia, they give the latter the full control over managing the former's funds. Accordingly, this is regarded as an additional agency problem that entrenches IBs. Another distinctive feature of IBs is the Sharia supervisory board (SSB). This board comprises scholars in Fiqh al-mu'amalat (jurisprudence of commercial transactions), and is characterized by virtue and piety. However, SSB is regarded as an additional layer of corporate governance at IBs that might play a crucial role in curbing earnings management (Quttainah, Song, & Wu, 2013).

[1] "Sharia is the legal framework within which the public and private aspects of life are regulated for those living in a legal system based on fiqh (Islamic principles of jurisprudence) and for Muslims living outside the domain" (Beck et al., 2013; footnote 5, p 434).

Overall, the Islamic label of these banks emphasizes that the unique agency issues are regarded as a trade-off between the fiduciary duty to maximize shareholders' wealth, the crux of agency theory, and achieving these duties according to the Sharia law, which is considered one of the Islamic pillars (Archer, Karim, & Al-Deehani, 1998). This per se may accentuate the moral side of the Islamic financing paradigm, which leads to curb opportunistic earnings management.

However, although these nascent banks have attracted significant attention worldwide because of its idiosyncratic features and a genuine performance during the financial crisis, the extant literature lacks a consensus on how different corporate governance mechanisms may affect earnings management within these banks, and how this effect might differ in CBs counterparts. One main reason of these conflicting results might be considering the classical agency theory to explain this relationship, whereas the equity structure at IBs is quite different due to the existence of equity-like deposits (Safieddine, 2009).

The agency theory addresses the conflicts that may arise from the separation of the ownership (principal) and management (agent) (Jensen & Meckling, 1976). In the case of IBs, Beck et al. (2013) and Safieddine (2009) argue that even though IBs are a subset of the banking sector, they deserve separate analyses of agency problems because they have an idiosyncratic nature, a unique agency framework and the relationships between agents (managers) and other stakeholders are more complicated. For example, an additional agency problem arises from the equity-like nature of liabilities accounts –savings accounts and IAHs– which makes IBs prone to further depositors' scrutiny while, on the other hand, it might lessen the IBs abidance to monitor borrowers, because they do not face the threats of immediate deposits withdrawal (Beck et al., 2013). However, these accounts have provoked a fierce discussion between scholars, regulators, and practitioners. Safieddine (2009), for instance, decomposes IAHs to restricted investment accounts holders (RIAHs) and unrestricted investment accounts holders (URIAHs). With respect to the RIAHs, deposits are highly secured and returns are relatively safe since the depositors can manage their funds and choose among different investment projects, which mitigates the agency problems. In contrast, URIAHs deposits are not secured and bank managers have complete latitude to use these funds, and therefore depositors do not have the ability to participate in managing

their own funds. This accentuates an additional agency problem that is neither observed in non-financial firms nor in CBs.

As a reaction to protect those investors, many countries of Middle East and North Africa (MENA) have passed many prudential regulations to safeguard IAHs interests and mitigate agency problems. In the Kingdom of Saudi Arabia (KSA), it is permitted to IBs to accept restricted investment accounts only. Qatar, on the other hand, gives permission to IBs to accept unrestricted investment accounts but requires them to pay a fixed rate of return on these investments, which resembles fixed interest rates on deposits at CBs. However, such regulations may give rise to additional agency problems because it undermines IBs ability to adhere to the Sharia-compliant principle (Chong & Liu, 2009; Safieddine, 2009), which is one of the dominant interests of depositors, shareholders, and other stakeholders. For instance, 86% and 95% of Bahraini and Sudanese depositors at IBs, respectively, are ready to withdraw their deposits in case bank managers indulge in any behaviour that violates the Sharia-compliant principle (Chapra & Habib, 2002). Overall, the unique characteristics of equity-like financial products and the Sharia-compliant principle at IBs clearly unveil the distinct agency problems that do not exist in CBs.

Due to these distinctive agency problems, a growing body of literature is dedicated to explore how different governance practices might impact the quality of reported earnings at IBs. Quttainah et al. (2013) find that the SSB, as an additional layer of corporate governance, plays a significant role in constraining earnings management. Abdelsalam, Dimitropoulos, Elnahass, & Leventis, (2016) accentuate the importance of the strict religious norms and the constrained models of financing to enhance the quality of reported earnings. Farook, Hassan, & Clinch (2014), contradict the findings of Abdelsalam et al. (2016) and Quttainah et al. (2013). Specifically, they find that IBs are more likely to use accrual decisions to manage earnings, especially smaller IBs, than CBs.

Although prior literature undeniably bodes well in using the agency theory to explain the relationship between corporate governance and earnings management within IBs, the results are still sparse. This may be due to the aforementioned complex agency problems and the idiosyncratic corporate governance framework

of these banks (Safieddine, 2009). Therefore, our aim in this dissertation is to contribute to the comparative literature between CBs and IBs as well as to the stream of literature on corporate governance within such unique context, IBs, in threefold. First, we examine the role of **the regular board of directors (BOD) size and composition** in mitigating earnings management within the context of CBs and IBs. Second, we study **the dominated capital structure** of CBs and IBs and how it might affect earnings management differently. Finally, we explore **the role of audit committee activities, independence, and expertise** in curbing earnings management within CBs and IBs. In order to address the shortcoming of the classical agency theory in explaining the relationship between corporate governance and earnings management, we attempt to consider a different array of **theories** and several **prevailed cultural issues related to the political ties and family involvement within a developing context such as MENA region**.

This chapter proceeds as follows: In the next section we briefly introduce the Islamic banking paradigm and its basic financial products. Section 1.3 presents the unique corporate governance framework in IBs. The dissertation outline is presented in section 1.4.

1.2. Islamic banking paradigm

IBs, unlike CBs, derive their regulations, laws, and financial products from the interpretation of two sources, namely (i) primary sources which are the holy Quran and Sunnah (sayings and deeds of prophet Muhammad) and (ii) secondary sources from Sharia such as Ijma' (unanimous agreement among Sharia scholars about specific issues which have not been investigated by the foregoing primary sources), Qiyas (the use of deduction by analogy), and Ijtihad (personal reasoning) (El-Gamal, 2006). According to these sources, the sharia-compliant principle differentiates IBs from CBs in many aspects. Sharia forbids Riba or usury (interest or excessive interest), Gharar (which is defined as speculation), and financing illicit sectors (e.g. weapons, drugs, and alcohol) (Beck et al., 2013). Furthermore, IBs consider receiving and charging interests on their financial products as a form of exploitation and inconsistent with the notion of fairness. So they create financial products based on the PLS principle, which is backed by real

economic transactions on both sides of the balance sheet, being assets and liabilities.

On the assets side, Elnahass, Izzeldin, & Abdelsalam (2014) and Quttainah et al. (2013), among others, classify Islamic financial products into three main types: equity-type contracts, mark-up price (debt)-type contracts, and benevolence loans. As an alternative of the fixed interest rate on loans, equity-type contracts call for contracting based on equity participation, Mudarabah (profit sharing) and Musharakah (PLS). In a Mudarabah (trustee finance or limited partnership contract), while IBs provide capital to the entrepreneur/client (trustee), while the latter exercises complete control over the business. In the case of profits, these profits are split according to a previously agreed-upon profit sharing rate. In the case of losses, the financial losses are completely borne by IBs and the trustee receives no compensation for running the business. Thus, Safieddine (2009) classifies Mudarabah contract as the highest risk contract used by IBs because it is tacitly financed by IAHs funds, and gives complete latitude to bank managers to manage the capital of IAHs without giving them the right to intervene in managing their funds. In a Musharakah (full partnership contract), IBs and trustee jointly provide the capital and manage the business. While profits are shared based on a previously agreed-upon percentage, losses are shared according to the capital contribution ratio.

Due to the risk of the contracts (i.e. Mudarabah and Musharakah) incompleteness when many entrepreneurs (borrowers) use the funds received from IBs for their own consumption rather than for the assigned purposes in the contract, IBs resort to another form of sharia-compliant contracts, namely the markup price contracts. These contracts enable IBs to finance the purchase of assets in exchange for a negotiated profit margin (Aggarwal & Yousef, 2000). The most commonly used markup price contracts are Murabaha (cost-plus profit margin) and Ijara (lease financing). In both contracts, IBs purchase the assets with a predetermined agreement to resell it to the trustee at a previously agreed-upon price which covers the original cost and a negotiated profit margin on the form of fee. While in Murabaha the ownership of the assets is transferred to the trustee, the ownership in Ijara resides with the IBs until all payments are being paid, which resembles the operating leases in CBs (Beck et al., 2013).

Finally, Qard al-hasan (benevolence loan) is an exclusively financial product of IBs, which is a charitable loan to destitute and poor individuals and/or organizations. These loans are without interests due, no charges, and no mark-up. That is, these loans are a negative net present value investment for IBs (Aggarwal & Yousef, 2000). For example, the Jordan Islamic Bank (JIB) had provided JD 9.5 million ($ 13.3 million) as Qard al-hasan financing during 2013.[2]

In the liabilities side, IBs might be trustee in Mudarabah contracts (profit sharing) and Musharakah (PLS) when they receive funding from IAHs (see section 1.1). However, these accounts are the main source of financing the assets of IBs and to a great extent are fully under the control of bank managers which might represent another leeway to indulge to earnings management and an excessive risk-taking behaviour to appeal more deposits from IAHs.

In sum, regardless of the distinct array of financial products used by IBs, they are inevitably exposed to the default risk of all or some investments in Mudarabah, Musharakah, Murabaha, and Ijara. Moreover, a trade-off between regulations requirements (safety and soundness), goals of standard-setting bodies (transparency), and SSB in IBs (sharia-compliance), compels IBs to anticipate any potential losses and to absorb it by establishing loan loss reserves, which is a contra-asset account. Thus, according to the prevailing economic conditions, bank managers may resort to opportunistic earnings management when the losses are likely to become imminent.

1.3. Corporate governance framework of Islamic banks

It is widely argued by many scholars (e.g. Beck et al., 2013; Fama & Jensen, 1983; Safieddine, 2009) that while companies are confronted with agency problems from the separation of ownership (shareholders) and control (managers), the latter do not bear the risks or the "wealth effects of their decisions" (Fama & Jensen, 1983). As a result, corporate governance was emerged to mitigate these problems. With respect to the banking sector,

[2] http://www.jordanislamicbank.com/usersfilenew/folder/files/anuual%20reporteenglish.pdf.

irrespective of the bank type, Islamic or conventional, Hagendorff, Collins, & Keasey (2007) and Safieddine (2009) argue that the banking sector requires a separate agency analysis due to the complex agent-principal relationship, which ultimately leads to influence the financial reporting quality. This agency cost is likely to be more prominent in banks because of the obscure nature which surrounds its main activities and reporting practices (i.e. the quality of loans) (Mülbert, 2009), the high leveraged capital which leads to an excessive risk-taking pattern (Abdelsalam et al., 2016), the intense information asymmetries between bank managers and stakeholders (Leventis, Dimitropoulos, & Owusu-Ansah, 2013), and the governmental intervention through deposit insurance schemes and/or bailouts which spurs bank managers to indulge to riskier investments without considering penalties or insolvency risk (OECD, 2010). Overall, within the context of the banking sector, multiple agency costs might undermine the effectiveness of corporate governance practices, and widen the conflicts between agent-principal, control-minority shareholders, and creditors-shareholders (Abdelsalam et al., 2016).

With respect to IBs, an additional agency conflict arises between depositors (IAHs) and bank managers. While the latter fully controls the using of the former's funds, the former have no right to manage their own funds (see section 1.1). Moreover, bank managers at their discretion are able to commingle the funds of IAHs and shareholders to finance the bank's assets such as loans. As such, a conflict of interest prevails when bank managers intend to use the funds of IAHs in more riskier investments while using shareholders' funds in a relatively safer investments, which appeals bank managers and shareholders (e.g. block-holders, institutional investors) to facilitate earnings management. This per se accentuates the moral hazard notion since IBs indulge in riskier investments at the expense of IAHs who ultimately bear the risk of losses while IBs and shareholders participate in profits. However, on the other hand, the Islamic label of IBs manifests a different corporate governance structure that may reduce the agency conflicts and the ultimate agency costs that can influence the quality of reported earnings, mitigating earnings management.

Figure 1.1 shows that curbing earnings management at IBs through its unique governance structure might be in two prongs: first the so-called additional tier of

governance (viz., SSB), and second the additional moral accountability. Regarding the SSB, there are two approaches to regulate its functioning and enforcement power. First, creating Sharia advisory board that resemble SSB, but at a national level (e.g. Malaysia).[3] This board is nominated by the central bank and securities exchange commission who are in-charge of regulating, monitoring, and supervising the banking sector and the capital market, respectively. Accordingly, national sharia advisory board has the authority to legislate Islamic law for the purpose of introducing and monitoring Sharia-compliant financial products (Lai, 2014). Second, adopting a less centralized approach by giving each bank the ability to establish in-house SSB rather than sharia advisory board at a national level. This board is typically elected from the shareholders of IBs during the annual meeting of the general assembly. To effectively discharge its responsibility, according to many regulatory bodies, SSB has to be independent, encompass scholar in Fiqh al-mu'amalat (jurisprudence of commercial transactions), and have at least three individuals in the board. SSB is directly responsible for auditing the behaviour of IBs and ensure their conformity with the teachings of Islam through a constellation of scholars in Islamic jurisprudence. Besides ensuring the compliance with the Sharia, those scholars are responsible for issuing Fatwas (religious rulings). To apply these Fatwas, SSB guides and trains bank managers in day-to-day transactions, which leads to prevent any disagreement or ethical conflicts with investors and shareholders (Quttainah et al., 2013). Shareholders and creditors therefore get less agency costs and higher quality of the reported earnings with the increased level of moral monitoring by SSB to bank managers.

IBs' managers, however, confront additional moral accountability and legal liability toward IAHs' interests, since they are exposed to a vitriolic criticism in the case of misconduct or negligence. As mentioned above, IAHs and bank managers relationship represents an additional agency conflict that may lead to an additional legal liability if the latter breaches their fiduciary duties set forth or exploits the funds of the former to self-serving interests. However, moral accountability that prevails in a religiously oriented environment, IBs, might be viewed as disincentive to additional agency costs which leads to a higher quality of the reported earnings. This is consistent with McGuire, Omer, & Sharp (2012) and Dyreng, Mayew, &

[3] This is not applicable to any country that is included in our sample.

Williams (2012) findings regarding the prominence of moral accountability in constraining financial reporting irregularities and its crucial role as an alternative monitoring mechanism over corporate financial reporting. Specifically, they find that managers in a religious oriented environment are keen to report real earnings and less likely to use opportunistic accrual decisions to manipulate the reported earnings. As such, agency conflicts and earnings management are likely to decrease with more moral accountability.

Overall, due to this unique governance framework, IBs have been less affected by the latest financial crisis, 2007 – 09. Thus, understanding this governance framework and how it might impact agency costs through alleviating earnings management might be of a central importance for many reasons. First, Islamic financing has permeated across more than 70 countries through fully IBs or CBs having Islamic financing windows, including European and non-Islamic countries. Understanding governance practices of these banks might be essential to these countries to understand, monitor, and evaluate the performance and earnings quality of these banks. Second, due to its idiosyncratic financial products and contracts (e.g. IAHs), IBs confront additional risks such as displaced commercial risk (DCR).[4] Expanding our knowledge about the governance of these banks and how it reduces these associated risks might facilitate enacting more rules and regulations to enhance the disclosure practices of these banks, which leads to curb agency conflicts. Three, IBs confront the default risk of a part or all types of its financial products, similar to the default risk at CBs, which compels bank managers to resort to use discretionary accrual decisions to dilute this risk. Understanding how governance framework at IBs impact these decisions contributes to the extent literature on corporate governance by considering the Islamic religion dimension.

[4] See footnote 8.

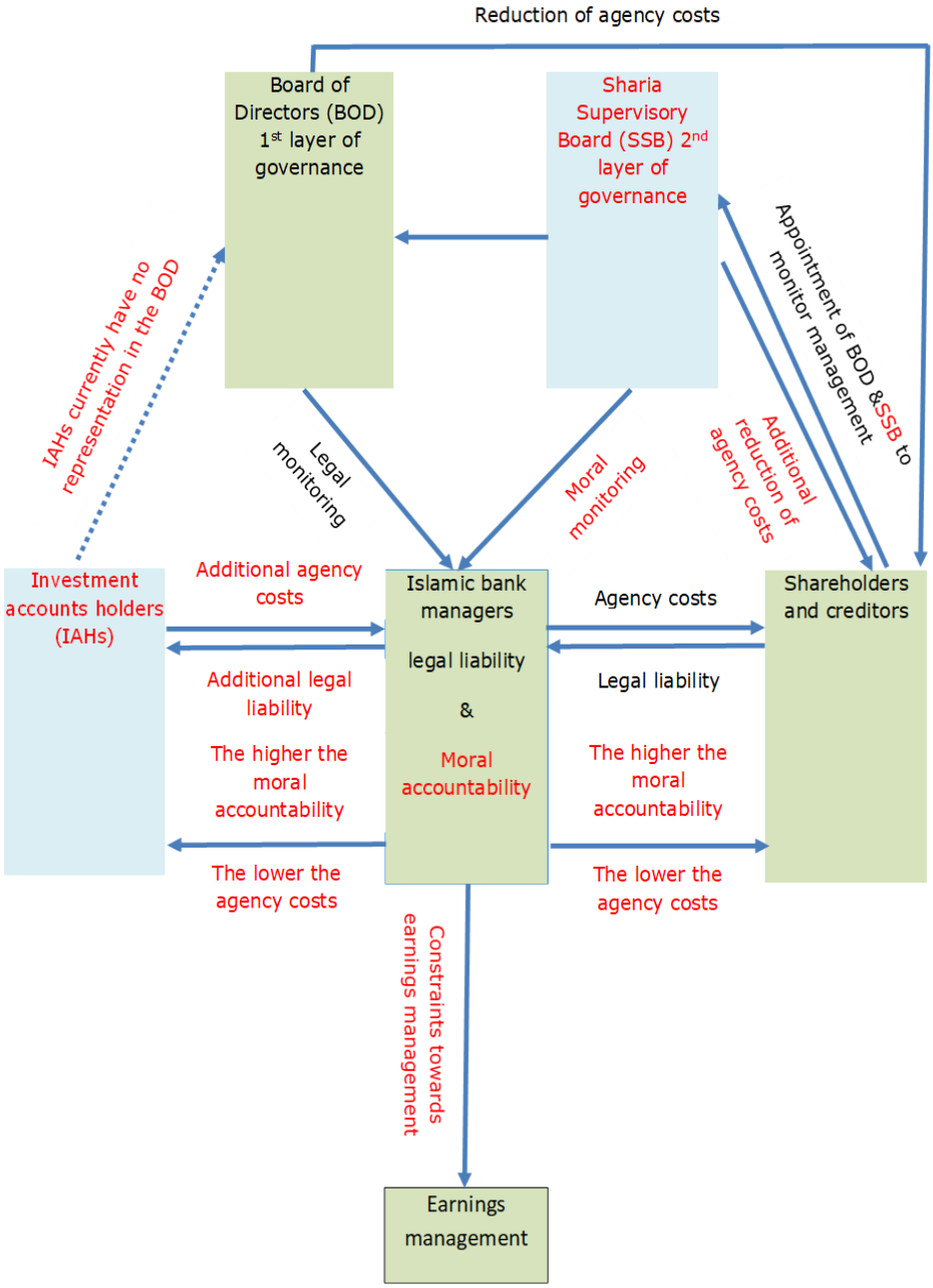

Figure 1.1. Corporate governance framework within Islamic banks
Source: (Abdelsalam et al. 2016)

1.4. Outline of the dissertation

The discussion above revealed that the complexity of agency conflicts, corporate governance framework and moral accountability of IBs significantly impact the earnings management behaviour. Indeed, the view of the stakeholders involved in IBs (e.g. management, BOD, SSB, shareholders, and IAHs) to earnings management is steered by the religious obligation to promote Amana (trust), which compels the IBs' parties to seek Adl (justice), Qist (balance), and Ihsaan (perfection) (Beekun & Badawi, 2005). Accordingly, the overall argument of this dissertation indicates that the involved parties in IBs, as religiously oriented banks, along with the unique corporate governance framework are expected to be disincentive to the opportunistic earnings management which ultimately leads to a higher quality of the reported earnings and lower agency conflicts.

Based on this argument as well as the central research objective of this dissertation, we can draw a broad research question which can be described as follows: to what extent, if any, might the different idiosyncratic features of a unique context of religiously oriented banks, IBs, influence the relationship between different corporate governance mechanisms and earnings management, and how might this relationship be different within CBs that resemble western banks? To answer this question which will be divided into several questions across the chapters of this dissertation, we use all available hand collected data from the listed CBs and IBs that co-exist in the stock markets of the MENA countries for the period from 2006 till 2014. Specifically, to obtain (non)financial data about each listed bank, we use the available annual reports at the website of each respective bank. Moreover, in order to minimize the heterogeneity of our sample, we follow three criteria: (1) The annual reports of each bank must be available for at least five years, (2) During these years the bank must use International Financial Reporting Standards (IFRS), and (3) The law of each country has to give the right for CBs as well as IBs to work within its banking sector.

After defining our sample, we measure the earnings management (i.e. the dependent variable) which will be used throughout chapters 2,3, and 4. We follow prior literature on the banking sector to decompose the loan loss provisions (LLP) and realized securities gains and losses (RSGL) into its (non)discretionary parts

which are widely used in this stream of literature (e.g. Beatty, Ke, & Petroni, 2002; Cornett, McNutt, & Tehranian, 2009; Kanagaretnam, Lim, & Lobo, 2010). To do so, we use the two-stage approach by identifying the proxies that represent the nondiscretionary part of LLP (i.e. nonperforming loans, net loans charges-off, beginning balance of loan loss reserves, etc.) and RSGL (i.e. unrealized securities gains and losses). In the second stage, we use the error terms (i.e. discretionary LLP and RSGL) to proxy for the earnings management that bank managers might use to conceal the deteriorated earnings or to exploit bank resources to self-serving interests.

Accordingly, Figure 1.2 shows that **Chapter 2** focuses on specific characteristics of the regular BOD, namely its size, composition and whether the CEO serves as chairperson (hereafter duality) by addressing the following question: "*to what extent, if any, the regular BOD mitigates or deters earnings management, and whether the role of BOD in constraining earnings management is different between listed IBs and CBs?"*. The role of BOD in mitigating earnings management has been documented within the context of CBs (e.g. Cornett et al., 2009). However, the role of the regular BOD in curbing earnings management within a unique governance framework in religiously oriented banks is still sparse. Therefore, we examine the role of the BOD size and composition in mitigating earnings management within the context of IBs and CBs in MENA region while considering the idiosyncratic nature of the former agency relationship. This paper advances the knowledge on the relationship between BOD characteristics and earnings management to an emerging countries contexts, the MENA region. Specifically, the banking sector in this region promotes BOD composition with more independent directors to monitor and control earnings management while the BOD size and duality have no significant effect on earnings management. Distinguishing between CBs and IBs, we demonstrate that the smaller BOD and/or more independent directors reduce earnings management in IBs than CBs. Moreover, we corroborate the findings of prior studies on the superiority of the loans quality and credit policies of IBs. Finally, we give compelling evidence on the importance of the religious social norms dimension in addressing agency problems and fostering others' interests.

In **chapter 3** we take the challenge to study the effect of ownership structure on earnings management when equity structure diverges from the conventional forms; that is, the existence of equity-like deposits at IBs, namely IAHs. The existence of IAHs within the equity structure of IBs accentuates new agency conflicts between IAHs-management as well as IAHs-shareholders. Accordingly, we argue that the equity structure at IBs, especially IAHs, presents a unique type of agency conflicts that calls for more investigation of the relationship between ownership structure and earnings management.

These agency conflicts give a prominence to collusion, coalition, tunnelling, and moral hazard notions to explain the effect of the ownership structure on earnings management. Therefore, we examine whether the relationship between ownership structure and earnings management might be influenced within IBs at MENA, where the CBs and the majority based IBs co-exist. This unique mix also evoked our attention to examine if ownership structure affects earnings management differently in these two subsectors. To do so, we identify the prevailed ownership structure in IBs as well as CBs. Specifically, we focus on internal ownership (BOD, CEOs, and their relatives), block-holders (owners of 5% or more of shareholdings), and institutional ownership. Contrary to the extant literature at IBs, we show the effect of the ownership structure which is actually dominated in IBs rather than the one used by prior literature, government and foreign ownership, which is the prevailed ownership structure in MENA countries but not for IBs. More importantly, this chapter supports our expectation about the shortcomings of the traditional agency theory in explaining the impact of the ownership structure on earnings management, especially within the religiously oriented banks, IBs. Moreover, we give evidence that the actors of IBs (i.e. internal and institutional owners) may collude to breach the fiduciary duty and the moral accountability that dominate the governance structure of IBs (see Figure 1.1) and indulge in earnings management behaviour. In contrast, block-holders at IBs view monitoring earnings management as a trade-off between bearing more risk or the ability to exploit bank resources to their own interests. This may accentuate the tunnelling notion that bank managers might use earnings management to tunnel the resources of banks to the third party (block-holders, institutional owners, etc.)

Chapter 4 elaborates on the role of audit committees in constraining earnings management. Prior literature (e.g. Archer et al., 1998; Safieddine, 2009) foretells the importance of audit committees within the context of IBs since such committees may work on the best interests of IAHs through monitoring earnings management and ensure the reliability of the financial information (Safieddine, 2009). Though, to date, no empirical study that we are aware of examines the role of audit committees on mitigating earnings management within the context of IBs. This chapter also attempts to introduce the religious social norms notion that is prevailed at IBs. Religious social norms perspective states that a person or a group of individuals (e.g. audit committee directors) who work within a religiously oriented organization, IBs, may act on a way that complies with the prevailed behavioural norms of the group that they interact within this organization. We posit that the religiosity label of IBs is a key factor that may influence the relationship between audit committees and earnings management. In other words, we expect that audit committees at IBs view their monitoring duty to curb earnings management as a paragon of virtue (Kuran, 1995), which conforms to the teachings of Islam. Consequently, this chapter examines whether the IBs characteristics influence the relationship between audit committee activities, independence, and expertise and earnings management, and how this relationship might differ within CBs counterparts.

In line with our expectations, our results suggest that the moral accountability of audit committees in an environment that emphasizes religious beliefs, ethics, and honesty facilitates monitoring earnings management that may harm the interests of stakeholders (e.g. IAHs). Overall, the prevailed religious social norms might motivate individuals to conform to a surrounding religious environment by promoting honesty in achieving their duties.

Finally, in **Chapter 5** we summarize the most important empirical finding of each respective chapter, discuss the most relevant theoretical and practical contributions of this dissertation, and we provide recommendations and suggestions for future research.

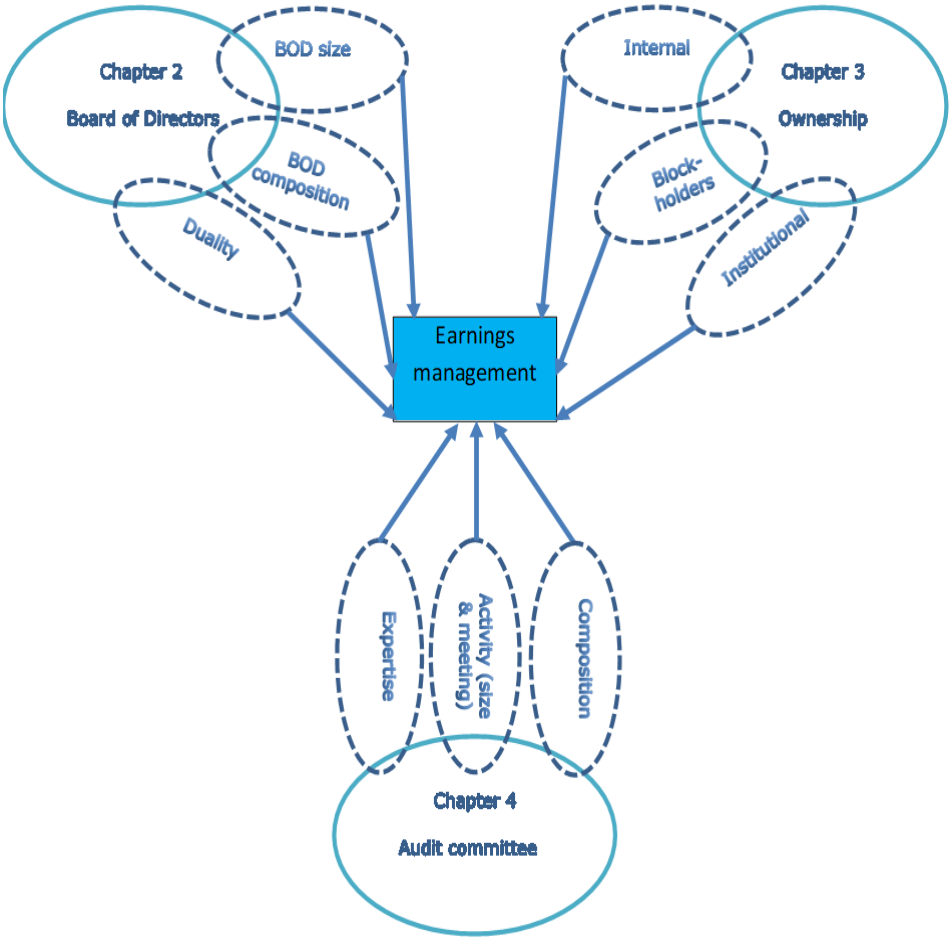

Figure 1.2. Thesis outline

Chapter 2 - Board of directors and earnings management: Conventional and Islamic banks

2.1. Introduction

Regulators, academics, and bank stakeholders alike consider the board of directors (BOD) size and composition as novel corporate governance mechanisms that monitor and control the opportunistic behaviour of bank managers. Though, earnings management,[5] as one of opportunistic behaviour, exacerbates agency conflicts and information asymmetry problems between bank managers and other stakeholders. As a result, the opportunistic earnings management has not only casted doubts on the credibility of banks' financial information, but also has undermined the ability of BOD to monitor management opportunism, which has been prevailed especially after the latest financial crisis.

Among other banking segments, the aforementioned crisis has stimulated interest on different idiosyncratic aspects of Islamic banks (IBs) since they have been less affected. Prior literature attributes this resilience to the adherence of IBs to the Islamic law (*Sharia*)[6] (e.g. Abdelsalam et al., 2016), using the profit and losses sharing (PLS) principle on their financial products (Bourkhis & Nabi, 2013), and the existence of *Sharia* supervisory board (SSB) (Quttainah et al., 2013).

However, although the unique attributes of IBs may have an impact on the effect of the BOD on earnings management, there is still some uncertainty about how this relationship might be different within the IBs context compared to the conventional banks (CBs). Haniffa & Hudaib (2007) among few studies, find that IBs are less likely to disclose its BOD size and composition. More recently, Abdelsalam et al. (2016) find that the independent directors negatively affect

[5] Earnings management refers to the use of managers' judgment in financial reporting and in structuring transactions to alter financial reports with the objective of either misleading stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on the reported accounting numbers (Healy & Wahlen, 1999).

[6] "*Sharia* is the legal framework within which the public and private aspects of life are regulated for those living in a legal system based on *fiqh* (Islamic principles of jurisprudence) and for Muslims living outside the domain" (Beck et al., 2013; foottnote 5, p 434).

earnings management. Understanding a regular BOD role in mitigating earnings management may expand our knowledge of how the banking sector in Middle East and North Africa (MENA) has been less affected during the financial crisis, especially IBs. *Sharia* governs a Muslim's life, promotes fairness, welfare, and worship for God (Haniffa & Hudaib, 2007). Therefore, at the plus side, IBs are expected to follow *Sharia* rules, fulfil their fiduciary duties toward depositors[7] and shareholders, and less likely to manage earnings (Haniffa & Hudaib, 2007; McGuire et al., 2012). On the other side, while IBs realize their priority over CBs in a Muslim masses who prefer them on the religiosity basis (Haniffa & Hudaib, 2007), they might be less aware of the quality of earnings and engage more in earnings management (Safieddine, 2009).

According to the prevailing economic conditions, both CBs and IBs use discretion in accruals estimation and timing, such as loan loss provisions (LLP) and/or realized securities gains and losses (RSGL). However, the distinctive characteristics of IBs have raised a question about to what extent, if any, the regular BOD mitigates or deters earnings management, and whether the role of BOD in constraining earnings management is different between listed IBs and CBs.

This paper examines the role of BOD size and composition in mitigating earnings management within the context of IBs and CBs in MENA for the period from 2006 till 2014. By using robust OLS regression on all available data of 78 CBs and 26 IBs from 12 countries, our findings are presented in two levels. First, we find for the whole MENA banking sector that independent directors and affiliated directors play a significant role in mitigating earnings management. In addition, unlike the extant literature on developed countries, BOD size and duality have no significant

[7] Depositors in Islamic banks are called investment accounts holders (IAHs). These accounts are fully under the control of IB managers. Safieddine (2009) decomposes IAHs to restricted investment accounts holders (RIAHs) and unrestricted investment accounts holders (URIAHs). In the case of RIAHs, investments are restricted upon depositor preferences rather than IBs. Thus, it is highly secured and returns are relatively safe, which mitigates the agency problems. The contrary view is regarded to the URIAHs, wherein deposits are not secured and IBs managers have complete latitude to use these funds, and therefore owners do not have the ability to participate in managing their own funds, which aggravates agency problem.

effect on earnings management. Second, distinguishing between CBs and IBs, we find that a larger BOD and affiliated directors are positively and significantly associated with earnings management at IBs. We also find that the existence of independent directors at IBs has a more negative effect on earnings management than independent directors at CBs.

This study contributes to the extant literature on the relationship between BOD characteristics and earnings management in many ways. First, it builds on the extant literature that documents the importance of independent directors in mitigating earnings management in developed countries, and extends these findings to an emerging countries contexts, the MENA region. Second, our study shows that the effect of independent directors spills to subsectors, especially to IBs. Third, our study also corroborates prior studies that highlight the prominence of IBs loans quality and credit policy (Abdelsalam et al., 2016; Elnahass et al., 2014; Quttainah et al., 2013). Fourth, our study gives evidence that confirms the use of earnings management by IBs and CBs. Fifth, this study attempts to explain how the role of independent and affiliated directors might differ in constraining earnings management behaviour. Finally, this study accentuates the importance of religious social norms in addressing agency problems and fostering the others' interests.

The remainder of the paper is organized as follows. Section 2.2 describes literature review and hypotheses. Section 2.3 describes data and methodology. Section 2.4 presents the results and discussions. And section 2.5 presents conclusions.

2.2. Literature review and hypotheses development

2.2.1. Board of directors size

A larger BOD is an important governance characteristic that enables allocating more duties to a larger number of directors, allows them to specialize, and be more able to handle more complex matters, which ultimately leads to better monitoring to the discretionary decisions of bank managers (Ahmed & Duellman, 2007; Boone, Casares Field, Karpoff, & Raheja, 2007). On the other hand, a larger BOD may plummet the coordination, exacerbate the free riding problem, and

increase decision-making time (Jensen, 1993). However, for any entity, in order to maximize the value of BOD size, a balance between effectiveness (monitoring and advising) and efficiency (coordination, control, and decision making) must be considered (Andres & Vallelado, 2008). In addition, BOD size is determined according to the functioning of its directors in dealing with different (non)pecuniary decisions, the level of information asymmetry, and the level of regulators monitoring. Along with these deep-seated aspects in banks, they usually have more subsidiaries and/or overseas branches. This per se entails banks to integrate more representatives to coordinate and monitor its subsidiaries and/or branches (Adams & Mehran, 2012). For instance, Coles, Daniel, & Naveen (2008) find that larger BOD are more beneficial in more complex firms (i.e. banks). Thus, the idiosyncratic nature of banks perhaps calls for larger BOD.

In the MENA banks, however, a board chairman is usually one of an influential tribe (e.g. royal families) or bank's founders families (Chahine, 2007). This is likely to increase the number of directors that might be hired based on personal relationships rather than their efficiency in monitoring earnings management. In addition, the chairman and/or founders families usually have control of five percent or more of outstanding shares, which enables them to hire representatives on bank BOD. Those representatives directors may work in the best interests of those controlling shareholders rather than monitoring and controlling earnings management. Within this system, the symbolic directors may dominate the BOD, which in turn increases the BOD size, but on the other hand, lessens their ability to monitor earnings management. So, we propose the following:
H1a: The BOD size positively affects earnings management in MENA banks.

From an agency theory perspective, the main role of a BOD is to ensure that manager behaviour is aligned with the shareholders' best interests (Cuevas-Rodríguez, Gomez-Mejia, & Wiseman, 2012). In IBs this relationship is more complicated than in CBs (Beck et al., 2013; Safieddine, 2009) for many reasons. First, the equity-like nature of IAHs calls the BOD to exercise more scrutiny over manager decisions, since those investors have no right to manage their funds. Second, IBs are confronted with additional risk which is termed displaced

commercial risk (DCR).[8] This risk shifts part of shareholders' earnings to IAHs to mimic interest rate thresholds by CBs, and to prevent an aggressive deposits withdrawals (Daher, Masih, & Ibrahim, 2015). Third, IBs set aside profit equalization reserves (PER) to smooth out profits distribution to IAHs from good to bad performance periods (Mollah & Zaman, 2015). In the case of imminent financial turmoil, PER is fully under IB managers control, which might be another way of earnings management (Archer & Abdel Karim, 2006). Thus, we expect larger BOD at IBs to be less effective in monitoring earnings management, and thus we hypothesize:

H1b: The predicted positive effect of larger BOD on earnings management is higher for IBs than CBs.

2.2.2. Board of directors independence

The extent to which directors intervene in monitoring earnings management largely depends on their level of independence from management. Independent directors are less likely to have conflicts of interests with management (Andres & Vallelado, 2008), and therefore are more able to control managers' accrual decisions. Davidson, Goodwin-Stewart, & Kent (2005, p. 244) define BOD independence as "the extent to which a board is comprised of non-executive directors who have no relationship with the firm beyond the role of board director". While many regulatory and standards-setters clearly define independent directors characteristics (e.g. NYSE 303A.02), numerous literature contravenes the conditions set forth to curtail the definition to the affiliated directors. Those might currently have no current executive position but may have another relationship with the company

However, independent directors are less controlled by management, more diversified in term of expertise, more able to appeal external resources through

[8] Displaced commercial risk (DCR): "refers to the risk arising from assets managed on behalf of IAH which is effectively transferred to the IBs own capital because the IBs follows the practice of foregoing part or all of its *Mudarib* share of profit on such funds, when it considers this necessary as a result of commercial pressure in order to increase the return that would otherwise be payable to the IAH" (Islamic Financial Services Board, 2005 p.19).

their connections with external environment (Peng, 2004), and their reputation is more prone to a severe impact in case of financial failure (Srinivasan, 2005). The extant literature on developed countries has documented the negative relationship between earnings management and the independent directors (Xie, Davidson, & Dadalt, 2003). Even in less developed countries, Chen, Elder, & Hsieh (2011) find that Taiwanese firms employ less earnings management after corporate governance reforms, especially independent directors.

Ex ante we believe that the above arguments spill to the banking sector, but it is worth mentioning that the BOD independence for banks is more complicated than for non-financial firms. First, unlike non-financial firms, banks normally nominate or represent best customers as BOD members (Adams & Mehran, 2012). While this practice according to the Sarbanes Oxley Act (SOX) 2002 may impede the independence of those directors, it is argued that this might be a beneficial practice for the banking sector (Adams & Mehran, 2012). Second, since the strict regulatory oversight over the banking sector may control earnings management, the independent directors' effect on earnings management might be minimal (Booth, Cornett, & Tehranian, 2002).

In the MENA region, the prominent traditional values and norms (e.g. political ties, influential tribes, Sheikhdom system. etc.) might influence BOD independence (Chahine & Tohmé, 2009). In addition, independent directors are usually executives or CEOs in other firms and/or banks. From upper echelons theory perspective, those directors may facilitate earnings management of their fellow managers (He & Yang, 2014). Within such system, it is difficult to predict how independent directors affect earnings management. Yet, in these economies, reputation of independent directors is the sine qua non of holding multiple directorship in other entities. Stakeholders as well prefer such prudent directors to supplant the weak regulatory framework (Chahine & Tohmé, 2009). So, we propose the following:

H2a: BOD independence negatively affects earnings management in MENA banks.

CBs and IBs are highly leveraged; that is, bank assets are mainly financed by debt rather than equity. Debt levels might spur bank managers to reduce discretion decisions, such as earnings management (Agrawal & Knoeber, 1996; Jensen,

1986). Bankruptcy also is likely to increase with increased debt, which hinders overconfident discretionary decisions (Arping & Sautner, 2010). Recent evidence suggests that effective corporate governance structure (e.g. BOD independence) may substitute debt as a mechanism of monitoring managers. He & Yang (2014) as well find that firms with well-designed corporate governance have lower debt and in turn lower earnings management.

Debt structure at IBs is quite different from debt structure at CBs. For instance, PLS contracts are used as a source of funds rather than interests-based deposits. These contracts offer sharing profits or losses between financers (IAHs) and entrepreneurs (IBs). Profits, or even losses, are adjustable based on bank performance (Abedifar, Molyneux, & Tarazi, 2013). IBs according to *Sharia* are forbidden to trade conventional debt instruments such as fixed rate bonds and certificate of deposits (CDs), which constrains debt levels (Elnahass et al., 2014). These debt attributes at IBs indicate that they are less leveraged than CBs. Thus, we expect that independent directors at IBs are more motivated to monitor earnings management in order to make up for the lower levels of leverage which might control the discretionary decisions. This leads to the following hypothesis:

H2b: The predicted negative effect of BOD independence on earnings management is higher for IBs than CBs.

2.2.3. Affiliated board of directors

Recall from the previous section, that affiliated directors are those who currently have no current executive positions, but their role at the bank extends the role as board directors, such as bank's lawyer, family relationship with executives, interlocking board memberships, etc. (Peng, 2004). Distinguishing whether directors are affiliated or independent is complex and depends mainly on the classification of each respective bank. While the former are mainly in charge to monitor bank manager decisions, the latter might have another role such as a political role. Moreover, affiliated directors might sound beneficial to the BOD since they are more familiar with and actively involved in bank operations, especially if they previously were executives and/or having strong relationships with the current internal employees. This kind of relationships, on the other hand, may spur affiliated directors to facilitate opportunistic earnings management of their

fellow CEOs to exploit bank resources to self-serving interests. This conflict of interests may exacerbate the information asymmetry and control the contents and the timing flow of information to other directors. Given these complexities, Booth et al. (2002) find that the monitoring role of affiliated directors is minimal in regulated sectors such as utilities and banking sectors. They attribute these findings to the strict regulatory oversight which may supplant the monitoring role of BOD.

The banking sector in the MENA region is no exception as well. The strong relationship with influential families and political parties is prominent in an environment where the tribal customs prevail. As such, more affiliated and symbolic directors are expected to sit in the BOD, while they are less effective in monitoring earnings management. Thus, we hypothesize as follows:

H3a: Affiliated directors positively affect earnings management in MENA banks.

While the above mentioned argument might be generalized to the affiliated directors at CBs, affiliated directors at IBs might make a choice so as to conform to the Islamic tenet and thus promote religious social norms that are prevailed in IBs. As indicated in Figure 1.1, the moral accountability plays a crucial role in the corporate governance framework at IBs. Sanctions for failure or misconduct of individuals in such environment are largely coming from the prevailed social networks (e.g. religion) rather than the legal system (Cialdini & Goldstein, 2004). Thus we hypothesize as follows:

H3b: The predicted positive effect of affiliated directors in earnings management is higher in CBs than IBs

2.2.4. CEO duality

Agency theory predicts that CEO duality exacerbates agency problems since it facilitates manager's opportunism (Chahine & Tohmé, 2009). Consistent with the agency theory, many corporate governance guidelines (e.g. OECD principles of corporate governance 2004) assume that a BOD is less likely to monitor CEO's decisions when duality exists.

In this context, the MENA region is no exception. But we augment that the anecdotal evidence indicates that the bailout policies at MENA countries are influenced by political conditions, such as repayment of insolvent debts by the government as royal grants. These policies might be viewed as a deliberate attempt to payback of loans to banks which are clandestinely controlled by royal or other influential families. Additionally, the hierarchical authority stewardship style in the MENA region induces CEOs to experience nepotism when selecting senior levels management (Chahine & Tohmé, 2009). Hubris theory states that a CEO who also serves as a chairperson is more likely to be overconfident in the discretionary decisions (Li & Tang, 2010). Thus we hypothesize as follows:

H4: CEO duality increases earnings management in both CBs and IBs. [9]

2.3. Data and methodology

2.3.1. Data

In order to test our hypotheses, we use listed CBs and IBs in stock markets of MENA countries for the period from 2006 till 2014. The initial countries under the study are these listed in the World Bank website under the MENA region, [10] where a majority based IBs are listed. Banks' names and their classifications to CB or IB are obtained from Zawya database. All (non)financial data are hand-collected from the annual reports available on the web site of each respective bank.

Our selection process is based primarily on two criteria. First, the availability of annual reports for the selected banks for at least five years during the study period (2006-2014). Second, during these years the selected banks must follow International Financial Reporting Standards (IFRS). Based on these criteria, our data is available for 12 MENA countries. These data are partitioned into 78 CBs and 26 IBs, yielding 613 unbalanced bank-year observations including outliers. While these outliers may have potential effect on our results, we use Cook's

[9] Due to a few duality observations in IBs, we base our conjecture on the whole sample (H3).
[10] http://www.worldbank.org/en/region/mena

(1977) distance criterion to remove the influential observations.[11] Further, we excluded 342 observations with missing values due to the availability of data on BOD size and composition, leading to a final sample of 271 observations distributed on 77 banks (19 IBs & 58 CBs) across 11 countries. The sample size constitutes a limitation for this study. Yet, it represents all available data of listed CBs and IBs in each MENA country. The final sample distribution is presented in Table 2.1.

Table 2.1. Sample distribution by bank type and country

Country	IBs	CBs	Total banks	IBs (%)	CBs (%)	(%) by country
Bahrain	6	7	13	46.20	53.80	12.50
Egypt	0	1	1	0.00	100.00	0.96
Iraq	0	1	1	0.00	100.00	0.96
Jordan	2	13	15	13.30	86.70	14.40
Kuwait	4	6	10	40.00	60.00	9.60
Lebanon	0	9	9	0.00	100.00	8.70
Oman	0	7	7	0.00	100.00	6.70
Palestine	1	4	5	20.00	80.00	4.80
Qatar	3	6	9	33.30	66.70	8.70
Saudi Arabia	5	7	12	41.70	58.30	11.50
Syria	0	3	3	0.00	100.00	2.90
United Arab Emirates	5	14	19	26.30	73.70	18.30
Total	26	78	104	25.00	75.00	100.00

[11] The boxplot and normality tests of the main variables show 9 outliers. However, we winsorize all variables at the top and bottom 1% of observations and results are robust to these changes.

2.3.2. Models

2.3.2.1. Measures of earnings management

All bank managers unwaveringly use their own latitude in provisioning decisions. Consequently, the challenge is to decompose LLP and RSGL into (non)discretionary components. LLP is created to adjust loan loss reserve (LLR) balance to face expected future loan losses. The highly predicted loan losses represent the potential uncontrollable default risk, the non-discretionary loan loss provisions (NLLP). The drastic surplus/deficit of LLR over/under NLLP is the discretionary loan loss provisions (DLLP), which represents earnings management (Cornett et al., 2009; Elnahass et al., 2014). However, consistent with Beatty et al. (2002) and Kanagaretnam et al. (2010), our proxies to NLLP are nonperforming loans, net loans charge-off, and different categories of loans portfolio. Specifically, we use the following model:

$$LLP_{it} = \alpha + \beta_1 BEGLLR_{it} + \beta_2 LASSET_{it} + \beta_3 LCO_{it} + \beta_4 CHLOANS_{it}$$

$$+ \beta_5 NPL_{it} + \beta_{6\text{-}11} L\_CATEGORE_{it} + \varepsilon_{it} \quad (1)$$

The variables in the model 1 are operationally defined in Table 2.2. The error term from model 1 represents the DLLP which remains after controlling all (un)expected losses. A positive relationship is expected between LLP, LCO and NPL. Finally, similar to that of Cornett et al. (2009), the error term is standardized by total asset as $DLLP_{it} = (\varepsilon_{it} \times LOANS_{it})/ASSETS_{it}$ where LOANS is total loans and ASSETS is total assets.

In addition to LLP, bank managers may resort to RSGL (Cornett et al., 2009). However, in order to find the discretionary realized security gains and losses (DRSGL), we follow Beatty et al. (2002). Specifically, we use the following model:

$$RSGL_{it} = \alpha + \beta_1 LASSET_{it} + \beta_2 URSGL_{it} + \varepsilon_{it} \quad (2)$$

The variables in model 2 are operationally defined in Table 2.2. RSGL can be split into three parts, namely (i) the actual amount of gains or losses the bank reports from a real selling transactions, (ii) the predicted gains or losses from selling the remaining AFS securities that reflects the real level of RSGL, and (iii) the

discretionary portion of RSGL which is subject to a discretion of bank managers (i.e. DRSGL). The error term of model 2 is the DRSGL. We expect a positive relationship between RSGL and URSGL. Table 2.3 depicts the regression results for model 1 and 2 in panel A and B, respectively. Consistent with our expectation, the results in panel A indicate that LLP is significantly and positively related to LCO and NPL. Panel B indicates that RSGL is significantly and positively related to URSGL only for IBs. However, the trade-off between recognizing RSGL and/or LLP identifies the magnitude and direction of earnings management; that is, manage earnings upward by higher levels of earnings management through recognizing more RSGL and less LLP and vice versa (Cornett et al., 2009). Consequently, the earnings management is defined as follow:

$$EM_{it} = DRSGL_{it} - DLLP_{it} \quad (3)$$

Where EM is the discretionary part of LLP and RSGL. DRSGL is the error term from model 2. DLLP is the error term from model 1.

Table 2.2. Definitions of variables used to measure earnings management

Variable	Definition
LLP	Loan loss provisions account as percentage of total loans.
BEGLLR	Beginning loan loss reserves as percentage of total loans.
LASSET	The natural log of total assets.
LCO	The net loans that have been written-off after deducting any recoveries (net loans charge-off) as percentage of total loans.
CHLOANS	Change in total outstanding loans at the end of year *t.*
NPL	The loans that are past due for more than 90 days and still accruing interests (nonperforming loans) as percentage of total loans.
L_CATEGORE	The main categories of loans portfolio (viz., individual, other banks, corporate, governmental, and other loans)
RSGL	Realized securities gains and losses as a percentage of total assets (includes realized gains and losses from AFS and HTM securities).
URSGL	Unrealized securities gains and losses as a percentage of total assets (includes only unrealized gains and losses from AFS securities).

Table 2.3. Regression results to measure earnings management

Panel A: regression results for variables used to measure DLLP eq. (1).					
	(1) LLP	(2) LLP	(3) LLP	(4) LLP	(5) LLP
BEGLLR	-0.034***	-0.0461***	0.0478	-0.0355***	-0.0392***
	(-3.54)	(-4.25)	(1.25)	(-3.04)	(-5.29)
LASSET	0.0027***	0.00312***	0.00108	0.00171***	0.00262***
	(5.21)	(4.94)	(0.73)	(2.82)	(8.37)
LCO	0.0950***	0.105*	0.115*	0.0572***	0.104***
	(7.58)	(7.38)	(1.80)	(3.24)	(6.26)
CHLOANS	-0.0022**	-0.00330**	-0.00036	-0.0037***	-0.002***
	(-2.15)	(-2.50)	(-0.17)	(-3.18)	(-2.74)
NPL	0.049 ***	0.0549***	0.0445***	0.0758***	0.0432***
	(9.77)	(9.37)	(3.22)	(11.65)	(14.33)
INDLOANS	0.00268	-0.0324***	0.00298	-0.0166***	0.00250
	(0.92)	(-4.13)	(0.53)	(-3.04)	(1.63)
CORPLOANS	0.00282	-0.0295***	-0.00467	-0.0153***	0.00065
	(1.02)	(-3.82)	(-1.07)	(-2.89)	(0.46)
BANKLOANS	0.00095	-0.0309***	-0.00576	-0.0184***	0.00083
	(0.32)	(-3.87)	(-0.95)	(-3.34)	(0.50)
GOVLOANS	-0.00426	-0.0373***	-0.00555	-0.0211***	-0.00478**
	(-1.18)	(-4.47)	(-1.08)	(-3.43)	(-2.55)
REALELOANS	0.00165	-0.0302***	-0.00117	-0.0207***	0.00279
	(0.50)	(-3.74)	(-0.24)	(-3.57)	(1.58)
OTHERLOANS	0.00206	-0.0259***	-0.00323	-0.0145**	0.00113
	(0.51)	(-2.83)	(-0.56)	(-2.14)	(0.50)
Year and Country	Yes	Yes	Yes	Yes	Yes
N	560	436	123	273	285
F-stat	26.490***	21.640***	7.870***	37.770***	40.560***
R^2	0.338	0.328	0.499	0.578	0.599

This table presents our OLS robust regression results to measure DLLP. For the variables definitions see Table 2.2. In column 1 we present the regression results for all banks. Column 2 and 3 depict the results for CBs & IBs respectively. Column 4 presents the results for all banks when the residuals (DLLP) are above zero. Column 5 presents the results for all banks when the residuals (DLLP) are below zero. For each variable, both the beta coefficient and *t* statistics (in parentheses) are reported. ***, **, * indicate significance level at the 1%, 5%, and 10% respectively (two-tailed).

Panel B: regression results for variables used to measure DRSGL eq. (3).					
	(1) RSGL	(2) RSGL	(3) RSGL	(4) RSGL	(5) RSGL
LASSET	0.0005*** (4.55)	0.0004** (5.12)	0.00105 ** (2.04)	0.00001 (0.06)	0.00024*** (8.78)
URSGL	-0.00671 (-1.37)	-0.005 (-1.06)	0.228*** (6.03)	-0.0487*** (-3.35)	-0.0043 (-1.57)
Year and country	Yes	Yes	Yes	Yes	Yes
N	837	634	203	416	420
F-stat	5.690***	5.470***	11.120***	5.850***	11.320***
R^2	0.043	0.061	0.188	0.112	0.182

This table presents our OLS robust regression results to measure DRSGL. For the variables definitions see Table 2.2. In column 1 we present the regression results for all banks. Column 2 and 3 depict the results for CBs & IBs respectively. Column 4 presents the results for all banks when the residuals (DRSGL) are above zero. Column 5 presents the results for all banks when the residuals (DRSGL) are below zero. For each variable, both the beta coefficient and *t* statistics (in parentheses) are reported. ***, **, * indicate significance level at the 1%, 5%, and 10% respectively (two-tailed).

2.3.2.2. Measures of explanatory variables

BOD size: We include B_SIZE to represent the number of BOD members at the end of the fiscal year.

BOD independence: To ensure BOD independence, we classify the BOD members into inside, affiliated, and independent directors. The directors who have no material interests with the bank except their current position as BOD member are classified as independent directors. Thus, we add B_IND as the percentage of total independent directors to the total BOD size to proxy for board independence.

Affiliated directors: After considering independent directors, we classify the remaining directors into inside and affiliated. Inside directors are currently working as bank executives. Affiliated directors have no current executive position, but have other relationships or worked as executives. We therefore add NONEXE_B as the percentage of total affiliated directors to the total BOD size.

CEO duality: We include DUAL as a dummy variable that equals 1 if a CEO is also the chairperson of BOD, and 0 otherwise.

Islamic bank: Due to the unique attributes of IBs which might impact the relationship between the BOD and earnings management, we add a dummy variable that equals 1 if the bank is an Islamic bank, and 0 otherwise.

2.3.2.3. Control variables[12]

Regulatory capital management motive: Ahmed, Takeda, & Thomas (1999) and Shrieves & Dahl (2003) argue that banks may use earnings management to meet the capital requirement (Tier I) without resorting to external financing. Since accruals increase primary capital, we expect a positive relationship between earnings management and tier I capital ratio. Thus, we use the lagged tier I capital ratio to control for regulatory capital management motive.

Income smoothing motive: Bank managers may use LLP and/or RSGL to disguise the effect of yearly earnings volatility to sustain a consistent upward pattern of the reported earnings (Burgstahler & Dichev, 1997). We expect a positive relationship between earnings management and current year net income before taxes and discretionary items. Thus, we use the current year net income (NI_{it}) before taxes and discretionary items to proxy for the income smoothing motive.

Signalling motive: The discretionary items of income statement, balance sheet, and related footnotes can be used as signalling tools to convey private information to investors (Wahlen, 1994). However, since the view that accruals affect the coming years reported information (e.g. LLR and retained earnings), we expect a positive relationship between earnings management and the signalling motive. So, we use NI_{it+1} and NI_{it+2} before taxes and accruals as a proxy for the signalling motive.

Merger and/or acquisition motive: Many prior studies have examine the effect of M&A transactions on earnings management at acquiring firms (Erickson & Wang,

[12] Bank size and big 4 external auditing firms were excluded as control variable, since the banks in our sample are relatively large with a total assets size of more than $1 billion and all of them are audited by the big 4 audit firms.

1999; Jeong & Bae, 2013; Louis, 2004) and at targeted firms (e.g. Anagnostopoulou & Tsekrekos, 2013). Unanimously, these research studies find that the firms who are involved in M&A transactions manage earnings to buttress their financial position. We also expect a positive relationship between the merger motive and earnings management. Given this reasoning, we add MER as a dummy variable that equals 1 if there are M&A transactions in each bank, and 0 otherwise.

Sharia Supervisory Board:[13] IBs, unlike CBs, have to establish an additional in-house corporate governance layer, namely, the SSB. This board must be independent and encompasses S*haria* scholars, imbued with piety and righteousness (Elnahass et al., 2014). This board monitors the adherence of financial transactions to *Sharia* which ipso facto controls earnings management (Quttainah et al., 2013). Thus, we add a dummy variable that equals 1 if SSB exists, and 0 otherwise.

2.3.2.4. Empirical model

To investigate whether the BOD affects earnings management at the MENA banking sector, we regress the earnings management measure on the BOD characteristics as follows:

$$EM_{it} = \alpha + \beta_1 B\_SIZE_{it} + \beta_2 B\_IND_{it} + \beta_3 NONEXE\_B_{it} + \beta_4 DUAL_{it} + \beta_5 TIER1_{it-1} + \beta_6 NI_{it} + \beta_7 NI_{it+1} + \beta_8 NI_{it+2} + \beta_9 MER_{it} + \beta_{10} SSB_{it} + \beta_{11} IB_{it} + \varepsilon_{it} \quad (4a)$$

To examine this relationship within CBs and IBs, we add IB and interaction variables as follows:

$$EM_{it} = \alpha + \beta_1 B\_SIZE_{it} + \beta_2 B\_IND_{it} + \beta_3 NONEXE\_B_{it} + \beta_4 DUAL_{it} + \beta_5 TIER1_{it-1} + \beta_6 NI_{it} + \beta_7 NI_{it+1} + \beta_8 NI_{it+2} + \beta_9 MER_{it} + \beta_{10} SSB_{it} + \beta_{11} IB_{it} + \beta_{12} B\_SIZE_{it} * IB_{it} + \beta_{13} B\_IND_{it} * IB_{it} + \beta_{14} NONEXE\_B_{it} * IB_{it} + \varepsilon_{it} \quad (4b)$$

The variables in Model 4 (a&b) are operationally defined in Table 2.4 . Finally, we use robust OLS which according to Hamilton (1991) outperforms OLS regression in many facets. First, this regression runs OLS and Cook's (1977) distance

[13] We include CBs with Islamic windows only if they have to establish SSB according to the stipulated rules in each respective country.

criterion to remove any influential observation from the sample (Cornett et al., 2009) when Cook's distance is greater than 1. Second, when Cook's distance is less than 1, robust OLS runs iteration process begins by computing weights of observations based on its absolute residual values. Third, these weights are measured based on two weight functions, namely, Huber and Biweighting.[14] Both functions are used in order to address the problem of yielding multiple solutions and the severe impact of extreme outliers, respectively. To conclude, using robust OLS solves the problem of OLS which fits the outliers at the expense of the other observations by rather removing them or down-weight them with increased absolute residual values. Moreover, we use the robust OLS regression instead of fixed and random effect regressions since the results of R^2 of the former were higher.

Table 2.4. Definitions of chapter 2 variables

Variable	Definition
EM	Is the discretionary part of loan loss provisions and realized securities gains and losses.
B_SIZE	Is the number of BOD members at the end of the fiscal year.
B_IND	Is the percentage of external directors within the BOD.
NONEXE_B	Is the percentage of affiliated directors within the BOD.
DUAL	Is a dummy variable that equals 1 if the CEO/Chairman exists, and 0 otherwise.
$TIER1_{it-1}$	Is the lagged tier 1 capital ratio to risk weighted assets.
NI_{it}	Is the current year net income before taxes and accruals deflated by total assets.
NI_{it+1} and NI_{it+2}	Are one and two years ahead current year net income before taxes and accruals deflated by total assets.
MER	Is a dummy variable that equals 1 if any M&A has occurred in bank i from 2006 - 2014, and 0 otherwise.
SSB	Is a dummy variable that equals 1 if the SSB exists, and 0 otherwise.
IB	Is a dummy variable that equals 1 if the bank is an Islamic bank, and 0 otherwise.

[14] For more information see Hamilton (1991).

2.4. Results

2.4.1. Descriptive statistics and correlation

Table 2.5 presents descriptive statistics for the full sample. In Table 2.6 we present the *t*-test and Wilcoxon (***z-score***) test[15] for differences in mean and median, respectively, between IBs and CBs. Earnings management (EM) mean for the full sample (CBs sample, IBs sample) is 0.1% (0.1%; 0.3%). Interestingly, this variable is positively skewed which indicates that bank managers are generally tilted toward using income-increasing earnings management.

We also present the descriptive statistics for the empirical model variables. B_SIZE mean for the full sample (CBs sample; IBs sample) is 9.52 (9.46; 9.74), B_IND is 40.7% across full sample and for both sectors, NONEXE_B is 55.3% (55.1%; 55.4%), and DUAL 10.9% (12.4%; 5.7%). Except for B_IND, the *t*-test results for these variables indicate significant differences between IBs and CBs counterparts. The results of the control variables indicate that $TIRE_{it-1}$ mean for full sample (CBs sample; IBs sample) is 17.6% (16.2%; 22.4%), NI_{it} and NI_{it+1} are 2.5% (2.6%; 2.1%), NI_{it+2} is 2.3% (2.6%; 1.5%), and MER is 19.1% (16.2%; 28.7%). All these variables are significantly different between CBs and IBs. Table 2.7 presents Pearson (below the diagonal) and Spearman (above the diagonal) pairwise correlations of the variables included in model 4a. The variable IB on both correlation matrices is positively and significantly correlated with the earnings management variable. This is contrary to the prior literature findings which indicates that IBs employ less earnings management (e.g. Quttainah et al., 2013). This could indicate that IBs might manage earnings to pay comparable returns to IAHs to avoid aggressive deposits withdrawals. We also find that B_SIZE and NONEXE_B are negatively and significantly correlated with earnings management. B_IND and DUAL are correlated insignificantly with earnings management. Correlation values indicate no existence of multicollinearity between variables. Furthermore, we perform the variance inflation factor (VIF) analysis and all scores are below the recommended cut-off of 10 (highest 2.34).

[15] Our descriptive statistics and related discussions are based on the *t*-test results.

Table 2.5. Descriptive statistics

Variable	N	Mean	Median	Std. dev.	Min.	Max.
EM	613	.001	.000	.011	-.103	.132
B_SIZE	601	9.521	9.00	1.75	5.00	15.00
B_IND	381	.407	.400	.261	.000	1.00
NONEXE_B	469	.553	.571	.313	.000	1.00
DUAL	607	.109	.000	.312	.000	1.00
IB	613	.233	.000	.423	.000	1.00
$TIER1_{it-1}$	521	.176	.156	.086	.000	1.00
NI_{it}	535	.025	.024	.017	-.076	.154
NI_{it+1}	611	.025	.023	.014	-.076	.184
NI_{it+2}	457	.023	.023	.015	-.034	.183
MER	613	.191	.000	.393	.000	1.00
SSB	613	.382	.000	.486	.000	1.00

This table presents the descriptive statistics results for the full sample of main empirical model variables.

Table 2.6. Two samples t-test and z-score results.

	Class	N	Mean	Median	Std. dev	S.E. mean	*t*-test ***z-score***
EM	IBs	143	0.003	0.001	0.008	0.001	-2.370**
	CBs	470	0.001	-0.000	0.012	0.001	***-4.389****
B_SIZE	IBs	140	9.736	9.500	1.360	0.115	-1.950*
	CBs	461	9.456	9.000	1.850	0.086	***-1.494***
B_IND	IBs	90	0.407	0.444	0.264	0.028	-0.006
	CBs	291	0.407	0.400	0.260	0.015	***-0.229***
NONEXE_B	IBs	115	0.554	0.545	0.313	0.029	-2.309**
	CBs	354	0.551	0.571	0.329	0.017	***-2.251****
DUAL	IBs	140	0.057	0.000	0.233	0.019	2.691***
	CBs	467	0.124	0.000	0.330	0.015	***2.234****
$TIRE1_{it-1}$	IBs	120	0.224	0.185	0.141	0.013	-4.795***
	CBs	401	0.162	0.153	0.053	0.003	***-5.280****
NI_{it}	IBs	124	0.021	0.018	0.024	0.002	2.199**
	CBs	411	0.026	0.024	0.014	0.001	***4.606****
NI_{it+1}	IBs	143	0.021	0.019	0.023	0.023	2.597***
	CBs	468	0.026	0.024	0.026	0.014	***4.839****
NI_{it+2}	IBs	105	0.015	0.017	0.015	0.001	6.307***
	CBs	352	0.026	0.024	0.015	0.001	***6.469****
MER	IBs	143	0.287	0.000	0.434	0.038	-3.006***
	CBs	470	0.162	0.000	0.369	0.017	***-3.328****

This table present two sample t-test and z-score results. ***, **, * indicate significance level at the 1%, 5%, and 10% respectively (two-tailed).

Table 2.7. Correlation matrix

Correlation matrix: Pearson correlations (below the diagonal) and Spearman correlations (above the diagonal)

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. EM	**1**	.01	-.07	-.02	.03	.18**	.07	-.25**	-.11**	-.18**	.06	.10***
2. B_SIZE	-.09**	**1**	.15**	-.15**	.06	.06	-.08*	-.07	-.09***	-.06	.06	-.01
3. B_IND	-.07	.15***	**1**	-.67**	.00	.01	-.21**	-.14***	-.11***	-.04	.04	.14**
4. NONEXE_B	-.13***	-.10**	-.69***	**1**	-.13**	.01	.18**	.21**	.20**	.22**	-.02	-.10***
5. DUAL	-.01	.06	-.01	-.12***	**1**	-.09***	-.12***	-.18**	-.17**	-.14**	.03	-.12***
6. IB	.14***	.07	.00	.01	-.09**	**1**	.23**	-.20**	-.20**	-.30**	.12**	.62**
7. $TIER1_{it-1}$	.13***	-.08*	-.24***	.13***	-.10**	.31***	**1**	.13***	.06	-.02	.01	.08*
8. NI_{it}	-.25***	-.06	-.15***	.16***	-.10**	-.16***	.14***	**1**	.70**	.61**	-.15**	-.08*
9. NI_{it+1}	-.09**	-.09**	-.13***	.15***	-.09*	-.17***	-.01	.64***	**1**	.72**	-.14**	-.09***
10. NI_{it+2}	-.19**	-.06	-.01	.15***	-.09***	-.31***	-.14***	.54***	.67***	**1**	-.23**	-.14**
11. MER	.06	.05	.04	-.02	.03	.14***	.01	-.16***	-.15***	-.25***	**1**	.07*
12. SSB	.06	.01	.13**	-.10**	-.12***	.62***	.15***	-.11**	-.12***	-.21***	.07*	**1**

This table presents correlation matrix Pearson correlations (below the diagonal) and Spearman correlations (above the diagonal). ***, **, * indicate significance level at the 1%, 5%, and 10% respectively (two-tailed).

2.4.2. Robust OLS results, sensitivity analyses, and discussion

2.4.2.1. Robust OLS results

Table 2.8 presents the results for four robust OLS regressions for the empirical models 4 (a and b). Column 1 includes the regression for the whole banking sector in the MENA region, whereas column 2 split the sample into CBs and IBs. Further, in columns 3 and 4 we split the full sample into income-increasing (EM>0) and income-decreasing (EM<0)[16], respectively. All models are found to be highly significant according to the F-statistic.

In column 1, larger BOD and chairman duality have no significant effect on earnings management, so H1a and H3 are not supported. The results indicate that more independent directors seem to reduce earnings management, (β = -.0156, $p < 0.01$) which confirms hypothesis H2a. However, the results show that affiliated directors might play a significant role in constraining earnings management, which contradicts H3a. As such, there are perhaps grounds to believe that the presence of affiliated directors may play a key role in monitoring earnings management even in addition to the role that they play or the relationships they have with the bank in the MENA region.

column 2 shows that the coefficient of IB is significantly negative (β = -.0114, $p < 0.01$), which confirms the findings of Abdelsalam et al. (2016) and Quttainah et al. (2013).[17] Distinguishing between CBs and IBs, the results show that a larger BOD at IBs increases earnings management. That is, a one-unit increase in BOD size increases earnings management by .00125. In contrast, a one-unit increase in BOD size at CBs decreases earnings management by .0003, which confirms H1b for IBs only. Independent directors seem to decrease earnings management only at IBs, while this effect is insignificant at CBs, which partially confirms H2b. More specifically, a one-unit increase in BOD independence decreases earnings management at IBs by .0108. With regard to affiliated directors, our results

[16] We use the absolute values of income-decreasing earnings management.

[17] These results contradict our results in correlation matrix, Table 2.7, since these results represent the multivariate regression where each variable affects partially on the dependent variable, while correlation matrix gives univariate relationship.

indicate that affiliated directors are likely to have an insignificant effect on earnings management at CBs, whereas earnings management increases with more affiliated directors at IBs. This contradicts our conjecture in H3b for both subsectors, CBs and IBs; that is, the positive effect of affiliated directors seems to be more prominent at IBs even with the Islamic label of these banks.

Since bank managers might be more inclined to manage earnings upward or downward depending on the current and future performance, our results also are extended to an income-increasing and income-decreasing earnings management in columns 3 and 4 respectively. For CBs, the results in both models indicate that independent and/or affiliated directors seem to decrease income-increasing and income-decreasing earnings management, whereas BOD size seems to become insignificant when considering the directions of earnings management. With regard to IBs, the interaction variable IB*B_SIZE is significant in columns 3 and 4, but positive and negative respectively, which indicates that the effect of larger BOD on earnings management is likely to be varied according to the intent of managers to increase or decrease income. In contrast, having more independent directors is likely to alleviate earnings management when bank managers intend to manage earnings to increase income, whereas income-decreasing earnings management is likely to increase with more independent directors in the board of IBs. Affiliated directors seem to increase earnings management regardless of the direction of earnings management. Overall, consistent with García-Meca & Sánchez-Ballesta (2009), our results indicate that the sign of the earnings management might have significant effect on the role of corporate governance practices (e.g. BOD) in constraining earnings management.

Finally, with respect to the control variables, $TIER1_{it-1}$ is significantly positive in column 3, which confirms our conjecture. These results suggest that bank managers may opportunistically use income-increasing earnings management to fulfil the regulatory capital requirements. NI_{it} also is significant but negative in columns 2 and 3 indicating that banks with increased net income demand a lesser degree of earnings management to smooth out net income. NI_{it+1} in columns 2 and 4 is correlated positively and significantly with earnings management, which reveals the using of earnings management to convey signals about next year net income, whereas NI_{it+2} significantly decreases income-increasing earnings

management. The MER variable in column 4 is correlated positively with earnings management to decrease net income ($\beta = .00048$, $p<0.1$). This is consistent with Jeong & Bae (2013) findings which indicate that earnings management to decrease net income is likely to be used to increase the number of shares to the shareholders of the targeted firm. SSB is not likely to influence earnings management, which confirms Quttainah et al. (2013) findings on the role of SSB.

Table 2.8. Regression results

	(1) EM	(2) EM	(3) EM > 0	(4) AEM < 0
B_SIZE	-0.00048			
	(-0.90)			
B_IND	-0.0156***			
	(-2.92)			
NONEXE_B	-0.0167**			
	(-2.57)			
DUAL	0.00179	0.00104	0.00042	0.00076
	(1.02)	(0.92)	(0.33)	(1.33)
IB*B_SIZE		0.00125***	0.00074***	-0.00077***
		(4.88)	(3.23)	(-2.73)
(1-IB)*B_SIZE		-0.0003**	0.00009	0.00002
		(-2.17)	(0.55)	(0.03)
IB*B_IND		-0.0108***	-0.0089***	0.0116***
		(-7.01)	(-6.48)	(5.30)
(1-IB)* B_IND		-0.00255	-0.00846***	-0.00240**
		(-1.48)	(-4.56)	(-2.23)
IB*NONEXE_B		0.00330**	0.00242*	0.0146***
		(2.23)	(1.72)	(8.57)
(1-IB)* NONEXE_B		-0.00225	-0.0112***	-0.00256**
		(-1.43)	(-6.95)	(-2.44)
IB	-0.00163	-0.0114***	-0.0112***	-0.00761*
	(-0.70)	(-3.78)	(-3.99)	(-1.91)
$TIER1_{it-1}$	0.00555	0.00316	0.0219***	-0.00054
	(0.59)	(1.46)	(10.17)	(-0.35)
NI_{it}	-0.0769	-0.127***	-0.167***	0.00517
	(-0.36)	(-7.89)	(-8.28)	(0.56)
NI_{it+1}	0.0576	0.0283*	0.0043	0.0211*
	(0.46)	(1.71)	(0.25)	(1.77)
NI_{it+2}	-0.0331	0.0179	-0.0701***	0.00051
	(-0.35)	(1.12)	(-3.40)	(0.07)
MER	-0.00096	0.00086	-0.00008	-0.00048*
	(-0.48)	(1.63)	(-0.14)	(-1.75)
SSB	-0.0007	-0.0003	-0.00042	0.00019
	(-0.43)	(-0.54)	(-0.70)	(0.67)
Country and year	Yes	Yes	Yes	Yes
N	270	270	147	123
F-stat	2.756***	10.290***	16.350***	9.838***
R^2	0.175	0.234	0.422	0.337

This table presents OLS regression results on earnings management for the empirical model 4a and 4b. Column 1 presents regression results of model 4a. Column 2 presents regression after introducing interaction variables, model 4b. Column 3 presents regression results of model 4b when EM is intended to increase net income. Column 4 presents regression results of model 4b when EM is intended to decrease net income. For each variable, both the beta coefficients and t statistics (in parentheses) are reported. ***, **, * indicate significance level at the 1%, 5%, and 10% respectively (two-tailed).

2.4.2.2. Sensitivity analyses

Using the absolute value of earnings management

Consistent with prior literature (e.g. Davidson et al., 2005; Quttainah et al., 2013), we repeat our analysis reported in Table 2.8, column 2 by using the absolute value of earnings management (AEM) as dependent variable. Using AEM provides evidence on the earnings management magnitude rather than considering the intentions that might spur bank managers to indulge to this behaviour, which are very important determinants to explain the hypothesized arguments (Warfield, Wild, & Wild, 1995). The results in Table 2.9, column 1 indicate that (1-IB)*B_SIZE is no longer significant, whilst (1-IB)*B_IND and (1-IB)*NONEXE_B have become significant. One possible explanation for these changes is that independent and affiliated directors at CBs might concern about the aggregate as well as the sign or direction of earnings management (see: Table 2.8 columns 3 and 4). This result corroborates Amir, Einhorn, & Kama (2014) findings about the intention of managers to distort the absolute value of earnings management by using two components that affect net income in opposite directions. Specifically, they find that the disaggregated financial reporting might be beneficial to stakeholders (e.g. investors, BOD, etc.) when the accounting items are tightly interrelated by their effect on the reported earnings, but vary considerably in their sensitivity to earnings management as well as their signs.

Split earnings management to its components (DLLP and DRSGL)

Clinch & Magliolo (1993) suggest that commingling DLLP and DRSGL into one earnings management variable is not appropriate. Accordingly, in Table 2.9, columns 2 and 3, we split the earnings management variable into DRSGL and DLLP, respectively. In general, the results indicate that the former is more monitored than the latter from BOD. The rationale behind this result is that RSGL are larger in magnitude, less regulated and selling decisions of these securities are fully under the discretion of bank managers (Cornett et al., 2009). While lower regulatory oversight might spur bank managers to use RSGL to manage earnings, independent and affiliated directors might exercise more vigilant monitoring on recognizing gains (or losses) from these securities rather than LLP which is more

regulated even by supranational institutions such as the Basel Committee on Banking Supervision (BCBS). However, it is worth mentioning that IB*B_IND variable is changed to a positive effect on earnings management. This change may occur because the independent directors at IBs usually view estimating gains and losses from securities as *Sharia-compliant* transactions, and therefore SSB is in charge to monitor these transactions, especially to identify and pay the alms giving (Zakah).[18]

[18] Abdel Karim (1995, p 291) defines Zakah as: ''Zakah is alms giving and it is a duty on all Muslims to pay it. It is distributed to a group of eight specific classes of the more or less relatively poor. Its amount differs according to the type of business. For example, in trade (which includes Islamic banks) it is levied at the rate of 2.5% while in industry the rate is 10%."

Table 2.9. Robustness analyses

	(1) AEM	(1) DRSGL	(3) DLLP
DUAL	0.0005	-0.0002	-0.00009
	(0.64)	(-0.40)	(-0.11)
IB*B_SIZE	0.00178***	0.00093***	-0.00055
	(10.79)	(7.07)	(-1.19)
(1-IB)*B_SIZE	0.00004	-0.00018**	0.00007
	(0.40)	(-2.57)	(0.50)
IB*B_IND	-0.00588***	0.00875***	0.00250
	(-5.92)	(11.07)	(1.43)
(1-IB)*B_IND	-0.00454***	-0.00204**	-0.00143
	(-4.13)	(-2.33)	(-0.85)
IB*NONEXE_B	0.00778***	-0.00152**	0.00440**
	(8.18)	(-2.01)	(2.55)
(1-IB)*NONEXE_B	-0.00360***	-0.0024***	-0.00372**
	(-3.58)	(-2.95)	(-2.51)
IB	-0.0217***	-0.0150***	0.00019
	(-11.18)	(-9.73)	(0.04)
$TIER1_{it-1}$	0.00496***	0.00103	0.00151
	(3.58)	(0.94)	(0.80)
NI_{it}	-0.022**	0.0301***	0.0450***
	(-2.28)	(3.67)	(3.27)
NI_{it+1}	-0.0293***	-0.022***	-0.00111
	(-2.76)	(-2.61)	(-0.06)
NI_{it+2}	-0.00962	-0.0143*	0.00741
	(-0.94)	(-1.75)	(0.36)
MER	-0.00016	-0.00053*	-0.0002
	(-0.46)	(-1.95)	(-0.37)
SSB	0.0005	0.00044	0.00127**
	(1.46)	(1.63)	(2.43)
Country and year	Yes	Yes	Yes
N	270	270	165
F-stat	8.740***	11.18***	3.123***
R^2	0.195	0.406	0.237

This table presents our comparative robustness tests. Column 1 presents the main regression model 4b by using the absolute value of EM variable. Column 2 and 3 are the models where the EM variable is separated into DRSGL and DLLP. For each variable, both the beta coefficients and *t* statistics (in parentheses) are reported. ***, **, * indicate significance level at the 1%, 5%, and 10% respectively (two-tailed).

2.4.2.3. Discussion

The purpose of this study is to examine the role of the BOD in mitigating earnings management in the whole MENA banking sector. We examined to what extent, if any, BOD size and composition impact earnings management differently between listed IBs and CBs. We predicted that the idiosyncratic features of the MENA region with the unique mix of the majority based IBs and CBs to reveal different relationships between the BOD characteristics and earnings management of that being documented in developed countries. Before considering the difference between CBs and IBs, our results on the whole banking sector at MENA indicate that although the BOD size is a key factor with an increased level of complexities and information asymmetry, it seems to have an insignificant effect on earnings management at MENA. This stems from the notion that bank specific characteristics might determine the BOD size (Boone et al., 2007) and its effect on earnings management. That is, the size of the BOD is determined based on the trade-off between the firm specific benefits of increased level of monitoring and the cost of such monitoring. Moreover, MENA banks are likely to promote corporate governance practices with more independent BOD. Prior literature also documents the negative effect of independent directors on earnings management (e.g. Chen & Zhang, 2014; Cornett et al., 2009). One obvious explanation is that independent directors might confront more vitriolic criticism in case of financial reporting failure (Srinivasan, 2005). Another explanation is that in emerging economies, independent directors may supplant a weak regulatory framework.

Affiliated directors also seem to constrain earnings management. They are less prone to information asymmetry. Our results echoed García-Meca & Sánchez-Ballesta (2009) findings on the impact of affiliated directors on earnings management, as duality is found to have no significant effect on earnings management in MENA. Our result did not support the findings of Abdelsalam et al. (2016) since they find a positive association between duality and earnings management. The strict regulatory monitoring role which may control CEO/chairman discretionary decisions, especially in a regulated sector as banks, might explain these results.

Distinguishing between CBs and IBs, inefficient larger BOD at IBs may be due to the complexities of agency problems and equity structure (i.e. IAHs). A crucial role of SSB also may lessen directors' appetite to monitor earnings management and exacerbate free-riding problem across both boards.

More importantly, independent directors at IBs are more effective in monitoring earnings management compared to CBs. These findings are consistent with prior literature findings on the negative effect of independent directors on earnings management (e.g. Abdelsalam et al. 2016; Cornett et al., 2009; Xie et al., 2003). According to McGuire et al. (2012), religious social norms might explain individuals' abidance to their duty, which might be applicable to independent directors at IBs. However, affiliated directors who have relationship with IBs might be more aware of the risk that IBs confront, so they might facilitate earnings management.

Our results also have some limitations which are considered interesting avenues for future research. First, although the present paper includes all available data of listed banks from 2006 till 2014, the studied banks are still limited. This may bias our results toward the healthier banks which fulfil disclosure and listing rules. Future studies may include unlisted banks which may have more subtle earnings management. Second, IBs, unlike CBs, have many other ways to manage earnings (e.g. PER, URIAHs) which are less regulated and fully controlled by bank managers. Thus, they may deliberately use these tools instead of LLP and/or RSGL which are regulated and monitored by the BOD. It is therefore interesting for future research to study if these accounts may be used to manage earnings. Third, although prior studies have documented the negative effect of SSB on earnings management, the relationship between this board and the regular BOD is still sparse. So, it is worth to study this relationship and how it may impact earnings management.

2.5. Conclusion

Earnings management is a widespread issue that impedes the credibility of financial data and its related analyses. It also widens the agency conflicts between agent-principal and controlling-minority shareholders as well. However, the BOD

size and composition play a key role in mitigating this behaviour as documented by studies that focus on developed countries. We contribute to this stream of literature by providing evidence that the banking sector in an emerging region, such as MENA, manifests the role of independent directors in circumscribing earnings management behaviour to address agency conflicts.

More importantly, our findings also contribute to the comparative literature between CBs and IBs in many different ways. First, it suggests the importance of independent directors when distinguishing between both subsectors. The idiosyncratic agency conflicts of IBs have shown that more independent directors with smaller BOD are better to reduce earnings management. Second, our study confirms the prior literature findings with regards to the higher quality of loans and credit policy of IBs (e.g. Abdelsalam et al., 2016). Third, similar to the literature on earnings management within US banks, our study confirms the using of LLP and/or RSGL as earnings management tools by both subsectors. More importantly, our study gives evidence that even IBs, as religiously oriented banks, unwaveringly use earnings management. Fourth, our study helps to explain the differences in the way of influencing earnings management between independent and affiliated directors (see García-Meca & Sánchez-Ballesta, 2009), and how they might affect earnings management differently in CBs and IBs.

Our study has important practical implications. Specifically, it suggests more awareness to the additional agency problems at IBs by representing IAHs in BOD or its subcommittees. This per se will foster IBs development, constraining earnings management, and curtail contagion effect on the whole banking sector. Our study also sheds light on the importance of religious social norms and how it might be utilized to direct individuals and organizations efforts toward maximizing others' interests, which remains a fertile ground for future academic research.

Chapter 3 - The impact of ownership structure on earnings management within the context of conventional and Islamic banks: The MENA countries

3.1. Introduction

Prior literature has documented that the ownership structure alleviates earnings management behaviour (Chung, Firth, & Kim, 2002; Jensen, 1993; Shleifer & Vishny, 1997; Warfield et al., 1995). From an agency theory perspective, monitoring earnings management by shareholders aligns their interests with the interests of bank managers, as well as the interests of controlling and minority shareholders. However, the challenge is to identify the effect of ownership structure on earnings management when corporate equity diverges from its conventional forms (Dharwadkar, George, & Brandes, 2000).

A salient example of an unconventional equity structure is the one of the Islamic banks (IBs). Safieddine (2009) finds that the equity structure of these banks complicates and depicts additional agency problems and widens the issue of ownership and control separation. That is, the equity-like nature of the contracts between IBs and investment accounts holders (IAHs)[19] – which resembles depositor accounts in conventional banks (CBs) – gives the right to IBs to share in profit but not in risk and losses and forbids IAHs from managing their funds (Archer et al., 1998). Managers of IBs as well at their discretion are able to commingle the funds of IAHs and shareholders to finance assets (e.g. loans). Consequently, moral hazard in the allocation of risk, profit and losses between shareholders and IAHs is prevailed when bank managers decide to use the latter funds in riskier investments (Chong & Liu, 2009). This tacitly induces bank

[19] Safieddine (2009) decomposes IAHs to restricted investment accounts holders (RIAHs) and unrestricted investment accounts holders (URIAHs). In the case of RIAHs, investments are restricted upon depositor preferences rather than IBs. Thus, it is highly secured and returns are relatively safe, which mitigates the agency problems. The contrary view is regarded to the URIAHs, wherein deposits are not secured and IBs managers have complete latitude to use these funds, and therefore owners do not have the ability to participate in managing their own funds, which aggravates agency problem.

managers and shareholders to facilitate earnings management to extract personal benefits at the expense of IAHs (Abdelsalam et al., 2016).

However, although IBs' unique attributes may affect the relationship between ownership structure and earnings management, less attention has been paid to study this relationship within this unique context and whether this relationship differs in CBs counterparts that resemble western banks. The essence of IBs notion promotes contracting on the profit and losses sharing principle (PLS) that forbids interests (usury), speculation (gharar), and financing illicit activities (e.g. drugs, weapons, alcohol, etc.). Thus, IBs' managers are entrusted to adhere to the Sharia-compliant investments in addition to the fiduciary duty to maximize shareholders wealth (Archer et al., 1998). As such, adherence to Islamic law (Sharia) accentuates the fairness, piety, virtue, and social responsibility that hampers agency problems and mitigates earnings management. Thus, unlike CBs, the agency structure of IBs is a trade-off between contracting in accordance with Sharia and protecting investors' interests (Safieddine, 2009).

This study examines whether the relationship between ownership structure and earnings management might differ within IBs at Middle East and North Africa (MENA), where the CBs and the majority based IBs co-exist. These two subsectors also give a chance to examine if the relationship between ownership structure and earnings management is different between IBs and CBs. In this respect, this study first identifies the ownership structure of IBs in light of prior literature, and how these banks have emerged. These banks have permeated as a synergy of individuals who usually manage these nascent banks (Syed Ali, 2007), wealthy individuals (block-holders) and institutions advocate IBs notion (Farook et al., 2014). Thus, to proxy for ownership structure this study uses the number of shares that CEOs and/or directors own (viz., internal ownership), block-holders who are individuals and/or entities owning more than 5% of shareholdings, and institutional ownership. To measure earnings management, this study decomposes loan loss provisions (LLP) and realized securities gains and losses (RSGL) into nondiscretionary (NLLP, NRSGL) and discretionary (DLLP, DRSGL) components, respectively. DLLP and DRSGL represent the earnings management that managers may use to conceal the deteriorated earnings or to exploit bank resources to their own interests. Consistent with Beatty et al. (2002), this study

uses a two-stage approach in which the residuals of the first stage (viz., DLLP and DRSGL) are used to proxy for earnings management, and then uses robust ordinary least regression (OLS) to regress earnings management on ownership variables along with a set of control variables.

By using available hand collected data between 2006 to 2014 on 26 IBs and 78 CBs from 11 MENA countries, this study finds that internal ownership at IBs facilitates earnings management. This effect is aggravated when other shareholders such as block-holders and institutional owners are existing within the ownership structure. Results indicate that block-holders monitor earnings management if the allocation of the associated risk of investments with IAHs is more beneficial than using earnings management to exploit IB's resources to self-serving interests. In addition, results show that institutional owners tilt toward using earnings management, which might explain their intention to establish for conglomerates at the expense of IAHs and minority shareholders rather than monitor earnings management at bank level. The results also indicate that Sharia may spur all involved parties in IBs' contracts to work on the others' best interests, which accentuates the behavioural pattern of agency conflicts in IBs. The results also show that, unlike IBs, internal and institutional owners at CBs have an insignificant effect on earnings management. This might indicate a stricter regulators' oversight over CBs that alleviates earnings management. Block-holders at CBs seek to entrench their control through earnings management, since they might be individuals from influential families or political parties.

Our study differs from and contributes to the existing literature on earnings management at IBs and comparative studies across subsectors, CBs and IBs, in many ways. First, this study attempts to examine the relationship between ownership structure and earnings management within a more complex agency context such as IBs. Prior literature of IBs governance-related studies focuses on the relationship between earnings management, government and/or foreign ownership (e.g. Abdelsalam et al., 2016). Our study complements these studies by considering the ownership structure that actually exists in MENA banks, especially IBs. Second, this study also gives evidence on how this relationship might be different between IBs and CBs that resemble the western countries banking sector. Third, prior studies documented a significant negative effect of

the Sharia supervisory board (SSB) (e.g. Quttainah et al., 2013) and the Sharia-compliant principle (e.g. Abdelsalam et al., 2016; Elnahass et al., 2014) on earnings management. Though, our study gives compelling evidence that internal and institutional owners at IBs may breach the fiduciary duties that they are entrusted toward others' interests and indulge to earnings management. Fourth, this study also suggests that other theories such as tunnelling, collusion, and coalition which are documented in similar developing economies (e.g. Liu & Lu, 2007) might address the conflict of interests better than agency theory. Finally, our study accentuates the necessity of understanding the effect of equity structure on earnings management at IBs based on the trade-off between financial and behavioural outcomes, which enables regulators, IBs and standards-setting bodies to enact effective regulations and rules to buttress the goal congruence principle among all stakeholders.

The rest of this paper proceeds as follows. The next section gives a literature review and discusses hypotheses development. Section 3 describes the data and models. The paper proceeds in section 4 with results. Finally, the paper gives a conclusion in section 5.

3.2. Literature review and hypotheses development

3.2.1. Internal ownership

The core of agency theory states that the separation of ownership and management creates an agency problem between owners (i.e. shareholders) and managers (Fama & Jensen, 1983; Wright, Ferris, Sarin, & Awasthi, 1996). Accordingly, managers with no or a low amount of shares are more likely to deviate from the main goal of maximizing the wealth of shareholders, and to engage more in opportunistic earnings management behaviour for self-serving purposes such as increasing their compensations or enhancing their reputation (Holthausen, Larcker, & Sloan, 1995). Directors of the board with no or a low ownership as well may be less aware of monitoring and controlling management discretions. They might clandestinely collude with management to facilitate earnings management to improve the spurious performance of the firm, and eventually enhance their own interests through, for instance, increasing the

market value of their shares (Cornett et al., 2009). Thus, the increased level of internal ownership could make the internal owners' interests more akin to other shareholders' interests (Liu & Lu, 2007), which leads to dampen the likelihood of opportunistic earnings management behaviour.

Though, an excessive ownership of executives and directors may aggravate the information asymmetry problem by controlling the content and the timing of data flow to other stakeholders (Warfield et al., 1995). Managers with a high percentage of ownership also can employ accruals decisions to achieve self-serving objectives (Warfield et al., 1995). With attention to IBs, according to Farook et al. (2014), the ownership of executives and directors dominates the ownership structure of these banks. IBs use the equity-like IAHs as another source of funds to finance investments on assets (i.e. loans) based on the PLS contracts. While these contracts are fully under the control of bank managers, it may aggravate the agency problems and tacitly induce the managers to commingle the funds of both IAHs and shareholders (Safieddine, 2009). In the case of imminent financial stumble, IB managers might indulge to riskier investments by using the funds of IAHs rather than shareholders' funds in order to manage earnings. The tunnelling issue as well is salient in the IBs where the bank managers are able to transfer bank resources and/or IAHs' returns that are fully under their control to themselves or to other controlling shareholders such as directors (Johnson, LaPorta, Lopez-de-Silanes, & Shleifer, 2000). Consistent with this, IBs managers according to their level of ownership are more likely to use earnings management to expropriate bank resources at the expense of minority shareholder (Liu & Lu, 2007) and to appeal more financing from IAHs in order to indulge to riskier investments without bearing any associated risk, but sharing profits. Given that CBs have no IAHs and are borne to the risk of fixed interests to depositor (Safieddine, 2009), we expect internal ownership at CBs to promote interests alignment with other shareholders and depositors. Thus, we argue that internal ownership affects negatively on earnings management at CBs and positively at IBs. Therefore, we propose the following:

H1: CEOs' and/or directors' ownership negatively affects earnings management in CBs, whilst it positively affects earnings management in IBs.

3.2.2. Ownership concentration

The effect of ownership concentration on earnings management at the banking sector has provoked dialectic debates in the literature, since the regulators and governments may intervene to prevent aggressive merger and acquisition (M&A) transactions (Hagendorff et al., 2007; Leventis et al., 2013). For instance, in some countries the government intervenes in banks' ownership structure either by acting directly as shareholder (e.g. Switzerland) or by passing prudential regulations to control substantial outsiders' ownership (e.g. Italy). Accordingly, governments' and regulators' intervention alleviates the block-holders' effect on earnings management. In less developed countries as well, concentrated ownership is viewed as the ultimate reason of corporate governance weaknesses because it obstructs economic reform policies (Claessens, Djankov, & Lang ,2000).

Weak corporate governance with concentrated ownership may jeopardize a bank's overall performance, as well as the interests of minority shareholders in many ways (Chen, Li, & Shapiro, 2011). First, instead of selecting experts to the senior level positions (i.e. directors), block-holders may elect individuals from influential parties or families with higher remunerations and benefits to act in the interest of those block-holders (Young, Peng, Ahlstrom, Bruton, & Jiang, 2008). Second, block-holders may exploit bank resources to their own interests through inappropriate lending and/or related-parties transactions. Third, they may deviously obstruct the productive activities or investments in order to widen their personal and/or family control (Young et al., 2008). Thus, those block-holders might relinquish their duty towards minority and other shareholders and facilitate earnings management behaviour to achieve their pernicious interests (Bouvatier, Lepetit, & Strobel, 2014).

On the other hand, block-holders, according to their respective ownership level, might provide the bank with many potential benefits. For instance, from an interests alignment hypothesis perspective, block-holders may play a crucial role in monitoring management opportunism (e.g. earnings management). They can use their voting rights in different aspects of the bank, such as to hire and monitor CEOs, approve company's general policies, and elect BOD members. Doing so

effectively underpins the overall objectives of the bank, and ultimately maximizes the value of all shareholders (Shleifer & Vishny, 1997). Admati & Pfleiderer (1994) find that although the block-holders' existence might promote the free-riding problem in monitoring between control and minority shareholders, equilibrium in monitoring and controlling manager decisions might be the result due to the risk sharing consideration.

Risk sharing is a core principle in IBs, whereas all investment contracts, deposits (IAHs) and assets (loans), at both sides of the balance sheet are based on the PLS principle. In view of that, all stakeholders, including block-holders, are committed to accentuate effective monitoring to bank managers' decisions, such as earnings management. Additionally, investors, such as block-holders, in IBs are religiously oriented individuals who base their investments on the Sharia-compliant principle (Elnahass et al., 2014). They therefore may ensure their fiduciary duty towards minority shareholders and IAHs. In contrast, block-holders at CBs may seek to entrench their control over bank resources through the creation of dual class shares (e.g. preferred shares) and/or using the shares pyramid control (Chen et al., 2011), whereas Sharia prohibits such behaviour. Consistent with the private benefit hypothesis, they may also deliberately facilitate earnings management with bank managers in order to share some private benefits (Doidge, Karolyi, Lins, Miller, & Stulz, 2009). Therefore, while the block-holders at CBs are expected to facilitate earnings management to entrench their control, block-holders at IBs are more akin to promote effective monitoring over earnings management behaviour. This leads us to the following hypothesis:

H2: Block-holders' ownership positively affects earnings management in CBs, whilst it negatively affects earnings management in IBs.

3.2.3. Institutional ownership

Scholars, regulators, and practitioners view institutional investors as a corner stone of sound corporate governance practices. The institutional owners' presence within the ownership structure hampers opportunistic earnings management since the bank managers definitely know the pivotal role that those owners might play in monitoring their decisions (Jiambalvo, Rajgopal, & Venkatachalam, 2002).

Consistent with this argument, Jiambalvo et al. (2002) find that opportunistic earnings management behaviour significantly decreases with an increased level of institutional ownership. In addition, institutional investors are considered financially sophisticated investors who are able to stabilize and predict future earnings based on the current available financial information (Hoskisson, Hitt, Johnson, & Grossman, 2002; Jiambalvo et al., 2002). Even with this cognition, it is emphatically argued that institutional investors do prefer short-term earnings more than long-term performance (Baik & Choi, 2010). This forces bank managers to focus on the former rather than the latter to achieve market earnings thresholds by resorting to earnings management.

In addition, institutional investors are less likely aware of the monitoring role on firm level. Rather, they are more concerned about their whole investment portfolio. According to this argument, Dharwadkar, Goranova, Brandes, & Khan (2008) suggest to analyse institutional ownership on the investment portfolio level rather than on the firm level. They find that the efficacy of the monitoring role of institutional investors is constrained by their portfolio characteristics. This states that institutional investors play a monotonic role in monitoring opportunistic management behaviour. Sáenz González & García-Meca (2014), on Latin American non-financial firms, find that institutional ownership has a weak correlation with the absolute value of accruals. Likewise, the findings of Omran, Bolbol, & Fatheldin (2008) at Arab markets, suggest that the ownership concentration of individuals and government are better to foster performance than the concentrated ownership of institutional investors. These findings could be attributed to the crucial role that the governments might play in countries with underdeveloped stock markets and a weak regulatory framework (Chahine & Tohmé, 2009).

However, the moral hazard theory states that the moral hazard emanates when one party wilfully indulges in riskier activities and perversely unscathed because the other party may apt to more risk burden from these activities (Hellmann, Murdock, & Stiglitz, 2000). This is literally applicable to IBs when examining the shareholders (e.g. institutional investors) and URIAHs relationship (Daher et al., 2015). That is, the shareholders might transfer risk to URIAHs while enjoying more returns (e.g. the management fees received from IBs for managing URIAHs)

(Archer & Abdel Karim, 2006). Likewise, the institutional investors as rational, expert, and risk avert investors might relinquish their surveillance duties and facilitate opportunistic earnings management in order to entice more URIAHs to the equity structure. Given this argument, it is quite conceivable that while the IBs institutional shareholders are motivated to facilitate earnings management due to the existence of URIAHs accounts, the CBs counterparts are not. Therefore, the third hypothesis is stated as follow:

H3: Institutional ownership negatively affects earnings management in CBs, whilst it positively affects earnings management in IBs.

3.3. Data and models

3.3.1. Data

Our study focuses on the MENA commercial CBs and IBs listed on their respective stock markets, for which we extracted both bank names and its classification to CBs or IBs from the Zawya database. For each bank, both financial statement data and ownership structure characteristics were hand-collected from the annual reports published on its website over the period 2006 - 2014.

To be included in our sample, a bank had to fulfil three criteria. First, the annual reports of the bank must be available for at least five years. A five years threshold was selected to guarantee more heterogeneity in an ownership structure, since nuance changes might occur on it from one year to another. Second, during these years the bank must follow International Financial Reporting Standards (IFRS). These standards enhance the comparability across the countries where similar culture, religion, and language are already prevailing. Third, the law of each country has to give the right for both banking segments, CBs and IBs, to co-exist within its banking sector. This indicates that both segments follow the same set of rules and regulations.

First we intended to include all countries classified within the MENA region and the Gulf Countries Council (GCC). More specifically, these countries are Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, United Arab

Emirates, and Yemen. However, based on the aforementioned criteria, we excluded six countries due to data unavailability, such as Algeria, Djibouti, Libya, Morocco, Tunisia, and Yemen. We also excluded Iran and Sudan because the legislation of these countries states that the whole banking sector must follow the Islamic banking system.

The data set achieved is available for 78 CBs and 26 IBs across 12 MENA countries, yielding 613 unbalanced bank-year observations including outliers.[20] To hamper the effect of these outliers on our results, we use robust ordinary least square regression (robust OLS) which outperforms ordinary least square (OLS) in case of outliers in the data set. Further, 390 observations with missing values were excluded[21] due to the missing information about ownership structure of the banks included in our study, leading to a final sample of 223 observations for 77 banks, 58 CBs and 19 IBs, across 11 countries. These data represent all available data of listed CBs and IBs in the MENA region, see Table 2.1.

3.3.2. Models

3.3.2.1. Measuring earnings management

In order to examine how a bank's ownership structure might affect the way of using earnings management, we use the two-stage approach to measure the abnormal level of earnings management of LLP and RSGL which is widely used in the banking literature. For LLP, following Beatty et al. (2002) and Kanagaretnam et al. (2010)we first split total LLP into both NLLP and DLLP parts. NLLP represents the uncontrollable default risk associated with the bank's loans portfolio. To proxy NLLP, we add beginning loan loss reserve (BEGLLR), bank size by using the natural log of assets (LASSET), net loans charge-offs (LCO), change in the total loans outstanding (CHLOANS), nonperforming loans (NPL), different categories of

[20] We winsorize all variables at the top and bottom 1% of observations and the regressions results are robust to these changes.
[21] We use listwise deletion of missing values to minimize missing values bias, which excludes the entire observation if any single value of variables is missing. As robustness test, we also use multiple imputation for handling missing data and our regressions tests are robust to this technique.

outstanding loans (L_CATEGORIES), and dummy variables for years and country. Specifically, we use the following model:

$$LLP_{it} = \alpha + \beta_1 BEGLLR_{it} + \beta_2 LASSET_{it} + \beta_3 LCO_{it} + \beta_4 CHLOANS_{it}$$

$$+ \beta_5 NPL_{it} + \beta_{6\text{-}11} L\_CATEGORIES_{it} + \varepsilon_{it} \quad (1)$$

For variables definitions see Table 2.2. Except for beginning LLR, we expect positive relationships between these variables and LLP. That is, bank managers are more likely to increase LLP relatively with an increased size of bank, net loans charge-off, changes in loans portfolio, nonperforming loans, and increases in different loans categories. DLLP represents the error term from model 1, which remains after controlling all expected losses that bank managers usually consider when adjusting LLR each year. However, the error term standardized by total assets, similar to Cornett et al. (2009), is as follow:

$$DLLP_{it} = (\varepsilon_{it} \times LOANS_{it})/ASSETS_{it} \quad (2)$$

Where LOANS is total outstanding loans and ASSETS is the total assets as of annual reports date. However, RSGL is another way that bank managers might use to manage bank earnings. Again we follow Beatty et al. (2002) in order to find the DRSGL. Specifically, we use the following model:

$$RSGL_{it} = \alpha + \beta_1 LASSET_{it} + \beta_2 URSGL_{it} + \varepsilon_{it} \quad (3)$$

For variables definitions see Table 2.2. Banks usually realize securities gains and losses from selling held-to-maturity (HTM) and available-for-sale (AFS) securities, RSGL. They may manage earnings by an overconfident prediction of gains and losses from the selling of the remaining AFS, URSGL. We expect a positive relationship between RSGL and URSGL. The error term from model 3, which remains after controlling for the highly expected URSGL, represents DRSGL. Table 2.3, chapter 2, depicts the regression results for models 1 and 3 in panel A and B, respectively. However, the trade-off between recognizing RSGL and/or LLP identifies the magnitude and direction of earnings management; that is, manage earnings upward by a higher level of earnings management through recognizing more RSGL and less LLP and vice versa (Cornett et al., 2009). Consequently, earnings management is defined as follow:

$$EM_{it} = DRSGL_{it} - DLLP_{it} \quad (4)$$

3.3.2.2. Measuring explanatory and control variables

Explanatory variables

Internal ownership: We add the internal ownership (INT_OWN) variable as a proxy for executives/directors' ownership. Their ownership is an important internal control mechanism to monitor and control management discretion. Though, prior literature in the MENA banking sector concentrates on government and foreign ownership (e.g. Abdelsalam et al., 2016). Within IBs context, government and foreign ownership are not common because the establishment of these banks usually comes from individuals who ultimately represent internal ownership. Thus, we use the INT_OWN variable as the number of outstanding shares owned by executives, directors, and their relatives to the total assets as of the date of annual reports.

Ownership concentration: The ownership concentration variable is measured by the presence of block-holders. According to the regulations of many MENA countries (e.g. Jordan, Saudi Arabia), block-holders are those individuals and/or entities who own 5% or more of outstanding shares. With this threshold, block-holders might exercise significant control over management decisions, which might at best circumscribe earnings management, or to junk status facilitate it. Thus, we add the block-holders (BLOCK) variable to indicate the percentage of total shares owned by individuals and/or entities who own 5% or more of shareholdings to total assets as of the date of annual reports.

Institutional ownership: This variable refers to the ownership from other institutions and/or banks. Those owners are regarded as an effective external tool that have the ability and resources to monitor and influence management decisions (Dharwadkar et al., 2008). However, those investors might ostensibly invest in IBs to signal that they are religiously oriented, while they deliberately invest in IBs to expropriate more return at the expense of IAHs. Therefore, we add the institutional ownership (INST_OWN) variable as the percentage of outstanding shares that is owned by institutional owners to total assets as of the date of annual reports.

Islamic banks and interaction variables: In addition to our interest to study the effect of ownership structure on earnings management at the MENA banking sector, the idiosyncratic ownership structure of IBs calls for further study in the MENA banking sector where a majority based IBs exist. Investment in these banks is viewed as a paragon of virtue to promote fairness, justice, and abidance to Sharia rules. Given this, shareholders - whether they are internal, block-holders, and/or institutional - have to work earnestly to maximize stakeholders' welfare. Therefore, we add a dummy variable that equals 1 if the bank is an Islamic bank, and 0 otherwise. To examine whether the aforementioned ownership structure at IBs may affect earnings management differently from that at CBs counterparts, we add several interactive variables by multiplying the variable IB with internal, block-holders, and institutional variables.

Control variables

Capital arbitrage motive: Banks may use earnings management to meet the capital requirement (Tier I) without resorting to external financing or facing insolvency risk. Beatty, Chamberlain, & Magliolo (1995) show the trade-off between earnings management through LLP and/or RSGL and regulatory capital. They find that these earnings management tools lead to increased regulatory capital. Accordingly, we expect a positive relationship between earnings management and the lagged tier I capital ratio ($TIER1_{it-1}$). Therefore, the lagged tier I capital ratio is used to control for regulatory capital motive.

Income smoothing: Another motive to conceal earnings volatility is to use discretionary decisions to sustain a consistent pattern of the reported earnings (Burgstahler & Dichev, 1997). We use the current year net income (NI_{it}) before taxes and discretionary items such as LLP, RSGLS, and extraordinary items as a proxy for the income smoothing motive. Since bank managers may manage earnings upward (downward) in order to disguise the effect of yearly earnings volatility, we have no prediction concerning the relationship between earnings management and current year net income before taxes and discretionary items.

Signalling motive: The signalling motive also might spur bank managers to indulge to earnings management behaviour. Wahlen (1994) finds that the discretionary

items of income statement, balance sheet, and related footnotes can be used as signalling tools to convey private information to investors. However, since the view that the discretionary items within financial statements affect the coming years reported information (e.g. LLR and retained earnings), we expect a positive relationship between earnings management and the signalling motive. Therefore, we use one and two years ahead current year net income before accruals as proxy for the signalling motive, NI_{it+1} and NI_{it+2}.

Merger and/or acquisition: M&A transactions are unanimously viewed by prior literature as motive that leads to earnings management. All firms which are involved in M&A transactions manage earnings upward in order to buttress their financial position (e.g. Anagnostopoulou & Tsekrekos, 2013; Erickson & Wang, 1999; Louis, 2004). Given this reasoning, we add the merger motive (MER) as a dummy variable that equals 1 if there are M&A transactions during the study period on each respective bank, and 0 otherwise. Consistent with these studies, we expect a positive relationship between the merger motive and earnings management.

Sharia supervisory board: IBs incorporate an additional layer to their corporate governance structure, namely SSB. This board must be independent and encompasses S*haria* scholars, imbued with piety and righteousness (Elnahass et al., 2014). Those scholars clarify any ambiguity that obstructs stakeholders' understanding of IBs financial transactions from Sharia point of view (Quttainah et al., 2013). Given this role, CEOs and top management are required to provide transparent and trustworthy (non)financial information to SSB members in order to confirm that all products, services, and transactions of IBs are in accordance with the *Sharia* rules. Elnahass et al. (2014) argue that aggressive earnings management occurrence is not possible in IBs because of SSB that does not exist at CBs counterparts. Likewise, findings of Quttainah et al. (2013) document the effective role of SSB in mitigating earnings management at IBs, whether they are with(out) in-house SSB. They attribute these findings to the fiduciary duty that this board might play in order to emphasize adherence of all managerial decisions to Islamic *Sharia*. However, some MENA countries levy CBs that have Islamic windows to incorporate SSB. As the bulk of the literature documents the effective role the SSB might play in monitoring and advising IBs management, we expect

this board to affect adversely on earnings management. Thus, in order to control the effect of SSB as additional layer of corporate governance, we add a dummy variable that equals 1 if the bank has in-house SSB, and 0 otherwise.

3.3.2.3. Empirical model

After defining the earnings management from LLP and RSGL, we utilize the aforementioned explanatory variables that reflect the dominated ownership structure in MENA banking, especially in IBs, along with a set of control variables. More specifically, we use the following model:

$$EM_{it} = \alpha + \beta_1 INT\_OWN_{it} + \beta_2 BLOCK_{it} + \beta_3 INST\_OWN_{it} + \beta_4 TIER1_{it-1} + \beta_5 NI_{it} + \beta_6 NI_{it+1} + \beta_7 NI_{it+2} + \beta_8 MER_{it} + \beta_9 SSB_{it} + \beta_{10} IB_{it} + \beta_{11} INT\_OWN_{it} * IB_{it} + \beta_{12} BLOCK_{it} * IB_{it} + \beta_{13} INST\_OWN_{it} * IB_{it} + \varepsilon_{it} \quad (5)$$

The variables in model 5 are operationally defined in Table 3.1. We use robust OLS adjusted for Cook's (1977) distance criterion to remove influential observations from the sample.

Table 3.1. Definitions of chapter 3 variables

Variable	Definition
EM	The measure of earnings management as percentage of total assets.
INT_OWN	The number of shares owned by BOD members, CEOs, and their relatives as percentage of total assets.
BLOCK	The proportion of shares owned by the top shareholders (5% or more) as percentage of total assets.
INST_OWN	The number of shares owned by other (non)financial institutions as percentage of total assets.
IB	A dummy variable that equals 1 if the bank is Islamic bank, and 0 otherwise.
$TIER1_{it-1}$	The lagged tier 1 capital ratio to risk weighted assets.
NI_{it}	The current year net income before taxes, extraordinary items, LLP, and RSGL deflated by total assets.
NI_{it+1} NI_{it+2}	One and two years ahead current year net income before taxes, extraordinary items, LLP, and RSGL deflated by total assets.
MER	A dummy variable that equals 1 if any M&A occurred in bank i from 2006 till 2014, and 0 otherwise.
SSB	A dummy variable that equals 1 if the SSB exists within the governance structure of the Islamic bank, and 0 otherwise.

3.4. Results

3.4.1. Descriptive statistics and correlations

Table 3.2 presents the descriptive statistics for the full sample, whereas Table 3.3 splits the data into two sub-samples, CBs and IBs, where the t-test and Wilcoxon ***z-score*** are presented in the last two columns for differences in mean and median, respectively. For the full sample, the mean (median) for earnings management as measured by the discretionary parts of LLP and RSGL is .001 (.000). Moreover, the results indicate that the ownership structure of MENA banks is dominated by block-holders with mean value .569, institutional investors with mean value .534 and to a lesser degree internal ownership with mean value .084. These results confirm Omran et al. (2008) findings that indicate that ownership of the Arab equity markets, including the banking sector, are highly concentrated.

Distinguishing between CBs and IBs, except for INT_OWN, we find that the mean and median values for CBs sample (IBs sample) are significantly different by both

t-test and z-score, respectively. We find that the mean value for BLOCK is .595 (.471) and for INST_OWN is .557 (.448). Despite the fact that the IBs are relatively nascent banks, their ownership structure seems to be more diffused than in CBs. This stems from the notion that Muslims masses in MENA may prefer to invest in IBs rather than in CBs.

With regard to the control variables, we find that the mean and median values for the full sample (CBs sample; IBs sample) are significantly and positively different. The mean value for $TIER1_{it-1}$ is .176 (.162; .224), NI_{it} is .025 (.026; .021), NI_{it+1} is .024 (.026; .021), NI_{it+2} is .023 (.026; .015), and MER is .199 (.162; .287).

In Table 3.4, we present Pearson (below the diagonal) and Spearman (above the diagonal) pairwise correlations of the variables which are included in our empirical model. In contrast to prior literature (Abdelsalam et al., 2016; Quttainah et al., 2013), the variable IB on both correlation matrices is correlated positively and significantly with the earnings management variable. One explanation for this result is that IBs may manage their earnings to disguise assets substitution activities (Quttainah et al., 2013). Another explanation is that IBs are either overconfident or less aware in their accruals decisions, especially DRSGL, since their financial transactions eventually must be backed by real financial transactions in accordance with Sharia. Earnings management also correlates positively and significantly with institutional ownership among other ownership structure variables, suggesting that institutional investors may deliberately facilitate earnings management to exploit bank resources to their interests. The BLOCK variable also correlates significantly and positively, but with INST_OWN, indicating that institutional investors usually tilt toward significant ownership (more than 5%) in order to exercise more control over BOD decisions[22]. In addition to the Pearson and Spearman pairwise correlations, we conduct the variance inflation factor (VIF) for model 5 to test if multicollinearity exists. None

[22] As robustness test, we run two regressions, one without BLOCK and one without INST_OWN and our results are robust to these changes (see sensitivity analyses section).

of the VIF measures is higher than 4.67, indicating that multicollinearity is not a serious issue in our data.

Table 3.2. Descriptive statistics

Variable	N	Mean	Median	Std. dev.	Min.	Max.
EM	613	.001	.000	.011	-.103	.132
INT_OWN	323	.084	.040	.123	.000	.607
BLOCK	509	.569	.589	.221	.000	1.00
INST_OWN	471	.534	.545	.228	.000	.980
IB	613	.233	.000	.423	.000	1.00
$TIER1_{it-1}$	521	.176	.156	.086	.000	1.00
NI_{it}	535	.025	.024	.017	-.076	.154
NI_{it+1}	611	.025	.023	.014	-.076	.184
NI_{it+2}	457	.023	.023	.015	-.034	.183
MER	613	.191	.000	.393	.000	1.00
SSB	613	.382	.000	.486	.000	1.00

This table presents the descriptive statistics results for the full sample of main empirical model variables.

Table 3.3. Two samples t-test and z-score results

	Class.	N	Mean	Median	Std. dev	S.E. mean	*t*-test ***z-score***
EM	IBs	143	0.003	0.001	0.008	0.001	-2.370**
	CBs	470	0.001	-0.000	0.012	0.001	***-4.389****
INT_OWN	IBs	88	0.091	0.015	0.146	0.016	-0.484
	CBs	235	0.082	0.043	0.112	0.007	***0.107***
BLOCK	IBs	107	0.471	0.484	0.255	0.025	4.654***
	CBs	402	0.595	0.600	0.203	0.010	***4.274****
INST_OWN	IBs	96	0.448	0.453	0.223	0.023	4.249***
	CBs	375	0.557	0.565	0.222	0.011	***3.893****
$TIRE1_{it-1}$	IBs	120	0.224	0.185	0.141	0.013	-4.795***
	CBs	401	0.162	0.153	0.053	0.003	***-5.280****
NI_{it}	IBs	124	0.021	0.018	0.024	0.002	2.199**
	CBs	411	0.026	0.024	0.014	0.001	***4.606****
NI_{it+1}	IBs	143	0.021	0.019	0.023	0.023	2.597***
	CBs	468	0.026	0.024	0.026	0.014	***4.839****
NI_{it+2}	IBs	105	0.015	0.017	0.015	0.001	6.307***
	CBs	352	0.026	0.024	0.015	0.001	***6.469****
MER	IBs	143	0.287	0.000	0.434	0.038	-3.006***
	CBs	470	0.162	0.000	0.369	0.017	***-3.328****

This table presents two sample t-test and z-score results. ***, **, * indicate significance level at the 1%, 5%, and 10% respectively (two-tailed).

Table 3.4. Correlation matrix

Correlation matrix (Pearson correlations below the diagonal, Spearman correlations above the diagonal)

Variable	1	2	3	4	5	6	7	8	9	10	11
1. EM	**1.000**	-.072	.030	.060	.177***	.065	-.251***	-.107***	-.189***	.058	.100**
2. INT_OWN	-.046	**1.000**	-.409***	-.593***	-.006	-.115*	-.068	-.097*	-.106*	-.126**	-.024
3. BLOCK	.049	-.151***	**1.000**	.743***	-.164***	.072	.080*	.082*	.058	-.015	-.084*
4. INST_OWN	.143***	-.409***	.724***	**1.000**	-.180***	-.000	.018	.021	-.006	.092**	-.440
5. IB	.081***	.030	-.231***	-.193***	**1.000**	.232***	-.199***	-.196***	-.303***	.135***	.615***
6. $TIER1_{it-1}$	.085*	-.065	-.055	-.042	.309***	**1.000**	.133***	.058	-.022	.013	.079*
7. NI_{it}	-.044	-.058	.067	-.057	-.125***	.174***	**1.000**	.704***	.614***	-.146***	-.079*
8. NI_{it+1}	-.079**	-.065	.053	-.058	-.128***	.004	.595***	**1.000**	.715***	-.140***	-.090*
9. NI_{it+2}	-.126***	-.049	.044	-.074	-.288***	-.119**	.453***	.559***	**1.000**	-.228***	-.141***
10. MER	.036	-.086	-.044	.097**	.135***	-.007	-.148***	-.152***	-.220***	**1.000**	.071*
11. SSB	.030	-.003	-.143***	-.072	.615***	.158***	-.077*	-.096**	-.199***	.071*	**1.000**

For the variables definitions see table 2. ***, **, * indicate significance level at the 1%, 5%, and 10% respectively (two-tailed).

3.4.2. OLS results, sensitivity analyses, and discussion

3.4.2.1. OLS results

Table 3.5 presents results for robust OLS regression estimations of our empirical model for six regressions. In columns 1 through 3, we introduce INT_OWN, BLOCK, and INST_OWN, respectively, to test our hypotheses separately. In column 4, we regress earnings management in all ownership structure variables of our interest in order to examine whether their effect will change or not. Further, in columns 5 and 6 we split the sample into income-increasing and income-decreasing earnings management, whereas the effect of ownership structure might be conditional on the direction of earnings management.

Column 1 shows that the internal ownership at CBs has an insignificant effect on earnings management. For IBs, internal ownership has a positive and significant effect on earnings management. This implies that an increase in internal ownership by one-unit, leads to an increase in earnings management at IBs by approximately 1%. Surprisingly, in column 4, this effect has increased to 1.9%, which indicates the increase of earnings management behaviour of internal owners when more controlling owners enter the ownership structure. So while our conjecture of the first hypothesis H1 is partially confirmed for IBs, our results fail to accept H1 for CBs.

With regard to the second hypothesis, the results in column 2 confirm our expectation for both CBs and IBs. Block-holders at CBs have a positive and significant ($\beta = .0009$; $p < .1$) effect on earnings management. Similarly, in column 4, CBs block-holders positively affect earnings management, but with a larger effect ($\beta = .00225$; $p < .1$), suggesting that the block-holders' motive to manage earnings management increases with internal and institutional ownership existence. For IBs in column 2, the overall results of the interaction variable, IB*BLOCK, depict that block-holders significantly constraint earnings management behaviour. That is, a unity increase of block-holders' ownership significantly decreases earnings management by approximately 0.2%. In columns 4 and 5, a unity increase in block-holders leads to 0.38% and 0.25% decrease in earnings management, respectively. This confirms that block-holders at IBs are

more akin to promote the interest alignment principle through monitoring earnings management.

In column 3, we fail to confirm the third hypothesis H3 for CBs and IBs because of an insignificant relationship between institutional ownership and earnings management. Interestingly, this relationship has changed to positive and significant in columns 4 and 5 for IBs. In view of that, a unity increase in institutional ownership increases earnings management and income-increasing earnings management by 1.06% and 0.6%, respectively.

Of all control variables included in the regression models, only current year net income (NI_{it}) affects earnings management negatively and significantly almost across all models. This contrasts the findings of Elnahass et al. (2014) as well as our conjecture about using LLP to smooth earnings. Inconsistent with Quttainah et al. (2013), we find that SSB is statistically negative and significant in column 4. In column 5, NI_{it+2} has negative and significant effects on earnings management. However, in contrast to our posit, we do not find a significant association between earnings management and the regulatory capital motive, one year ahead signalling motive, and M&A transactions.

3.4.2.2. Sensitivity analyses

To ensure the robustness of the results presented in the previous section, we conduct a number of additional sensitivity analyses. First, consistent with prior literature, we have to examine if our main empirical model is subject to endogeneity. The common analysis used by prior literature to solve this issue is the use of instrumental variables (e.g. Adams & Mehran, 2012; Aslan & Kumar, 2014; Chen & Zhang, 2014; Cornett et al., 2009). The challenge of this method is to find at least one instrumental variable correlating with the endogenous variable but neither correlating with the dependent variable nor with the unobservable variables in error term. Another analysis proposed by Arellano & Bond (1991) is the generalized method of moments (GMM). This method addresses the shortcoming of instrumental variables by using the lag values of the endogenous variables, which is definitely correlated with the endogenous variable but strictly exogenous with the dependent variable and error term. This

method solves estimation problems such as simultaneity, dynamic endogeneity, and unobserved heteroscedasticity. We use a two-step system estimator with command "xtabond2" on STATA which is proposed by Roodman (2006) to conduct this test. In order to apply this method effectively, the number of instruments generated must be less than the number of groups on the data set. Therefore, as shown in Table 3.6, we run the test three times with considering each one of INT_OWN, BLOCK, and INST_OWN as endogenous variables on columns 1, 2, and 3, respectively. We were unable to run GMM on the full model with the whole ownership structure because the number of instruments are more than the number of groups, which may indicate misspecification errors. However, for the three models presented in Table 3.6 we report diagnostic tests to confirm the validity of the estimation method. For instance, the first differenced residual test AR (2) is used to test that there is no second-order serial correlation, which confirms our tests validity.

Except for the first model, it is important to note that the other models indicate no endogeneity since the lag value of the earnings management (EM) variable is not significant. However, our results in column 1 indicates that the effect of internal ownership at CBs has changed to significant ($p < .05$), which is consistent with our conjecture in H1. Moreover, the results of column 2 in Table 3.6 have not changed, which confirms our results for CBs and IBs. Finally, the effect of institutional ownership has changed to significant in column 3 and therefore contradicts H3.

Table 3.5. Regression results

	(1) EM	(2) EM	(3) EM	(4) EM	(5) EM>0	(6) AEM<0
IB*INT_OWN	0.014***			0.0187***	0.0092**	-0.0086
	(3.12)			(4.55)	(2.46)	(-1.27)
(1-IB)*INT_OWN	-0.0044			-0.00193	-0.0056	0.00047
	(-1.43)			(-0.62)	(-1.16)	(0.22)
IB*BLOCK		-0.0015*		-0.0038**	-0.0025*	-0.0013
		(-1.98)		(-2.56)	(-1.75)	(-0.75)
(1-IB)*BLOCK		0.0009*		0.00225*	0.00285	-0.0013
		(1.82)		(1.94)	(1.63)	(-1.61)
IB*INST_OWN			-0.0002	0.0106**	0.00604	0.00314
			(-0.14)	(2.39)	(1.28)	(0.70)
(1-IB)*INST_OWN			0.0007	-0.00157	-0.0034	0.00052
			(0.81)	(-0.74)	(-1.38)	(0.31)
IB	0.00082	0.0009	0.00166	-0.0100**	-0.0085*	-0.0014
	(0.92)	(1.15)	(1.53)	(-2.57)	(-1.98)	(-0.37)
$TIER1_{it-1}$	0.0003	-0.0004	-0.0001	0.00083	-0.0014	-0.0003
	(0.13)	(-0.17)	(-0.04)	(0.32)	(-0.56)	(-0.11)
NI_{it}	-0.06***	-0.06***	-0.06***	-0.0430**	-0.0111	0.0314**
	(-3.79)	(-4.17)	(-4.12)	(-2.50)	(-0.53)	(2.06)
NI_{it+1}	0.0026	0.0159	0.00982	0.0238	-0.0196	0.0162
	(0.13)	(0.96)	(0.65)	(1.21)	(-1.00)	(0.72)
NI_{it+2}	-0.0037	0.0103	0.0209	-0.00511	-0.21***	-0.0032
	(-0.02)	(0.69)	(1.54)	(-0.28)	(-8.94)	(-0.25)
MER	0.0003	0.00043	-0.0005	0.00041	0.00052	-0.0002
	(0.41)	(0.95)	(-0.11)	(0.63)	(0.74)	(-0.00)
SSB	-0.001	-0.0005	-0.0003	-0.0013*	0.00005	0.00076
	(-1.20)	(-1.21)	(-0.55)	(-1.74)	(0.06)	(1.15)
Country and year	Yes	Yes	Yes	Yes	Yes	Yes
N	235	371	347	223	115	107

R^2	0.123	0.071	0.050	0.154	0.352	0.305
F	3.494***	3.316***	2.457***	3.256***	7.284***	2.524***

This table presents OLS robust regression for empirical model, eq. 5. For the variables definitions see Table 3.1. Column 1 presents regression results by using only INT_OWN. Column 2 presents regression results by using only BLOCK. Column 3 presents regression results by using only INST_OWN. Column 4 presents regression results by using the whole ownership structure; that is, internal, block-holders and institutional ownership. Column 5 presents regression results for the whole capital structure, but with EM greater than 0, income increasing EM. Column 6 presents regression results for the whole capital structure, but with EM less than 0, income decreasing EM. For each variable, both the beta coefficients and *t* statistics (in parentheses). ***, **, * indicate significance level at the 1%, 5%, and 10% respectively (two-tailed).

Second, Clinch & Magliolo (1993) suggest that commingling DLLP and DRSGL into one earnings management variable is not appropriate. Thus, as depicted in Table 3.7, columns 1 and 2, we split the earnings management variable into DRSGL and DLLP, respectively. Except for block-holders at CBs and $TIER_{it-1}$, our results show that our regression in the previous section is robust when using DRSGL. This may indicate that block-holders at CBs do not affect earnings management through DRSGL due to the ability of bank managers to conceal it because of the less strict regulatory oversight (García-Meca & Sánchez-Ballesta, 2009). In contrast, LLP is likely prone to more strict oversight from regulators, analysts, and shareholders.

Finally, given the fact that the institutional owners might own more than 5% of bank shareholdings because they seek to have control on banks' decisions, a multicollinearity might exist. Thus, we run two regressions: one without BLOCK, and another without INST_OWN. The results in Table 3.8 are relatively similar to our main results above, which indicates no multicollinearity effect.

Table 3.6. Two-step GMM regression

Robustness test 1: Estimation method is the Arellano & Bond (1991) two-step GMM difference estimator for panel data with lagged dependent variables.

	(1) EM	(2) EM	(3) EM
L.EM	0.412***	-0.0315	-0.0431
	(3.46)	(-1.27)	(-0.99)
IB*INT_OWN	0.0343*		
	(1.94)		
(1-IB)*INT_OWN	-0.0335**		
	(-2.20)		
IB*BLOCK		-0.0031*	
		(-1.84)	
(1-IB)*BLOCK		0.0058**	
		(2.36)	
IB*INST_OWN			-0.0003
			(-0.78)
(1-IB)*INST_OWN			0.0202*
			(1.79)
IB	-0.0053	-0.00386	0.0127*
	(-0.69)	(-1.36)	(1.76)
$TIER_{it-1}$	-0.0653	0.0033	0.0005
	(-0.76)	(0.35)	(0.09)
NI_{it}	-0.647***	-0.009***	-0.0522***
	(-3.31)	(-3.14)	(-2.83)
NI_{it+1}	0.046	0.0377***	-0.0515
	(0.38)	(4.26)	(-0.32)
NI_{it+2}	-0.622	-0.0428	0.0203
	(-0.91)	(-0.81)	(0.33)
MER	0.0019	-0.0003	-0.0001
	(0.42)	(-0.26)	(-0.20)
SSB	0.0045	-0.00386	-0.00241*
	(1.35)	(-0.98)	(-2.00)
Country and year	Yes	Yes	Yes
N	235	371	348
Chi^2			96.59***
F	12.845***	4.062***	
AR (1)	-2.67***	-1.790*	-1.960*
AR (2)	-0.653	0.750	-1.120
No. of instruments	35	49	53
No. of groups	46	71	69

This table presents GMM regression results when considering one of each ownership structure as endogenous variable. For the variables definitions see Table 3.1. Column 1 presents regression results using INT_OWN as endogenous variable. Column 2 presents regression results using BLOCK as endogenous variable. Column 3 presents regression results using INST_OWN as endogenous variable. For each variable, both the beta coefficient and *t* statistics (in parentheses). ***, **, * indicate significance level at the 1%, 5%, and 10% respectively (two-tailed).

Table 3.7. Decomposing earnings management to DLLP & DRSGL

Robustness test 2: Split the earnings management variable into DRSGL and DLLP

	(1) DRSGL	(2) DLLP
IB*INT_OWN	0.0172***	-0.00745
	(11.70)	(-0.63)
(1-IB)*INT_OWN	0.0001	-0.0007
	(0.08)	(-0.22)
IB*BLOCK	-0.00207***	0.00053
	(-3.92)	(0.23)
(1-IB)*BLOCK	0.00019	-0.00234**
	(0.46)	(-2.12)
IB*INST_OWN	0.00936***	-0.00486
	(5.94)	(-0.76)
(1-IB)*INST_OWN	-0.00055	0.0031
	(-0.73)	(1.63)
IB	-0.00706***	0.00554
	(-5.10)	(1.02)
$TIER_{it-1}$	0.00259***	-0.00042
	(2.81)	(-0.17)
NI_{it}	-0.0354***	-0.0471***
	(-5.79)	(-2.88)
NI_{it+1}	-0.00355	-0.0239
	(-0.50)	(-1.11)
NI_{it+2}	-0.00997	0.00649
	(-1.52)	(0.25)
MER	-0.00009	-0.00022
	(-0.39)	(-0.36)
SSB	0.00014	0.00121*
	(0.50)	(1.68)
Country and year	Yes	Yes
N	223	161
R^2	0.571	0.056
F	12.37***	1.75*

This table presents regression results, eq.5, which splits EM into DRSGL and DLLP. For the variables definitions see Table 3.1. Column 1 presents regression results for empirical model using DRSGL as dependent variable. Column 2 presents regression results for empirical model using DLLP as dependent variable. For each variable, both the beta coefficient and *t* statistics (in parentheses). ***, **, * indicate significant level at the 1%, 5%, and 10% respectively (two-tailed).

Table 3.8. Multicollinearity test between block-holders and institutional owners

Robustness test 3: Test potential multicollinearity		
	(3)	(4)
	EM	EM
IB*INT_OWN	0.0113***	0.00950***
	(3.51)	(2.80)
(1-IB)*INT_OWN	-0.00301	-0.00339
	(-0.93)	(-1.00)
IB*BLOCK		-0.00093*
		(-1.87)
(1-IB)*BLOCK		0.00169*
		(1.96)
IB*INST_OWN	0.00130**	
	(2.36)	
(1-IB)*INST_OWN	0.00152	
	(1.05)	
IB	0.00092	-0.00054
	(0.53)	(-0.45)
$TIER_{it-1}$	0.0005	-0.00131
	(0.19)	(-0.46)
NI_{it}	-0.0648***	-0.0615***
	(-3.73)	(-3.24)
NI_{it+1}	0.00509	-0.00015
	(0.25)	(-0.01)
NI_{it+2}	0.00212	-0.0133
	(0.11)	(-0.65)
MER	0.00006	0.0004
	(0.08)	(0.57)
SSB	-0.00108	-0.00103
	(-1.38)	(-1.20)
N	224	232
R^2	0.284	0.310
F	3.288***	3.867***

This table presents regression results, eq.5, which tests for multicollinearity between BLOCK and INST_OWN. For the variables definitions see Table 3.1. Column 1 presents eq.5 without BLOCK variable. Column 2 presents eq.5 without INST_OWN. For each variable, both the beta coefficient and *t* statistics (in parentheses). ***, **, * indicate significance level at the 1%, 5%, and 10% respectively (two-tailed).

3.4.2.3. Discussion

The primary purpose of this study is to examine if the association between ownership structure and earnings management might be influenced within the relatively unexplored IBs in the MENA banking sector, where CBs and IBs co-exist. Such unique mix evoked our attention to examine whether the ownership structure affects earnings management differently in these two segments, which is the second important question of our study. In order to answer these questions, we first measured earnings management by decomposing LLP and RSGL into both (non)discretionary parts, which are widely used measures in the banking literature. Secondly, we identified the dominant ownership structure within CBs and IBs. Accordingly, we argue that the equity structure at IBs, especially IAHs, presents a unique type of agency conflicts that call for more investigation of the relationship between earnings management and ownership structure. Therefore, a vigilant study of this relationship at IBs might open new avenues to solve this unique agency problem. At the outset, our findings reveal that the dominant ownership structure of IBs is internal, block-holders, and institutional ownership. This complements prior literature that only examined foreign and state ownership (e.g. Abdelsalam et al., 2016).

Consistent with our argument, we find that the executives and directors with an increased level of their ownership are more inclined to facilitate earnings management at IBs. Contrary to the classical agency theory, those owners are more likely to diverge from the goal congruence with other shareholders. These results are consistent with Grais & Pellegrini (2006) argument that in many instances the failure of IBs is due to a collusion between board and management, i.e. collusion theory. Thus, they facilitate earnings management to expropriate banks' resources to self-serving interests (Arya, Glover, & Sunder, 1998). Another possible explanation is that the internal owners might be compelled to manage earnings in order to alleviate the severe impact of the tailored risks that are inherent only to IBs. That is, IBs may manage earnings to provide enough returns to IAHs to prevent aggressive withdrawals of their funds (Daher et al., 2015). In return, IAHs seek to trustworthy mechanism to secure their funds that are fully under the control of bank managers. Consistent with this, Archer et al. (1998) claim that IAHs may trust shareholders to exert more monitoring to the bank

managers' decisions. Our results contradict Archer et al.'s claim; that is, the existence of block-holders and institutional owners within the ownership structure spurs internal owners to manage earnings, specifically income-increasing earnings management. As such, the ownership that is more diverse buttresses internal owners' power to manage earnings, since it potentially gives a chance to internal owners to collude with other shareholders (Bennedsen & Wolfenzon, 2000).

On the other hand, the block-holders' existence gives a momentum to the coalition theory, since our results reveal that their existence alleviates earnings management at IBs. In this view, one obvious explanation is that block-holders may choose to monitor earnings management based on the trade-off decisions between bearing more risk or their ability to divert more bank's resources to their own interests. In other words, if they choose to diffuse the risk, they alleviate earnings management in order to enhance earnings quality, which in turn appeals more IAHs funds and dilute the risk. Another explanation for these findings is that block-holders fulfil their fiduciary duties toward stakeholders according to Sharia teachings, which calls for better monitoring for harmful earnings management. This is consistent with Quran: "And devour not one another's possessions wrongfully." (Quran Al-Baqara 2:188).

With regard to the institutional ownership, our results corroborate our conjecture of its positive association with earnings management. These findings present additional conflicts of interest between institutional owners and IAHs. Ostensibly, institutional owners might call to increase IAHs funds significantly to monitor management decisions through an increased leverage level (Hayat & Kabir Hassan, 2017). While in a conventional situation this is regarded as a mechanism to control management decisions to the shareholders' best interests (Liao, Mukherjee, & Wang, 2015), it might be a deliberate policy to expropriate IAHs funds to self-serving interests of institutional owners and management. They may manage earnings to appeal more funds, which is regarded as a less risky source of funds because of the nature of PLS contracts. In risky investments, while the risk borne to IAHs and their funds are used, the profits are shared between them and shareholders. In case of loss, IBs charge commission from IAHs for managing their accounts. In contrast, shareholders only finance the highly safe investments

and receive all profits. Another explanation for these results is that institutional owners concentrate on short term profit, which spurs bank managers to manage current earnings to achieve market returns thresholds. Remarkably, the significant effect of institutional ownership on earnings was with the full ownership structure model, which might indicate that they may selectively choose other shareholders to establish for conglomerates. It is worth noting that the SSB monitors earnings management with the full ownership structure, which indicates the overall role that this board might play with other shareholders to mitigate earnings management.

As evident, our results also showed that the effect of the ownership structure on earnings management at IBs is quite different from that effect at CBs counterparts. Unlike IBs, only block-holders have significant associations with earnings management. That is, the increased level of the block-holders' ownership increases earnings management. One explanation is that in a weak regulatory framework like the MENA region, block-holders seek to entrench their control through earnings management. This corroborates Bouvatier et al. (2014) findings on the European CBs context, which document that block-holders may deliberately facilitate earnings management to entrench their control, and to divert banks' resources to their own interests, especially within weaker supervisory regimes. Another explanation might be that the block-holders at CBs and IBs have not the same attitudes toward promoting fairness, virtue, and piety according to Sharia teachings, which dominates IBs stakeholders behaviour (Abdelsalam et al., 2016). Further, block-holders at the MENA banking sector, especially at CBs, are usually from influential tribes (e.g. royal families) or close to influential political parties. This gives them the motive to expropriate banks' resources without fear of consequences (Chahine & Tohmé, 2009).

With regard to the internal and institutional ownership at CBs, we find no significant effect on earnings management. One explanation is that the regulators are able to monitor CBs managers because both (inter)national regulations originally have been established on the CBs notion. Some countries of the MENA region are aware of this issue (e.g. Bahrain, Jordan), therefore they have started

to institute for new regulations and standards to accommodate the idiosyncratic nature of Islamic financing.

Although our findings drew attention to the unique agency conflicts entrenched in IBs, some limitations are still obstructing our understanding to these conflicts, which opens new avenues for future research. Our results were explained according to the basic agency theory which might be less effective in the context of developing countries (Liu & Lu, 2007). Considering other theories such as tunnelling, collusion, and coalition may address the agency conflicts at IBs and CBs in the MENA region.

The MENA region is highly harmonized in terms of religion, culture, customs, and language. While these attributes increase test power and comparability across MENA, it also limits the generalizability of our results to other contexts such as East Asia. Thus, including countries outside the MENA region with more heterogeneous characteristics will enhance generalizability to other regions.

In our study, we use only listed banks that are relatively large with high returns quality and performance. This may bias our results toward healthier banks. Including unlisted and smaller banks with lower returns quality and performance may unveil more subtle earnings management, which in turn deepens our understanding of more aggressive earnings management in IBs and CBs.

Unlike CBs, IBs base all (non)financial transactions on Islamic Sharia which calls for social responsibility and welfare to all society. While this may prevent bank managers from committing earnings management, our study only used quantitative analysis research to study earnings management. Thus, future research may conduct questionnaires to consider this important moral dimension.

Finally, due to data availability, we were only able to use one measure for earnings management. This may constraint our analysis to one pattern of earnings management. Considering other patterns of earnings management such as managerial compensations and debt contracts can be a challenge to the future research.

3.5. Conclusion

Our study contributes to the extant literature on how the idiosyncratic of IBs might impact the relationship between ownership structure and earnings management, and how it might differ at CBs counterparts. Both agency conflicts between agent-principal as well as controlling-minority shareholders also existed at IBs. While extant literature addresses different scenarios to control both conventional agency conflicts, controlling IAHs – management as well as IAHs – shareholders agency conflicts is still scarce. However, not addressing these agency conflicts will obstruct IBs development, induce earnings management behaviour, concentrate using debt contracts that are relatively similar to interest-based financing rather than PLS, curtail the competence of IBs to invent new financial products in accordance with Sharia, exacerbate contagion effect to the whole banking sector, and increase the likelihood of aggressive funds withdrawals and inhibit appealing more IAHs.

Islamic finance contracts in essence are disincentive to exploit others' property. According to our findings, the involved parties of these contracts may breach the fiduciary duty set forth and indulge in earnings management behaviour. Bank managers, directors and institutional owners are more akin to the collusion theory. They might facilitate exploitation of bank resources to self-serving interests. They may seek to entrench their control at the expense of other shareholders and IAHs. Further, they may exempt from the associated risk of investments, but share the profit with IAHs. In contrast, block-holders tile toward the coalition hypothesis. They promote the notion of PLS based on fairness and equality. Thus, our study has highlighted that the agency conflicts at IBs are dependent on the mix of financial and behaviour outcomes. We also provide evidence that if the notion of the synergy between IAHs, block-holders, and other shareholders (e.g. minority shareholders) applies, it may reinforce the financial outcome and enhance earnings quality. Behaviour outcome as well is the crux of controlling agency conflicts and mitigates opportunistic behaviour of all parties involved in Islamic financial contracts. SSB with more access to transparent reports and information can play a crucial role to foster behaviour outcome to the

best of all parties involved in Islamic finance contract, whether they are managers, shareholders, or IAHs.

In addition, our results give empirical evidence that the relationship between ownership structure and earnings management is quite different between IBs and CBs. Additional dimensions at CBs might play a role in this relationship such as regulations, political power, and personal relationship with influential forces.

This paper has several practical implications. Enhancing the Islamic contracts quality in a way that serves all involved parties starts from understanding the agency conflicts and its severe repercussions such as earnings management. This per se is the contribution of our study, where the regulators, banks, and standards-setting bodies can use to ratify more effective rules and regulations to control agency conflicts and enhance the quality of reported earnings. More awareness of additional agency conflicts definitely will spur some course of actions such as sharing experiences across BOD committees and with SSB, and training BOD members to shape their financial acumen to monitor earnings management behaviour. Doing so, will lead to align the interests of management, owners, and IAHs, and as such monitor earnings management behaviour.

Chapter 4 - The role of audit committee activities, independence, and expertise in mitigating earnings management within the context of conventional and Islamic banks: MENA countries.

4.1. Introduction

Around two decades ago, Blue Ribbon Committee (BRC) (1999) came up with a detailed framework of the best practices pertaining to reinforce the functioning of audit committees. In particular, BRC recommends that a capable audit committee must be active, independent, and encompass financial experts. These recommendations are echoed by the Sarbanes-Oxley Act 2002 (SOX), especially after the high-profile accounting scandals, such as Enron and HealthSouth. This momentum spills to less developed markets such as Middle East and North Africa (MENA), where many countries have amended its governance guidelines (Koldertsova, 2011). However, the globally accepted "best practice" notion has been largely criticized after the subprime financial crisis (Adams & Mehran, 2012), since a "one-size-fits-all" approach failed to accommodate different institutional factors.

One unique natural experiment to test the "best practice" notion is the Islamic banks (IBs), since its financial products, equity structure, and agency problems are certainly different. Prior literature argues that the agency problems are quite different in IBs because its financial products are based on the profit-and-losses (PLS) principle. More specifically, borrowers (i.e. assets side) share profits and losses with IBs, which in turn share profits and losses with investment accounts holders (IAHs)[23] – which resemble depositors in conventional banks (CBs) (Chong & Liu, 2009). Safieddine (2009) argues that a "well-functioning" audit committee is highly needed for IBs to ensure the reliability of the reported financial information. Quttainah et al. (2013) find that some attributes of IBs are effective

[23] Safieddine (2009) decomposes IAHs to restricted investment accounts holders (RIAHs) and unrestricted investment accounts holders (URIAHs). While the former are able to choose the kind and scope of using their funds, the latter funds are fully under bank managers control.

corporate governance tools that protect these banks from opportunistic earnings management, such as Sharia supervisory board (SSB).

Although the unique attributes of IBs might affect the relationship between audit committee characteristics and earnings management, no empirical study that we are aware of examines this issue. The notion of religious social norms is prevailed within the high levels of religious adherence contexts, such as IBs. This notion posits that individuals within IBs, such as audit committee directors, may act in ways that are conform to the behavioural norms of the groups which they interact within a bank. As such, those individuals who follow the Islamic norms may promote fairness and deal with their fiduciary duties as a paragon of virtue (Kuran, 1995). Dyreng et al. (2012) find the firms that are located in a high level of religious adherence environment are less likely to restatement and/or misrepresentation of its financial statements and its accruals are less deviated from the expected accruals. Abdelsalam et al. (2016) findings within the IBs context indicate also that the religious social norms have significant effect on the quality of reported earnings. On the other hand, developing these social norms within a firm is mainly based on the social relationship between individuals which might obstruct or delay highlighting the incompetence of individuals, such as audit committee directors (Jensen, 1993). Accordingly, we argue that the religiosity label of IBs is an important factor that influences the efficiency of certain audit committee activities and composition in constraining earnings management. Assessing the relationship between earnings management and audit committees by incorporating the religious context, IBs, may explain their resilience in the latest financial crisis and engender more regulations beneficial even in non-Islamic context.

This study examines whether the IBs characteristics influence the relationship between audit committee characteristics and earnings management, and whether this relationship is different between IBs and CBs that co-exist in the MENA region. In this respect, we identify the main audit committee characteristics that are identified as a "best practice" by many governance codes at MENA countries. Specifically, we use activities (committee size and yearly meetings), independence, and expertise. To measure earnings management, we use a two-stage approach to measure the abnormal levels of loan loss provisions (LLP) and

realized securities gains and losses (RSGL). Bank managers may use these accounts to conceal the deteriorated financial performance or to exploit bank resources for self-serving interests. Thus these accrual accounts are widely used in the banking literature (e.g. Abdelsalam et al., 2016; Beatty et al., 2002; Cornett et al., 2009) to measure the abnormal LLP and RSGL, which in effect represents earnings management.

By using 435 bank-year observations for 77 banks, 58 CBs and 19 IBs, across 11 countries, we find, for banks in the MENA region, that more independent outside directors representation in audit committees is negatively related to earnings management. The findings also indicate that the size and the number of audit committee meetings have no impact on earnings management.

Distinguishing between CBs and IBs, the results indicate that larger audit committees and/or less meetings decrease earnings management at IBs. Moreover, the presence of more independent directors on audit committees of CBs and IBs is associated with a reduced level of earnings management. Results also reveal that more financially sophisticated directors on the audit committees of IBs are more likely to mitigate earnings management, whereas this effect is significant at CBs only when the majority of audit committee directors are experts.

This study contributes to the extant literature on earnings management in many ways. First, while the relationship between earnings management and different audit committee characteristics has received much attention during the last two decades (e.g. Abbot, Parker, & Peters, 2004; Abbott, Park, & Parker, 2000; Bédard, Chtourou, & Courteau, 2004; He & Yang, 2014; Klein, 2002; Vafeas, 2005; Xie et al. 2003), none of these studies focuses on a religious dimension. This dimension seems to be important in explaining this relationship (Abdelsalam et al., 2016; Dyreng et al., 2012; McGuire et al., 2012). Second, by considering the theoretical studies (e.g. Archer et al., 1998; Safieddine, 2009) that foreshadow the key role of audit committees in enhancing the financial information at IBs context, we give empirical evidence on how the audit committees might reduce earnings management. Finally, our study extends our knowledge on the effect of audit committees on earnings management in less-developed economies such as the MENA region.

The rest of the papers is arranged as follows: Section 4.2 discusses hypotheses development and related literature. Section 4.3 describes data and methodology. Section 4.4 presents the results and discussions. The conclusions are presented in section 4.5.

4.2. Literature review and hypotheses development

4.2.1. Audit committee activities

An audit committee is defined as an internal monitoring tool to facilitate the flow of information among internal audit, external stakeholders such as external auditors, and the BOD (Davidson et al., 2005). The BOD delegates audit committees to exert different duties to safeguard and prop up shareholders' interests (Chen & Zhang, 2014), which include inter alia, (i) exercising scrutiny over manager's opportunistic behaviour (Klein, 2002) (ii) keeping a sound financial reporting process (iii) monitoring and interacting with bank's internal and external auditors, and (iv) ratifying the audit scope and frequency (Bédard et al., 2004). In the banking sector context, to fulfil these duties effectively, an information asymmetry issue that occurs from the complexities of bank operations must be considered. In addition, banks are highly leveraged because of the deposits that are received from costumers. For these reasons, along with the essential role that banks play in the stabilization of the demand and supply of funds, the banks are subject to strict regulators oversight (Andres & Vallelado, 2008).

While regulators oversight might be viewed as an additional corporate governance mechanism, it may constrain other corporate governance mechanisms from monitoring earnings management decisions (Andres & Vallelado, 2008). For instance, regulators may reduce the motive of depositors to monitor bank managers when they enact deposit insurance schemes to protect depositors' funds (Macey & O'hara, 2003). Such inherent characteristics of the banking sector require the audit committee to eliminate this imbroglio by devoting substantial efforts. A small audit committee may not be able to integrate more independent and financial experts, which lessens its ability to constraint bank managers from exercising earnings management (Beasley & Salterio, 2001). However, larger

audit committee may lack coordination and exacerbate free riding problems (He & Yang, 2014). Consistent with this view, Bédard et al.(2004) find that a larger audit committee has no effect on constraining aggressive earnings management. He & Yang (2014) corroborate these findings to the regulated firms, including banks, when they find that larger audit committees do not seem to affect the likelihood of earnings management.

In MENA banks, the notion of constituting audit committees is still nascent, whereas the first code of corporate governance for banks was introduced by Emirati regulators on 2005, followed by Jordan, Saudi Arabia, Oman and Qatar (Koldertsova, 2011). Irrespective whether these codes are required or encouraged to be applied by banks, the process of applying it has advanced at a cautious pace (Koldertsova, 2011). However, the corporate environment in the MENA region, including banks, is still influenced by the traditional values such as personal relations with influential families and dominating political parties (Ali, 1990). They also still experience "power distance" between, for instance, employers and employees (Chahine & Tohmé, 2009).

Within this context, the symbolic directors may spill to audit committee, which in turn increases its size at the expense of its fiduciary duty of monitoring earnings management. Thus, we expect a positive relationship between audit committee size and earnings management as follows:

H1a: An audit committee with more directors is associated with higher earnings management in MENA banks.

This effect might be less salient or negative in IBs for many reasons. First, depositors in IBs (viz. IAHs) are more motivated to monitor earnings management than depositors of CBs, since their funds are fully under the control of bank managers (Farook, Hassan, & Clinch, 2012; Sundararajan & Errico, 2002). As a result, from an agency theory perspective, IAHs existence exacerbates agency conflicts. On the other hand, their existence is regarded as an additional means of controlling management decisions (Hayat & Kabir Hassan, 2017). This might make the audit committee activities under the scrutiny of IAHs (Safieddine, 2009). Second, the existence of SSB as an additional corporate governance layer at IBs might be intertwined with audit committees to be more aware of their duty of

monitoring bank managers, which lessens the aggressive earnings management behaviour (Elnahass et al., 2014). Finally, it is argued that audit committees at IBs, to some extent, could play a role to ensure that complex accounting standards are in accordance with Sharia rules, which tacitly directs their efforts toward monitoring earnings management. Thus we propose the following:

H1b: Audit committee size positively (negatively) affects earnings management at CBs (IBs).

The effectiveness of audit committees is also influenced by the frequency of its meetings. It is argued that the audit committee must meet more frequently in order to discharge its responsibilities effectively (e.g. Bédard et al., 2004). Consistent with this argument, Xie et al. (2003) find that earnings management is less likely to occur with an increased number of the audit committee meetings during a fiscal year. Abbott et al. (2000) and Beasley, Carcello, Hermanson, & Lapides (2000) also find that firms with more frequent audit committee meetings are less exposed to sanctions for misleading financial reporting.

Ex ante we believe that the above argument holds for MENA banks, especially after introducing banks corporate governance codes, but it is worth mentioning that irregular and limited patterns of audit committee meetings are prevalent within the corporate sectors, as the banking sector, (Al–Twaijry, Brierley, & Gwilliam, 2002; Safieddine, 2009). This leads to the following hypothesis:

H1c: The number of audit committee meetings negatively affects earnings management in MENA banks.

Regarding IBs, more meetings are expected to be less effective in constraining earnings management, since audit committees at IBs are likely to confront more challenges in comparison with CBs counterparts. For instance, the PLS feature of IBs contracts calls for rigors computation of the profit sharing rate which varies widely between different assigned projects (Sundararajan & Errico, 2002). The number and scope of the projects that IBs might indulge by using IAHs funds are unlimited as well (Sundararajan & Errico, 2002). Therefore, monitoring earnings management is less likely to receive enough attention during the audit committee meetings at IBs. Another challenge which might lessen audit committees at IBs

to monitor earnings management and calls for more efforts (i.e. meetings) is the lack of Islamic auditing standards to effectively avail from the internal auditing process (Safieddine, 2009). For instance, nowadays, only five auditing standards have been issued by the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI).[24] Given these complexities inherent at IBs rather than CBs, we expect that the meetings of IBs audit committees positively affect earnings management. This leads us to the following hypothesis:

H1d: The number of audit committee meetings negatively (positively) affects earnings management at CBs (IBs).

4.2.2. Audit committee independence

The complexities of a firm's (non)pecuniary issues and the level of its exposure to regulations require audit committee members to exert enormous efforts (He & Yang, 2014). However, their effectiveness in dealing with these challenges is fostered, in part, by the level of their independence in accomplishing the assigned duties. Independent directors are usually more able to effectively monitor financial reporting quality because they are less controlled by bank managers. They are also prone to bear reputational cost in case of financial reporting failure (Srinivasan, 2005). Prior research (e.g. Bédard et al., 2004) and regulators have long suggested that the higher proportion of independent members on audit committees leads to vigilant monitoring over management's opportunistic behaviour. SOX 2002, for instance, compels the US listed firms to institute audit committees with entirely independent members.

However, contrasting to SOX (2002), Klein (2002) finds that audit committees with entire independent members have no impact on the magnitude of abnormal accruals. Rather, she finds that the audit committee of a majority of independent members is more likely to decrease abnormal accruals. A major stream of literature corroborates Klein (2002) findings that the audit committee which is dominated by independent directors significantly and negatively affects earnings

[24] http://aaoifi.com/standard/accounting-standards/?lang=en#.

management (See: Bédard et al., 2004; Chen & Zhang, 2014; Davidson et al., 2005; García-Meca & Sánchez-Ballesta, 2009; Xie et al., 2003).

To some extent, these findings might be generalized to MENA countries since the reform of corporate governance promotes the independence of audit committees as a corner stone to its effectiveness. Though, while this might be held officially, it might be violated practically. For instance, the authoritative and hierarchical structure prevails the management style in MENA countries (Ali, 1993). Such style prepares the subordinates, such as audit committees, to accept the decisions which are made by management rather than participate in or monitor it (Ali, 1993). However, independent directors in audit committees may bear other positions in other banks, organizations and/or governmental agencies (Chen & Zhang, 2014). Therefore, it is argued that those directors may have an incentive to effectively perform their duties to maintain their level of reputation, which in turn opens new directorships. Hence, we expect that the independent audit committee members negatively affect earnings management, which leads to the following hypothesis:

H2a: Audit committee independence negatively affects earnings management in MENA banks.

In IBs context, the reputation of audit committee members, especially independent directors, is at stake since they are exposed to more vitriolic criticism in case of financial reporting failure due to the religious label of these banks and the social responsibility of its individuals. In addition, the prevailed religious social norms in IBs might spur individuals to promote honesty in conducting their assigned tasks (Dyreng et al., 2012). Independent directors, in addition to their regular roles, are regarded as an objective third party to guarantee a proper use of funds of IAHs (Safieddine, 2009). For this reason, we expect that the independent directors at IBs might be more vigilant to the earnings management, which leads to the following hypothesis:

H2b: The negative association between audit committee independence and earnings management is lower in CBs than in IBs.

4.2.3. Audit committee expertise

To buttress the effectiveness of the audit committee, its members should adequately possess competent accounting and financial expertise. The audit committee that includes members with financial literacy is presumably able to control and communicate with internal and external auditors. It is quite conceivable that the role of those members could be more crucial in banks due to the complex financial reporting process, peculiarities of accounting standards, information asymmetry, and the subtle earnings management. This is consistent with the report of the American Institute of Certified Public Accounts (AICPA, 2006), which states that banks' LLR is ranked the first account to camouflage earnings management among deficiency cases discovered by the Public Company Accounting Oversight Board (BCAOB).

Dechow, Myers, & Shakespeare (2010) examine the effect of audit committee expertise on earnings management through asset securitizations realized gains, based on a sample where banks make up its largest portion. They find evidence that the financial experts of the audit committee have no impact on realized gains from assets securitization. They attribute these findings to the complexities of fair value accounting rules even for the financial experts of audit committees.

However, another stream of literature documents the negative effect of an expert audit committee on earnings management. Focusing on (un)regulated sectors, He & Yang (2014) document that the number of experts of an audit committee is negatively related to earnings management. More specifically, they find that the audit committee with financial experts in regulated industries (i.e. banks) is more able to significantly undermine positive accruals than unregulated firms. Based on a sample of the first 110 S&P 500 index, Xie et al. (2003) find that financially sophisticated audit committee members are important in constraining earnings management. Abbott et al. (2004) and Bédard et al. (2004) also find that the financial experts of an audit committee are negatively associated with financial restatement and aggressive earnings management, respectively.

These findings which focus on developed countries, such as the US and European countries, spur less developed countries to enact corporate governance codes that

promote audit committees with expert members, as MENA countries. Yet, in these economies the effective implementation of codes should not be taken for granted. Also, the "naming is shaming" expression dominates the MENA region (Koldertsova, 2011). That is, enforcement authorities might levy or force companies and individuals to penalties and/or corrective actions without publically announcing it, which likely weakens the accountability and humpers the appetite toward transparent disclosure (Chahine & Tohmé, 2009). Therefore, the agency problems might be exacerbated since the accuracy of the financial reporting process could not be verified. This reasoning leads us to the following hypothesis:

H3a: Audit committee expertise positively affects earnings management in MENA banks.

With regard to IBs, the importance of audit committee expertise is hampered by two main factors. First, in order for financial products to be compliant with the Sharia, it must be ratified and approved by SSB scholars. Those scholars should be highly educated and knowledgeable of Islamic financial law (*Fiqh Al-Mua'malat*) (Hayat, Den Butter, & Kock, 2013). This aggravates the free riding problem between SSB and the experts of an audit committee. More specifically, the latter may rely on the former approval to the compliance of financial products to Sharia, which is ipso facto protected from aggressive earnings management due to the nature of financial products and the religious label of IBs (Elnahass et al., 2014; Quttainah et al., 2013). Second, while using IAHs' funds is fully under the control of bank managers, it may induce managers to manage earnings to appeal more funds of IAHs to indulge in riskier investments instead of using shareholders' funds. This accentuates the agency problem of IAHs, which obstructs the expert members of the audit committee to be omniscient of different earnings management behaviour by IB managers. Therefore, we expect the following hypothesis:

H3b: The positive association between audit committee expertise and earnings management is lower in CBs than in IBs.

4.3. Data and methodology

4.3.1. Data

Our study focuses on the MENA commercial CBs and IBs listed on their respective stock markets, for which we extracted both bank names and its classification to CBs or IBs from Zawya database. Further, both financial statements data and audit committee characteristics were hand-collected from the annual reports published on the website of each bank over the period from 2006 -2014.

Our selection process is based primarily on three criteria. First, the annual reports of each bank must be available for at least five years. The threshold of five years was selected in order to make sure that some changes happened on the audit committee of each bank, which is to some extant stable across years. Second, each bank during these years must follow International Financial Reporting Standards (IFRS). These standards enhance the comparability across MENA countries where similar culture, religion, and language are already prevailed. Third, the law of each country must give the right for both banking segments, CBs and IBs, to co-exist within its banking sector. This indicates that both segments follow the same set of rules and regulations.

We intended first to include all countries classified within the MENA region and the Gulf Countries Council (GCC) as well. More specifically, these countries are Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen. Based on the aforementioned criteria, we excluded six countries due to data unavailability, such as Algeria, Djibouti, Libya, Morocco, Tunisia, and Yemen. We also excluded Iran and Sudan because the legislation of these countries states that the whole banking sector must follow the Islamic banking system.

The data set achieved is available for 78 CBs and 26 IBs across 12 MENA countries, yielding 613 unbalanced bank-year observations including outliers. To hamper the effect of these outliers on our results, we winsorize all variables at the top and

bottom 1%. Further, 178 observations with missing values were excluded[25] due to the missing information about audit committees of the banks included in our study, leading to a final sample of 435 observations for 77 banks, 58 CBs and 19 IBs, across 11 countries. These observations represent all the available data of listed CBs and IBs in MENA region. The final sample distribution to CBs and IBs across countries is presented in Table 2.1, chapter 2.

4.3.2. Models

4.3.2.1. Measuring earnings management

The published literature on the banking sector has focused on the discretionary portion of the accruals to test for earnings management. Following Beatty et al. (2002) and Kanagaretnam et al. (2010), we use the two-stage approach to measure the abnormal level of LLP and RSGL, earnings management. For LLP, we split total LLP into a nondiscretionary and discretionary loan loss provisions, NLLP and DLLP. The NLLP part represents the uncontrollable default risk associated with the bank's loans portfolio. This risk is disclosed in financial statements of the bank through net loans charge-offs (LCO) and non-performing loans (NPL) (Wahlen, 1994). In addition, bank managers consider the change in total outstanding loans (CHLOANS), different categories of outstanding loans (L_CATEGORIES), and beginning loan loss reserve (BEGLLR) when evaluate LLP (Cornett et al., 2009). Bank size also may determine the LLP; that is, a larger bank with more loans is likely to have more LLP. So, we proxy bank size through the natural log of total assets (LASSET). Specifically, we use the following model:

$$LLP_{it} = \alpha + \beta_1 BEGLLR_{it} + \beta_2 LASSET_{it} + \beta_3 LCO_{it} + \beta_4 CHLOANS_{it}$$

$$+ \beta_5 NPL_{it} + \beta_{6\text{-}11} L\_CATEGORIES_{it} + \varepsilon_{it} \quad (1)$$

For variables definitions see Table 2.2. Except for beginning LLR, we expect positive relationships between these variables and LLP. That is, bank managers are likely to increase LLP relatively with an increased level of net loans charge-off, changes in loans portfolio, nonperforming loans, and increases in different

[25] We use list wise deletion of missing value to minimize missing values bias, which excludes the entire observation if any single value of variables is missing.

loans categories. DLLP represents the error term of model 1, which remains after controlling all expected losses that bank managers usually consider when adjusting LLR each year. However, the error term standardized by total asset, similar to that of Cornett et al. (2009), is as follows:

$$DLLP_{it} = (\varepsilon_{it} \times LOANS_{it})/ASSETS_{it} \quad (2)$$

Where LOANS is total outstanding loans and ASSETS is total assets at the annual report date. RSGL is another way that bank managers might use to manage bank earnings. Again we follow Beatty et al. (2002) in order to find the discretionary part of RSGL, DRSGL. Specifically, we use the following model:

$$RSGL_{it} = \alpha + \beta_1 LASSET_{it} + \beta_2 URSGL_{it} + \varepsilon_{it} \quad (3)$$

For variables definitions see Table 2.2. $RSGL_{it}$ stands for realized securities gains and losses from held-to-maturity (HTM) and available-for-sale (AFS) securities to total assets for bank *i* at year *t*. According to Dechow et al. (2010), bank managers may utilize the discretion from fair value rules to manage earnings by predicting gains and losses from the selling of the remaining AFS, URSGL. We expect positive relationship between RSGL and URSGL. The error term of model 3 represents DRSGL, which remains after controlling for the expected URSGL.

Table 2.3, chapter 2, depicts the regression results for models 1 and 3 in panel A and B, respectively. Our measure of earnings management magnitude and direction is identified by the trade-off between recognizing RSGL and/or LLP; that is, manage earnings upward by a higher level of earnings management through recognizing more RSGL and less LLP and vice versa (Cornett et al., 2009). As such, the earnings management is defined as follow:

$$EM_{it} = DRSGL_{it} - DLLP_{it} \quad (4)$$

4.3.2.2. Measuring explanatory variables and control variables

Explanatory variables

Audit committee activity: We add two variables in order to measure the audit committee activity: its size and the number of meetings. The audit committee size

(ACSIZE%) measures the percentage of the total number of directors sitting on an audit committee to the total number of BOD at the annual report date. The number of meetings (DMMEET3) is a dummy variable that equals 1 if the audit committee meets three times or more during the year, and 0 if less or missing.[26]

Audit committee independence: To measure the audit committee independence we use the percentage of independent directors (ACIND%), which is the number of audit committee members that have no relationship with bank i except their position as BOD and/or audit committee member to the total audit committee size at the annual report date.

Audit committee expertise: To measure the audit committee expertise we use the percentage of expert directors (ACEXPERT%), which is the number of audit committee members holding an accounting/finance degree and/or having experience in auditing to the total audit committee size at the annual report date.

Islamic banks and interaction variables: In addition to our interest to study the effect of audit committee characteristics on earnings management within the MENA banking sector, the idiosyncratic characteristics of IBs calls for further study. All parties, including audit committees, of IB are involved in the notion of promoting fairness, justice, and abidance to Sharia rules. Given this behavioural pattern, we add a dummy variable that equals 1 if the bank is Islamic bank, and 0 otherwise. Finally, to examine whether the aforementioned audit committee characteristics at IBs may affect earnings management differently from that for CBs counterparts, we add several interactive variables by multiplying the variable IB with audit committee activity, independence, and expertise variables.

Control variables

Regulatory capital motive: Elnahass et al. (2014) argue that bank managers may resort to earnings management to comply with the minimum regulatory capital (Tier I) without resorting to external financing or facing insolvency risk. Beatty et

[26] Prior literature (e.g. Bédard et al., 2004) and the best governance practices of each respective country suggest three or four meetings a year in order to classify the audit committee as active committee.

al. (1995) find that earnings management through LLP and RSGL lead to increase regulatory capital. Accordingly, we expect a positive relationship between earnings management and the lagged tier I capital ratio. Therefore, a lagged tier I capital ratio ($TIER1_{it-1}$) is used to control for regulatory capital motive.

Income smoothing motive: To sustain consistent patterns of the reported earnings, bank managers may resort to earnings management (Burgstahler & Dichev, 1997). Since bank managers may manage earnings upward (downward) in order to conceal yearly earnings volatility, we have no prediction concerning the relationship between earnings management and a current year net income before taxes and discretionary items. Thus, we use the current year net income (NI_{it}) before taxes and discretionary items as a proxy for income smoothing motive.

Signalling motive: Earnings management could also be used to convey some information or signals to a financial market. Wahlen (1994) finds that the discretionary items of income statement, balance sheet, and the related footnotes can be used to convey private information to investors. However, since the view that the discretionary items within financial statements affect the coming years reported information (e.g. LLR and retained earnings), we expect a positive relationship between earnings management and the signalling motive. Therefore, we use one (NI_{it+1}) and two (NI_{it+2}) years ahead the current year net income before accruals as a proxy for signalling motive.

Merger and acquisition (M&A) transactions: All firms which are involved in M&A transactions might use earnings management in order to buttress their financial position (Anagnostopoulou & Tsekrekos, 2013; Erickson & Wang, 1999; Louis, 2004). Consistent with these studies, we expect a positive relationship between merger motive and earnings management. Thus, we add merger motive (MER) as a dummy variable that equals 1 if there are M&A transactions in each bank during the study period at the MENA region, and 0 otherwise.

Sharia Supervisory Board (SSB): IBs as well CBs with Islamic financing windows are obliged to incorporate SSB to its organization structure. This board must revise the financial products in order to ensure its adherence to the Sharia. They are also responsible to promote fairness and justice as important pillars of Sharia. Given

this role, CEOs and top management are required to provide transparent and trustworthy (non)financial information to SSB members in order to confirm that all products, services, and transactions are in accordance with the Sharia rules. Elnahass et al. (2014) and Quttainah et al. (2013) argue that this board protects IBs from aggressive earnings management. Consistent with these studies, we expect SSB to affect earnings management adversely. Thus, to control the effect of SSB as an additional layer of corporate governance, we add a dummy variable that equals 1 if the SSB is exist, and 0 otherwise.

4.3.2.3. Empirical model

After identifying the discretionary portions of LLP and RSGL that represent earnings management as well as several explanatory variables that reflect the audit committee characteristics of MENA banking, we use the following model:

$$EM_{it} = \alpha + \beta_1 ACSIZE\%_{it} + \beta_2 DMMEET3_{it} + \beta_3 ACIND\%_{it} + \beta_4 ACEXPERT\%_{it} + \beta_5 IB_{it} + \beta_6 IB_{it}*ACSIZE\%_{it} + \beta_7 IB_{it}*DMMEET3_{it} + \beta_8 IB_{it}*ACIND\%_{it} + \beta_9 IB_{it}* ACEXPERT\%_{it} + \beta_{10} TIER1_{it-1} + \beta_{11} NI_{it} + \beta_{12} NI_{it+1} + \beta_{13} NI_{it+2} + \beta_{14} MER_{it} + \beta_{15} SSB_{it} + \varepsilon_{it} \quad (5)$$

The variables in Model 5 are operationally defined in Table 4.1. We conduct our analysis using ordinary least square (OLS) adjusted for heteroscedasticity by using White (1980) robust standard errors.

Table 4.1. Definitions of chapter 4 variables

Variable	Definition
EM	The measure of earnings management as a percentage of total assets.
ACSIZE%	The percentage of audit committee members to the board of directors members at the annual report date.
DMMEET3	A dummy variable that equals 1 if the audit committee meets three times or more during the year, and 0 otherwise.
ACIND%	The percentage of the independent directors of audit committee to the audit committee size at the annual report date.
ACEXPERT%	The percentage of expert directors of the audit committee to the audit committee size at the annual report date.
$TIER1_{it-1}$	The lagged tier 1 capital ratio to the risk weighted assets.
NI_{it}	The current year net income before taxes, extraordinary items, LLP, and RSGL deflated by total assets.
NI_{it+1} and NI_{it+2}	One and two years ahead the current year net income before taxes, extraordinary items, LLP, and RSGL deflated by total assets.
MER	A dummy variable that equals 1 if any M&A occurred at banks i from 2006 till 2014, and 0 otherwise.
SSB	A dummy variable that equals 1 if the SSB exists within the governance structure of the Islamic bank, and 0 otherwise.

4.4. Results and discussions

4.4.1. Descriptive statistics and correlations

Table 4.2 presents descriptive statistics for the full sample. The data were further split into two subsamples, CBs and IBs in Table 4.3. In the last column, the t-test and the Wilcoxon z-score of these group differences in mean and median are presented, respectively. These results indicate that for the full sample (CBs sample; IBs sample) the mean ACIND% is 48.6% (47.2%; 53.3%), and ACEXPRT% is 39.6% (36.9%; 48.6%). These variables are significantly different between CBs and IBs. More specifically, this indicates that the audit committee of IBs typically have more independent and expert directors than their CBs

counterparts. There are no significant differences between CBs and IBs in terms of the audit committee size and the number of meetings.

With regard to the control variables, distinguishing between CBs and IBs, the latter is less likely to report less net income before accruals. Yet, they are more keen to meet Tier I capital requirements, and have a significantly higher level of M&A transactions.

Table 4.4 presents Pearson (below the diagonal) and Spearman (above the diagonal) pairwise correlations of the variables which were included in our empirical model. First, we notice that the IB variable is positively associated with earnings management. Consistent with our expectation, the audit committee size and the percentage of the audit committee experts are positively related to earnings management. We also notice that earnings management is likely to be used to increase the regulatory capital, but it is not used for income smoothing or signalling motives. Remarkably, we notice that the audit committee independence variables are positively and significantly related with its expertise variables; that is, the banks seek to institute audit committees with more independent and experts directors. In addition to Pearson and Spearman correlations, the results of the variance inflation factor (VIF) tests indicate that the multicollinearity is not a serious issue across different regression specifications, higher (2.16).[27]

[27] VIF tests results are based on the different models that are listed in regression results, Table 4.5.

Table 4.2. Descriptive Statistics

Variable	N	Mean	Median	Std. dev.	Min.	Max.
EM	613	.001	.000	.011	-.014	.041
ACSIZE%	603	.312	.333	.162	.000	.625
DMMEET3	613	.483	.000	.500	.000	1.00
ACIND%	601	.486	.500	.375	.000	1.00
ACEXPERT%	601	.396	.333	.355	.000	1.00
IB	613	.233	.000	.423	.000	1.00
$TIER1_{it-1}$	521	.176	.156	.086	.000	1.00
NI_{it}	535	.025	.024	.017	-.076	.154
NI_{it+1}	611	.025	.023	.014	-.076	.184
NI_{it+2}	457	.023	.023	.015	-.034	.183
MER	613	.191	.000	.393	.000	1.00
SSB	613	.382	.000	.486	.000	1.00

This table presents the descriptive statistics results for the full sample of main empirical model variables.

Table 4.3. Two samples t-test and z-score results

	Class	N	Mean	Median	Std. dev	S.E. mean	*t*-test ***z-score***
EM	IBs	143	0.003	0.001	0.008	0.001	-2.370**
	CBs	470	0.001	-0.000	0.012	0.001	***-4.389****
ACSIZE%	IBs	140	0.300	0.333	0.146	0.012	1.055
	CBs	463	0.315	0.333	0.167	0.008	***1.133***
DMMEET3	IBs	143	0.441	0.000	0.498	0.042	1.159
	CBs	470	0.496	0.000	0.500	0.023	***1.155***
ACIND%	IBs	140	0.533	0.667	0.405	0.034	-1.668*
	CBs	461	0.472	0.500	0.365	0.017	***-1.825****
ACEXPERT%	IBs	140	0.486	0.417	0.382	0.032	-3.248***
	CBs	461	0.369	0.333	0.342	0.016	***-3.157****
$TIRE1_{it-1}$	IBs	120	0.224	0.185	0.141	0.013	-4.795***
	CBs	401	0.162	0.153	0.053	0.003	***-5.280****
NI_{it}	IBs	124	0.021	0.018	0.024	0.002	2.199**
	CBs	411	0.026	0.024	0.014	0.001	***4.606****
NI_{it+1}	IBs	143	0.021	0.019	0.023	0.023	2.597***
	CBs	468	0.026	0.024	0.026	0.014	***4.839****
NI_{it+2}	IBs	105	0.015	0.017	0.015	0.001	6.307***
	CBs	352	0.026	0.024	0.015	0.001	***6.469****
MER	IBs	143	0.287	0.000	0.434	0.038	-3.006***
	CBs	470	0.162	0.000	0.369	0.017	***-3.328****

This table presents two sample t-test and z-score results. ***, **, * indicate significance level at the 1%, 5%, and 10% respectively (two-tailed).

Table 4.4. Correlation matrix

Correlation matrix (Pearson correlations below the diagonal, Spearman correlations above the diagonal)

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. EM	**1**	.009	-.006	.006	.128*	.177*	.065	-.250*	-.107*	-.179*	.058	.100*
2. ACSIZE%	.076*	**1**	.461*	.337*	.237*	-.046	-.147*	-.070	-.061	-.024	.024	.042
3. DMMEET3	.006	.489*	**1**	.319*	.133*	-.047	-.092*	.069	.035	.111*	-.062	.040
4. ACIND%	.010	.451*	.323*	**1**	.506*	.075*	-.035	.150*	-.145*	-.132*	.030	.129*
5. ACEXPERT%	.115*	.336*	.097*	.516*	**1**	.129*	-.021	-.337*	-.334*	-.323*	.116*	.019
6. IB	.144*	-.040	-.047	.068*	.139*	**1**	.232*	-.200*	-.196*	-.303*	.135*	.615*
7. $TIER1_{it-1}$	.132*	-.132*	-.105*	-.037	.005	.314*	**1**	.133*	.058	-.022	.013	.079*
8. NI_{it}	-.247*	-.143*	.027	-.127*	-.282*	-.164*	.137*	**1**	.704*	.614*	-.146*	-.079*
9. NI_{it+1}	-.088*	-.126*	.002	-.122*	-.283*	-.166*	-.007	.642*	**1**	.715*	-.140*	-.090*
10. NI_{it+2}	-.189*	-.096*	.073	-.081*	-.281*	-.312*	-.140*	.541*	.668*	**1**	-.228*	-.141*
11. MER	.058	.018	-.062	.030	.131*	.135*	.010	-.160*	-.151*	-.248*	**1**	.071*
12. SSB	.060	.048	.040	.135*	.022	.615*	.149*	-.105*	-.122*	-.206*	.071*	**1**

For the variables definitions see table 4.1. * indicates significance level at 10% or less (two-tailed).

4.4.2. OLS results, sensitivity analyses, and discussion

4.4.2.1. OLS results

Table 4.5 presents the results of six OLS regressions of the empirical model. columns 1, 3, and 5 present a baseline model for the audit committee activity, independence, and expertise, respectively, whereas the interaction variables are introduced in columns 2, 4, and 6. At the outset, we find that the IB variable is generally associated with higher levels of earnings management. This result contradicts Abdelsalam et al. (2016) and Quttainah et al. (2013) with respect to the negative association between IBs and earnings management.

column 1 shows that the relationship between the audit committee activities (viz. the size and the number of meetings) and earnings management are insignificant, thus H1a and H1c are not supported. Similarly, in column 2 no significant relationship is observed between the audit committee activities and CBs' managed earnings, which partially contradicts H1b and H1d. For IBs, these hypotheses are confirmed in column 2. This model shows a significant negative sign in the interaction of the IB dummy and ACSIZE% as predicted in H1b. That is, a one-unit increase in the audit committee size is associated with a 0.0146 unit decrease in earnings management at IBs. The interaction variable between IB dummy and DMMEET3 is also significant but positive.

column 3 presents a significant negative relationship between the audit committee independence and earnings management (β= -.00244, $p<0.01$). Distinguishing between CBs and IBs, model 4 shows that the interaction variable IB*ACIND% is not significant, whereas (1-IB)*ACIND% variable is significant and negative (β= -.00231, $p<0.01$). Thus, H2b is not confirmed since the role of independent directors at CBs is more crucial at IBs in constraining earnings management. column 5 indicates that the literate audit committee has an insignificant effect on earnings management, therefore H3a is not confirmed. Similar results also are presented in column 6 for CBs. These results contradict the recommendations of BCBS (2010) and BRC (1999) that the existence of financial experts on the audit committee is associated with better earnings quality.

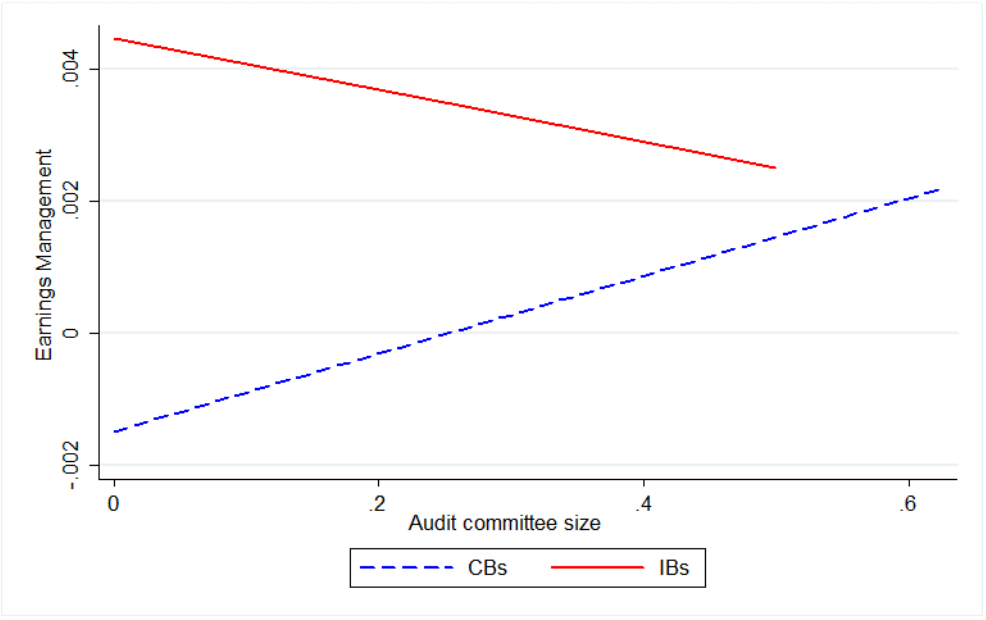

Figure 4.1. The relationship between audit committee size and earnings management in CBs vs. IBs

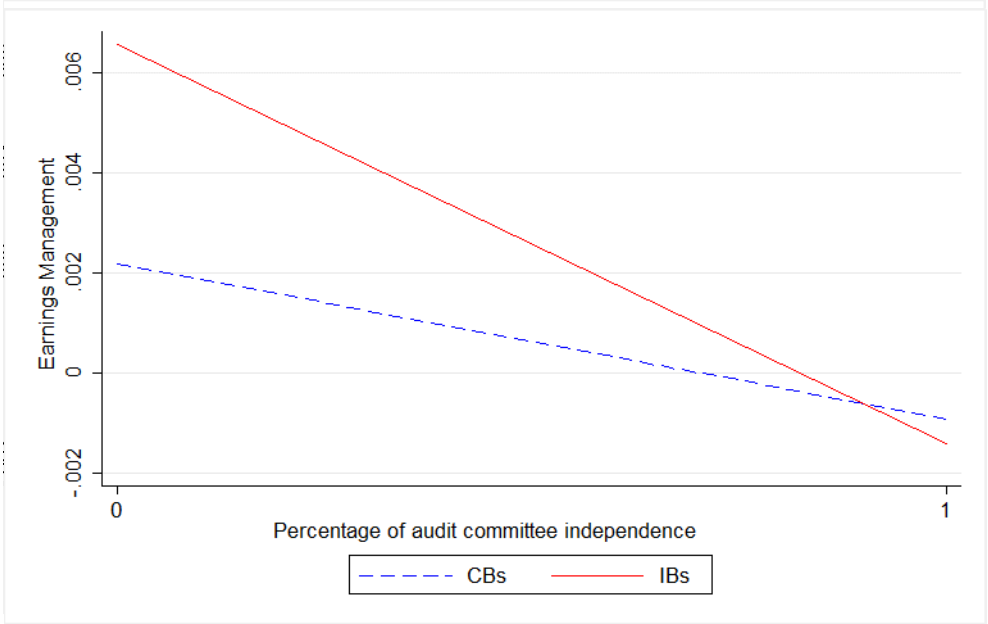

Figure 4.2. The relationship between audit committee independence and earnings management in CBs vs. IBs

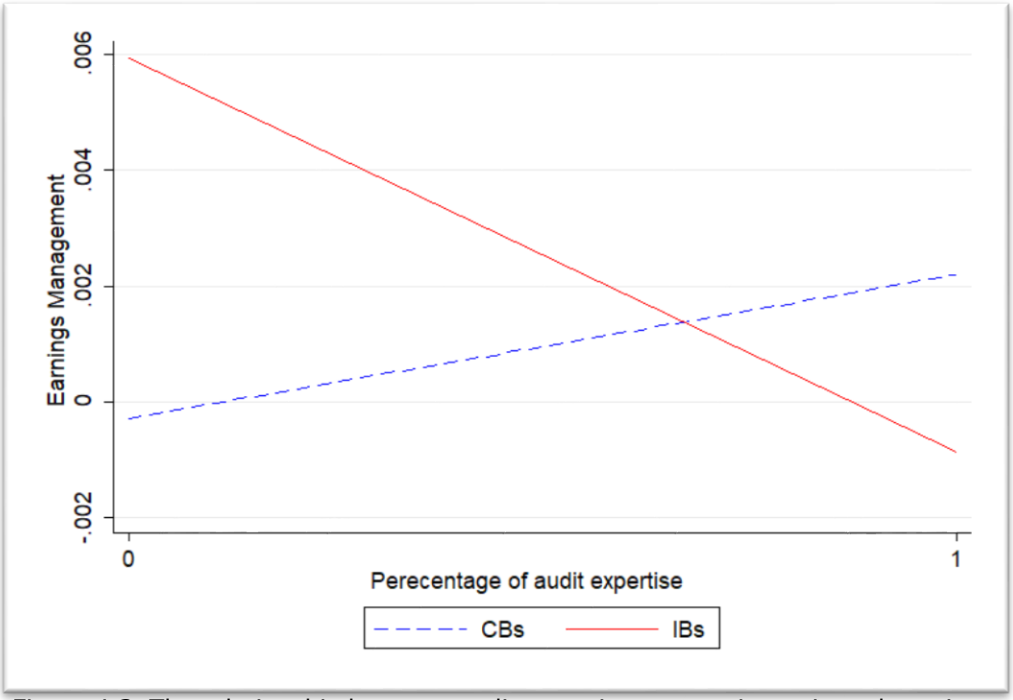

Figure 4.3. The relationship between audit committee expertise ratio and earnings management in CBs vs. IBs

However, for IBs, column 6 presents a negative and significant relationship between IB*ACEXPRT% and earnings management. A one-unit increase in the audit committee expertise at IBs leads to a 0.007 unit decrease in earnings management regardless whether the majority are experts or not. This contradicts our conjecture in H3b.

To better demonstrate the relationship between audit committee characteristics and earnings management at CBs and IBs, we provide Figures 4.1, 4.2, and 4.3. All figures are drawn based on the final sample and holding all other variables at the mean values. Figure 4.1 indicates a negative relationship between the audit committee size and earnings management at IBs, while a positive relationship between these two variables is observed in CBs. These results suggest that a larger audit committee actually helps to constrain earnings management in IBs, whereas a larger committee is associated with higher earnings management at CBs.

Figure 4.2 explains a negative relationship between the independent directors ratio and earnings management in both IBs and CBs. However, the elasticity difference between these two subsectors is minimal. Figure 4.3 demonstrates that the expert directors ratio decreases earnings management in IBs, but increases earnings management at CBs. Finally, of all control variables only the income smoothing motive (NI_{it}) is significantly negative across all regressions. This might indicate that bank managers are less motivated to smooth earnings with increased income.

Table 4.5. Regression results

	(1) EM	(2) EM	(3) EM	(4) EM	(5) EM	(6) EM
ACSIZE%	0.00151					
	(0.55)					
DMMEET3	0.00043					
	(0.59)					
ACIND%			-0.0024***			
			(-2.90)			
ACEXPERT%					-0.0009	
					(-0.74)	
IB*ACSIZE%		-0.0146**				
		(-2.14)				
(1-IB)*ACSIZE%		0.00379				
		(1.27)				
IB*DMMEET3		0.00348**				
		(2.10)				
(1-IB)*DMMEET3		-0.00034				
		(-0.41)				
IB*ACIND%				-0.0029		
				(-1.44)		
(1-IB)*ACIND%				-0.0023***		
				(-3.04)		
IB*ACEXPRT%						-0.0074***
						(-3.18)
(1-IB)ACEXPRT%						0.00111
						(0.80)
IB	0.0019**	0.00548**	0.00166*	0.002	0.00178*	0.0057***
	(2.12)	(2.41)	(1.84)	(1.43)	(1.94)	(4.52)
$TIER1_{it-1}$	0.0101	0.00838	0.00806	0.00786	0.00832	0.00787
	(1.40)	(1.30)	(1.19)	(1.21)	(1.21)	(1.23)
NI_{it}	-0.17***	-0.166***	-0.172***	-0.173***	-0.166***	-0.172***
	(-3.13)	(-3.19)	(-3.20)	(-3.17)	(-3.12)	(-3.29)
NI_{it+1}	0.108	0.114	0.112	0.112	0.108	0.112
	(1.37)	(1.48)	(1.43)	(1.43)	(1.36)	(1.46)

NI_{it+2}	0.00776	0.00588	0.00969	0.0104	0.00187	0.00759
	(0.08)	(0.06)	(0.10)	(0.11)	(0.02)	(0.08)
MER	-0.001	-0.0006	-0.001	-0.001	-0.00096	-0.0006
	(-1.08)	(-0.74)	(-1.18)	(-1.17)	(-1.09)	(-0.72)
SSB	-0.0009	-0.00085	-0.00075	-0.00078	-0.00094	-0.00088
	(-1.38)	(-1.28)	(-1.21)	(-1.24)	(-1.51)	(-1.45)
Year and country	Yes	Yes	Yes	Yes	Yes	Yes
N	436	436	435	435	435	435
R^2	0.260	0.277	0.268	0.268	0.257	0.288
F	3.248^{***}	3.201^{***}	3.550^{***}	3.488^{***}	3.504^{***}	4.233^{***}

This table presents OLS regression for empirical model, eq.5. For the variables definitions see Table 4.1. Columns 1 (2) present audit committee activities without (with) interaction variables with IB, respectively. Columns 3 (4) present audit committee independence without (with) interaction variables with IB, respectively. Column 5 (6) present audit committee expertise without (with) interaction variables with IB, respectively. For each variable, both the beta coefficients and *t* statistics (in parentheses). ***, **, * indicate significance level at the 1%, 5%, and 10% respectively (two-tailed)

4.4.2.2. Sensitivity analyses

In order to ensure that the results presented in the previous section are robust, we conduct some additional tests. First, consistent with prior literature (e.g. Quttainah et al., 2013), we retest the interaction models (columns 2, 4, and 6) in Table 4.5, but we use the absolute value of earnings management. Using the absolute value deals with the magnitude of earnings management rather than the intention of bank managers to increase or decrease income. With regard to audit committee activities, the results in Table 4.6 column 1 depict that (i) IB*ACSIZE% variable is no longer significant, and (ii) (1-IB)*ACSIZE% variable has changed to significant. column 2 states that IB*ACIND% variable has changed to insignificant, whereas the results on column 3 are unchanged.

Second, prior literature (e.g. He & Yang, 2014; Palmrose, Richardson, & Scholz, 2004) suggests that the directions of earnings management to increase or decrease income might possess different characteristics, which in turn affects the effectiveness of monitoring by audit committees in different ways. We expect that the intention of audit committees to monitor earnings management is likely to differ with the directions of earnings management. However, to test this hypothesis, we split the full sample into income-increasing (EM>0) versus income-decreasing (EM<0) accruals. Table 4.7 presents results that are associated with the positive accruals in columns 1, 3, and 5 that represent audit committee activities, independence, and expertise, respectively. With regard to the audit committee activities, these results show that (i) larger audit committees increase positive accruals at CBs, and (ii) no statistically significant difference is observed between CBs and IBs with respect to the number of audit committee meetings. The results for audit committees independence indicate that independent directors constrain earnings management to increase income at CBs as well as IBs. The results with respect to the audit committee experts are similar to the results depicted in Table 4.5.

Columns 2, 4, and 6 in Table 4.7 present results associated with the negative accruals. Specifically, we find that (i) larger audit committees significantly decreases income-decreasing earning management, whereas no significant difference exists between the effect of the number of audit committee meetings

on negative accruals to decrease income at IBs or CBs, (ii) independent directors have no significant effect on negative accruals in both IBs and CBs, and (iii) no significant difference is observed between CBs and IBs with regard to the audit committee expertise. Overall, our results suggest that the function of audit committees might be different in controlling income-increasing and income-decreasing accruals, while the former is more important to audit committees at IBs.

Table 4.6. Using the absolute value of earnings management

Robustness test 1: Absolute value of earnings management.

	(1) AEM	(2) AEM	(3) AEM
IB*ACSIZE%	-0.00663		
	(-0.87)		
(1-IB)*ACSIZE%	0.00547*		
	(1.69)		
IB*DMMEET3	0.00281*		
	(1.76)		
(1-IB)*DMMEET3	-0.00114		
	(-1.20)		
IB*ACIND%		-0.00371*	
		(-1.89)	
(1-IB)*ACIND%		-0.00275***	
		(-3.52)	
IB*ACEXPRT%			-0.00696***
			(-2.80)
(1-IB)* ACEXPRT%			0.00025
			(0.18)
IB	0.00004	-0.00107	0.00184
	(0.02)	(-0.78)	(1.43)
$TIER1_{it-1}$	0.0189**	0.0166**	0.0168**
	(2.54)	(2.32)	(2.34)
NI_{it}	-0.166**	-0.180**	-0.177**
	(-2.43)	(-2.58)	(-2.58)
NI_{it+1}	0.0591	0.0587	0.0561
	(0.65)	(0.64)	(0.62)
NI_{it+2}	0.00011	0.00610	-0.00039
	(0.00)	(0.07)	(-0.00)
MER	-0.00034	-0.00067	-0.0003
	(-0.34)	(-0.64)	(-0.29)
SSB	-0.0005	-0.0006	-0.0007
	(-0.85)	(-0.97)	(-1.22)
Year and country	Yes	Yes	Yes
N	436	435	435
R^2	0.279	0.281	0.288
F	3.712***	3.977***	4.432***

***Table 4.7*. Split earnings management to increase or decrease income**

Robustness test 2: accruals to increase income (EM>0) or decrease income (EM<0).

	(1)	(2)	(3)	(4)	(5)	(6)
	EM>0	EM<0	EM>0	EM<0	EM>0	EM<0
IB*ACSIZE%	-0.010	-0.006**				
	(-1.18)	(-2.03)				
(1-IB)*ACSIZE%	0.008**	0.00009				
	(2.13)	(0.04)				
IB*DMMEET3	0.0023	0.00092				
	(1.18)	(0.70)				
(1-IB)*DMMEET3	-0.001	0.00058				
	(-0.58)	(0.95)				
IB*ACIND%			-0.006***	0.0001		
			(-2.73)	(0.11)		
(1-IB)*ACIND%			-0.004***	0.0003		
			(-2.84)	(0.04)		
IB*ACEXPRT%					-0.008***	-0.0012
					(-3.22)	(-0.84)
(1-IB)* ACEXPRT%					0.00207	0.00003
					(0.98)	(0.03)
IB	0.0042	0.004***	0.00124	0.0019	0.005***	0.0025**
	(1.50)	(2.78)	(0.85)	(1.53)	(3.06)	(2.59)
$TIER1_{it-1}$	0.021**	-0.00482	0.0181**	-0.0041	0.0196**	-0.004
	(2.07)	(-1.57)	(1.98)	(-1.28)	(2.11)	(-1.29)
NI_{it}	-0.2***	-0.0165	-0.236***	-0.012	-0.234***	-0.0147
	(-3.34)	(-0.48)	(-3.28)	(-0.31)	(-3.47)	(-0.40)
NI_{it+1}	0.0951	0.0846**	0.0987	0.0875**	0.1000	0.0835**
	(1.03)	(2.20)	(1.06)	(2.30)	(1.12)	(2.13)
NI_{it+2}	-0.025	-0.0321	-0.0202	-0.0369	-0.0263	-0.0325
	(-0.20)	(-0.76)	(-0.16)	(-0.86)	(-0.22)	(-0.75)
MER	-0.007	-0.00036	-0.0020*	-0.0003	-0.00151	-0.0003
	(-1.44)	(-0.49)	(-1.72)	(-0.47)	(-1.32)	(-0.42)
SSB	-0.001	-0.00074	-0.00047	-0.0005	-0.0008	-0.0005
	(-1.06)	(-1.13)	(-0.54)	(-0.78)	(-0.99)	(-0.89)
Year and country	Yes	Yes	Yes	Yes	Yes	Yes
N	220	216	219	216	219	216
R^2	0.319	0.290	0.409	0.277	0.402	0.262
F	4.85***	4.470***	5.343***	4.291***	5.430***	4.961***

4.4.2.3. Discussion

The focus of this study is to explore whether the relationship between audit committee characteristics and earnings management might be different within the high levels of religious adherence contexts, such as IBs. These banks co-exist with CBs that resemble the western banks in the MENA, which gives a natural experiment to test our arguments. Taking social norm theory, we predict that a religious adherence environment will spur individuals (i.e. audit committee directors) to monitor earnings management behaviour. Accordingly, we argue that banks with an Islamic label are considered as an ideal setting to examine the effect of audit committee characteristics, as recommended by best practice codes, on earnings management. before considering the differences between CBs and IBs, we find that the MENA banks generally employ less earnings management when audit committees incorporate more independent directors. This suggests that the implementation of BRC (1999) recommendations could indeed significantly enhance the monitoring role of audit committees. This also corroborates Koldertsova (2011) findings about the transition of MENA countries to the strict enforcement of governance codes rather than recommend it.

For IBs, consistent with our expectations, the results indicate that larger audit committees are more effective in curbing earnings management. less meetings also are found to constrain earnings management. This might be consistent with the notion that a larger audit committee and fewer meetings will keep directors motivated to effectively attend the meetings and reduce free riding problems. Another possible reason is that larger audit committees at IBs might be more beneficial with the increased level of complexities and information asymmetry due to its unique equity structure (Safieddine, 2009).

Results also indicate that less earnings management is associated with more presence of independent directors on audit committees of IBs. This is consistent with Klein's (2002) findings, since it articulates that the optimal mix of external and insider directors is achieved when the former dominate the audit committee structure and the latter bring in more timely information about the bank. A higher proportion of experts on audit committees, in contrast to our expectations, hinders the ability of bank managers to manage earnings. This is consistent with prior

literature (e.g. Bédard et al., 2004) findings with respect to the crucial role that the expert directors might play in curbing earnings management. Within IBs context, this result may also indicate to a complementary role, if existing, between the scholars of SSB and the experts of the audit committee, which might be an interesting issue for future research.

Distinguishing between CBs and IBs, the audit committee size and the number of meetings have no significant effect on earnings management at CBs. In addition, results indicate that the negative effect of an audit committee independence on earnings management is significant within CBs but not at IBs. However the audit committee expertise of the latter significantly affects earnings management. Collectively, these results present evidence that the Islamic label of IBs might differently affect the role of audit committees in curbing earnings management as compared to its role at CBs.

This study faces certain limitations that can be an important challenge for future research. First, we study only one dimension of earnings management, namely accrual-based earnings management. While our results generally show the negative impact of audit committees on earnings management by using accruals, the reform of governance codes may spur banks to change their way of managing earnings to other subtle ways such as real activities earnings management (e.g. Roychowdhury, 2006).

Second, our results might be biased towards the well-recognized and large banks since we have targeted the listed banks only. Including unlisted or smaller banks might divulge more aggressive earrings management.

Third, we cannot directly measure the level of the religious adherence of individuals on audit committees which might direct their efforts toward better monitoring of management discretion decisions. Future research may conduct questionnaires to consider this important dimension.

Finally, due to the limited data availability, we excluded important factors inherent to the MENA region, such as whether the audit committees comprise individuals

from influential families (e.g. royal families) classified as independent and/or experts, which may severely constrain its effectiveness.

4.5. Conclusion

This study contributes to the extant literature on the relationship between the audit committees characteristics, as promoted by best practice codes, and earnings management by providing an additional unexplored dimension, namely IBs. Prior literature has shown that the religiously oriented banks have profound influence on earnings management behaviour, yet no study has included the effect of an Islamic label of these banks on the relationship between audit committees and earnings management. Failure to address this issue may lead to curtail the monitoring and implementing of corporate governance codes into different contexts, enacting ineffective rules and regulations, and prevent benefiting from these unconventional contexts to improve the regulations set forth.

As such, we find that the Islamic label assigned to IBs is an important factor in determining the relationship between earnings management and the functioning of audit committees. Specifically, we find that larger audit committees with fewer meetings are associated with less optimistic accrual choices. These banks also have lower levels of earnings management with an increased proportion of independent directors on audit committee. Furthermore, more financially sophisticated directors on audit committee definitely constrains earnings management behaviour. These results are to a large extent consistent with the stipulated recommendations by BRC (1999). Distinguishing between CBs and IBs, while the independent directors on the audit committees of CBs reduce earnings management, only audit committees with financially sophisticated directors at IBs alleviate earnings management. Collectively, our results are consistent with the religious social norms theory which might motivate individuals to conform to a surrounding religious environment by promoting honesty in achieving their duties.

Our results suggest that the morality-driven audit committee in an environment that promotes religious belief, ethics, and honesty refrain from perpetrating earnings management. Considering this dimension can be a valuable source of knowledge for regulators, standard setters, and CBs. They can draw some lessons

from IBs and give attention to the factors motivating individuals, such as audit committee directors, to direct their efforts toward monitoring earnings management.

Chapter 5 - Conclusion

5.1. Outline

The research objective of this dissertation is to expand our knowledge of corporate governance in a unique context, IBs, and how it might impact earnings management differently. By using several **prevailed cultural issues related to the political ties and family involvement in a developing context, the MENA region**, and a different array of **theories**, this dissertation adds to the current literature by identifying and filling several gaps related to this topic. This final chapter briefly highlights the empirical findings in section 5.2. Section 5.3 presents the theoretical contributions. Section 5.4 summarises practical contributions. And suggestions for future research are presented in section 5.5.

5.2. Empirical findings

Findings chapter 2. The main objective of this chapter was to examine the role of BOD on mitigating earnings management within a relatively unexplored developing region, namely MENA. Our results reveal that the banking sector in the MENA region generally promotes the independent and/or affiliated directors as a key factor to monitor earnings management. This extends the prior literature findings to a developing countries context. However, the BOD size and duality seems to have insignificant effect on earnings management within MENA banks. This contradicts prior literature on the importance of larger BOD size in curbing earnings management in banks (e.g Andres & Vallelado, 2008).

Moreover, we examined to what extent, if any, BOD size, independence, and duality may impact earnings management differently between CBs and IBs. Our results indicate that the larger BOD at the latter is less efficient in constraining earnings management. Taking agency theory into account, these results confirm prior literature on the inefficiency of larger BOD, since it hampers coordination and decision making process, especially within a complex agency context as IBs. In addition, IBs with more independent directors are more able to reduce agency conflicts through more vigilant monitoring to earnings management. However, this is not the case when BOD at IBs encompasses more affiliated directors: the

agency conflicts increase since the earnings management is likely to occur with more affiliated directors.

Findings chapter 3. The focus of this chapter was to explore whether the relationship between ownership structure and earnings management might be affected within IBs that have different equity structure from the one in CBs counterparts. Such different equity structure might present more complicated agency conflicts, namely IAHs-bank managers. These agency conflicts generally result from the full control of the bank managers on the funds of IAHs, while the latter are not able to manage their funds. The existence of such agency conflicts may change the way that the shareholders (viz. internal, block-holders, and institutional owners) view earnings management. In other words, those shareholders might facilitate earnings management to exploit IAHs funds for self-serving purposes (e.g. moral hazard). In line with our argument, the results indicate that as the level of internal (directors, CEOs, and their relatives) and/or institutional ownership at IBs increase, earnings management is likely to increase. This exacerbates agency conflicts and information asymmetry problem of the reported earnings that IAHs usually use to monitor bank managers.

With respect to block-holders, the results reveal that with more shares owned by block-holders, earnings management is likely to plummet. By monitoring opportunistic earnings management, agency conflicts between IAHs and banks managers are likely to decrease, which gives a momentum to the notion of coalition between block-holders and IAHs to secure the latter funds.

Findings chapter 4. In this chapter we further examined whether the relationship between audit committees and earnings management might be different within the high levels of religious adherence contexts, such as IBs, from that relationship within CBs. Specifically, we consider the so called "best practices" codes of governance that promote the audit committee activities (its size and the number of meeting), independence, and expertise. We argue that the religious social norms prevailed in religiously oriented IBs might spur audit committee directors who interact within this environment to practice more vigilant monitoring on the unethical practices of earnings management. Consistent with our expectations, our results indicate that larger audit committees as well as less yearly meetings at IBs are likely to reduce earnings management. Due to the

IAHs-bank managers complex agency conflicts, larger audit committee might help IAHs to ensure the reliability of the reported earnings while less meetings might enhance the coordination and reduce the free-riding problem.

Our results also indicate that earnings management is likely to decrease with a majority rather than wholly independent directors sitting on the audit committee of IBs. This composition might be optimal in constraining earnings management since some executives within audit committee may bring more timely, accurate, and updated information. However, this is not the case when an audit committee have additional financially sophisticated directors. Within IBs, the existence of financial experts may create overlap between their duties and SSB directors and aggravates free-riding problems at the expense of monitoring earnings management.

5.3. Theoretical contributions

Our results offer several theoretical contributions to a body of research on the role of corporate governance. The main aim of this dissertation relates to extend the understanding of a relatively unexplored research topic of the role of different corporate governance mechanisms within a unique religiously oriented and idiosyncratic agency conflicts context, IBs (Safieddine, 2009). The main agency problem that may arise in such contexts is to diverge from Islamic principles of Sharia to secure the rights of IAHs. While the funds that are received from those investors based on the PLS contracts and represent the main source of financing banks' assets, these contracts forbid IAHs from intervening in the management of their funds. This appeals bank managers to opportunistically manage earnings to attract more IAHs for self-serving benefits. Thus, a special and vigilant analyses of agency conflicts of IBs become of paramount importance especially with the tremendous growth rates the IBs are experiencing.

The main theoretical contribution of **chapter 2** of this dissertation relates to exploring the role of the regular BOD size, composition, and duality on mitigating earnings management within IBs that are characterised by an additional layer of corporate governance, SSB. While in such religiously oriented context the SSB role is prominent in all aspects of bank's activities as documented by many prior studies (e.g Abdelsalam et al., 2016; Quttainah et al., 2013), the overlap between

the duties of this board and the regular BOD is likely to be present. Even with this overlapping, chapter 2 revealed that smaller BOD and more external directors sitting on the BOD are not only play significant role to reduce the conventional agency conflicts but also to reduce the IAHs-management agency conflict through monitoring and constraining earnings management. However, earnings management is likely to increase with more affiliated directors who currently have no executive positions. Those directors may aggravate agency problems through facilitating earnings management because they are more aware of different idiosyncratic risks that IBs confront, such as DCR and deposits withdrawal in case of failure.

This chapter also builds on the popular paper of McGuire et al. (2012) that introduces the impact of religion in financial reporting irregularities. McGuire et al. (2012) indicate that firms reside in religious environment are less likely to manage earnings and the religious social norms are a key factor in mitigating agency problems. We extend this study to IBs where the Islamic social norms are prevailed.

Another theoretical contribution of this chapter is extending the prior literature (e.g. Cornett et al., 2009) on developed countries to a less developed context, namely MENA region. Although most countries of this region are classified as developing countries, these countries represent some of the more affluent customers in the world and banking sector is a key player in stabilising their economies. Moreover, this chapter contributes to a strand of literature that focuses on MENA region by introducing many prevailed cultural issues related to the political ties and family involvement. For instance, we attempt to explain how the strong political ties and controlling families such as royal families might impact the governance structure within banks.

Chapter 3 contributes to the corporate governance and earnings management literature by examining the role of ownership structure on mitigating earnings management when equity structure diverges from its conventional form. Although it is generally acknowledged that the ownership structure may have a large influence on earnings management, this chapter adds to a strand of literature that focuses in this issue within unconventional equity structure, IBs. While quit scarce, this study provides important insights on the importance of ownership structure

in aligning the interests of shareholders, bank managers, and IAHs which ultimately leads to reduce agency conflicts. In this regard, this chapter complements Abdelsalam et al. (2016) work on the effect of ownership structure in mitigating earnings management within IBs. We augment their findings by concentrating on the actual prominent capital structure at IBs rather than the dominant one in MENA region. Moreover, this chapter also addresses the shortcoming of overreliance on the agency theory in addressing agency conflicts when the equity structure is unconventional. In this chapter, we introduce different theories that may bode well in explaining how the equity-like nature of deposits might affect the view of shareholders towards opportunistic earnings management. Specifically, we first relied on the collusion theory to explain how the internal and institutional owners may increase the agency conflicts, i.e. IAHs-banks managers, by facilitating earnings management. While those owners are supposed to protect others' interests especially in a religiously oriented context, they breach their fiduciary duties set forth and facilitate earnings management to achieve self-serving interests. Bank managers and/or directors, as internal owners, may deliberately facilitate earnings management to tunnel the bank value to their own interests through the related party transactions that are largely undisclosed in the financial reporting at the MENA banking sector (Koldertsova, 2011). Overall, these findings contradict the prior literature that relies on agency theory in explaining the role of internal owners as well as institutional investors in constraining earnings management, which supports our argument about the shortcoming of agency theory in addressing agency conflicts within unconventional equity structure.

In such unique equity structure, our results further explained how a coalition theory might explain the agency conflicts. Our results revealed that the block-holders might decide to reduce agency conflicts by monitoring earnings management if they prefer to allocate the associated risk through appealing more funds from IAHs rather than exploiting bank's resources to their own interests.

In this chapter we also elaborate that IBs are more susceptible to a moral hazard notion which is generally not discussed in prior research in the IBs literature. Within IBs, this notion states that shareholders and bank managers may facilitate earnings management to extract personal benefits at the expense of IAHs. This

stems from the ability of bank managers to commingle the funds of IAHs and shareholders. In riskier investments, the formers' funds are used, and the profits are shared while IAHs borne the entire losses. On the other hand, moral hazard may prevail when bank managers at their discretion shift earnings from shareholders to IAHs in order to appeal more deposits, pay returns to current IAHs similar to the interest rate thresholds on the deposits at CBs, and to prevent the aggressive withdrawal of deposits.

Chapter 4 also has significant theoretical contributions on the role of audit committee in mitigating earnings management, especially within the unique context of IBs. In the first place this chapter examined the globally accepted "best practices" pertaining to reinforce the functioning of audit committees. In this regard, we examined the recommendations (viz. audit committee size, yearly meetings, independence, and expertise) that are stipulated the BRC (1999) report and have been adopted almost by all corporate governance codes at MENA countries. Though, according to the best of our knowledge, this is the first empirical study that examines how the characteristics of audit committee might reduce agency conflicts by monitoring earnings management within conventional and religiously oriented banks. In this context, this chapter extends the prior literature on this relationship by considering the religion dimension. While this dimension seems to be important to spur individuals to fulfil their fiduciary duties and ultimately reduce agency conflicts, prior literature that considers agency theory ignored this vitally important dimension. In this chapter, we therefore rely on religious social norms, which argue that firms located in environments with strong religious social norms generally experience lower opportunistic earnings management, which in turn represents an effective mechanism to reduce costly agency conflicts (McGuire et al., 2012). In this way, we responded to Archer et al. (1998) and Safieddine (2009) recommendations that foreshadowed the key role that well-functioning audit committees might play to reduce agency conflicts by monitoring the reported earnings.

Overall, throughout this dissertation, we corroborated Safieddine (2009) findings with respect to the shortcoming of the agency theory in addressing the peculiar governance issues facing IBs. Moreover, we considered different theories that might accommodate the complex agency framework within IBs, and how the

religious-driven behaviour may minimize agency conflicts through vigilant monitoring for opportunistic earnings management.

5.4. Practical contributions

Against the above mentioned empirical and theoretical contributions of this dissertation, we address in this section several practical implications for different actors involved in IBs as well as CBs. Our research suggests the prominence of the moral accountability of different actors (banks managers, BOD, shareholders, audit committee, etc.) beyond the legal liability in reducing the additional agency conflicts that arise between IAHs and bank managers. The results of **chapter 2** unveiled the vitally important role that a constellation of independent directors might play in alleviating the agency conflicts through monitoring earnings management. Moreover, keeping BOD small can help coordinate the efforts of directors toward monitoring earnings management. An optimal BOD size and composition might be of high importance in terms of providing timely and reliable financial information, providing advice and guidance to assist the current or potential IAHs in the crucial investment decisions. Our results in chapter 2 also echoed the outcries that calls for enacting more prudential regulations to protect IAHs rights, and to represent those investors in the regular BOD and its committees. The regular board directors also should be aware to the interaction between the regular BOD and SSB and how this interaction can be very impactful to reduce agency conflicts. While the regular BOD assigns responsibilities and then evaluates and corrects the management actions and activities, SSB mainly devotes their monitoring and controlling to ensure that managers' actions and activities are in accordance with the Islamic Sharia. As such, both boards need to harmonize their activities by sharing their experiences and provide each other with timely and transparent information to help in better monitoring to bank managers.

Chapter 3 results also on the role of ownership structure in controlling agency conflicts and monitoring earnings management indicate that shareholders at IBs may deliberately facilitate earnings management. Specifically, our results revealed that except for block-holders, internal and institutional shareholders may breach their fiduciary duties and indulge to earnings management behaviour.

Those owners may falsify the actual performance, limit the information that they provide to other stakeholders, and influence the behaviour of others to exploit bank's resources to their own interests. Remedying these agency conflicts might be through enhancing the quality of IBs' contracts in a way that serves all parties involved in these contacts and foster their interests. Moreover, these results may also be highly valuable to IBs as they may apply array of actions that are beneficial to alleviate the agency conflicts such as sharing the experiences across the BOD's committees and with SSB as well, and provide relevant and adequate training for directors to shape their financial acumen to understand and monitor opportunistic earnings management.

In addition to these actions, extra caution is needed to the politically connected owners whether they CEOs, directors, or institutional investors. The existence of such owners usually stunts proper monitoring required to mitigate opportunistic earnings management since the external directors involved in the monitoring may suffer from the higher power distance of a politically connected shareholders. Those shareholders also are connected with influential and royal families in MENA countries. In such context of high power distance, accountability is likely to be lower and a transparent disclosure of ownership structure is likely to be weak. This spurs regulators to enhance transparency of reporting practices to ownership structure and any related party transactions that might aggravate agency conflicts.

Finally, findings of **chapter 4** indicate that an audit committee in a religiously oriented context also have significant role in constraining earnings management. Results revealed that a larger audit committee and lower number of meetings usually enhance the efficiency of an audit committee to circumscribe earnings management. Moreover, earnings management is less likely to occur when the majority of audit committee directors are independent and financially sophisticated. These characteristics corroborate the codes of governance of the many MENA countries. Regulators' ability to foster effective audit committee outcomes will determine how these committees will reduce agency conflicts and protect stakeholders' interests.

Interaction between audit committee and SSB also must be vitally important. While SSB ensure that financial products are in accordance with Islamic Sharia,

audit committee is entrusted to ensure that financial reporting practices are in accordance with the generally accepted accounting and auditing standards, reflect the real financial position of banks, coordinate an internal audit efforts with external auditors. To ensure an effective coordination of these efforts, a clear statement of duties and instructions that highlights the assigned functions for both parties is highly recommended. An adequate and transparent disclosure of these duties is a paramount importance to protect stakeholders interests and reduce agency conflicts.

5.5. Suggestions for future research

The findings of this dissertation also raised many additional research questions that pave the way for future research. **First**, while a large stream of literature document the ingenuity of IBs during the latest financial crisis and how these banks were more resilient, no empirical study that we are aware of discusses the abnormal accruals behaviour pre, during and post the financial crisis within the IBs contexts. So, we take the first step in this regard by conducting the following proposal to address this important issue.

Abnormal accruals pre, during, and post the financial crisis: Conventional vs. Islamic banks.

Overview

Since the great depression of the 1930s, the latest subprime financial crisis, 2007-08, is ranked the worst. The contagion effect of the crisis has transmitted to encompass the global economy. This crisis has casted doubts on the interest-based financing system, conventional banks (CBs). Organisation for Economic Co-operation and Development (OECD) (2010) argues that banks which mainly funded themselves from other banks, money market funds, and corporate treasuries were more vulnerable to crisis, such as the US and the UK banks. Banks in other countries such as Australia and Canada were less affected because they mainly have based their source of funds in deposits, which mainly came from retail sources such as households (OECD, 2010). Corporate governance practices on the other hand were largely blamed during the crisis due to its deficiency to consider the special features of a bank governance (Adams & Mehran, 2012). However, such report and prior literature on these developed countries have not identified

the resilience of banks that its equity and governance structures diverge from the conventional forms (Ravi Dharwadkar et al., 2000).

Islamic banks (IBs) are a prominent example of the unconventional equity and governance structures that were less affected by the aforementioned crisis (Hasan & Dridi, 2011). Deposit accounts[28] of these banks are mainly based on the profit and loss (PLS) sharing principle. This equity-like nature of deposits protects IBs from the pro-cyclical fluctuations in the case of adverse conditions; that is, the profits or even losses are adjustable based on the performance of IB (Abedifar et al., 2013). Abdelsalam et al. (2016) argue that the earnings quality of IBs is affected by the prevailed religious norms within IBs. Their findings reveal that earnings management at IBs are less likely to occur than CBs counterparts. Quttainah et al. (2013) also find that IBs are protected from the aggressive earnings management because of the additional layer of corporate governance, namely Sharia Supervisory Board (SSB).

However, despite the fact that these features may differently impact the relationship between earnings management and corporate governance practices, less attention has been paid to study the behaviour of the accruals of IBs pre, during, and post the aforementioned crisis.

Research questions

To fill the above mentioned gap, we argue that the Islamic label of IBs, the distinctive features of its equity and governance structures might explain their resilience during the latest financial crisis. Specifically, this proposed study attempts to answer the following questions:

1) To what extent, if any, the corporate governance practices and idiosyncratic characteristics of IBs affect different accrual levels pre, during, and post the financial crisis.

[28] Depositors in Islamic banks are called investment accounts holders (IAHs). Safieddine (2009) decomposes IAHs to restricted investment accounts holders (RIAHs) and unrestricted investment accounts holders (URIAHs). While the former are able to choose the kind and scope of using their funds, the latter funds are fully under bank managers control

2) To what extent, if any, the relationship between corporate governance and different accrual levels pre, during, and post the financial crisis is different between CBs and IBs.

Aim of the study

This study aims to examine the behaviour of accruals pre, during, and post the financial crisis within a unique context, namely IBs. The equity and governance structures of these banks are different from CBs, which per se represents a natural experiment to examine whether the behaviour of accruals are different between CBs and IBs. Achieving these goals will contribute to the extant literature in accruals and comparative studies between CBs and IBs in different ways. First, while prior studies focus on the conventional banking system during the financial crisis, this study extends these studies to new religiously and moral dimension, IBs. Second, to best of our knowledge, this is the first study that examines the behaviour of different accrual levels within such context pre, during, and post the financial crisis. Third, identifying the differences between the behaviour of earnings management between CBs and IBs pre, during, and post the financial crisis will explain the latter resilience during this crisis, which in turns will be of a high importance to enact new regulations and standards to non-Islamic contexts.

Methodology

The focus of this study is to examine whether corporate governance practices curb earnings management as measured by the abnormal accruals within a unique context such as IBs pre, during, and post the financial crisis. Our data is based on all available data of CBs and IBs listed on their respective markets in MENA countries for the period pre (2006-07), during (2008-09) and post (2010-14) the financial crisis. From these banks, we collect 613 year observations that represent earnings management. Further, we rank these observations on the size of the earnings management and select 100 observations as follows: (i) 25 observations with the highest income-increasing abnormal accruals (ii) 25 observations with the highest income-decreasing abnormal accruals, (iii) 25 observations with the lowest income-increasing abnormal accruals, and (iv) 25 observations with the lowest income-decreasing accruals. We classify the first two groups as using aggressive earnings management and the remaining two groups as low earnings management.

Second, another interesting research question related to earnings management behaviour is to predict whether the aggressive earnings management might be used as an indicator to predict the fraudulent practices based on the level of earnings management. A strand of literature (e.g. Dechow, Ge, Larson, & Sloan, 2011) as well as high-profile of accounting scandals indicate that CEOs resort to a fraudulent financial reporting after exhausting all legal earnings management options. Classifying banks according to their level of earnings management along with other indicators such as non-performing loans, net loans charge-offs, return on asset, etc. may unveil important signals that indicate whether the respective bank is likely to commit fraud in the future or not.

Due to the "naming is shaming" expression that dominates MENA region for the banks that commit fraud and the data availability, we were not able to study the real fraud profiles of a few IBs (e.g. Ihlas Finance House, Faisal Islamic Bank, etc.) and how the earnings management behaviour of these banks pre and post the fraud detection was. Addressing this issue in the future research may give more explanations to the role of BOD, ownership structure, and audit committee in constraining the aggressive earnings management and/or fraud, and how it might be different between (non)fraud IBs as well as CBs. Moreover, another measure of a fraudulent financial reporting practices might be the publically available non-financial information (e.g. the number of employees and branches) (Brazel, Jones, & Zimbelman, 2009). While CEOs are generally professional in concealing the deteriorated financial performance by earnings management and/or fraud, non-financial data are less likely to be manipulated, difficult to conceal, and the verification of these data are usually straightforward. Examining such these information and how it might indicate to the likelihood of committing fraud yield very interesting results that might be viewed as a red flag for auditors, investors, regulators, and analysts.

Third, throughout this dissertation our results revealed the crucial role the moral accountability and behavioural dimension might play in reducing earnings management and information asymmetry that exacerbate agency conflicts. As indicated in Figure 1.1, moral accountability and behavioural dimension are integral part of the corporate governance framework at IBs. These dimensions reveal the additional fiduciary duties of bank managers at IBs toward a wider

spectrum of stakeholders (e.g. IAHs, SSB, etc.). Yet, Haniffa & Hudaib (2007) and more recently Belal, Abdelsalam, & Nizamee (2015) argue that there is incompatibility between the disclosed and ideal ethical identities of IBs. In other words, these dimensions within the context of IBs are taken for granted without any vigilant monitoring from BOD, shareholders, audit committee, external auditors and many other stakeholders. Future research could test the effect of these dimensions by conducting questionnaire and/or interview with different actors (CEOs, directors, SSB members, IAHs, costumers, shareholders, etc.) of IBs as well as CBs which will give more robustness to the qualitative research that predicts the crucial role of these dimensions.

Forth, due to the data availability we were able throughout this dissertation to consider only one pattern of earnings management behaviour, namely accrual-based earnings management. Considering other kinds of earnings management might give more understanding to agency conflicts of the MENA banking sectors. Agency conflicts might be exacerbated because of one important incentive to manage earnings, namely the performance-based compensation. Even in developed countries, prior literature (e.g. Dechow et al., 2010) findings reveal a shortcoming of different corporate governance practices in monitoring earnings management behaviour when the incentive is to conceal the deteriorated performance to increase manager compensations. Disclosing compensation schemes is very rare even within IBs with an ethical and religious label (Haniffa & Hudaib, 2007). IBs in order to adhere to the Sharia, they have to prop up their financial products with real financial transactions. While this is the crux of the Islamic financing, bank managers may facilitate aggressive lending behaviour of IBs to conceal the earnings management behaviour through asset securitization practices which are largely unexplored in IBs literature and CBs as well. We encourage IBs scholars to examine this issue in future research and how different motives and earnings management patterns might impact the performance of these banks with religious label.

In addition, Our sample only targeted the listed banks in the stock markets of each country. Listed banks are usually confronted to more scrutiny from regulators, central banks, IAHs and other stakeholders. These banks therefore are less likely to commit aggressive earnings management by using accrual-based

transactions, such as LLP and RSGL, which are highly monitored. In contrast, smaller and unlisted banks are less monitored. Moreover, these banks might be more appetite to manage earnings in order to meet the listing rules, regulatory capital, signalling and income smoothing motives. Including them by future research may unveil different patterns of earnings management as well as more subtle cases.

Fifth, to a large extent, our results revealed the important interaction between the functioning of BOD, audit committee, and SSB to reduce agency conflicts. The ability to coordinate the functions of these governance mechanisms may buttress the monitoring of management discretionary decisions. However, unclear segregation of duties between these boards as well as its subcommittees that are involved in monitoring bank managers may lead to exacerbate free riding problems and lessen the incentive of directors to effectively monitor the decisions of bank managers. Moreover, a disparity between the disclosed and the real monitoring practices of the directors of these boards may obstruct the understanding of the role that those boards might play in constraining earnings management. Thus, we believe that the corporate governance structure of IBs provide a fruitful opportunity to examine the interaction of the functioning of these boards. Specifically, an interesting avenue for future research is to examine whether the functions of these boards are complementary or substitutional as it is unknown to which extent these boards complement or substitute each other.

Finally, our study investigated the role of corporate governance in MENA region where the majority are Muslims. This region enhances the comparability across countries since they share similar religion, language, cultures, and traditions. Though, curtailing Muslims' behaviour to the Arab countries may confuse the Arab culture with Islam since Muslims from Arabian origins represent only 25% of Muslims masses that are spread globally. Islamic financing is adopted in many non-Arab countries such as Indonesia, Iran, Malaysia, Pakistan, and Turkey. These countries throughout the last four decades have made unprecedented progress in the Islamic financing. For instance, Indonesia and Malaysia have made efforts to enact a separate legal framework under which IBs can operate in a dual banking system. Thus, including more non-Arabs countries may be helpful to better understand the normative Islam and how might impact the agency conflicts.

References

Abbott, L. J., Park, Y., & Parker, S. (2000). The effects of audit committee activity and independence on corporate fraud. *Managerial Finance*, *26*(11), 55–68. https://doi.org/10.1108/03074350010766990

Abbott, L. J., Parker, S., & Peters, G. F. (2004). Audit committee characteristics and restatements. *Auditing: A Journal of Practice & Theory*. https://doi.org/10.2308/aud.2004.23.1.69

Abdel Karim, R. A. (1995). The nature and rationale of a conceptual framework for financial reporting by Islamic banks, *25*(100), 285–300.

Abdelsalam, O., Dimitropoulos, P., Elnahass, M., & Leventis, S. (2016). Earnings management behaviors under different monitoring mechanisms: The case of Islamic and conventional banks. *Journal of Economic Behavior and Organization*, *132*, 155–173. https://doi.org/10.1016/j.jebo.2016.04.022

Abedifar, P., Molyneux, P., & Tarazi, A. (2013). Risk in islamic banking. *Review of Finance*, *17*(6), 2035–2096. https://doi.org/10.1093/rof/rfs041

Adams, R. B., & Mehran, H. (2012). Bank board structure and performance: Evidence for large bank holding companies. *Journal of Financial Intermediation*, *21*(2), 243–267. https://doi.org/10.1016/j.jfi.2011.09.002

Admati, A. R., Pfleiderer, P., & Zechner, J. (1994). Large shareholder activism, risk sharing, and financial market equilibrium. *Journal of Political Economy*, *102*(6), 1097–1130.

Aggarwal, R. K., & Yousef, T. (2000). Islamic banks and investment financing. *Journal of Money, Credit, and Banking*, *32*(1), 93–120.

Agrawal, A., & Knoeber, C. R. (1996). Firm performance and mechanisms to control agency problems between managers and sharholders. *Journal of Financial and Quantitative Analysis*, *31*(3), 377–397. https://doi.org/10.2307/2331397

Ahmed, A. S., & Duellman, S. (2007). Accounting conservatism and board of director characteristics: An empirical analysis. *Journal of Accounting and Economics*, *43*(2–3), 411–437. https://doi.org/10.1016/j.jacceco.2007.01.005

Ahmed, A. S., 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), 1–25. https://doi.org/10.1016/S0165-4101(99)00017-8

AICPA. (2006). *Large firm PCAOB inspection deficiency analysis.* Retrieved from https://www.aicpa.org/interestareas/centerforauditquality/resources/pcaob/inspections.htmlficiency+analysis+2006&sort=recency&page=317

Al–Twaijry, A. A. M., Brierley, J. A., & Gwilliam, D. R. (2002). An examination of the role of audit committees in the Saudi Arabian corporate sector. *Corporate Governance: An International Review*, *10*(4), 288–297. https://doi.org/10.1111/1467-8683.00293

Ali, A. J. (1990). Management theory in a transitional society: The Arab's experience. *International Studies of Management & Organization*, *20*(3), 7–35.

Ali, A. J. (1993). Decision-making style, individualism, and attitudes toward risk of Arab executives. *International Studies of Management & Organization*, *23*(3), 53–73.

Amir, E., Einhorn, E., & Kama, I. (2014). The role of accounting disaggregation in detecting and mitigating earnings management. *Review of Accounting Studies*, *19*(1), 43–68. https://doi.org/10.1007/s11142-012-9220-9

Anagnostopoulou, S. C., & Tsekrekos, A. E. (2013). Do firms that wish to be acquired manage their earnings? Evidence from major European countries. *International Review of Financial Analysis*, *30*, 57–68. https://doi.org/10.1016/j.irfa.2013.06.002

Andres, P. de, & Vallelado, E. (2008). Corporate governance in banking: The role of the board of directors. *Journal of Banking and Finance*, *32*(12), 2570–2580. https://doi.org/10.1016/j.jbankfin.2008.05.008

Archer, S., & Abdel Karim, R. A. (2006). On capital structure, risk sharing and capital adequacy in Islamic banks. *International Journal of Theoretical and Applied Finance*, *9*(3), 269–280.

Archer, S., Karim, R. A. A., & Al-Deehani, T. (1998). Financial contracting, governance structures and the accounting regulation of Islamic banks: An analysis in terms of agency theory and transaction cost economics. *Journal of Management and Governance*, *2*(2), 149–170. https://doi.org/10.1023/A:1009985419353

Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte carlo evidence and an application to employment equations. *The Review of Economic Studies*, *58*(2), 277–297. https://doi.org/10.2307/2297968

Arping, S., & Sautner, Z. (2010). Corporate governance and leverage: Evidence from a natural experiment. *Finance Research Letters*, *7*(2), 127–134 . https://doi.org/10.1016/j.frl.2010.02.003

Arya, A., Glover, J., & Sunder, S. (1998). Earnings management and the revelation principle. *Review of Accounting Studies*, *3*(1), 7–34. https://doi.org/10.1023/A:1009631714430

Aslan, H., & Kumar, P. (2014). National governance bundles and corporate agency costs: A cross-country analysis. *Corporate Governance: An International Review*, *22*(3), 230–251. https://doi.org/10.1111/corg.12055

Baik, B., & Choi, W. (2010). Managing earnings surprises in Japan: Perspectives from main bank relationships and institutional ownership. *Journal of Business Finance and Accounting*, *37*(5–6), 495–51. https://doi.org/10.1111/j.1468-5957.2009.02167.x

Basel Committee on Banking Supervision, B. (2010). Principles for enhancing corporate governance.

Beasley, M. S., Carcello, J. V., Hermanson, D. R., & Lapides, P. D. (2000). Fraudulent financial reporting: Consideration of industry traits and corporate governance mechanisms. *Accounting Horizons*, *14*(4), 441–454. https://doi.org/10.2308/acch.2000.14.4.441

Beasley, M. S., & Salterio, S. E. (2001). The relationship between board characteristics and voluntary improvements in audit committee composition and experience. *Contemporary Accounting Research*, *18*(4), 539–570. https://doi.org/10.1506/RM1J-A0YM-3VMV-TAMV

Beatty, A., Chamberlain, S. L., & 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.

Beatty, A. L., Ke, B., & Petroni, K. R. (2002). Earnings management to avoid earnings declines across pubicily and privately held banks. *The Accounting Review*, *77*(3), 547–570. https://doi.org/10.2308/accr.2002.77.3.547

Beck, T., Demirgüç-Kunt, A., & Merrouche, O. (2013). Islamic vs. conventional banking: Business model, efficiency and stability. *Journal of Banking and Finance*, *37*(2), 433–447. https://doi.org/10.1016/j.jbankfin.2012.09.016

Bédard, J., Chtourou, S. M., & Courteau, L. (2004). The effect of audit committee expertise, independence, and activity on aggressive earnings management. *Auditing: A Journal of Practice & Theory*, *23*(2), 13–35. https://doi.org/10.2308/aud.2004.23.2.13

Beekun, R. I., & Badawi, J. A. (2005). Balancing ethical responsibility among multiple organizational stakeholders: The Islamic perspective. *Journal of Business Ethics*, *60*(2), 131–145. https://doi.org/10.1007/s10551-004-8204-5

Belal, A. R., Abdelsalam, O., & Nizamee, S. S. (2015). Ethical Reporting in Islami bank Bangladesh Limited (1983–2010). *Journal of Business Ethics*, *129*(4), 769–784. https://doi.org/10.1007/s10551-014-2133-8

Bennedsen, M., & Wolfenzon, D. (2000). The balance of power in closely held corporations. *Journal of Financial Economics*, *58*(1–2), 113–139. https://doi.org/10.1016/S0304-405X(00)00068-4

Blue Ribbon Committee, B. (1999). *Report and recommendations of the Blue Ribbon Committee on improving the effectivness of corporate audit committees*. New York.

Boone, A. L., Casares Field, L., Karpoff, J. M., & Raheja, C. G. (2007). The determinants of corporate board size and composition: An empirical analysis. *Journal of Financial Economics*, *85*(1), 66–101 . https://doi.org/10.1016/j.jfineco.2006.05.004

Booth, J. R., Cornett, M. M., & Tehranian, H. (2002). Boards of directors, ownership, and regulation. *Journal of Banking & Finance*, *26*, 1973–1996.

Bourkhis, K., & Nabi, M. S. (2013). Islamic and conventional banks' soundness during the 2007-2008 financial crisis. *Review of Financial Economics*, *22*(2), 68–77. https://doi.org/10.1016/j.rfe.2013.01.001

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. https://doi.org/10.1016/j.jbankfin.2013.12.001

Brazel, J. F., Jones, K. L., & Zimbelman, M. F. (2009). Using nonfinancial measures to assess fraud risk. *Journal of Accounting Research*, *47*(5), 1135–1166. https://doi.org/10.1111/j.1475-679X.2009.00349.x

Burgstahler, D., & Dichev, I. (1997). Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics*, *24*, 99–126.

Chahine, S. (2007). Activity-based diversification, corporate governance, and the market valuation of commercial banks in the Gulf Commercial Council. *Journal of Management and Governance*, *11*(4), 353–382. https://doi.org/10.1007/s10997-007-9034-5

Chahine, S., & Tohmé, N. S. (2009). Is CEO duality always negative? An exploration of CEO duality and ownership structure in the Arab IPO context. *Corporate Governance: An International Review*, *17*(2), 123–141. https://doi.org/10.1111/j.1467-8683.2008.00724.x

Chapra, M. U., & Habib, A. (2002). Corporate governance in Islamic financial institutions. *Islamic Research and Training Institute, Islamic Development Bank*, (6), 1–170. https://doi.org/10.1002/jcaf.20374

Chen, J. J., & Zhang, H. (2014). The impact of the corporate governance code on earnings management - Evidence from Chinese listed companies. *European Financial Management*, *20*(3), 596–632. https://doi.org/10.1111/j.1468-036X.2012.00648.x

Chen, K. Y., Elder, R. J., & Hsieh, Y.-M. (2011). Corporate governance, growth opportunities, and earnings restatements: Effects of a corporate governance code. *Asia-Pacific Journal of Accounting & Economics*, *18*(2), 169–200. https://doi.org/10.1080/16081625.2011.9720880

Chen, V. Z., Li, J., & Shapiro, D. M. (2011). Are OECD-prescribed "good corporate governance practices" really good in an emerging economy? *Asia Pacific Journal of Management*, *28*(1), 115–138. https://doi.org/10.1007/s10490-010-9206-8

Chong, B. S., & Liu, M. H. (2009). Islamic banking: Interest-free or interest-based? *Pacific Basin Finance Journal*, *17*(1), 125–144. https://doi.org/10.1016/j.pacfin.2007.12.003

Chung, R., Firth, M., & Kim, J. B. (2002). Institutional monitoring and opportunistic earnings management. *Journal of Corporate Finance*, *8*(1), 29–48. https://doi.org/10.1016/S0929-1199(01)00039-6

Cialdini, R. B., & Goldstein, N. J. (2004). Social influance: Compliance and conformity. *Annual Review of Psychology*, *55*, 591–621. https://doi.org/10.1146/annurev.psych.55.090902.142015

Claessens, S., Djankov, S., & Lang, L. H. . (2000). *The separation of ownership and control in East Asian corporations*. *Journal of Financial Economics* (Vol. 58). https://doi.org/10.1016/S0304-405X(00)00067-2

Clinch, G., & Magliolo, J. (1993). CEO compensation and components of earnings in bank holding companies. *Jornal of Accounting and Economics*, *15*, 241–272. https://doi.org/10.1111/j.1911-3846.1998.tb00558.x

Coles, J. L., Daniel, N. D., & Naveen, L. (2008). Boards: Does one size fit all? *Journal of Financial Economics*, *87*(2), 329–356. https://doi.org/10.1016/j.jfineco.2006.08.008

Cook, D. R. (1977). Detection of influential obervation in linear regression. *Technometrics*, *19*(1), 15–18.

Cornett, M. M., McNutt, J. J., & Tehranian, H. (2009). Corporate governance and earnings management at large U.S. bank holding companies. *Journal of Corporate Finance*, *15*(4), 412–430. https://doi.org/10.1016/j.jcorpfin.2009.04.003

Cuevas-Rodríguez, G., Gomez-Mejia, L. R., & Wiseman, R. M. (2012). Has agency theory run its course?: Making the theory more flexible to inform the management of reward systems. *Corporate Governance: An International Review*, *20*(6), 526–546. https://doi.org/10.1111/corg.12004

Daher, H., Masih, M., & Ibrahim, M. (2015). The unique risk exposures of Islamic banks' capital buffers: A dynamic panel data analysis. *Journal of International Financial Markets, Institutions and Money*, *36*, 36–52. https://doi.org/10.1016/j.intfin.2015.02.012

Davidson, R., Goodwin-Stewart, J., & Kent, P. (2005). Internal governance structures and earnings management. *Accounting and Finance*, *45*(2), 241–267. https://doi.org/10.1111/j.1467-629x.2004.00132.x

Dechow, P. M., Ge, W., Larson, C. R., & Sloan, R. G. (2011). Predicting material accounting misstatements. *Contemporary Accounting Research*, *28*(1), 17–82. https://doi.org/10.1111/j.1911-3846.2010.01041.x

Dechow, P. M., Myers, L. A., & Shakespeare, C. (2010). Fair value accounting and gains from asset securitizations: A convenient earnings management tool with compensation side-benefits. *Journal of Accounting and Economics*, *49*(1–2), 2–25. https://doi.org/10.1016/j.jacceco.2009.09.006

Dharwadkar, R., George, G., & Brandes, P. (2000). Privatization in emerging economies: An agency theory perspective. *Academy of Management Review*, *25*(3), 650–669. https://doi.org/10.5465/AMR.2000.3363533

Dharwadkar, R., Goranova, M., Brandes, P., & Khan, R. (2008). Institutional ownership and monitoring effectiveness: It's not just how much but what else you own. *Organization Science*, *19*(3), 419–440. https://doi.org/10.1287/orsc.1080.0359

Doidge, C., Karolyi, G. A., Lins, K. V., Miller, D. P., & Stulz, R. M. (2009). Private benefits of control, ownership, and the cross-listing decision. *Journal of Finance*, *64*(1), 425–466. https://doi.org/10.1111/j.1540-6261.2008.01438.x

Dyreng, S. D., Mayew, W. J., & Williams, C. D. (2012). Religious social norms and corporate financial reporting. *Journal of Business Finance and Accounting*, *39*(7–8), 845–875. https://doi.org/10.1111/j.1468-5957.2012.02295.x

El-Gamal, M. (2006). *Islamic finance law, economics, and practice,NewYork*.

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*, S160–S173. https://doi.org/10.1016/j.jebo.2013.08.018

Erickson, M., & Wang, S. (1999). Earnings management by acquiring firms in stock for stock mergers. *Journal of Accounting and Economics*, *27*(2), 149–176. https://doi.org/10.1016/S0165-4101(99)00008-7

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law & Economics*, *26*(2), 301–325.

Farook, S., Hassan, M. K., & Clinch, G. (2012). Profit distribution management by Islamic banks: An empirical investigation. *Quarterly Review of Economics and Finance*, *52*(3), 333–347. https://doi.org/10.1016/j.qref.2012.04.007

Farook, S., Hassan, M. K., & Clinch, G. (2014). Islamic bank incentives and discretionary loan loss provisions. *Pacific Basin Finance Journal*, *28*, 152–174. https://doi.org/10.1016/j.pacfin.2013.12.006

García-Meca, E., & Sánchez-Ballesta, J. P. (2009). Corporate governance and earnings management: A meta-analysis. *Corporate Governance: An International Review*, *17*(5), 594–610. https://doi.org/10.1111/j.1467-8683.2009.00753.x

Grais, W., & Pellegrini, M. (2006). *Corporate governance in institutions offering Islamic financial Services: Issues and options*. *World Bank Publications* (Vol. Vol.4052).

Hagendorff, J., Collins, M., & Keasey, K. (2007). Bank governance and acquisition performance. *Corporate Governance: An International Review*, *15*(5), 957–968. https://doi.org/10.1111/j.1467-8683.2007.00601.x

Hamilton, L. C. (1991). How robust is robust regression? *Stata Technical Bulletin*, *2*(January 1992), 21–26. Retrieved from http://www.stata.com/products/stb/journals/stb2.pdf

Haniffa, R., & Hudaib, M. (2007). Exploring the ethical identity of Islamic banks via communication in annual reports. *Journal of Business Ethics*, *76*(1), 97–116. https://doi.org/10.1007/s10551-006-9272-5

Hasan, M., & Dridi, J. (2011). The effects of the global crisis on Islamic and conventional banks: a comparative study. *Journal of International Commerce, Economics and Policy*, *02*(02), 163–200. https://doi.org/10.1142/S1793993311000270

Hayat, R., Den Butter, F., & Kock, U. (2013). Halal certification for financial products: A transaction cost perspective. *Journal of Business Ethics*, *117*(3), 601–613. https://doi.org/10.1007/s10551-012-1534-9

Hayat, R., & Kabir Hassan, M. (2017). Does an Islamic label indicate good corporate governance? *Journal of Corporate Finance*, *43*, 159–174. https://doi.org/10.1016/j.jcorpfin.2016.12.012

He, L., & Yang, R. (2014). Does industry regulation matter? New evidence on audit committees and earnings management. *Journal of Business Ethics*, *123*(4), 573–589. https://doi.org/10.1007/s10551-013-2011-9

Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, *13*(4), 365–383. https://doi.org/10.2308/acch.1999.13.4.365

Hellmann, T. F., Murdock, K. C., & Stiglitz, J. E. (2000). Moral hazard in banking, and prudential liberalization, regulation: Are capital requirements enough? *American Economic Review*, *90*(1), 147–165. https://doi.org/10.1257/aer.90.1.147

Holthausen, R. W., Larcker, D. F., & Sloan, R. G. (1995). Annual bonus schemes and the manipulation of earnings. *Journal of Accounting and Economics*, *19*(1), 29–74. https://doi.org/10.1016/0165-4101(94)00376-G

Hoskisson, R. E., Hitt, M. A., Johnson, R. A., & Grossman, W. (2002). Conflicting voices: The effect of institutional ownership heterogeneity and internal governance on corporate innovation strategies. *Academy of Management Journal*, *45*, 697–717. https://doi.org/10.2307/3069305

IFSB. (2005). Capital adequacy standard for institutions (other than insurance institutions) offering only Islamic financial services.

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review*, *76*, 323–339.

Jensen, M. C. (1993). The modern industrial revolution , exit , and the failure of internal control systems the failure of internal control systems. *Journal of Finance*, *48*(3), 831–880.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, *3*(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X

Jeong, J. W., & Bae, G. (2013). Do acquiring firms knowingly pay too much for target firms? Evidence from earnings management in member-firm mergers in Korean business groups. *Asia-Pacific Journal of Accounting & Economics*, *20*(3), 223–251. https://doi.org/http://dx.doi.org/10.1080/16081625.2012.761938

Jiambalvo, J., Rajgopal, S., & Venkatachalam, M. (2002). Institutional ownership and the extent to which stock prices reflect future earnings. *Contemporary Accounting Research*, *19*(1), 117–145. https://doi.org/10.1506/EQUA-NVJ9-E712-UKBJ

Jiraporn, P., Kim, J. C., Kim, Y. S., & Kitsabunnarat, P. (2012). Capital structure and corporate governance quality: Evidence from the institutional shareholder services (ISS). *International Review of Economics and Finance*, *22*(1), 208–221. https://doi.org/10.1016/j.iref.2011.10.014

Johnson, S., LaPorta, R., Lopez-de-Silanes, F., & Shleifer, A. (2000). Tunneling. *The American Economic Review*.

Kanagaretnam, K., Lim, C. Y., & Lobo, G. J. (2010). Auditor reputation and earnings management: International evidence from the banking industry. *Journal of Banking and Finance*, *34*(10), 2318–2327. https://doi.org/10.1016/j.jbankfin.2010.02.020

Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics*, *33*(3), 375–400.

Koldertsova, A. (2011). The second corporate governance wave in the Middle East and North Africa. *OECD Journal: Financial Market Trends*, *2010*(2), 219–226. https://doi.org/10.1787/fmt-2010-5kggc0z1jw7k

Kuran, T. (1995). Islamic economics and the Islamic subeconomy. *Journal of Economic Perspectives*, *9*(4), 155–173. https://doi.org/10.1257/jep.9.4.155

Lai, J. (2014). Accountability and the enforcement of ethical values in finance : insights from Islamic finance. *Australian Journal of Public Administration*, *73*(4), 437–449. https://doi.org/10.1111/1467-8500.12108

Leventis, S., Dimitropoulos, P., & Owusu-Ansah, S. (2013). Corporate governance and accounting conservatism: Evidence from the banking industry. *Corporate Governance: An International Review*, *21*(3), 264–286. https://doi.org/10.1111/corg.12015

Li, J., & Tang, Y. (2010). CEO hubris and firm risk taking in China: the moderating role of managerial discretion. *Academy of Management Journal*, *53*(1), 45–68. https://doi.org/10.5465/amj.2010.48036912

Liao, L.-K., Mukherjee, T., & Wang, W. (2015). Corporate governance and capital structure dynamics: an empirical study. *Journal of Financial Research*, *38*(2), 169–191. https://doi.org/10.1111/j.1540-6261.2012.01735.x

Liu, Q., & Lu, Z. (2007). Corporate governance and earnings management in the Chinese listed companies: A tunneling perspective. *Journal of Corporate Finance*, *13*(5), 881–906. https://doi.org/10.1016/j.jcorpfin.2007.07.003

Louis, H. (2004). Earnings management and the market performance of acquiring firms. *Journal of Financial Economics*, *74*(1), 121–148. https://doi.org/10.1016/j.jfineco.2003.08.004

Macey, J. R., & O'hara, M. (2003). The corporate governance of banks. *FRBNY Economic Policy Review*, *9*, 91–107.

McGuire, S. T., Omer, T. C., & Sharp, N. Y. (2012). The impact of religion on financial reporting irregularities. *Accounting Review*, *87*(2), 645–673. https://doi.org/10.2308/accr-10206

Mollah, S., & Zaman, M. (2015). Shari'ah supervision, corporate governance and performance: Conventional vs. Islamic banks. *Journal of Banking and Finance*, *58*, 418–435. https://doi.org/10.1016/j.jbankfin.2015.04.030

Mülbert, P. (2009). Corporate governance of banks. *European Business Organization Law Review*, *10*(3), 411–436.

OECD. (2010). Competition, concentration and stability in the banking sector. Organisation for Economic Co-operation and Development.

Omran, M. M., Bolbol, A., & Fatheldin, A. (2008). Corporate governance and firm performance in Arab equity markets: Does ownership concentration matter? *International Review of Law and Economics*, *28*(1), 32–45. https://doi.org/10.1016/j.irle.2007.12.001

Organization for Economic Cooperation and Developmet. (2004). *OECD principles of corporate governance 2004*. OECD Publishing.` https://doi.org/10.1787/9789264015999-en

Palmrose, Z. V., Richardson, V. J., & Scholz, S. (2004). Determinants of market reactions to restatement announcements. *Journal of Accounting and Economics*, *37*(1), 59–89. https://doi.org/10.1016/j.jacceco.2003.06.003

Peng, M. (2004). Outside directors and firm performance during institutional transitions. *Strategic Management Journal*, *25*(5), 453–471. https://doi.org/10.1002/smj.390

Quttainah, M. a., Song, L., & Wu, Q. (2013). Do Islamic banks employ less earnings management? *Journal of International Financial Management & Accounting*, *24*(3), 203–233. https://doi.org/10.1111/jifm.12011

Roodman, D. (2006). *How to do xtabond2: An introduction to "difference" and "system" GMM in STATA*. *System*. https://doi.org/10.2139/ssrn.982943

Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics*, *42*(3), 335–370. https://doi.org/10.1016/j.jacceco.2006.01.002

Sáenz González, J., & García-Meca, E. (2014). Does corporate governance influence earnings management in Latin American markets? *Journal of Business Ethics*, *121*(3), 419–440. https://doi.org/10.1007/s10551-013-1700-8

Safieddine, A. (2009). Islamic financial institutions and corporate governance : New insights for agency theory. *Corporate Governance: An International Review*, *17*(2), 142–158.

Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, *52*(2), 737–783.

Shrieves, R. E., & Dahl, D. (2003). Discretionary accounting and the behavior of Japanese banks under financial duress. *Journal of Banking and Finance*, *27*(7), 1219–1243. https://doi.org/10.1016/S0378-4266(02)00252-2

Srinivasan, S. (2005). Consequences of financial reporting failure for outside directors: Evidence from accounting restatements and audit committee members. *Journal of Accounting Research*, *43*(2), 291–342. https://doi.org/10.1111/j.1475-679x.2005.00172.x

Sundararajan, V., & Errico, L. (2002). Islamic financial institutions and products in the global financial system: Key issues in risk management and challenges ahead. IMF Working Paper. https://doi.org/10.5089/9781451859775.001

Syed Ali, S. (2007). Financial distress and bank failure: Lessons from closure of Ihlas finans in Turkey. *Islamic Economic Studies*, *14*(1–2), 1–52.

VAFEAS, N. (2005). Audit committees, boards, and the quality of reported earnings. *Contemporary Accounting Research*, *22*(4), 1093–1122. https://doi.org/10.1506/1QYN-2RFQ-FKYX-XP84

Wahlen, J. M. (1994). The nature of information in commercial banks and loan loss disclosure. *The Accounting Review*, *69*(3), 455–478.

Warfield, T. D., Wild, J. J., & Wild, K. L. (1995). Managerial ownership, accounting choices, and informativeness of earnings. *Journal of Accounting and Economics*, *20*(1), 61–91. https://doi.org/10.1016/0165-4101(94)00393-J

White, H. (1980). A heteroskedasticity-consistent covariance matrix and a direct test for heteroskedasticity. *Econometrica*, *48*, 817–838.

Wright, P., Ferris, S. P., Sarin, A., & Awasthi, V. (1996). Impact of corporate insider, blockholder, and institutional equity ownership on firm risk taking. *Academy of Management Journal*, *39*(2), 441–463.

Xie, B., Davidson, W. N., & Dadalt, P. J. (2003). Earnings management and corporate governance: The role of the board and the audit committee. *Journal of Corporate Finance*, *9*(3), 295–316. https://doi.org/10.1016/S0929-1199(02)00006-8

Young, M. N., Peng, M. W., Ahlstrom, D., Bruton, G. D., & Jiang, Y. (2008). Corporate governance in emerging economies: A review of the principal-principal perspective: Review paper. *Journal of Management Studies*, *45*(1), 196–220. https://doi.org/10.1111/j.1467-6486.2007.00752.x