

## Internal Governance Mechanisms and Information Value of Banks Earnings

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### Abstract

#### Purpose

This study examines the association between internal corporate governance mechanisms (i.e. board of directors and audit committee) and the information value of bank earnings. We comparatively assess this association across different bank types, Islamic versus conventional banks. We also investigate the mediating effect of Shariah governance.

#### Design/methodology/approach

We utilise a unique and an international sample of 723 bank-year observations representing 100 listed banks from 16 countries during the period of 2007 to 2015. We investigate the characteristics of the board of directors and audit committee (i.e. size and independence) and employ three core analyses for earnings informativeness (i.e. earnings persistence, cash flow predictability and reliability of loan loss provisions). Additional analyses address Shariah supervisory boards' size, financial expertise, and multiple outside directorships. We use the random-effect GLS estimation technique and provide several robustness checks and sensitivities.

#### Findings

We find that, on average, having large and independent boards (and audit committees) increases the informativeness of reported earnings for banks. Conditional on bank type, our results report strong evidence for differential effects across the two alternative banking systems. In Islamic banks, large and independent board of directors (and audit committees) are positively associated with all measures of information value. There is insignificant evidence for conventional banks. However, Shari'ah supervisory boards show no significant effect on the reported earnings' informativeness.

#### Originality/value

This is the first study, to the best of our knowledge, that empirically and comparatively assesses the information value of reported earnings in association with effective internal governance while recognizing the institutional characteristics of different bank types. We offer new insights to policy makers, investors and other stakeholders located within countries operating on a dual banking system. The results could help regulators to improve their rules/guidance related to double-layer governance and financial reporting quality.

**Keywords:** Corporate governance; Information Value; Bank type, Financial reporting

**JEL Classifications:** C23, G01, G21, G28, L50, M4

## 1. Introduction

The quality of corporate financial reporting and systems of governance have been the subject of extensive research and debates representing key factors influencing firm's stability and value. The number of accounting scandals that the twenty-first century has witnessed, such as Enron and WorldCom, has caused severe damage to investors' confidence in financial reporting systems, and raised many concerns regarding managerial opportunism. The governance of banking institutions came under stricter scrutiny after the onset of the financial crisis of 2007-2009, because bank poor governance has been listed among major causes of the financial turmoil and loss of public trust (Adams and Mehran, 2012; Li et al. 2022). Although banks contribute to the strength of the national economy, some banking practices showed either inadequate quality or a lack of transparency in published annual reports which tend to promote discretionary practices, such as aggressive earnings management and fraudulent reporting (e.g. the cases of Lehman Brothers, and Bear Stearns Company).

Corporate governance in the banking industry is different from that in non-financial sectors due to its underlying principles. The banking sector is highly regulated and more complex than other areas of business because the external regulators of banks act on behalf of stakeholders such as depositors, investors, and creditors, ensuring that the banks are sound and work in their interests. The complexity and diversity of banking financial instruments and transactions lead to substantial information asymmetries (De Andres and Vallelado, 2008). The importance of high levels of regulation in the banking sector lies in the fact that ineffectual financial reporting can lead to substantial managerial opportunism and banking instability (Adams and Mehran, 2003; Elnahass et al. 2018).

Boards of directors alongside audit committees are marked as key "*internal governance mechanisms*" in banks which play a vital role in making decisions that balance the requirements for financial stability and quality of reported earnings by banks through optimal risk management and effective monitoring (Alharbi et al. 2022). The board of directors' efficiency in the banking industry is different than in other sectors due to the highly regulated and complex system in the sector, which requires high monitoring and counselling (Trinh et al. 2020). Board members work on maximizing the wealth of shareholders through decision making and monitoring the managers, especially when their activities conflict with the shareholders' interests. This latter point concerns a notable phenomenon called the agency issue, which arises from a conflict in interests between managers and shareholders, but which may be reduced by monitoring on the part of the board of directors.

Much emphasis has also been placed on the audit committee's role in overseeing the financial reporting process and preventing fraudulent accounting statements. A board of directors delegates to the audit committee the duty of monitoring and controlling the financial reporting process, which involves oversight of financial reporting, internal control, and external audit activity (Joshi and Wakil, 2004; Pomeroy and Thornton 2008; Beasley et al. 2009). Both, the board of directors and audit committees can use their wider experience to promote the best interest of both the company and the shareholders and a strong representation of non-executive directors is able to monitor managers' action more effectively, consequently restricting their self-interest (Peasnell et al. 2005, Chiu et al. 2012 and Tahir et al. 2019). According to Watts and Zimmerman (1978) and Bushman and

Smith (2001), good financial reporting limits managerial self-interest behaviour and aligns managers' interests with those of shareholders. To make accurate decisions, users of financial reports need high-quality information which must be reliable and trustworthy.

Several studies in the literature have underlined the critical role of good corporate governance to limit manipulative earnings management practices and protect shareholders' interests (e.g. Xie et al. 2003; Iatridis and Kadorinis 2009; Salem et al. 2021). The literature on banking governance commonly shows how critical the role of the board of directors and audit committee are in mitigating bank risk, and driving performance, earnings management, and stock market valuation (Pathan and Faff, 2013; Berger et al., 2014; Dong et al., 2017; Owen and Temesvary, 2018; Elnahass et al., 2020; Trinh et al., 2020; Elnahass et al., 2022a). However, prior literature still lacks evidence on the role of internal governance on the informativeness of reported earnings within the banking sector. Academic and regulatory pressure is exerted to promote the informativeness of bank earnings, helping to mitigate earnings management practices and to promote long-term banking resilience (Srivastav and Hagendorff, 2016).

Moreover, there is a lack of empirical studies in the literature examining the role of bank type (i.e., Islamic versus conventional banks) on corporate governance- earnings informativeness nexus.<sup>1</sup> Accordingly, studying the effect of board members and audit committee, as key internal governance mechanisms, on banks' informative value of earnings while considering the effect of bank type became an important matter in the corporate governance literature (Pathan and Faff, 2013; Mollah et al., 2017; Trinh et al., 2020). This effect could be pervasive for specific banking systems like Islamic banks, marked by religious business practices, high agency costs, and complex internal governance mechanisms when compared to their conventional counterparts. Therefore, research on the governance and the quality of information for reported earnings particularly within religious establishments (e.g., Islamic banking) has become prolific.

This study covers the existing gaps in prior literature through employing empirical assessments of whether enhanced internal corporate governance can increase the value of published bank earnings information by examining board of directors' and audit committees' size and independence. We take a step further to examine this predicted association across Islamic versus conventional banks. Islamic banks are distinguished from conventional banks by several characteristics in their business models. The operations of the Islamic banking industry are principally driven by a constrained business model and complex agency costs, which inherits both religious orientations and moral accountability values alongside legal responsibilities (Abdelsalam et al. 2016, 2021). Furthermore, governance in Islamic banking is more extensive than that in conventional banking. Besides the traditional governance mechanisms used in conventional banks (i.e., board of directors and audit committees), Islamic banks operate on an additional (i.e., non-traditional) governance structure, with the existence of the Shariah supervisory board (SSB).<sup>2</sup> This internal (extra) layer of governance represents scholars

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<sup>1</sup> Islamic banks are those banks that follow Islamic Shariah principles in their business transactions. These banks operate on a banking model which prohibits usury, excessive uncertainty and speculation while encourages risk and profit-sharing between the bank and its depositors. Conventional banks refer to traditional commercial banks which operate on an interest basis (Elnahass et al. 2018).

<sup>2</sup> The Shariah supervisory board (SSB) acts as a monitoring mechanism to carry out an independent audit and issue a separate report as part of the bank's financial statements. SSB members may also have to review additional information and reports, such as operating

in Islamic legitimacy who monitor the banks' activities and funding decisions.

Our sample comprises 723 bank-year observations from 100 listed banks (61 conventional and 39 Islamic) in 16 countries operating on a dual banking system for the period 2007 to 2015. The empirical setting of this study uses several alternative models to measure the information value of earnings such as earnings persistence, predictability of future cash flows and the reliability of loan loss provisions. We examine the size and independence of both the board and audit committees for the whole sample in addition to the two bank types. Given the constrained business model and the additional governance layer adopted by Islamic banks, our premise is that the quality of information for reported earnings is likely to be higher in Islamic banks than in conventional banks. This prediction is also in line with prior evidence (Elnahass et al. 2014, 2018; Abdelsalam et al. 2016, 2020; Lassoued et al. 2018; Salem et al. 2021), showing that Islamic banks engage in a higher financial reporting quality and lower managerial opportunism as compared to their conventional counterparts. That premise is also consistent with prior literature, which documents that religious orientation and robust institutional environments ultimately shape corporate behaviour and mitigate aggressive earnings management (McGuire et al. 2012; Kanagaretnam et al. 2015; Elnahass et al. 2022a). Moreover, Islamic banks commonly act under a predominant set of social norms.<sup>3</sup>

Our results show strong evidence that internal governance mechanisms play a catalytic role in promoting high quality and informative reported earnings for the whole sample of banks (i.e. irrespective of the bank types). We find that, on average, having both large and independent boards of directors (and audit committees) can significantly increase earnings persistence, cash flow predictability, and reliability of loan loss provisions. Conditional on the bank type, our results show significant differences between Islamic and conventional banks. Consistent with our predictions, we find that positive association between large as well as independent board of directors (and audit committees) and the information quality of earnings is more pronounced for Islamic banks when compared to their conventional counterparts. In particular, unlike conventional banks, large and independent board and audit committee of Islamic banks can significantly enhance the persistence of earnings, the ability of current earnings to predict future cash flows and the reliability of loan loss provisions. Additional analysis for the effect of Shariah governance (i.e. Shariah supervisor boards' size, financial expertise and multiple outside directorship) indicate an insignificant impact on increasing the information value of earnings for Islamic banks. Our main findings are robust in several model sensitivities and specifications (i.e., propensity score matching and GMM).

Our findings contribute to the broad strands of literature on earnings quality and corporate governance. First, to our knowledge, this is the first empirical study to identify the combined effects of internal governance mechanisms on information quality of earnings in the banking sector. We provide international evidence while

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and financial reports and policies (Abdelsalam et al. 2020). This board is appointed during the annual general assembly, and its members are likely to be recommended by the board of directors and approved by the shareholders.

<sup>3</sup> The social norm theory provides detailed grounds for shaping individual economic attitudes (Akerlof 1980; Kohlberg 1984). Social norms represent the prevailing code of conduct and ethics jointly shared by a group of individuals. This code drives forces and mechanisms for individuals. Compliance with norms and group expectations is subject to community support and acceptance, while non-compliance would promote social discrimination.

recognizing the effect of bank type alongside the mediating role of Shariah governance. This study goes beyond the evidence presented by Leventis and Dimitropoulos, 2012; Elamer et al., 2019), through offering new insights on the impact of internal governance from an earnings informational context (i.e. earnings persistence, predictability and reliability). Second, none of the prior literature has investigated the above predicted association among the two bank types. Previous studies have examined the different governance-related characteristics and earnings management among the two bank types without considering information value of earnings (Abdelsalam et al. 2016; Elnahass et al. 2022a). As such, our research is among early attempts in the comparative literature of Islamic versus conventional banking. Finally, previous studies have mainly considered the role of additional monitoring (i.e. Shariah governance) within the context of earnings management (e.g. Elnahass et al. 2018, 2022a). Other studies examined the individual effect of Shariah supervisor board on bank risk-taking, performance and social reporting (e.g., Abdul Rahman and Bukair, 2013; Almutairi and Quttainah, 2017). Together, the studies have failed to consider the mediating effect of such extra governance mechanism on the information quality of reported earnings. As such, we extend prior evidence by examining the role of Shariah governance.

This study provides important implications for policymakers and various sets of stakeholders engaging with global banking sectors. We highlight the importance of recruiting large and independent boards as well as audit committees to improve the information quality for reported earnings based on an international context. Through studying the effect of the bank type, this study highlights the impact of institutional characteristics and alternative business models in promoting the informativeness and quality of reported earnings across dual banking systems. The significant variations in results among two bank types offer new insights to the existing evidence in literature (e.g. Abdelsalam et al. 2016, Elnahass et al. 2014, 2018, 2022a) that internal mechanisms are among important determinants of the higher financial reporting quality for Islamic banking as compared to conventional banking. Hence, our findings provide strong evidence that could raise the attention of regulators and investors regarding the role of effective governance and institutional characteristics on the information quality of bank earnings.

The remainder of the paper is organized as follows; section 2 provides the background and hypotheses development. Section 3 describes the research methodology. Section 4 presents the empirical results and robustness tests. Finally, section 5 concludes.

## **2. Background and hypotheses development**

Following the collapse of several prominent financial institutions, such as Lehman Brothers, Bear Stearns and Company and Bank of Credit and Commerce International, there has been a growing concern that corporate governance mechanisms were weak and ineffective, resulting in poor board oversight and detrimental bank value. In line with the agency theory, self-interest and external rewards motivate managers to behave opportunistically. Agency conflicts may arise from the separation of ownership and control (Jensen and Meckling 1976; Fama and Jensen 1983). The problem of “information asymmetry”, where the agents have more access to the company’s information than the principals (Arnold and Lange 2004), creates more earnings management opportunities and reduces the information quality for earnings. Information asymmetry

complicates the agency conflicts, as managers can manipulate the information they disclose, and owners might not monitor and evaluate managers' actions accurately. Poor financial reporting quality and the underpinning earnings management can be viewed as core agency costs (Jiraporn et al. 2008). In line with the agency theory, managerial self-serving and opportunistic behaviour can be limited by establishing formal and effective corporate governance mechanisms. The agency theory considers corporate governance mechanism(s) as one of the classical cures in controlling conflict of interests between agents and principals (Shleifer and Vishny 1997; Brennan 2006). Effective monitoring by board and audit committee are indications of a sound internal governance system, which can help to reduce agency costs through greater monitoring activities (Ronen and Yaari 2008; Kent et al. 2010; Talavera et al. 2018; Trinh et al. 2020).

Company reports, providing information about a company's financial position and performance, serve as the primary source of accounting information for stakeholders. Such knowledge is highly influential for decision-making by investors, creditors, regulators, and other stakeholders (Beyer et al., 2010; Chen et al., 2018). The importance of accounting information arises from its dual role; informativeness to all parties and the role of stewardship (Feltham et al., 2006; Cascino et al., 2014). High quality information allows users to make informed decisions based on the perceived risks and future cash flows. Accurate accounting information is crucial for well-functioning markets, as it reduces information asymmetry between managers and capital providers (Biddle and Hilary, 2006), minimises the risks of moral hazards and adverse selection (Li, 2008), and enhances the efficiency of capital allocation (Bhattacharya et al., 2003).

Prior studies investigating the information value of earnings have examined it in relation to improvements in internal control (Altamuro and Beatty, 2010), legal, extralegal, and political institutional factors (Kanagaretnam et al., 2014), corporate social responsibility practices (García-Sánchez and García-Meca, 2017), and regulatory enforcement actions (Delis et al., 2018). Within the context of corporate governance, some studies examine the role of individual traditional governance mechanisms in earnings management, such as board size (Beasley 1996); board independence (Bédard et al. 2004; Dimitropoulos and Asteriou 2010); audit committee financial expertise and diversity (Zalata et al. 2018). Other previous studies investigate the association between governance index and earnings management (Iatridis and Kadorinis 2009; Leventis and Dimitropoulos 2012). Therefore, detailed examination of the information value of earnings in relation to internal governance mechanisms is still lacking. Such gaps in the literature are particularly evidential for the banking industry.

Banks are generally characterized by a high degree of opaqueness in transactions and activities. As a result, corporate governance in the banking sector exhibits its own attributes and characteristics. This is because of the unique features of the banking system, which aggravate governance problems and can lessen the effectiveness of traditional governance structures like boards and audit committees (Levine, 2004; Laeven, 2013; Alharbi et al. 2022), relative to non-financial firms. Because depositors are the major capital providers, their interests may deviate from shareholders' interests. The high leverage provides incentives for managers to invest in risky projects, as debtholders bear more of the excessive risk and not shareholders (Elnahass et al. 2022b). Banks are also exposed to a higher degree of different types of risks (e.g. credit, liquidity, insolvency, operational and, asset risks), when compared to non-financial institutions (John et al., 2016; Trinh et al, 2020). Another unique

bank characteristic that contributes to the importance of governance in banks is the high information asymmetry which arises from managers ability to hide valuable information about loan quality and structure, making it difficult to monitor their activities and this in turn threatens the traditional corporate governance mechanisms (Levine, 2004; Abdelsalam et al. 2021).

These unique bank features demonstrate the need for more effective and distinct corporate governance mechanisms for banks in order to control the high agency costs. Confirming this view, the Basel Committee on Banking Supervision (BCBS) states that the banking industry has its own rules concerning corporate governance involving “the manner in which the business and affairs of banks are governed by their boards of directors and senior management” (Basel Committee on Banking Supervision, 2006, p. 4). This implies that due to the special nature of banking institutions, internal governance mechanism plays a catalytic role in the way they conduct their business and meet their obligations.

## **2.1. Board of directors and information value of earnings**

According to agency theory, the board of directors is considered as a primary governance mechanism employed to address conflicts of interests arising from relationships between agents and principals. Beasley (1996) claims that the board of directors is responsible for ensuring that high-quality financial information is available to all stakeholders. Prior studies have provided evidence that effective monitoring by board of directors enhances the quality of financial reporting (Leventis and Dimitropoulos, 2012; Quttainah et al., 2013; Abdelsalam et al., 2016; Elnahass et al., 2018). However, these studies have assessed the quality of financial reporting mainly from an opportunistic earnings management perspective and hence, the impact of the board of directors’ characteristics on the information value of earnings has not been broadly investigated.

From an information perspective, the quality of financial reporting increases as managers disclose more accurate information and ensure that the financial information precisely reflect the firms’ future earnings and cash flows. This informativeness role of accounting information has been highlighted by the conceptual framework for financial reporting developed by the International Accounting Standards Board (IASB) where it emphasizes that the objective of financial reporting is to provide useful information about the reporting entity to existing and potential investors, lenders, and other creditors. These users rely on financial statements to help them assess the risks and prospects for future cash flow to the entity (International Financial Reporting Standards, 2018). Given that the board of directors is responsible to ensure that high-quality accounting information is available to all users, effective governance through large and independent board members would be expected to enhance the information value of reported earnings.

The composition of the board of directors may also be a factor in strengthening the value of earnings information. Board size has a bearing on the prevalence of opportunistic behavior (Elnahass et al., 2022a; Tahir et al. 2019). A large board may encourage the putting forward of alternative views which otherwise would not have been considered. According to the resource dependence theory, a larger board is "a provider of resources, such as legitimacy, advice and council links to other organizations, etc." (Hillman and Dalziel 2003, p. 383) and

therefore enhances the skills, expertise, and knowledge needed to exert effective monitoring over earnings management practices (Xie et al. 2003; Peasnell et al. 2005).

Besides board size, the board's independence is essential (Filatotchev and Wright 2011). According to the agency theory, independent directors can exercise sovereign judgement to protect shareholders' interests when an agency conflict is present (Jensen and Meckling 1976). Given the need to develop and maintain a reputation in the labour market, and since independent directors bring valuable expertise and potential networks that could benefit the firm (Fama and Jensen 1983; Pathan and Skully 2010), boards dominated by independent directors are better positioned to monitor and control managers' activities (Fama and Jensen, 1983). A larger board of directors with a high proportion of independents is expected to enhance the information value of bank earnings (Xie et al., 2003; Davidson et al., 2005; Kang and Kim, 2012; González and García-Meca, 2014) and can bring enhanced skills, knowledge, and expertise to exert effective monitoring over financial reporting. If independent directors on the board enhance monitoring, they should also be associated with lower use of earnings management (Cornett et al. 2009). Beasley (1996), for example, examines whether including larger proportions of outside members on the board reduces the likelihood of financial statement fraud and finds that non-fraud firms have boards with significantly higher percentages of outside members than those of fraud firms. Dechow et al. (2010) find that firms manipulating earnings are more likely to have boards with a lower proportion of independent members.

We conjecture that large board size and more independent boards are likely to monitor/mitigate managerial opportunism and promote high quality information for reported earnings. However, as we extend our insights to the effect of the bank type, we also conjecture that for Islamic banks operating on a complex and constrained banking model, the role of the board of directors in controlling agency problems should be more visible compared with that in conventional banks. The governance structure employed by Islamic banks is likely to be more complicated than that of conventional (Mollah and Zaman 2015; Elnahass et al. 2020). In both bank types, the board of directors is responsible for the implementation of strategic decisions, protection of the shareholders' interest and maximization of the bank value. However, for Islamic banks, under the constrained banking model and the nature of the products/services offered, the board of directors has additional responsibilities related to the establishment of the appropriate Shariah governance framework besides the development of relevant policies to ensure that all activities are conducted in compliance with the Shariah law (Quttainah et al. 2013). Furthermore, for Islamic banks, additional agency costs are likely to be associated with the Islamic banking model. This is due to a peculiar institutional environment in Islamic banks including the special bank-depositors' relationship.<sup>4</sup>

With expectations that social norms in these religious organizations dominate, effective scrutiny by large and independent board of directors is necessary. Hence, the size of the boards of directors and independence of board members in Islamic banks can substantially influence their monitoring skills and promote high information

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<sup>4</sup> With the absence of representation on the board of directors for depositors, Islamic bank managers have full control of the investment process of depositors' funds which suggest high agency problems.



quality for earnings. Therefore, our first hypothesis are stated in alternative forms:

**H<sub>1</sub>:** A large and independent board of directors increases the information value of banks' reported earnings.

This effect is more pronounced in Islamic banks when compared to conventional banks.

## **2.2. Audit committee and information value of earnings**

The presence of an audit committee strengthens governance, promotes conservatism, and reduces opportunistic earnings management (Xie et al. 2003; Bédard et al. 2004; Sharma and Kuang 2014). Prior literature has established that an effective audit committee is a governance device that aids the board of directors in its monitoring role and enhances financial reporting quality (Pomeroy and Thornton, 2008; Beasley et al., 2009; Bin-Ghanem and Ariff, 2016).

A large audit committee can be seen as an indication of the resources and varied expertise available to the committee to effectively monitor financial reporting practices (Baxter and Cotter 2009). Yang and Krishnan (2005) provide evidence of a significant negative association between audit committee size and discretionary accruals for a sample of 250 U.S. publicly traded firms between 1996 and 2000. Kent et al. (2010) examines a sample of Australian companies and find that higher accruals quality is associated with larger audit committees. García et al. (2012) study a sample of Spanish firms between 2003 and 2006 and conclude that the size of the audit committee has a significant negative association with discretionary accruals. Previous studies in this context have assessed the quality of financial reporting from an opportunistic earnings management perspective (Yang and Krishnan, 2005; Baxter and Cotter, 2009; García et al., 2012; Chen and Zhang, 2014), from a financial restatement perspective (Abbott et al., 2004; Srinivasan, 2005; Carcello et al., 2011), and from the aspect of conservative accounting (Krishnan and Visvanathan, 2008; Sultana, 2015).

Accomplishing key functions depends on the independence of audit committees' members (Klein 2002). Abbott et al. (2004) suggest that audit committee directors' independence is associated with effective monitoring for two reasons: (1) the absence of economic or psychological ties to management that might conflict with their job duties; and (2) the reputational capital preservation/development motivates independent directors to serve as active overseers of the financial accounting processes. Klein (2002) finds that large increases in abnormal accruals accompany reductions in audit committee independence. Abbott et al. (2004) find that the independence of the audit committee exhibits a significant and negative association with the occurrence of a financial restatement. Chang and Sun (2009) and Chen and Zhang (2014) provide strong evidence for a significant negative association between audit committee independence and earnings management.

An audit committee that is large and composed of independent directors is expected to enhance the information value of bank earnings. We maintain similar predictions to that in the first hypothesis. That is to say that the role of large and independent audit committees in controlling managerial behavior is expected to be more noticeable in Islamic banks than in conventional banks particularly, under the assumed dominance of religious norms, complex governance structure and high agency costs related to the Islamic banking business model. This leads to our second set of hypothesis stated in alternative forms:

**H<sub>2</sub>:** A large and independent audit committee increases the information value of bank earnings. This effect is more pronounced in Islamic banks when compared to conventional banks.

### **3. Research methodology**

#### **3.1 Sample and data distribution**

We initially had 486 conventional banks and 145 Islamic banks from 23 countries. Following Beck et al. (2013), Mollah et al. (2017) and Elnahass et al. (2022a,b), three sample criteria were applied: (1) countries having both, Islamic and conventional banking systems; (2) availability of governance data; and (3) availability of at least three consecutive years of bank data. The final sample comprises 723 bank-year observations from 100 listed banks (61 conventional and 39 Islamic) in 16 countries for the period 2007 to 2015. The relevance of the sample period is that the Basel II Capital Adequacy framework (Basel Committee on Banking Supervision, 2006) became mandatory for IBs in 2007 (see Ariss and Sarriddine 2007; Elnahass et al. 2020a). This period also allows an examination of whether bank managers opportunistically deviate from accounting standards and regulations during the 2007-2008 financial crisis (see Li et al. 2022).

Financial data are collected from DataStream, Bloomberg, and Bankscope and country-specific macroeconomic data are obtained from the World Bank's World Development Indicators. Both corporate governance data (i.e. board and audit committee characteristics and others) alongside Shariah governance data are hand-collected from banks' annual reports. Moreover, prior literature has found association between earnings quality and other board characteristics such as qualifications, age and tenure. However, since the corporate governance and Shariah governance data in this study is hand-collected from banks' annual reports, information on such characteristics are not available for most of the sampled banks. The final sample distribution across countries and the two bank types is presented in Table 1.

**[Insert Table 1 here]**

#### **3.2 Measuring the information value of earnings**

The main assumption in this study is that the various internal governance mechanisms employed in banks affect the information value of reported earnings. Unlike most of the previous attempts in the literature that examine earnings quality from an opportunistic earnings management perspective, this empirical study uses three measures of earnings quality that particularly reflect the information enhancing value of reported earnings. These measures are earnings persistence, ability of current earnings to predict future cash flows, and reliability of loan loss provisions.

##### **3.2.1 Earnings persistence and predictability of future cash flows**

Earnings quality is examined using two related but distinct accounting-based attributes: earnings persistence, and predictive ability of earnings. These two attributes relate to the time-series properties of earnings. According to the time-series perspective, earnings can be classified into two elements: a permanent element and a transitory (temporary) element (Easton et al., 2000). Permanent earnings are the product of

business transactions that generate earnings that will continue in the future. Transitory earnings represent irregular (non- recurring) items recorded in the income statement (Goncharov, 2005; Pan, 2007).

Earnings persistence refers to the extent to which current earnings prevail in the earnings series (Dechow and Schrand, 2004), thus, it is associated with the continuation of earnings over time. Persistent earnings are considered desirable as they are permanent, less transitory, and therefore more useful for forecasting future earnings (Schipper and Vincent, 2003; Frankel and Litov, 2009; Parte-Esteban and García, 2014; García-Sánchez et al., 2017). Earnings persistence has been used in prior literature as a measure of earnings quality, as it contributes to the value relevance of information and it is considered a good input for equity valuation models (Ali and Zarowin, 1992; Ramakrishnan and Thomas, 1998; Dechow et al., 2010). The persistence of earnings is determined by the firm's fundamental performance and the accounting measurement system used to evaluate the performance. In addition, firms with persistent earnings will have a more sustainable earnings stream, making it a useful input to equity valuation models. Accordingly, more persistent earnings are of higher quality than less persistent earnings. (García-Sánchez et al., 2017). Following Kanagaretnam et al. (2014), earnings persistence is estimated as the coefficient on current period earnings at time  $t$  ( $EBT_t$ ) in a regression of future earnings on current earnings. EBT measures a bank's capacity to utilize its assets to generate earnings before contractual obligations, and it is measured as earnings during a period before taxes.

The second accounting-based attribute is earnings predictability, which refers to the ability of past earnings to predict future earnings (Lipe, 1990). Financial statement users rely on accounting information to make decisions regarding their capital investment. The predictive process requires assessing firms' risks and future cash flows. High quality predictive earnings enable users to make more accurate assessments of future performance and cash flows. Goncharov (2005) states that persistence and predictability are desired outcomes of financial reporting from the perspective of valuation. For this reason, several empirical studies have used these aspects as measures of financial reporting quality (Doyle et al., 2007; Gaio, 2010; Parte-Esteban and García, 2014). However, their analysis excludes banks and financial institutions because of their unique regulatory environment.

The use of earnings persistence and predictability as measures of earnings quality has recently been documented in banking literature. Altamuro and Beatty (2010) examined the effect of internal control provisions mandated by the Federal Depository Insurance Corporation Improvement Act (FDICIA) on banks' financial reporting quality. In particular, they compared financial reporting of banks governed by the FDICIA's internal control provisions to that of others. They found that improvements in internal control monitoring increased earnings persistence and predictability of cash flow, indicating an enhanced quality of financial reporting. Kanagaretnam et al. (2014) examined the relationship between legal, extra-legal, and political institutional factors and earnings quality of banks across 48 countries. To measure the information value of bank financial reporting, they used earnings persistence and the ability of current earnings to predict the next period's cash flow. They provided evidence that stronger legal, extra-legal, and political factors are associated with higher levels of earnings persistence and cash flow predictability. Two cross-country studies by García-Sánchez and García-Meca (2017), and García-Sánchez et al. (2017) use earnings persistence and the ability

of earnings to predict future cash flow as measures for earnings quality in a sample of banks from nine countries. García- Sánchez and García-Meca (2017) found that banks' commitment to corporate social responsibility practices enhance the persistence of earnings and the predictability of cash flow. Moreover, García-Sánchez et al. (2017) examined the role of gender diversity on boards and financial expertise on audit committees in enhancing banks earnings quality. Their results illustrate that women and financial expert directors improve earnings persistence and ability to predict future cash flow in banks. Delis et al. (2018) investigated whether regulatory enforcement actions issued to banks for violations of rules and regulations improved earnings quality. They found that both the risk-related and the accounting- related enforcement actions significantly improve cash flow predictability and earnings persistence in a sample of US banks that were subject to enforcement actions between 2000 and 2010.

We developed a corporate governance index in the above model (GOV) to measure the characteristics of the internal governance mechanisms using principal components, board of directors and audit committees. Various corporate governance indices have been previously developed by many researchers and institutions. However, most of these indices relate to developed economies (Gompers, Ishii and Metrick's G-Index, 2003; FTSE-ISS Corporate Governance index, 2005; ISS Governance QuickScore, 2013). These indices cover different aspects of corporate governance, such as board structure, board responsibility, audit committee, shareholder rights and equity structure. However, since the corporate governance data in this study is hand-collected from banks' annual reports, information on some of these aspects are not available for most of the sampled banks. Hence, the index in this study (GOV) offers a generic measure for the effectiveness of board of directors (size and independence) and audit committee (size and independence).

To study the effect of internal corporate governance mechanisms on earnings persistence and predictability, the following regression models are estimated:

$$EBT_{t+1} = \beta_0 + \beta_1 EBT_{it} + \beta_2 GOV_{it} + \beta_3 GOV_{it} * EBT_{it} + \beta_4 SIZE_{it} + \beta_5 AGE_{it} + \beta_6 BIG4_{it} + \beta_7 CEODUAL_{it} + \beta_8 CAP_{it} + \beta_9 GDP + \beta_{10} COUNTRY\_GOV + \beta_{11} \sum Tt_{t=2015}^{2007} + \varepsilon_{it} \quad (1)$$

$$EBTLLP_{t+1} = \beta_0 + \beta_1 EBT_{it} + \beta_2 GOV_{it} + \beta_3 GOV_{it} * EBT_{it} + \beta_4 SIZE_{it} + \beta_5 AGE_{it} + \beta_6 BIG4_{it} + \beta_7 CEODUAL_{it} + \beta_8 CAP_{it} + \beta_9 GDP + \beta_{10} COUNTRY\_GOV + \beta_{11} \sum Tt_{t=2015}^{2007} + \varepsilon_{it} \quad (2)$$

Where:

$EBT_{t+1}$	earnings before taxes during year $t+1$ deflated by lagged total assets
$EBTLLP_{t+1}$	earnings before taxes and loan loss provisions during year $t+1$ deflated by lagged total assets
GOV	two ( <i>separate</i> ) corporate governance indices measured as the sum of the characteristics (i.e. size and independence) for the two principal components of internal governance system represented by: (i) the board of directors; and (ii) audit committee. The size is measured as the total absolute number of members and the

	independence is measured as the ratio of independent members over the total number of members.
GOV* EBT	interaction variable used to examine the role of internal governance mechanisms in enhancing the persistence and predictability of earnings
SIZE	bank size, measured as the natural logarithm of the year-end total assets
AGE	bank age, measured as the natural logarithm of the number of years the bank has operated in the country
BIG4	an indicator variable for audit quality that takes 1 if the bank's auditor is a Big Four, and 0 otherwise
CEODUAL	an indicator variable for CEO duality that takes 1 if the CEO is also the chairman of the board, and 0 otherwise
CAP	capital adequacy measured as Tier 1 capital
GDP	the country-prevailing GDP annual growth rate
COUNTRY_GOV	a country governance index measured as the average of six governance measures – control for corruption, government effectiveness, political stability, regularity quality, the rule of law and voice and accountability
$Tt_{t=2015}^{2007}$	Year Fixed Effects
$\varepsilon$	error term

For the GOV variable, we regress each index separately (i.e. for board of directors and audit committee) across all models. In the above models (1) and (2), the coefficient of interest is the coefficient on the interaction variable GOV\*EBT, which is expected to have a positive sign, in line with the claim that large and independent board members/audit committee increase the persistence of earnings and their predictability of future cash flows.

Following earlier studies (Gaio, 2010; Altamuro and Beatty, 2010; Wang and Campbell, 2012; García-Sánchez et al., 2017), the empirical models control for bank-specific factors such as bank size (SIZE), bank age (AGE), and capital adequacy level (CAP). Prior literature also finds that financial reporting quality differs depending on some other corporate governance characteristics such as the external audit quality (Abdelsalam et al., 2016) and whether the CEO is also the chairman of the board (Cornett et al., 2009). Accordingly, the models control the quality of the external audit by introducing an indicator variable (BIG4) for banks audited by a Big Four audit firm. An indicator variable (CEODUAL) is also introduced to reflect CEO duality.

Regarding the country-level factors, prior literature has documented that firms operating in countries with well-developed financial markets and strong legal institutions commit to higher quality financial reports (Gaio, 2010). Additionally, it has been documented that strong country governance and legal environment is associated with higher earnings quality (Leuz et al., 2003; Bushman et al., 2004, Elnahass et al. 2022a). Furthermore, Kanagaretnam et al. (2014) provide evidence that stronger political institutional structures are associated with higher earnings quality. Therefore, our empirical models control country-level factors that may explain variations in financial reporting quality. These include the annual growth rate of GDP to account for macroeconomic conditions. Moreover, to capture between-country differences in governance perceptions, we follow Čihák and Hesse (2010) and Trinh et al. (2020) to introduce a country governance

index (COUNTRY\_GOV).

### 3.2.2. Loan loss provisions and future loan charge-offs

Although the main purpose of loan loss provisions is to reflect expected future loan losses, prior studies provide evidence that managers may use loan loss provisions to pursue other objectives. These objectives range from earnings management (Beatty et al., 2002; Agarwal et al., 2007; Elnahass et al. 2014; Abdelsalam et al. 2016), capital management (Ahmed et al., 1999; Anandarajan et al., 2007; Elnahass et al. 2018), to signalling (Kanagaretnam et al., 2005; Leventis et al., 2012). A weaker association between the current period's loan loss provisions and future loan charge-offs implies the existence of managerial discretionary practices. If a large and independent board/audit committee could improve the validity of loan loss provision, then it is expected to observe a larger association between current period's loan loss provisions and next period's loan charge-offs. To test this argument, the following regression model is estimated:

$$CHGOFF_{t+1} = \beta_0 + \beta_1 LLP_{it} + \beta_2 GOV_{it} + \beta_3 GOV_{it} * LLP_{it} + \beta_4 SIZE_{it} + \beta_5 AGE_{it} + \beta_6 BIG4_{it} + \beta_7 CEODUAL_{it} + \beta_8 CAP_{it} + \beta_9 GDP + \beta_{10} COUNTRY\_GOV + \beta_{11} \sum Tt_{t=2015}^{2007} + \varepsilon_{it} \quad (3)$$

Where:

$CHGOFF_{t+1}$	the loan charge offs during year $t+1$ deflated by lagged total assets
LLP	the loan loss provisions during year $t$ deflated by lagged total assets
GOV*LLP	interaction variable used to examine the role of internal governance mechanisms in enhancing the validity of loan loss provision
	All other variables are defined in Appendix I.

The coefficient of interest in model (3) is the coefficient on the interaction variable GOV\*LLP, which is expected to have a positive sign in line with the claim that large and independent board/audit committee tend to improve the validity of loan loss provisions in anticipating next period's loan charge-offs.

In this study, the random-effect GLS estimation technique is used, based on the results from the Hausman Test<sup>5</sup>. The use of this method is also justified by the fact that typical corporate governance variables (board of directors and audit committee characteristics) do not vary much over time. Using fixed-effect estimations would result in massive loss of the degrees of freedom (Baltagi, 2005; Mollah and Zaman, 2015).

## 4. Results

### 4.1. Descriptive statistics and correlations

Table 2 presents the descriptive statistics for the full sample (in Panel A), the conventional banks (in Panel B), and the Islamic banks (in Panel C). In addition, the two-sample  $t$ -tests (comparing means for conventional banks and Islamic banks) are reported in the last column.

<sup>5</sup> Results of the Hausman Test are reported in Tables 5, 6 and 7.

The mean values of the current reported earnings ( $EBT_t$ ) are 0.019 and 0.014 for conventional and Islamic banks, respectively. This finding indicates that conventional banks report significantly higher earnings relative to Islamic banks (two-sample  $t$ -test of -3.603). These results are comparable to those of Abdelsalam et al. (2016) and Elnahass et al. (2018, 2022a) who report similar EBT of 0.018 and 0.014 for conventional banks and Islamic banks, respectively. Regarding the loan loss provisions and the loan charge-offs, conventional banks, and Islamic banks report comparable figures of 0.006 (0.004) and 0.006 (0.005), respectively. With respect to the internal governance variables, results show that for conventional banks (Islamic banks), the mean board of directors' size (BODSIZE) is 9.655 (10.023), board's independence (BODINDEP) is 0.369 (0.372), audit committee size (ACSIZE) is 3.661 (3.553), and audit committee independence (ACINDEP) is 0.544 (0.534), respectively. These means are reasonably close however, according to the mean comparison test, significant differences exist between the two subsamples for BODSIZE only. These results indicate that IBs have a significantly larger board size compared with their conventional counterparts. These findings are also in line with Elnahass et al. (2020a) and highlight the absence of significant differences between conventional banks and Islamic banks with respect to the independence of both board of directors and audit committees alongside the size of the audit committee. This implies that boards and audit committees have common roles in controlling agency problems within conventional and Islamic banks. However, to address more complex agency issues in Islamic banks, Shariah supervisory boards are established.

For bank-specific variables, results also show that, compared with CBs, IBs are younger in age, smaller in size and they have significantly higher capital adequacy than conventional banks. It was also found that, on average, 83%-86% of the banks in the sample are audited by a Big Four audit firm. This high percentage might be due to the complex nature of the banking activities.

**[Insert Table 2 here]**

Table 3 presents the Pearson correlation matrix for the full sample. Panel (A) presents the correlation coefficients for the variables used in the persistence and cash flow predictability models, while Panel (B) presents the correlation coefficients for the variables used in the third model (i.e. loan loss provision and future loan charge-offs). Panel (A) reveals significant positive correlations between current earnings ( $EBT_t$ ) and both one-period-ahead earnings before taxes and earnings before taxes and loan loss provisions. Panel (B) also reveals significant positive correlation between current period loan loss provisions and one-period-ahead loan charge-offs. The Pearson correlation matrix presented in Table 3 affirms that multicollinearity does not appear to be a statistical problem.

**[Insert Table 3 here]**

#### 4.2. Earnings persistence and cash flow predictability tests

Table 4 reports the results for the earnings persistence test for the full sample (in Panel A), conventional banks sample (in Panel B), and Islamic banks sample (in Panel C). Columns 1, 3, and 5 report the results for board characteristics, while columns 2, 4, and 6 present the results for audit committees. It is expected that large and independent board /audit committee members increase the information value of banks' earnings, through more persistent earnings. This effect is expected to be more noticed for Islamic banks when compared to conventional banks.

In Panel A, the two models separately test for the role of board of directors (BOD) and audit committee (AC) where GOV= BOD includes the sum of size and the independence of the board while GOV= AC represents the sum of the size and the independence of the committee.

Across all models, the coefficient on  $EBT_t$  is positively and significantly associated with future  $EBT_{t+1}$ . These findings indicate that earnings reported on average, as well as across the two bank types, are significantly and consistently persistent. We find that the coefficient on the interaction variable  $GOV*EBT_t$  shows positive and significant coefficients only for models (1), (2), (5), and (6). These results indicate that large and more independent board/audit committee members improves the persistence of earnings in the full sample and the Islamic banks sub-sample only. For the conventional banks model, the coefficient on the interaction terms shows insignificant result in model (3) and a marginal significance in model (4), implying that board of directors as well as audit committee characteristics have no role in enhancing conventional banks earnings persistence.

**[Insert Table 4 here]**

Table 5 reports the regression results for the cash flow predictability test for the full sample (in Panel A), conventional banks sample (in Panel B), and Islamic banks sample (in Panel C). Columns 1, 3, and 5 report the results for board characteristics, while columns 2, 4, and 6 present the results for audit committee. The premise is that large and independent board/audit committee members increase the information value of earnings by using quality current earnings to predict future cash flows.

The regression results show that current  $EBT_t$  is positively and significantly associated with future cash flows ( $EBTLLP_{t+1}$ ) across all models. These findings suggest that in both conventional banks and Islamic banks as well as on average effect (i.e. for the full sample), current earnings are able to predict future cash flows.

With respect to different bank types, in models (1), (2), (5) and (6) the coefficient on the interaction variable  $GOV*EBT$  shows significantly positive association, indicating that large and independent boards of directors and audit committees have an important role in enhancing the ability of current earnings to predict future cash flows only for full sample and in Islamic banks. However, the coefficients on the interaction variable are not significant in models (3) and (4) for conventional banks. These results indicate



that although current earnings in conventional banks can predict future cash flow, internal governance mechanisms have no significant impact on this predictive power.

**[Insert Table 5 here]**

#### **4.3. Loan loss provisions and future loan charge-offs**

The results for the loan loss provisions and future loan charge-offs tests are reported in Table 6. Panel (A) reports the results for the full sample, Panel (B) reports the results for the conventional banks, while the results for the Islamic banks are reported in Panel (C). Columns 1, 3, and 5 report the results for board characteristics, while columns 2, 4, and 6 present the results for audit committee.

In Panel (A), the coefficient on the current loan loss provisions (LLP) is positive and significant in all models. This indicates that current loan loss provisions reported by our sampled banks, regardless of the bank type, are positively associated with future loan charge-offs. These findings are consistent with prior studies (Altamuro and Beatty, 2010; Kanagaretnam et al., 2014).

More importantly, results show positive and significant coefficients on the interaction variable GOV\*LLP on average for the full sample (i.e. Panel A) and for Islamic banks (i.e. Panel C). This finding emphasizes the role of boards of directors and audit committees in monitoring the financial reporting process, ensuring its reliability, and enhancing the validity of loan loss provisions (Pomeroy and Thornton, 2008; Beasley et al., 2009; Elnahass et al. 2022a). However, the results for conventional banks, in Panel (B), do not provide significant evidence support to the initial expectation on the role of boards of directors and audit committees in enhancing the validity of loan loss provisions in conventional banks. Although results show that current loan loss provisions in conventional banks are significantly and positively associated with future loan charge-offs, it appears that this association is not affected neither by the board of directors nor by the audit committees' characteristics.

**[Insert Table 6 here]**

Overall, our main findings results are consistent with predictions and confirm our two studies hypotheses  $H_1$  and  $H_2$ . Findings highlight the importance of board size and independence in enhancing the information value of banks reported earnings through improving the persistence and predictive ability of earnings. Our results are also in line with prior literature claiming that firms having larger boards and audit committees can benefit from the member's knowledge and expertise to enhance the quality of reported earnings (Dalton et al., 1999; Xie et al., 2003; Chang and Sun, 2009; Chen and Zhang, 2014).

The observed significant and differential effects across the two bank types could be attributable to the unique institutional characteristics and complex agency costs, distinguishing Islamic banks from conventional banks, as prior literature supports the view that a strong institutional environment enhances the quality of financial reporting (McGuire et al., 2012; Kanagaretnam et al., 2015; Abdelsalam et al. 2016; Elnahass et al. 2020).

#### 4.4. Additional analyses: the role of Shariah governance

Decisions of the board of directors (audit committee) can depend much on the effectiveness of Shariah compliance for an Islamic bank. The presence of the Shariah supervisory board (SSB), as part of the governance structure in Islamic banks, is a unique characteristic that distinguishes their governance systems from those of conventional banks. SSB represents an additional layer of governance, beside the traditional governance mechanisms. The existence of the SSB is likely to provide additional assurance to shareholders that the social norms of the bank are preserved. At least in principle, having SSB should provide a deterrent against earnings management practices in Islamic banks. Previous studies demonstrate that the SSB, acting as an additional layer of governance, provides moral monitoring over management, which in turn can reduce agency costs (Abdelsalam et al., 2021). Additionally, a study conducted by Quttainah et al. (2013) found that the existence of a large Shariah board can contribute to lowering earnings management. Elnahass et al. (2022a) reported that SSB significantly reduces earnings management.

Therefore, additional tests are carried out to examine the role of SSB in enhancing the information value of earnings in Islamic banks. Specifically, the models test for the size, financial qualification, and multiple directorships of Shariah supervisory board.

Table 7 reports the regression results for the earnings persistence (Panel A), cash flow predictability (Panel B), and the relationship between loan loss provisions and future loan charge-offs (Panel C). We followed Mollah et al. (2017) and Elnahass et al. (2022a) and employed an index for the different characteristics of SSB, measured as the sum of SSB size, its financial qualification, and the multiple memberships held by its members.

The results show that the coefficient on current EBT is positive and significant (0.5012) and (0.5754) in Panels (A) and (B), respectively. These results indicate that current earnings reported by Islamic banks are persistent and can predict future cash flows. In addition, Panel (C) shows that the coefficient on current loan loss provisions (LLP) is positive and significant (0.3896), suggesting that current provisions reported by banks reflect expected future loan losses. These findings provide consistent evidence that Islamic banks exhibit high information value for reported earnings even controlling for Shariah governance.

When examining whether SSB mediates the predicted association (i.e. have a role in enhancing the information value of earnings), our results do not provide significant evidence. The coefficients on the interaction variables SSB\*EBT and SSB\*LLP are insignificant across all models. The lack of evidence on Shariah advisors' characteristics to enhance the information value of earnings may be attributable to the common advisory role played by Shariah scholars in the financial reporting process. Bank managers are responsible for the preparation of financial statements while SSB sit on board to review and scrutinize bank activities for Shariah compliance operations. Moreover, the complex nature of Islamic bank's activities and financial reporting require special accounting and financial expertise to effectively monitor managerial financial reporting decisions (Elnahass et al., 2022a). These justifications are also supported by Khalaf (2007) and Trinh et al. (2020) who argue that graduates Shariah scholars who lack financial

education may not be sufficiently competent to perform specific duties related to deep review of financial transactions and accounting treatments. Hence, SSB tends not to have an impact on the information value of reported earnings.

**[Insert Table 7 here]**

#### **4.5. Robustness checks**

To assess the credibility of the main findings, additional tests are performed. Firstly, to account for the “unbalanced” nature of the study sample, all tests examining the role of internal governance mechanisms in enhancing the information value of earnings are re-estimated using only those countries with observations on both types of banks (conventional and Islamic). The results from these additional tests are reported in Tables 8, 9, and 10 and they support the main findings of Tables 4, 5, and 6. These results provide strong and consistent evidence for the role of boards of directors and audit committees in promoting high earnings persistence, cash flow predictability, and reliability of loan loss provisions on average and for Islamic banks while conventional banks consistently show insignificant evidence.

**[Insert Tables 8, 9, 10 here]**

Secondly, additional tests examine whether government ownership in banks influences the information value of earnings. To accomplish this, the main models are extended to control for the effect of government ownership (GOV\_OWN), which is measured as the proportion of shares held by the government. Existing literature has documented that government ownership is associated with poor corporate governance (Shleifer, 1998; Abdelsalam et al. 2020, 2021), however, no evidence exists on the impact of government ownership on information value of earnings for our sampled banks. The results reported in Tables 11, 12, and 13 show that the main findings remain the same after controlling for government ownership. The results demonstrate that government ownership does not mediate the relationship between corporate governance mechanisms and the information value of earnings.

**[Insert Tables 11, 12, 13 here]**

Thirdly, additional tests are performed to address the issue of insignificant variables. These tests examine whether the signs and values of significant variables change when the insignificant variables are dropped from the analysis. The main results presented in Tables 4, 5, and 6 show that some control variables have insignificant values (i.e. AGE, CEODUAL, and GDP). The results from these additional tests are reported in Tables 14, 15, and 16 and show that the results for the main variables (board size, board independence, audit committee size, audit committee independence) remain unchanged after dropping insignificant control variables.

**[Insert Tables 14, 15, 16 here]**

Finally, the empirical analyses employ a panel data analysis, and our estimations account for the unobservable and constant heterogeneity (i.e. management style, business strategy or other bank-specific

features). However, some independent variables in the model (e.g. board structure, composition and functioning) are determined simultaneously with dependent variables, leading to possible simultaneity bias. To address the potential endogeneity problem between corporate governance variables (Elnahass et al. 2020; Trinh et al. 2020) and information value of earnings, Two-step system generalized method of moments (GMM) is utilized for additional robustness checks. The GMM controls for the unobserved effects by transforming the variables into first differences to eliminate unobserved heterogeneity and omitted variable bias. It allows us to treat all bank characteristics variables as endogenous and orthogonally employs the lag values of endogenous variables as IVs (Mollah and Zaman 2015; Mollah et al. 2017). Macroeconomics control variables are treated as strictly exogenous.

Unreported results for both GMM estimations show that the main findings presented earlier in Tables 4, 5, and 6 remain unchanged, after controlling for dynamic endogeneity and unobserved heterogeneity.

## 5. Conclusion

We utilized a unique set of international data for countries operating on dual banking systems to examine whether different board and audit committee characteristics can enhance the information value of banks earnings within an international context. A structured investigation for the characteristics (i.e. size and independence) of key governance instruments (like board of directors and audit committees) on promoting earnings informative still lacks particularly when comparing Islamic and conventional banks. This study is among the first attempts to examine financial reporting quality from an information perspective and with respect to internal governance characteristics. The study also bridges the gap in the existing literature by forming comparative assessments among Islamic and conventional banks and addresses the Shariah governance effect.

Based on systematic empirical analyses for 732 bank-year observations for 16 countries operating on a dual banking system, the main findings support our hypotheses and suggest that banks report high quality of information for reported earnings. We find strong evidence for the full sample that large and independent boards of directors/audit committees significantly increase the information value of earnings. However, depending on the banking, our results consistently show that board of directors' as well as audit committee characteristics have no role in enhancing conventional banks' earnings persistence, predicting future cash flow and reliability of loan loss provisions. This is the opposite case for their Islamic counterparts. Moreover, we find that Shariah boards' characteristics (i.e., size, financial expertise, and multiple directorships) have no direct or significant impact on the informativeness of earnings within Islamic banks. This finding suggests that unique institutional factors within Islamic banks are not prevailing in the standard banking governance system like board and audit committees. These findings imply that, unlike conventional banking, the informativeness of earnings (and more generally higher financial quality) in Islamic banking could be determined by the characteristics of internal governance mechanisms. However, findings suggest that characteristics for Shariah supervisory board (SSB)

members seem not to significantly affect the information value of earnings.

Our study extends the current literature on governance of different bank types while providing new insights to global banking, policy makers and market participants. Policymakers and regulators can use the evidence presented in this study to establish effective double governance mechanisms for countries operating on a dual banking system to unify/monitor financial reporting practices and mitigate future financial crises. By providing evidence on the relationship between internal governance mechanisms and earnings quality, the results provide useful information to investors and regulators who seek enhanced information on the value of a bank's reported earnings. Investors and other market participants should consider and maybe assess different board/audit committee characteristics, institutional characteristics, and corporate business orientations for their banks (i.e., religiously oriented). They should incorporate these factors into their decision-making, stock market valuations and investment choices.

This study also substantiates the influence of social norms on core economic matters with important ramifications for financial reporting framework and internal governance systems. Our findings also inform future guidance and regulations on financial reporting quality for dual banking systems. We recognize a limitation for our main findings to study other governance characteristics. This was due to data restrictions/availability for corporate and Shariah governance data given the rigorous hand-collection process involved for our international sample. Therefore, we invite future research to specifically evaluate other board/audit committee characteristics such as age, gender and tenure. Future studies can also explore internal governance mechanisms such as the effect of risk committees' effectiveness, blockholding and institutional ownership for both types of banks.

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<b>Table 1: Sample Distribution : by Country and Bank Type</b>						
<b>Country</b>	<b>Islamic Banks</b>	<b>Bank-Year Observations</b>	<b>Conventional Banks</b>	<b>Bank-Year Observations</b>	<b>Full Sample</b>	<b>Observations</b>
<b>Bahrain</b>	5	39	2	18	7	57
<b>Bangladesh</b>	6	22	6	34	12	56
<b>Egypt</b>	1	6	1	9	2	15
<b>Indonesia</b>	1	6	8	55	9	61
<b>Jordan</b>	2	14	9	76	11	90
<b>Kuwait</b>	5	35	4	33	9	68
<b>Lebanon</b>	0	0	4	32	4	32
<b>Malaysia</b>	1	9	2	18	3	27
<b>Oman</b>	2	6	3	18	5	24
<b>Pakistan</b>	2	18	2	17	4	35
<b>Palestine</b>	2	14	2	16	4	30
<b>Qatar</b>	3	22	5	42	8	64
<b>Saudi Arabia</b>	4	28	1	9	5	37
<b>Tunisia</b>	0	0	3	18	3	18
<b>Turkey</b>	2	17	7	61	9	78
<b>United Arab Emirates</b>	3	18	2	13	5	31
<b>Banks</b>	<b>39</b>		<b>61</b>		<b>100</b>	
<b>Observations</b>		<b>254</b>		<b>469</b>		<b>723</b>
Notes: This table presents the distribution of the final sample across countries and across the two bank types, after applying the previously discussed sample criteria.						

Source: Authors' own work/creation

**Table 2: Descriptive Statistics**

Variables	PANEL A FULL SAMPLE				PANEL B CONVENTIONAL BANKS				PANEL C ISLAMIC BANKS				Two-sample <i>t</i> -test (Two Tailed)
	Obs.	Mean	Std.	Media n	Obs.	Mean	Std.	Media n	Obs.	Mean	Std.	Median	T-test
EBT	723	0.017	0.021	0.019	466	0.019	0.014	0.020	257	0.014	0.029	0.015	-3.603***
EBT <sub>t+1</sub>	723	0.016	0.015	0.018	466	0.018	0.013	0.019	257	0.013	0.018	0.014	-5.020***
EBTLLP <sub>t+1</sub>	721	0.024	0.015	0.023	465	0.026	0.012	0.024	256	0.020	0.019	0.020	-4.674***
CHGOFF <sub>t+1</sub>	722	0.004	0.009	0.002	465	0.004	0.010	0.002	257	0.005	0.006	0.003	0.766
LLP	723	0.006	0.009	0.005	466	0.006	0.010	0.004	257	0.006	0.007	0.005	0.460
BODSIZE	723	9.786	2.801	10	466	9.655	2.669	10	257	10.023	3.018	9	1.697*
BODINDEP	661	0.370	0.234	0.333	422	0.369	0.228	0.333	239	0.372	0.244	0.333	0.130
ACSIZE	655	3.624	0.958	3	436	3.661	0.966	3	219	3.553	0.939	3	-1.363
ACINDEP	607	0.541	0.329	0.333	419	0.544	0.328	0.571	188	0.534	0.332	0.667	-0.345
SIZE	723	15.672	1.532	15.732	466	15.934	1.515	16.019	257	15.197	1.449	15.345	-6.355***
AGE	723	3.291	0.787	3.497	466	3.546	0.677	3.714	257	2.828	0.762	2.944	-13.046***
BIG4	723	0.851	0.357	1	466	0.863	0.345	1	257	0.829	0.377	1	-1.222
CEODUAL	723	0.100	0.300	0	466	0.120	0.326	0	257	0.062	0.242	0	-2.497**
CAP	714	16.496	13.565	14.060	460	15.136	6.383	13.670	254	18.959	20.861	15.270	3.635***
GDP	723	4.785	3.942	4.790	466	4.930	3.946	4.876	257	4.522	3.928	4.396	
COUNTRY_GOV	723	-0.165	0.478	-0.089	466	-0.166	0.462	-0.093	257	-0.165	0.508	-0.083	

Notes: This table reports the descriptive statistics. The sample period is 2007 to 2015. Panel A presents the results for the full sample including conventional and Islamic banks with 723 bank-year observations. Panel B presents the results for conventional banks sub-sample comprising 466 bank-year observations. Panel C presents the results for Islamic banks sub-sample comprising 257 bank-year observations. The last column also reports the mean differences and two-sample *t*- test (comparison of means for conventional banks and Islamic banks sub-samples).

\*, \*\*, \*\*\* denote significance at the 10%, 5%, and 1% respectively.

A list of the variables, their definitions, and measures is presented in Appendix I.

Source: Authors' own work/creation

**Table 3: Pearson Correlation Matrix for the Years 2007-2015**

<b>Panel (A): Pearson correlation matrix for variables used in persistence and cash flow predictability models.</b>												
<b>Variables</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>	<b>(7)</b>	<b>(8)</b>	<b>(9)</b>	<b>(10)</b>	<b>(11)</b>	<b>(12)</b>
1. EBT <sub>t+1</sub>	1											
2. EBTLLP <sub>t+1</sub>	<b>0.80</b>	1										
3. EBT <sub>t</sub>	<b>0.68</b>	<b>0.71</b>	1									
4. BOD	<b>0.13</b>	<b>0.13</b>	<b>0.12</b>	1								
5. AC	0.01	<b>0.11</b>	0.04	<b>0.22</b>	1							
6. SIZE	<b>0.25</b>	<b>0.28</b>	<b>0.24</b>	0.04	<b>0.17</b>	1						
7. AGE	<b>0.21</b>	<b>0.21</b>	<b>0.15</b>	<b>0.12</b>	0.05	<b>0.45</b>	1					
8. BIG4	<b>0.09</b>	<b>0.08</b>	0.06	<b>-0.14</b>	-0.07	<b>0.42</b>	<b>0.25</b>	1				
9. CEODUAL	<b>0.10</b>	0.06	0.02	-0.01	-0.06	-0.02	<b>0.12</b>	<b>0.10</b>	1			
10. CAP	<b>-0.15</b>	<b>-0.13</b>	-0.06	-0.03	<b>-0.12</b>	<b>-0.19</b>	<b>-0.31</b>	<b>0.12</b>	-0.02	1		
11. GDP	<b>0.17</b>	<b>0.17</b>	<b>0.21</b>	0.00	0.03	0.01	<b>-0.08</b>	-0.07	0.03	-0.07	1	
12. COUNTRY_GOV	-0.00	0.04	0.04	<b>-0.19</b>	-0.03	<b>0.41</b>	<b>0.08</b>	<b>0.50</b>	<b>-0.19</b>	0.06	<b>0.12</b>	1
<b>Panel (B): Pearson correlation matrix for variables used in loan loss provisions and future loan charge-offs model.</b>												
<b>Variables</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>	<b>(7)</b>	<b>(8)</b>	<b>(9)</b>	<b>(10)</b>	<b>(11)</b>	
1. CHGOFF <sub>t+1</sub>	1											
2. LLP	<b>0.48</b>	1										
3. BOD	-0.04	-0.06	1									
4. AC	0.08	<b>0.09</b>	<b>0.22</b>	1								
5. SIZE	-0.06	-0.01	0.04	<b>0.17</b>	1							
6. AGE	-0.05	0.01	<b>0.12</b>	0.05	<b>0.45</b>	1						
7. BIG4	<b>-0.07</b>	-0.04	<b>-0.14</b>	-0.07	<b>0.42</b>	<b>0.25</b>	1					
8. CEODUAL	<b>-0.12</b>	<b>-0.09</b>	-0.01	-0.06	-0.02	<b>0.12</b>	<b>0.10</b>	1				
9. CAP	-0.07	-0.05	-0.03	<b>-0.12</b>	<b>-0.19</b>	<b>-0.31</b>	<b>0.12</b>	-0.02	1			
10. GDP	<b>-0.12</b>	<b>-0.18</b>	0.00	0.03	0.01	<b>-0.08</b>	-0.07	0.03	-0.07	1		
11. COUNTRY_GOV	0.03	0.05	<b>-0.19</b>	-0.03	<b>0.41</b>	<b>0.08</b>	<b>0.50</b>	<b>-0.19</b>	0.06	<b>0.12</b>	1	

Notes: This table presents the Pearson correlation coefficients for the full sample. Panel (A) presents the correlation coefficients for the variables used in persistence and cash flow predictability models. Panel (B) presents the correlation coefficients for the variables used in the loan loss provision and future loan charge-offs model. Coefficients in bold indicate statistical significance at the 5% significance level or more.

Source: Authors' own work/creation

<b>Table 4: Regression Results for Earnings Persistence</b>						
<b>Variables</b>	<b>(A) Full Sample</b>		<b>(B) Conventional Banks</b>		<b>(C) Islamic Banks</b>	
	<b>(1) GOV = BOD Index</b>	<b>(2) GOV = AC Index</b>	<b>(3) GOV = BOD Index</b>	<b>(4) GOV = AC Index</b>	<b>(5) GOV = BOD Index</b>	<b>(6) GOV = AC Index</b>
Constant	-0.0078 (-0.91)	-0.0071 (-1.06)	-0.0046 (-0.60)	-0.0012 (-0.21)	-0.0097 (-0.42)	-0.0329 (-1.52)
EBT	0.4184*** (3.48)	0.1828*** (3.68)	0.7448*** (6.03)	0.6160*** (7.78)	0.2174** (2.09)	0.2009** (2.00)
GOV	0.0003 (1.18)	-0.0108*** (-4.37)	0.0002 (0.91)	-0.0054** (-1.97)	0.0004 (0.90)	-0.0022 (-1.23)
GOV * EBT	0.5088** (2.25)	0.5366*** (5.47)	0.0873 (1.30)	0.1977* (1.67)	1.5516*** (2.68)	1.5632** (2.42)
SIZE	0.0006 (1.24)	0.0009** (2.09)	0.0001 (0.42)	0.0006 (0.17)	0.0017 (1.32)	0.0038*** (2.72)
AGE	0.0009 (0.88)	0.0010 (1.31)	-0.0010 (-1.59)	-0.0003 (-0.37)	0.0021 (0.91)	0.0031 (1.09)
BIG4	0.0034 (1.29)	0.0020 (1.19)	0.0054* (1.90)	0.0050*** (3.36)	0.0003 (0.09)	-0.0027 (-0.81)
CEODUAL	0.0025 (1.06)	0.0022 (1.20)	-0.0004 (-0.23)	-0.0012 (-0.84)	0.0028 (0.97)	0.0083* (1.85)
CAP	-0.0001** (-2.33)	-0.0001*** (-3.51)	-0.0003 (-0.35)	-0.0009 (-0.14)	-0.0001** (-2.28)	-0.0001* (-1.89)
GDP	0.0001 (0.56)	0.0001 (0.74)	0.0003 (0.29)	0.0007 (0.60)	-0.0003 (-0.10)	-0.0004 (-1.29)
COUNTRY_GOV	-0.0032** (-2.41)	-0.0028** (-2.00)	-0.0028*** (-2.66)	-0.0027** (-2.52)	-0.0061** (-1.98)	-0.0098** (-2.57)
EBT + GOV*EBT	0.9272*** (6.45)	0.7193*** (12.04)	0.8321*** (13.62)	0.8137*** (14.37)	1.7690*** (3.40)	1.7641*** (3.05)
Year Dummies	YES	YES	YES	YES	YES	YES
Adjusted R <sup>2</sup>	56.42%	56.19%	67.98%	66.90%	55.53%	54.08%
Wald Chi2	239.80***	555.74***	315.08***	743.80***	258.69***	462.40***
Hausman Test	18.79	14.91	12.00	16.70	15.52	17.45
Observations	654	604	418	387	236	187

Notes: This table presents the regression results for the first model (i.e. earnings persistence for the full sample (Panel A), conventional banks sample (Panel B), and Islamic banks sample (Panel C). Columns 1, 3, and 5 report the results for board characteristics, while columns 2, 4, and 6 present the results for audit committee. Z-statistics are between parentheses. \*, \*\*, \*\*\* denote significance at the 10%, 5% and 1% respectively. All variables are defined in Appendix I. **The estimated Equation:**  

$$EBT_{t+1} = \beta_0 + \beta_1 EBT_{it} + \beta_2 GOV_{it} + \beta_3 GOV_{it} * EBT_{it} + \beta_4 SIZE_{it} + \beta_5 AGE_{it} + \beta_6 BIG4_{it} + \beta_7 CEODUAL_{it} + \beta_8 CAP_{it} + \beta_9 GDP + \beta_{10} COUNTRY\_GOV + \beta_{11} \sum Tt_{t=2015}^{2007} + \epsilon_{it}$$

Source: Authors' own work/creation

**Table 5: Regression Results for Cash Flow Predictability**

Variables	(A) Full Sample		(B) Conventional Banks		(C) Islamic Banks	
	(1) GOV = BOD Index	(2) GOV = AC Index	(3) GOV = BOD Index	(4) GOV = AC Index	(5) GOV = BOD Index	(6) GOV = AC Index
Constant	0.0002 (0.01)	0.0021 (0.25)	0.0048 (0.38)	0.0105 (0.90)	-0.0101 (-0.63)	-0.0147 (-0.74)
EBT	0.3061*** (3.54)	0.1988** (2.20)	0.5260*** (7.79)	0.5364*** (7.79)	0.2958*** (7.47)	0.2303*** (5.18)
GOV	0.0002 (1.00)	-0.0012** (-2.11)	0.0001 (0.30)	-0.0006 (-0.02)	0.0008** (1.97)	0.0001 (0.12)
GOV * EBT	0.5243** (2.16)	0.0432** (1.97)	0.1152 (1.07)	0.1717 (1.59)	1.1031*** (2.73)	1.3795*** (2.70)
SIZE	0.0009 (1.15)	0.0009 (1.50)	0.0008 (1.34)	0.0005 (0.92)	0.0014 (1.38)	0.0022* (1.69)
AGE	0.0010 (0.76)	0.0014 (1.30)	-0.0005 (-0.53)	-0.0008 (-0.83)	0.0034** (1.99)	0.0056** (2.50)
BIG4	0.0015 (0.63)	0.0017 (0.93)	0.0015 (0.38)	0.0022 (0.50)	0.0046 (1.35)	0.0034 (0.89)
CEODUAL	0.0012 (0.54)	0.0021 (1.12)	-0.0008 (-0.39)	-0.0006 (-0.36)	0.0063* (1.81)	0.0020 (0.40)
CAP	-0.0007 (-1.16)	-0.0005 (-1.35)	-0.0003* (-1.93)	-0.0002* (-1.73)	-0.0008 (-1.64)	-0.0006 (-1.00)
GDP	-0.0002 (-0.18)	0.0005 (0.51)	-0.0003 (-0.21)	-0.0005 (-0.40)	0.0006 (0.23)	-0.0002 (-0.49)
COUNTRY_GOV	-0.0032* (-1.90)	-0.0024 (-1.43)	-0.0022 (-1.16)	-0.0022 (-1.14)	-0.0051 (-1.62)	-0.0095** (-2.52)
EBT + GOV*EBT	0.8303*** (4.63)	0.2419*** (3.50)	0.6413*** (7.11)	0.7081*** (8.81)	1.3989*** (3.58)	1.6098*** (3.24)
Year Dummies	YES	YES	YES	YES	YES	YES
Adjusted R <sup>2</sup>	51.66%	51.41%	59.91%	58.67%	56.46%	52.85%
Wald Chi2	309.97***	365.07***	633.23***	446.41***	215.88***	135.62***
Hausman Test	13.71	17.26	15.03	16.27	14.86	16.00
Observations	653	601	417	414	236	187

Notes: This table presents the regression results for the second model (i.e. cash flow predictability for the full sample (Panel A), conventional banks sample (Panel B), and Islamic banks sample (Panel C). Columns 1, 3, and 5 report the results for board characteristics, while columns 2, 4, and 6 present the results for audit committee. Z-statistics are between parentheses. \*, \*\*, \*\*\* denote significance at the 10%, 5% and 1% respectively. **The estimated Equation:**

$$EBTLLP_{t+1} = \beta_0 + \beta_1 EBT_{it} + \beta_2 GOV_{it} + \beta_3 GOV_{it} * EBT_{it} + \beta_4 SIZE_{it} + \beta_5 AGE_{it} + \beta_6 BIG4_{it} + \beta_7 CEODUAL_{it} + \beta_8 CAP_{it} + \beta_9 GDP + \beta_{10} COUNTRY\_GOV + \beta_{11} \sum_{t=2007}^{2015} Tt_{t=2015} + \varepsilon_{it}$$

Source: Authors' own work/creation

**Table 6: Regression Results Loan Loss Provisions Predictability**

Variables	(A) Full Sample		(B) Conventional Banks		(C) Islamic Banks	
	(1) GOV = BOD Index	(2) GOV = AC Index	(3) GOV = BOD Index	(4) GOV = AC Index	(5) GOV = BOD Index	(6) GOV = AC Index
Constant	0.0117** (2.56)	0.0082*** (2.86)	0.0249*** (3.15)	0.0244*** (3.20)	-0.0034 (-0.78)	-0.0007 (-0.15)
LLP	0.2721*** (7.30)	0.3150*** (12.26)	0.1883*** (3.91)	0.1038** (2.12)	0.4839*** (7.38)	0.5599*** (11.01)
GOV	-0.0131*** (-3.75)	0.0003 (1.29)	-0.0004* (-1.75)	-0.0003 (-0.78)	0.0002* (1.68)	0.0007** (2.07)
GOV * LLP	1.4755*** (4.57)	0.4694** (2.24)	0.0923 (0.15)	0.3258 (0.52)	0.3932** (2.14)	0.4274* (1.71)
SIZE	-0.0003 (-0.87)	-0.0002 (-1.21)	-0.0006 (-1.24)	-0.0007 (-1.31)	0.0004 (0.16)	-0.0001 (-0.52)
AGE	-0.0005 (-0.82)	-0.0006* (-1.79)	-0.0007 (-0.60)	-0.0010 (-1.02)	0.0007 (0.12)	-0.0001 (-0.30)
BIG4	-0.0016 (-1.38)	-0.0012 (-0.67)	-0.0036 (-0.92)	-0.0036 (-0.97)	0.0019*** (2.64)	0.0019** (2.03)
CEODUAL	-0.0016 (-1.37)	-0.0009 (-1.12)	-0.0004 (-0.22)	-0.0008 (-0.44)	-0.0031** (-2.04)	-0.0015 (-1.09)
CAP	-0.0004 (-1.44)	-0.0003* (-1.85)	-0.0001* (-1.72)	-0.0002** (-1.99)	-0.0002 (-1.17)	-0.0002 (-1.30)
GDP	-0.0009 (-1.12)	0.0001 (0.03)	-0.0001 (-0.92)	-0.0002 (-0.13)	0.0001 (1.49)	0.0001 (1.09)
COUNTRY_GOV	0.0020** (2.10)	0.0003 (0.51)	0.0031** (2.06)	0.0029** (1.98)	-0.0008 (-1.00)	-0.0003 (-0.32)
LLP + GOV*LLP	1.7477*** (5.69)	0.7844*** (3.83)	0.2806 (0.44)	0.4296 (0.70)	0.8771*** (5.15)	0.9872*** (4.32)
Year Dummies	YES	YES	YES	YES	YES	YES
Adjusted R <sup>2</sup>	27.30%	34.40%	18.23%	13.20%	52.60%	64.78%
Wald Chi2	171.45***	225.93***	48.22***	33.20**	146.15***	275.21***
Hausman Test	9.57	12.08	11.39	13.07	10.41	12.49
Observations	713	601	417	414	236	187

Notes: This table presents the regression results for the third model (i.e. loan loss provisions reliability), for the full sample (Panel A), conventional banks sample (Panel B), and Islamic banks sample (Panel C). Columns 1, 3, and 5 report the results for board characteristics, while columns 2, 4, and 6 present the results for audit committee. Z-statistics are between parentheses. \*, \*\*, \*\*\* denote significance at the 10%, 5% and 1% respectively. **The estimated Equation:**  $CHGOFF_{t+1} = \beta_0 + \beta_1 LLP_{it} + \beta_2 GOV_{it} + \beta_3 GOV_{it} * LLP_{it} + \beta_4 SIZE_{it} + \beta_5 AGE_{it} + \beta_6 BIG4_{it} + \beta_7 CEODUAL_{it} + \beta_8 CAP_{it} + \beta_9 GDP + \beta_{10} COUNTRY\_GOV + \beta_{11} \sum_{t=2007}^{2015} T_t + \varepsilon_{it}$

Source: Authors' own work/creation



**Table 7: Additional Tests - Shariah Supervisory Boards within Islamic Banks**

Panel (A) Earnings Persistence Model		Panel (B) Cash Flow Predictability Model		Panel (C) Loan Loss Provisions Predictability	
Constant	-0.0359** (-2.26)	Constant	-0.0192 (-1.19)	Constant	0.0011 (0.22)
EBT	0.5012*** (4.13)	EBT	0.5754*** (4.74)	LLP	0.3896*** (2.71)
SSB	-0.0006 (-0.08)	SSB	0.0017** (2.16)	SSB	0.0002 (0.52)
SSB * EBT	-0.0370 (-1.45)	SSB * EBT	-0.0383 (-1.51)	SSB * LLP	0.0335 (1.28)
SIZE	0.0034*** (3.13)	SIZE	0.0017 (1.57)	SIZE	-0.0001 (-0.30)
AGE	0.0013 (0.80)	AGE	0.0028 (1.64)	AGE	-0.0005 (-0.84)
BIG4	-0.0018 (-0.49)	BIG4	0.0042 (1.16)	BIG4	0.0018 (1.55)
CEODUAL	0.0056 (1.60)	CEODUAL	0.0079** (2.27)	CEODUAL	-0.0030*** (-2.71)
CAP	-0.0008* (-1.72)	CAP	-0.0003 (-0.60)	CAP	-0.0002 (-1.21)
GDP	0.0009 (0.37)	GDP	0.0008 (0.34)	GDP	0.0001 (1.51)
COUNTRY_GOV	-0.0076** (-2.27)	COUNTRY_GOV	-0.0042 (-1.22)	COUNTRY_GOV	-0.0008 (-0.77)
AAOIFI	0.0044 (1.42)	AAOIFI	-0.0003 (-0.00)	AAOIFI	0.0007 (0.71)
Year Dummies	YES	Year Dummies	YES	Year Dummies	YES
Adjusted R <sup>2</sup>	54.32%	Adjusted R <sup>2</sup>	57.64%	Adjusted R <sup>2</sup>	56.32%
Wald Chi2	215.09***	Wald Chi2	286.10***	Wald Chi2	215.53***
Observations	254	Observations	254	Observations	254

Notes: This table presents the regression results for the additional tests, examining the role of Shariah supervisory board in enhancing the information value of earnings, through enhancing earnings persistence (Panel A), enhancing cash flow predictability (Panel B), and enhancing the predictability of loan loss provisions (Panel C). Z-statistics are between parentheses. \*, \*\*, \*\*\* denote significance at the 10%, 5% and 1% respectively.

Source: Authors' own work/creation

**Table 8: Sensitivity Test (1): Earnings Persistence Test – Countries with Observations on Both Bank Types**

Variables	(A) Full Sample		(B) Conventional Banks		(C) Islamic Banks	
	(1) GOV = BOD Index	(2) GOV = AC Index	(3) GOV = BOD Index	(4) GOV = AC Index	(5) GOV = BOD Index	(6) GOV = AC Index
Constant	-0.0066 (-0.83)	-0.0074 (-1.13)	-0.0025 (-0.34)	0.0005 (0.08)	-0.0097 (-0.42)	-0.0329 (-1.52)
EBT	0.4094*** (3.48)	0.1853*** (3.67)	0.7196*** (5.45)	0.6009*** (7.21)	0.2174** (2.09)	0.2009** (2.00)
GOV	0.0003 (1.18)	-0.0099*** (-3.89)	0.0002 (0.96)	-0.0049* (-1.69)	0.0004 (0.90)	-0.0022 (-1.23)
GOV * EBT	0.4731** (2.19)	0.5108*** (5.10)	0.0743 (1.05)	0.1966 (1.59)	1.5516*** (2.68)	1.5632** (2.42)
SIZE	0.0010* (1.83)	0.0013*** (2.83)	0.0004 (1.03)	0.0003 (0.73)	0.0017 (1.32)	0.0038*** (2.72)
AGE	0.0008 (0.84)	0.0010 (1.20)	-0.0011* (-1.66)	-0.0004 (-0.54)	0.0021 (0.91)	0.0031 (1.09)
BIG4	0.0046 (1.59)	0.0031* (1.74)	0.0065** (2.04)	0.0057*** (3.59)	0.0003 (0.09)	-0.0027 (-0.81)
CEODUAL	0.0045 (1.60)	0.0050** (2.30)	0.0008 (0.41)	0.0005 (0.26)	0.0028 (0.97)	0.0083* (1.85)
CAP	-0.0001** (-2.28)	-0.0001*** (-3.28)	-0.0002 (-0.26)	0.0001 (0.02)	-0.0001** (-2.28)	-0.0001* (-1.89)
GDP	0.0009 (0.63)	0.0001 (0.81)	0.0007 (0.60)	0.0001 (0.86)	-0.0003 (-0.10)	-0.0004 (-1.29)
COUNTRY_GOV	-0.0002*** (-3.01)	-0.0001*** (-2.95)	-0.0001*** (-2.91)	-0.0001*** (-3.00)	-0.0061** (-1.98)	-0.0098** (-2.57)
Year Dummies	YES	YES	YES	YES	YES	YES
Adjusted R <sup>2</sup>	57.50%	57.18%	68.56%	67.31%	55.53%	54.08%
Wald Chi2	241.57***	543.81***	769.27***	700.05***	258.69***	462.40***
Observations	622	576	386	359	236	187

Notes: This table presents the first sensitivity test under for the first model (i.e. earnings persistence), examining the role of internal governance mechanisms in enhancing earnings persistence for the full sample (Panel A), conventional banks sample (Panel B), and Islamic banks sample (Panel C). The results reflect only countries with observations on both bank types. Columns 1, 3, and 5 report the results for board characteristics, while columns 2, 4, and 6 present the results for audit committee. Z-statistics are between parentheses. \*, \*\*, \*\*\* denote significance at the 10%, 5% and 1% respectively.

Source: Authors' own work/creation

**Table 9: Sensitivity Test (1): Cash Flow Predictability Test – Countries with Observations on Both Bank Types**

Variables	(A) Full Sample		(B) Conventional Banks		(C) Islamic Banks	
	(1) GOV = BOD Index	(2) GOV = AC Index	(3) GOV = BOD Index	(4) GOV = AC Index	(5) GOV = BOD Index	(6) GOV = AC Index
Constant	0.0017 (0.14)	0.0021 (0.27)	0.0052 (0.43)	0.0120 (1.10)	-0.0101 (-0.63)	-0.0147 (-0.74)
EBT	0.3128*** (3.59)	0.1985** (2.15)	0.5003*** (7.82)	0.5175*** (7.74)	0.2958*** (7.47)	0.2303*** (5.18)
GOV	0.0002 (1.01)	-0.0013** (-2.13)	0.0001 (0.42)	-0.0005 (-0.11)	0.0008** (1.97)	0.0001 (0.12)
GOV * EBT	0.4706** (1.98)	0.0428* (1.91)	0.0662 (0.67)	0.1321 (1.34)	1.1031*** (2.73)	1.3795*** (2.70)
SIZE	0.0013 (1.63)	0.0013** (2.17)	0.0013* (1.87)	0.0009 (1.48)	0.0014 (1.38)	0.0022* (1.69)
AGE	0.0011 (0.85)	0.0016 (1.41)	-0.0005 (-0.52)	-0.0008 (-0.81)	0.0034** (1.99)	0.0056** (2.50)
BIG4	0.0030 (1.16)	0.0033* (1.70)	0.0036 (0.80)	0.0042 (0.86)	0.0046 (1.35)	0.0034 (0.89)
CEODUAL	0.0029 (1.13)	0.0042** (2.02)	0.0017 (1.06)	0.0015 (0.97)	0.0063* (1.81)	0.0020 (0.40)
CAP	-0.0006 (-1.03)	-0.0004 (-1.11)	-0.0002* (-1.95)	-0.0002* (-1.75)	-0.0008 (-1.64)	-0.0006 (-1.00)
GDP	-0.0003 (-0.20)	0.0005 (0.46)	-0.0003 (-0.21)	-0.0006 (-0.47)	0.0006 (0.23)	-0.0002 (-0.49)
COUNTRY_GOV	-0.0002*** (-3.02)	-0.0002*** (-2.87)	-0.0002** (-2.43)	-0.0002** (-2.28)	-0.0051 (-1.62)	-0.0095** (-2.52)
Year Dummies	YES	YES	YES	YES	YES	YES
Adjusted R <sup>2</sup>	53.99%	53.52%	61.35%	59.80%	56.46%	52.85%
Wald Chi2	309.45***	368.32***	629.75***	506.83***	215.88***	135.62***
Observations	621	569	385	382	236	187

Notes: This table presents the first sensitivity test under the second model (i.e. cash flow predictability), examining the role of internal governance mechanisms in enhancing the predictive power of earnings for the full sample (Panel A), conventional banks sample (Panel B), and Islamic banks sample (Panel C). The results reflect only countries with observations for both bank types. Columns 1, 3, and 5 report the results for board characteristics, while columns 2, 4, and 6 present the results for audit committee. Z-statistics are between parentheses. \*, \*\*, \*\*\* denote significance at the 10%, 5% and 1% respectively.

Source: Authors' own work/creation

**Table 10: Sensitivity Test (1): Loan Loss Provisions Reliability – Countries with Observations on Both Bank Types**

Variables	(A) Full Sample		(B) Conventional Banks		(C) Islamic Banks	
	(1) GOV = BOD Index	(2) GOV = AC Index	(3) GOV = BOD Index	(4) GOV = AC Index	(5) GOV = BOD Index	(6) GOV = AC Index
Constant	0.0084* (1.88)	0.0082*** (2.67)	0.0213*** (2.58)	0.0258*** (3.08)	-0.0034 (-0.78)	-0.0007 (-0.15)
LLP	0.2732*** (7.07)	0.3124*** (11.78)	0.1807*** (3.59)	0.0974* (1.90)	0.4839*** (7.38)	0.5599*** (11.01)
GOV	-0.0130*** (-3.58)	0.0003 (1.27)	-0.0004* (-1.71)	-0.0004 (-0.77)	0.0002* (1.68)	0.0007** (2.07)
GOV * LLP	1.4649*** (4.39)	0.4728** (2.19)	0.1158 (0.17)	0.3433 (0.52)	0.3932** (2.14)	0.4274* (1.71)
SIZE	-0.0002 (-0.75)	-0.0002 (-1.14)	-0.0007 (-1.21)	-0.0007 (-1.35)	0.0004 (0.16)	-0.0001 (-0.52)
AGE	-0.0005 (-0.78)	-0.0006* (-1.69)	-0.0006 (-0.55)	-0.0010 (-0.91)	0.0007 (0.12)	-0.0001 (-0.30)
BIG4	-0.0015 (-1.18)	-0.0012 (-1.56)	-0.0035 (-0.71)	-0.0035 (-0.77)	0.0019*** (2.64)	0.0019** (2.03)
CEODUAL	-0.0017 (-1.26)	-0.0009 (-0.92)	-0.0006 (-0.28)	-0.0009 (-0.39)	-0.0031** (-2.04)	-0.0015 (-1.09)
CAP	-0.0004 (-1.42)	-0.0003* (-1.78)	-0.0002* (-1.73)	-0.0002* (-1.95)	-0.0002 (-1.17)	-0.0002 (-1.30)
GDP	-0.0009 (-1.08)	-0.0005 (-0.01)	-0.0001 (-0.86)	-0.0002 (-0.18)	0.0001 (1.49)	0.0001 (1.09)
COUNTRY_GOV	0.0006 (1.58)	0.0003 (0.47)	0.0009* (1.68)	0.0030* (1.84)	-0.0008 (-1.00)	-0.0003 (-0.32)
Year Dummies	YES	YES	YES	YES	YES	YES
Adjusted R <sup>2</sup>	26.65%	33.64%	17.39%	12.60%	52.60%	64.78%
Wald Chi2	155.08***	202.24***	39.78***	33.28**	146.15***	275.21***
Observations	671	569	385	382	236	187

Notes: This table presents the first sensitivity test under the third model (i.e. loan loss provisions and future loan charge-offs), examining the role of internal governance mechanisms in enhancing the validity of loan loss provisions for the full sample (Panel A), conventional banks sample (Panel B), and Islamic banks sample (Panel C). The results reflect only countries with observations for both bank types. Columns 1, 3, and 5 report the results for board characteristics, while columns 2, 4, and 6 present the results for audit committee. Z-statistics are between parentheses. \*, \*\*, \*\*\* denote significance at the 10%, 5% and 1% respectively.

Source: Authors' own work/creation

<b>Table 11: Sensitivity Test (2): Earnings Persistence Test – Government Ownership Effect</b>						
Variables	(A) Full Sample		(B) Conventional Banks		(C) Islamic Banks	
	(1) GOV = BOD Index	(2) GOV = AC Index	(3) GOV = BOD Index	(4) GOV = AC Index	(5) GOV = BOD Index	(6) GOV = AC Index
Constant	-0.0009 (-0.14)	-0.0026 (-0.42)	-0.0002 (-0.03)	0.0045 (0.81)	0.0007 (0.03)	-0.0166 (-0.83)
EBT	0.4030*** (3.25)	0.1840*** (3.70)	0.7437*** (5.35)	0.6063*** (7.67)	0.2120** (2.07)	0.1950** (1.97)
GOV	0.0003 (1.07)	-0.0106*** (-4.31)	0.0002 (0.86)	-0.0055** (-2.02)	0.0003 (0.71)	-0.0023 (-1.27)
GOV * EBT	0.7344* (1.89)	0.5283*** (5.37)	-0.0889 (-0.41)	0.1956* (1.66)	1.5494*** (2.63)	1.4757** (2.17)
SIZE	0.0006 (1.34)	0.0009** (2.12)	0.0002 (0.51)	-0.0003 (-0.07)	0.0019 (1.42)	0.0038*** (2.74)
AGE	0.0007 (0.75)	0.0011 (1.32)	-0.0010 (-1.57)	-0.0007 (-0.09)	0.0020 (0.88)	0.0032 (1.10)
BIG4	0.0041 (1.50)	0.0023 (1.37)	0.0057* (1.88)	0.0051*** (3.36)	0.0008 (0.24)	-0.0020 (-0.58)
CEODUAL	0.0020 (0.91)	0.0022 (1.18)	-0.0004 (-0.27)	-0.0011 (-0.75)	0.0026 (0.88)	0.0076* (1.65)
GOV_OWN	-0.0096 (-1.13)	0.0019 (0.47)	0.0054 (0.93)	0.0041 (1.48)	-0.0018 (-0.16)	-0.0080 (-0.55)
CAP	-0.0002*** (-2.72)	-0.0001*** (-3.31)	-0.0002 (-0.22)	-0.0001 (-0.21)	-0.0001** (-2.30)	-0.0001** (-2.08)
GDP	0.0006 (0.46)	0.0009 (0.72)	0.0003 (0.32)	0.0007 (0.56)	-0.0004 (-0.12)	-0.0004 (-1.28)
COUNTRY_GOV	-0.0001** (-2.44)	-0.0001** (-2.27)	-0.0001*** (-2.68)	-0.0001*** (-2.81)	-0.0002** (-1.98)	-0.0003** (-2.45)
Year Dummies	YES	YES	YES	YES	YES	YES
Adjusted R <sup>2</sup>	56.77%	56.29%	68.10%	67.17%	55.41%	53.74%
Wald Chi2	245.49***	554.36***	472.62***	750.94***	245.54***	827.78***
Observations	624	574	408	377	216	167

Notes: This table presents the second sensitivity test (i.e. whether government ownership in banks affects the information value of earnings) under the first model (i.e. earnings persistence), examining the role of internal governance mechanisms in enhancing earnings persistence for the full sample (Panel A), conventional banks sample (Panel B), and Islamic banks sample (Panel C). Columns 1, 3, and 5 report the results for board characteristics, while columns 2, 4, and 6 present the results for audit committee. Z-statistics are between parentheses. \*, \*\*, \*\*\* denote significance at the 10%, 5% and 1% respectively.

Source: Authors' own work/creation

**Table 12: Sensitivity Test (2): Cash Flow Predictability Test – Government Ownership Effect**

Variables	(A) Full Sample		(B) Conventional Banks		(C) Islamic Banks	
	(1) GOV = BOD Index	(2) GOV = AC Index	(3) GOV = BOD Index	(4) GOV = AC Index	(5) GOV = BOD Index	(6) GOV = AC Index
Constant	0.0066 (0.61)	0.0054 (0.70)	0.0079 (0.67)	0.0133 (1.25)	-0.0014 (-0.09)	0.0052 (0.27)
EBT	0.2945*** (3.45)	0.1987** (2.21)	0.5175*** (7.61)	0.5271*** (7.65)	0.2919*** (7.36)	0.2282*** (5.17)
GOV	0.0002 (0.78)	-0.0013** (-2.14)	0.0001 (0.31)	-0.0007 (-0.02)	0.0007* (1.74)	-0.0001 (-0.11)
GOV * EBT	0.7371** (2.48)	0.0427* (1.95)	0.3109 (1.23)	0.4301* (1.77)	1.1262*** (2.76)	1.1802** (2.26)
SIZE	0.0010 (1.39)	0.0010* (1.70)	0.0009 (1.47)	0.0007 (1.10)	0.0015 (1.43)	0.0018 (1.30)
AGE	0.0007 (0.56)	0.0014 (1.26)	-0.0005 (-0.55)	-0.0008 (-0.92)	0.0033* (1.92)	0.0059*** (2.57)
BIG4	0.0021 (0.88)	0.0021 (1.18)	0.0021 (0.51)	0.0028 (0.60)	0.0053 (1.48)	0.0036 (0.92)
CEODUAL	0.0007 (0.32)	0.0019 (1.00)	-0.0012 (-0.59)	-0.0010 (-0.56)	0.0061* (1.75)	0.0006 (0.12)
GOV_OWN	-0.0150** (-2.31)	-0.0047 (-0.77)	-0.0072 (-0.94)	-0.0101 (-1.43)	0.0006 (0.01)	-0.0303 (-1.50)
CAP	-0.0008* (-1.66)	-0.0005 (-1.35)	-0.0002* (-1.87)	-0.0002* (-1.69)	-0.0008 (-1.55)	-0.0009 (-1.43)
GDP	-0.0003 (-0.25)	0.0006 (0.57)	-0.0002 (-0.18)	-0.0005 (-0.38)	0.0005 (0.22)	-0.0010 (-0.30)
COUNTRY_GOV	-0.0001** (-2.13)	-0.0001* (-1.76)	-0.0010 (-1.48)	-0.0009 (-1.39)	-0.0002* (-1.71)	-0.0002* (-1.65)
Year Dummies	YES	YES	YES	YES	YES	YES
Adjusted R <sup>2</sup>	53.12%	51.49%	60.38%	59.38%	56.43%	53.03%
Wald Chi2	324.65***	367.64***	675.47***	410.91***	212.74***	137.28***
Observations	623	571	407	404	216	167

Notes: This table presents the second sensitivity test (i.e. whether government ownership in banks affects the information value of earnings) under the second model (i.e. cash flow predictability), examining the role of internal governance mechanisms in enhancing the predictive power of earnings for the full sample (Panel A), conventional banks sample (Panel B), and Islamic banks sample (Panel C). Columns 1, 3, and 5 report the results for board characteristics, while columns 2, 4, and 6 present the results for audit committee. Z-statistics are between parentheses. \*, \*\*, \*\*\* denote significance at the 10%, 5% and 1% respectively.

Source: Authors' own work/creation

**Table 13: Sensitivity Test (2): Loan Loss Provisions Reliability – Government Ownership Effect**

Variables	(A) Full Sample		(B) Conventional Banks		(C) Islamic Banks	
	(1) GOV = BOD Index	(2) GOV = AC Index	(3) GOV = BOD Index	(4) GOV = AC Index	(5) GOV = BOD Index	(6) GOV = AC Index
Constant	0.0083* (1.95)	0.0078*** (2.77)	0.0183** (2.39)	0.0233*** (3.07)	-0.0016 (-0.42)	-0.0005 (-0.13)
LLP	0.2750*** (7.38)	0.2891*** (11.10)	0.1690*** (3.45)	0.0820* (1.65)	0.4818*** (7.23)	0.5572*** (10.73)
GOV	-0.0128*** (-3.68)	0.0003 (1.31)	-0.0004* (-1.78)	-0.0004 (-0.87)	0.0002 (1.57)	0.0007** (2.10)
GOV * LLP	1.4602*** (4.52)	1.1172*** (4.30)	1.3006 (1.43)	1.7558** (1.98)	0.4480* (1.86)	0.4234** (2.57)
SIZE	-0.0002 (-0.77)	-0.0002 (-0.88)	-0.0005 (-0.96)	-0.0005 (-1.08)	0.0004 (0.14)	-0.0010 (-0.35)
AGE	-0.0005 (-0.87)	-0.0006* (-1.68)	-0.0007 (-0.61)	-0.0010 (-0.98)	0.0004 (0.07)	-0.0001 (-0.30)
BIG4	-0.0016 (-1.30)	-0.0012 (-1.62)	-0.0035 (-0.86)	-0.0036 (-0.98)	0.0020*** (2.73)	0.0020** (2.02)
CEODUAL	-0.0017 (-1.43)	-0.0011 (-1.42)	-0.0007 (-0.36)	-0.0009 (-0.50)	-0.0032** (-2.05)	-0.0014 (-0.99)
GOV_OWN	-0.0071 (-1.33)	-0.0095*** (-4.10)	-0.0116* (-1.87)	-0.0135** (-2.25)	-0.0015 (-0.47)	0.0005 (0.11)
CAP	-0.0004 (-1.47)	-0.0003** (-2.17)	-0.0001* (-1.66)	-0.0002* (-1.85)	-0.0002 (-1.23)	-0.0002 (-1.04)
GDP	-0.0008 (-1.05)	0.0002 (0.26)	-0.0009 (-0.73)	0.0006 (0.01)	0.0001 (1.45)	0.0001 (1.10)
COUNTRY_GOV	0.0006* (1.73)	0.0007 (1.23)	0.0001 (1.03)	0.0034 (1.33)	-0.0003 (-0.93)	-0.0002 (-0.50)
Year Dummies	YES	YES	YES	YES	YES	YES
Adjusted R <sup>2</sup>	27.18%	36.47%	18.50%	14.35%	52.75%	64.80%
Wald Chi2	169.84***	247.41***	49.71***	38.56***	145.60***	269.73***
Observations	683	571	407	404	216	167

Notes: This table presents the second sensitivity test (i.e. whether government ownership in banks affects the information value of earnings) under the third model (i.e. loan loss provisions and future loan charge-offs), examining the role of internal governance mechanisms in enhancing the validity of loan loss provisions for the full sample (Panel A), conventional banks sample (Panel B), and Islamic banks sample (Panel C). Columns 1, 3, and 5 report the results for board characteristics, while columns 2, 4, and 6 present the results for audit committee. Z-statistics are between parentheses. \*, \*\*, \*\*\* denote significance at the 10%, 5% and 1% respectively.

Source: Authors' own work/creation

**Table 14: Sensitivity Test (3): Earnings Persistence Test – Dropping Insignificant Variables**

Variables	(A) Full Sample		(B) Conventional Banks		(C) Islamic Banks	
	(1) GOV = BOD	(2) GOV = AC	(3) GOV = BOD	(4) GOV = AC	(5) GOV = BOD	(6) GOV = AC
Constant	-0.0069 (-0.81)	-0.0058 (-0.88)	-0.0036 (-0.48)	-0.0006 (-0.11)	-0.0052 (-0.24)	-0.0262 (-1.12)
EBT	0.4226*** (3.45)	0.1894*** (3.84)	0.7425*** (15.60)	0.6046*** (7.80)	0.2135** (2.01)	0.1813* (1.76)
GOV	0.0003 (1.26)	-0.0105*** (-4.30)	0.0002 (0.71)	-0.0057** (-2.11)	0.0004 (0.75)	-0.0027 (-1.43)
GOV * EBT	0.5161** (2.17)	0.5350*** (5.48)	0.1150 (1.58)	0.2171* (1.87)	1.6809*** (2.85)	1.6981** (2.53)
SIZE	0.0007 (1.48)	0.0011*** (2.66)	-0.0009 (-0.34)	0.0003 (0.10)	0.0019 (1.34)	0.0039** (2.34)
BIG4	0.0041 (1.63)	0.0024 (1.51)	0.0049* (1.82)	0.0043*** (3.17)	0.0007 (0.22)	-0.0015 (-0.40)
CAP	-0.0002** (-2.42)	-0.0001*** (-4.08)	-0.0003 (-0.36)	-0.0008 (-0.14)	-0.0002*** (-2.67)	-0.0002** (-2.19)
COUNTRY_GOV	-0.0036** (-2.53)	-0.0030** (-2.29)	-0.0026** (-2.52)	-0.0023** (-2.27)	-0.0065** (-2.05)	-0.0109*** (-2.65)
Year Dummies	YES	YES	YES	YES	YES	YES
Adjusted R <sup>2</sup>	55.93%	55.91%	67.77%	66.78%	54.83%	51.17%
Wald Chi2	198.47***	561.94***	187.93***	745.78***	255.72***	354.34***
Observations	654	604	418	387	236	187

Notes: This table presents the third sensitivity test (i.e. whether the signs and values of significant variables change when the insignificant variables are dropped from the analysis) under the first model (i.e. earnings persistence), examining the role of internal governance mechanisms in enhancing earnings persistence for the full sample (Panel A), conventional banks sample (Panel B), and Islamic banks sample (Panel C). Columns 1, 3, and 5 report the results for board characteristics, while columns 2, 4, and 6 present the results for audit committee.

Z-statistics are between parentheses. \*, \*\*, \*\*\* denote significance at the 10%, 5% and 1% respectively.

Source: Authors' own work/creation



**Table 15: Sensitivity Test (3): Cash Flow Predictability– Dropping Insignificant Variables**

Variables	(A) Full Sample		(B) Conventional Banks		(C) Islamic Banks	
	(1) GOV = BOD	(2) GOV = AC	(3) GOV = BOD	(4) GOV = AC	(5) GOV = BOD	(6) GOV = AC
Constant	-0.0005 (-0.04)	0.0021 (0.25)	0.0049 (0.39)	0.0102 (0.89)	0.0004 (0.03)	-0.0054 (-0.27)
EBT	0.3069*** (3.46)	0.2006** (2.22)	0.5269*** (7.93)	0.5328*** (8.09)	0.2789*** (7.28)	0.2262*** (5.33)
GOV	0.0003 (1.04)	-0.0012** (-2.10)	0.0008 (0.24)	-0.0002 (-0.05)	0.0007* (1.72)	-0.0004 (-0.37)
GOV * EBT	0.5294** (2.10)	0.0430** (1.96)	0.1242 (1.10)	0.1825 (1.61)	1.4075*** (3.66)	1.4720*** (2.93)
SIZE	0.0011 (1.55)	0.0012** (2.24)	0.0007 (1.21)	0.0004 (0.66)	0.0016 (1.48)	0.0026* (1.94)
BIG4	0.0018 (0.75)	0.0020 (1.15)	0.0013 (0.32)	0.0020 (0.45)	0.0052 (1.50)	0.0044 (1.12)
CAP	-0.0008 (-1.33)	-0.0006* (-1.78)	-0.0002* (-1.91)	-0.0002* (-1.71)	-0.0001*** (-2.84)	-0.0001** (-2.02)
COUNTRY_GOV	-0.0036** (-2.05)	-0.0028* (-1.72)	-0.0020 (-1.12)	-0.0021 (-1.17)	-0.0060* (-1.88)	-0.0109*** (-2.79)
Year Dummies	YES	YES	YES	YES	YES	YES
Adjusted R <sup>2</sup>	51.38%	51.18%	59.79%	58.51%	53.06%	48.94%
Wald Chi2	277.42***	363.35***	581.82***	388.88***	199.58***	120.89***
Observations	653	601	417	414	236	187

Notes: This table presents the third sensitivity test (i.e. whether the signs and values of significant variables change when the insignificant variables are dropped from the analysis) under the second model (i.e. cash flow predictability), examining the role of internal governance mechanisms in enhancing the predictive power of earnings for the full sample (Panel A), conventional banks sample (Panel B), and Islamic banks sample (Panel C). Columns 1, 3, and 5 report the results for board characteristics, while columns 2, 4, and 6 present the results for audit committee.

Z-statistics are between parentheses. \*, \*\*, \*\*\* denote significance at the 10%, 5% and 1% respectively.

Source: Authors' own work/creation

Variables	(A) Full Sample		(B) Conventional Banks		(C) Islamic Banks	
	(1) GOV = BOD	(2) GOV = AC	(3) GOV = BOD	(4) GOV = AC	(5) GOV = BOD	(6) GOV = AC
Constant	0.0108** (2.41)	0.0082*** (2.85)	0.0244*** (3.09)	0.0250*** (3.25)	-0.0040 (-0.95)	-0.0013 (-0.31)
LLP	0.2756*** (7.41)	0.3025*** (11.82)	0.1801*** (3.77)	0.0889* (1.83)	0.4497*** (6.03)	0.5341*** (10.80)
GOV	-0.0129*** (-3.68)	0.0003 (1.30)	-0.0004* (-1.95)	-0.0004 (-0.85)	0.0003** (2.21)	0.0008** (2.46)
GOV * LLP	1.5200*** (4.72)	0.5235** (2.49)	0.2073 (0.33)	0.5118 (0.83)	0.4728** (2.55)	0.4624* (1.90)
SIZE	-0.0004 (-1.30)	-0.0004** (-1.97)	-0.0008* (-1.68)	-0.0009** (-1.96)	0.0008 (0.32)	-0.0007 (-0.27)
BIG4	-0.0019 (-0.71)	-0.0017 (-1.29)	-0.0038 (-1.11)	-0.0042 (-1.38)	0.0019*** (2.67)	0.0014 (1.52)
CAP	-0.0003 (-1.12)	-0.0002 (-1.34)	-0.0001 (-1.61)	-0.0002* (-1.93)	-0.0002* (-1.72)	-0.0001 (-1.01)
COUNTRY_GOV	0.0023** (2.47)	0.0006 (1.09)	0.0031** (2.16)	0.0033** (2.35)	-0.0007 (-0.90)	-0.0009 (-0.10)
Year Dummies	YES	YES	YES	YES	YES	YES
Adjusted R <sup>2</sup>	26.65%	33.46%	17.49%	12.12%	50.44%	63.94%
Wald Chi2	166.38***	207.03***	44.97***	59.78***	111.49***	254.40***
Observations	713	601	417	414	236	187

Notes: This table presents the third sensitivity test (i.e. whether the signs and values of significant variables change when the insignificant variables are dropped from the analysis) under the third model (i.e. loan loss provisions and future loan charge-offs), examining the role of internal governance mechanisms in enhancing the validity of loan loss provisions for the full sample (Panel A), conventional banks sample (Panel B), and Islamic banks sample (Panel C). Columns 1, 3, and 5 report the results for board characteristics, while columns 2, 4, and 6 present the results for audit committee. Z-statistics are between parentheses. \*, \*\*, \*\*\* denote significance at the 10%, 5% and 1% respectively.

Source: Authors' own work/creation

## Appendix I: Definition of Variables

Variables	Definitions and Measures
EBT <sub>t+1</sub>	Earnings before taxes during year <i>t+1</i> deflated by lagged total assets.
EBT LLP <sub>t+1</sub>	Earnings before taxes and loan loss provisions during year <i>t+1</i> deflated by lagged total assets.
CHGOFF <sub>t+1</sub>	Loan charge offs during year <i>t+1</i> deflated by lagged total assets.
LLP	Loan loss provisions during year <i>t</i> deflated by lagged total assets.
GOV	Two (separate) corporate governance indices measured as the sum of the characteristics (i.e. size and independence) for the two principal components of internal governance system represented by: (i) the board of directors; and (ii) audit committee. The size is measured as the total absolute number of members and the independence is measured as the ratio of independent members over the total number of members.
BOD	An index for the structure of the board of directors, measured by combining its size (BODSIZE) and independence (BODINDEP).
AC	An index for the structure of the audit committee, measured by combining its size (ACSIZE) and independence (ACINDEP).
GOV*EBT	An interaction variable used to examine the role of internal governance mechanisms in enhancing the persistence and predictability of earnings.
GOV*LLP	An interaction variable used to examine the role of internal governance mechanisms in enhancing the validity of loan loss provision.
SIZE	Bank size, measured as the natural logarithm of the year-end total assets.
AGE	Bank age, measured as the natural logarithm of the number of years the bank has operated in the country.
BIG4	An indicator variable for audit quality that takes 1 if the bank's auditor is a Big Four, and 0 otherwise.
CEODUAL	An indicator variable for CEO duality that takes 1 if the CEO is also the chairman of the board, and 0 otherwise.
CAP	Capital adequacy, measured as Tier 1 capital.
GDP	The country-prevailing GDP annual growth rate.
COUNTRY_GOV	A country governance index, measured as the average of six governance measures – control for corruption, government effectiveness, political stability, regulatory quality, the rule of law, and voice and accountability

Source: Authors' own work/creation