THE RELATIONSHIP BETWEEN CORPORATE GOVERNANCE AND FAIR VALUE ACCOUNTING: THE CASE OF COMMERCIAL BANKS LISTED ON THE NAIROBI SECURITIES EXCHANGE

BY

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DECLARATION

I, the undersigned, declare that this research project is my original (except where acknowledged by way of citation) work and that it has never been submitted and approved for the award of any degree by this or any other University

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ACKNOWLEDGEMENT

DEDICATION

I dedicate this project to my sons Ethan and Arthur who I hope will surpass my academic

and professional achievements as they chart their way through life.

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ABBREVIATIONS AND ACRONYMS

CBK   -   Central Bank of Kenya

CEASA   -   Center for Excellence in Accounting & Security Analysis

CEO   -   Chief Executive Officer

FASB   -   Financial Accounting Standards Board

FV   -   Fair Value

FVGL   -   Fair Value - Gains and Losses

IASB   -   International Accounting Standards Board

IPO   -   Initial Public Offer

NASDAQ -   National Association of Securities Dealers Automated Quotations
System,

NSE   -   Nairobi Securities Exchange

PAT   -   Positive Accounting Theory

PWC   -   Price Waterhouse Coopers

ROA   -   Return on Asset

ROE   -   Return on equity

SEC   -   Securities Exchange Commission

SFAS   -   statement of financial accounting standards

SOX   -   Sarbanes Oxley Act

SPSS   -   Statistical Package for the Social Sciences

USA   -   United States of America

ABSTRACT

The world has awakened to the concerns of poor performance and eventual collapse of large corporations. This has led to calls for need to strengthen corporate governance. The waves of collapse and financial turmoil of large corporations many of which are in the financial sector, has elicited public interest both locally and internationally. Credit crisis was attributed to some extent on the use of fair value accounting which provided for opportunistic reporting on financial operations. Corporate governance is key in safeguarding shareholder interests which borders on prudent financial reporting. The study sought to determine whether a relationship exist between corporate governance and fair value adjustment in the case of commercial banks in Kenya. While determining the relationship the study focused on the use of level 2 and 3 inputs in estimating the designated value of financial assets and liabilities. The board being the apex organ in corporate governance was the focus of the study in estimating the values by use of level 2 and 3 inputs. The study took a census approach on 11 commercial banks listed on the NSE for period 2011 to 2015. The study design used a deductive approach while data analysis was on regression and correlation analysis to achieve research objective. Analyzed data was collected from annual financial reports got from the respective bank websites. The multiple linear regression model's coefficient of correlation (R) is 0.317 and coefficient of determination (R^2) is 0.008 implying that 31.7% of net financial assets designated at level 2 and 3 hierarchy is explained by the model's independent variables while 68.3% is explained by the error term and other independent variables. The study results do show the existence of positive relationship between net financial assets designated at level 2 and 3 fair values and board independence and external auditor independence. The negative relationship established by the study model and supported by both regression and correlation analysis related to board share ownership and board compensation. Board level of education was found to have a positive coefficient in regression model but with a positive correlation of .101 at sig .465. Results of this study also highlight that board's level of education, board compensation, board independence and external auditor independence are key in any attempt for opportunistic reporting on net financial assets designated at level 2 and 3 fair values. The results of this study will contribute to the debate on the opportunistic use of fair value accounting in a global context and seek to answer questions on the detriments of use of fair value accounting in modern day if any.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Financial Statements are the principal means through which a company communicates its financial information to its stakeholders. The financial statements are aggregates of different measures of assets, liabilities, revenues and expenditures. The selection of the measurement base used in preparing financial statements is one of the significant problems in accounting. The traditional basis of measurement in accounting has been historical cost but the recent times have seen a major shift towards fair value accounting. Fair value measurements are guided by standards established within the FASB and IASB frameworks but are largely dependent on estimates. These estimates are based on professional objective views of managers responsible for preparing the financial statements. The board of directors in presenting the financial statements to its varied users ratify the manager's figures which largely are based on estimates. Based on subjective human nature and varying management goals the fair value measurement can be abused.

Kenneth (2013) observes that there is an opportunity for extensive manipulation of accounting figures that can take place under fair value accounting, which ranges from loan loss provisions, increased valuation of assets and undervaluing financial liabilities. Corporate executives sit at the apex of a company and on agency relationship bear a responsibility to its principal. The responsibilities would include wealth creation but most importantly presenting the financial information to allow for useful decision making by investors. The structure of the board is key in ensuring the investors get desired value. The board structure has a bearing on the discretionary use of fair value models for good purpose (Ian, 2010).

The banking industry is an important sector in any economy in the world and the use of fair value measurement in the banking industry is of greater consequence (Hussam, 2009). According to Dang (2008) managers utilize the discretion to influence reported earnings and better banks performance because of; capital market incentives, including implementing management buyouts plan, initial public offerings (IPO), seasoned equity offerings and mergers plan, to meet earnings forecasts, contracts motivation such as management compensation plans, debt agreement or job preservation. The study seeks to understand the role of corporate governance in the adoption of fair value measurement in the banking industry in Kenya.

1.1.1 Corporate Governance

The financial world in 2007 to 2008 experienced a crisis, this crisis as Carletti (2008) observes was immensely influenced by fair value accounting. Liang (2015) observes that after many accounting failures in the early 2000s and the financial crisis of 2007-08, governments all over the world proposed and implemented many corporate governance reforms to better protect the shareholders (Liang, 2015). For instance in 2003, the Securities and Exchange Commission (SEC) started to require a majority of the board members and all members of audit committee to be independent (Liang, 2015). Of importance was safeguarding the welfare of the principal. Research by Domenico (2011) shows that the world banking industry was hit hard following the financial crisis as a result of fair value. Most banks were suffering, this was evident through increased loan loss provisions, and loan impairment loses, capital erosion, increased risk of default and dipping share prices for listed banks. The bank managers reacted to the downward spiral by engaging in accounting manipulative actions to manage losses and portray improved

performance or financial stability. The corporate governance reforms came into place to look behind the reported numbers as noted by Liang (2015) in the wake of the crisis.

Zhiying (2012) observes that corporate governance is the main target of the modern company, to monitor and motivate as the core content. He further notes that corporate governance structure plays a critical role in operator's supervision and instituting checks and balances, but also as a mechanisms to ensure corporate decision-making is effective so as to maintain the company's various stakeholder interests. Corporate governance is embodied in the board of directors who play a monitoring role in determining whether the bank; is manipulating gains to report favorable financial performance, is maintaining capital adequacy, is operating within limits of restrictive debt covenants, is operating within the prudential guidelines and its meeting all reporting requirements under law.

In its monitoring role and determining whether the discretionary use of fair value measurement model has been applied correctly then the boards structure is key. The managers use fair value for varied incentives and the board of directors has to be structured in a way that will be able to determine whether the use of fair value was for right purposes. To determine this the board has; *first*, to be knowledgeable in the areas of finance and accounting. The knowledge is a shared resource where some of the board members will have been educated in the subjects of finance and accounting, and having practiced in those areas as well. *Second*, own a limited percentage share in the bank. It's evident that the board of directors besides being the watchdog for the principal they themselves will be in the position of the principal to the extent of their share ownership in the bank. The board will therefore be more vigilant and align their interest with those of other investors while monitoring and directing the management. This will have a great impact in deterring

actions of manipulating banks figures. The banks are required to report on the level of share ownership by directors. *Third*, operate not as employees of the bank but paid a sum for their director activities. The compensation would be commensurate with the duties performed in a period and not in relation to the banks overall earning in a period. The work would be indicated in the number of corporate meetings attended, the committees served in and pay for each. All these are summed in the financial statements and presented at the year end. *Fourth*, to be independent. The boards independence goes with the duration served, number of committees board member is involved and the terms to call for outside professionals to inform the board in certain matters. Fifth, to appoint independent auditors. The independent auditor will be determined though the duration the auditor has been appointed or proposed by the board to continue serving and the type of audit opinions issued over the years the auditor has served.

1.1.2 Fair Value measurement

According to the SFAS No. 157, fair value is the price in an orderly transaction between market participants to sell the asset or transfer the liability in the market in which the reporting entity would transact for the asset or liability (Financial Accounting Standards Board [FASB], 2006). Fair value therefore is the exit price of the asset or liability because it is the selling or transfer price from the perspective of the reporting entity, not the replacement cost, with adjustments for specific characteristics as defined in SFAS No. 157. The reporting entity finds the fair value of an asset or liability on the balance sheet date using available market information and management assumptions (Kristina, 2011).

In establishing the fair value of an asset or a liability, a reporting entity will evaluate factors such as transaction price, transaction market, market participants, valuation approaches.

Transaction price is the price received for selling an asset or the price paid to transfer a liability in a hypothetical transaction which must be considered an orderly transaction if the transaction were to actually take place. The transaction is also assumed to occur in either the principal market for the asset or liability or the most advantageous market. The reporting entity also has to make assumptions about the buyers and sellers used to determine the price. These participants have knowledge about the asset or liability and have the ability and are willing to transact.

There are a number of approaches for determining the fair value of an assets or a liability depending on the information available and when the asset or liability is being measured. The methods further rely on the inputs available for each valuation technique. These inputs are categorized into three hierarchical levels; level 1 which uses quoted prices for identical items in active, liquid, and visible markets. This means that the prices used are based on markets that are trading identical assets or liabilities, like a stock exchange. An active market is "a market in which transactions for the assets or liability occur with sufficient frequent and volume to provide pricing information on an ongoing basis" (FASB, 2006). Level 2 are based on inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 data inputs are used for assets or liabilities where there are similar assets or liabilities, but not identical items, in active or inactive markets, (FASB, 2006). Level 3 is solely dependent on unobservable inputs for the asset or liability. These unobservable inputs are developed based on the best information available under the circumstances and are the reporting entity's assumptions about the assumptions market participants would make in pricing

assets or liabilities in a hypothetical transaction. It is this level that manipulations occur to reflect intended goals of management (Xu, 2013; Rashad, 2009).

There is high level of subjectivity in valuation techniques at level 3 hierarchy since it is based on management assumptions. Further, enterprises do not disclose how they arrived at the fair values presented in the financial statement and designated as level 2 and 3. This therefore takes away the comparability aspect of financial statement within the bank and industry wide.

Fair value is important in several aspects especially in a bank such as; determining the value of liabilities to take over when purchasing another entity or investing in another bank, determining the value of future earnings of a project before injecting funds, determining the actual present performance of a bank, valuing the loan losses of a bank, determining the value relevance when a bank wants to purchase stock (Husam, 2009). Wang (2012) also notes that fair value is conceptually relevant because it accurately reflects the market's assessment of current economic conditions, which is directly useful for investor decision making.

1.1.3 Corporate Governance and Fair Value Measurement

The objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential stakeholders in making decisions on dealing with the entity. Different measurement bases are employed by accountants in the preparation of the financial statements to serve the primary objective of financial reporting. The IFRS have provided guidelines on the measurements under mark to market and mark to model / fair value on three hierarchical levels. The extent of use of

fair value under level 1, 2 and 3 will be found in the disclosures to the financial statements (Bhat, 2008).

Under IFRS 13 (Fair Value Measurement), the definition of fair value emphasizes that if the liquid markets do not exist for orderly transactions, then fair values have to be measured based on managerial assumptions and models which is on level 3 hierarchy. The level of discretion allowed for choosing a valuation model under level 3 opens the door for manipulation of figures to achieve a certain goal.

The corporate structure dimensions impact the use of fair value accounting. It is expected that some members of the board of directors have knowledge of finance and accounting. Where the board is knowledgeable in accounting and finance then management is deterred from engaging in manipulative fair value accounting to achieve their own goal(s). This therefore leads to developing an expectation that the more knowledgeable the board is in finance and accounting the lesser the incentive to employ fair value techniques at level 2 and 3. Kenneth (2013) notes that NASDAQ, one of the leading stock exchanges in the world have issued guidelines demanding from listed firms to hire "financially literate" audit committee members; while the Sarbanes-Oxley Act (SOX) requires certain board members to acquire "financial sophistication".

Corporate executives are required to own a stake in the bank so as to motivate them to work towards achieving the common shareholder goals. Corporate executives therefore by owning a stake in the enterprise and assuming principal cum agent position are motivated in ensuring that the objectives of the management are aligned to those of the owners. This inflexibility will offer limited accounting options and thus restrict the subjective judgments in employing fair value accounting at level 2 and 3. This leads to developing an expectation

that where the corporate executives or board owns a stake in the company then there is less use of fair value accounting at level 2 and 3.

Compensation always acts as a motivator towards a certain direction. The board or corporate executives are not to be paid based on business performance as would apply to the management. The board is compensated in terms of honoraria, allowances and not pay based on the overall business performance. For an enterprise that rewards corporate executives following better posted results then there will be little to deter the enterprise from reporting opportunistically using fair values at level 2 and 3 in the years where the earnings seem to be poor. Where management is compensated based on better performance then there is incentive for them to manipulate earnings. The corporate executives in their monitoring role need to look behind these figures to ascertain the true earnings and root out any manipulations before the financial statements are published. This therefore leads to developing an expectation that where the corporate executive and management are compensated based on reported better performance then there is higher use of fair value accounting at level 2 and 3.

The corporate executive of an enterprise need to be independent and thus able to form or arrive at independent decisions. The independence of the board emanates from the duration the board members serve, the number of committees a board member serves in, the terms of reference allowing for independent consultation of professionals in certain subjects, whether the members are full time board members or not. For corporate executives to serve for long periods it enhances understanding which can be beneficial to the investors but also creates situations that can lead to manipulation of figures as a result of overfamiliarity. The expectation is that where the board collectively has stayed for long then there is higher use

of fair value accounting under level 2 and 3. Whereas where they are independent then the use of fair value accounting at level 2 and 3 is low.

Auditors are considered the watchdogs for the stakeholders outside the enterprise. In situations where the board's interest align with those of managers then there can be serious accounting manipulations to the detriment of the outside stakeholders including the public. The external auditor therefore is expected to act in the interests of the outside stakeholders by confirming whether the financial statements presented to them portray a true and fair picture of affairs of the enterprise in that particular period. The external auditor can find himself aligning to the management and corporate executives. The independence will be determined through the years the auditor has served and the types of audit opinions issued for those years. The expectation is that where the external auditor is not independent then there is high use of fair value accounting at level 2 and 3 (Bhat, 2008).

Several aspects of corporate governance and application to establish use of fair value measurement at level 2 and 3 will be studied to determine whether there is a correlation between the two.

1.1.4 Commercial Banks Listed on the NSE

Commercial banks listed on NSE report based on the IFRSs. The IFRSs give a clear guide on the application of different standards for each accounting treatment. The IFRSs have clear disclosures for banks regarding standards and especially IFRS 13 on fair value measurement. From the published financial reports of commercial banks it is evident that there is clear categorization of assets and liabilities designated as level 1, 2 or 3. The

commercial banks listed on NSE have varied ways of such disclosure with some disclosing on the statement of financial position while others in the notes to the financial statements.

These listed commercial banks are also required to publish annual financial statements in the newspapers for the benefit of the public. These requirements are guided by the Central Bank of Kenya prudential guidelines and the Kenya Banking Act. The listed commercial banks are also required to file returns of capital being tier 1 and tier 2, risk, non-performing loans and reserves with the Central Bank of Kenya on a monthly and quarterly basis. The published financial report include details of members of the board of directors and a statement of corporate governance that covers the number of meetings attended in the year, the number of committees in which the board member serves, the extent of shareholding in the bank and within the financial statements the director emoluments. Commercial banks listed on NSE are seen to adhere to these reporting elements in relation to corporate governance.

1.2 Research Problem

Fair value accounting has been a case for debate over three decades and points and arguments for and against have been raised. The concept of 'fair value' measurement emerged in financial accounting and was accepted in the abstract long before it was a subject of analysis and dispute, (Michael, 2007). According to Plantin (2004) there are different winners and losers from the shift to mark to- market for financial instruments in general, and helps to explain the intensity of the politics of fair value accounting, even prior to the financial crisis. While much of the heat generated by fair value concerns the politics of reporting discretion for banking institutions, Laux (2009) suggests that the polarization in the debate is founded primarily on different views about the goals of accounting.

Commercial banks are subject to different levels of regulations, these regulations have put requirements that the banks have to operate within or face sanctions. The need to operate within the regulator guidelines such as the CBK (2016) prudential guidelines, the banks may employ earnings management and other accounting manipulations to operate within the guidelines. The accounting manipulations would affect the capital adequacy, the yearly performance, and the leverage and liquidity risks that take care of large bank liability being customer deposits. The manipulation achieved through the discretion provided within fair valuation within level 2 and 3 hierarchy leads to distortion of figures. This distortion in the end portray a picture of a bank that's performing well, has adequate capital and that is solvent by having positive working capital ratios. The stakeholders will therefore engage in investment and other economic decisions based on distorted values which beats the decision usefulness of financial statements. With a strong board, the decision usefulness can be achieved by the investors. A strong board is characterized by independence of board members, the advanced level of education and professional competence in finance and accounting matters, the level of share ownership in bank which allows for further consideration in reporting, the independence of the external auditor as appointed and the level of compensation of the board which is not pegged to better earnings. These will deter manipulative actions by management on use of fair value and thus guaranteeing value to investors and other outside users of financial statements.

The research thus focuses on the discretionary choice by banks to employ levels 2 and 3 fair value accounting on financial reporting. Level 2 and especially level 3 fair value accounting gives reporting entities a wide choice on the valuation techniques to use. Xu (2013) observes that, although managers have discretion over both level 2 and level 3 fair

values, it may be easier to manipulate level 2 fair values than level 3 fair values for two reasons. Brian (2011) finds that banks violate regulatory capital requirements more frequently under a fair value based accounting system and the violations under fair value accounting help predict future regulatory capital violations.

There have been turmoil in the financial industry in Kenya following the collapse and placement under receivership of Dubai Bank and Imperial bank. From the financial reports published by listed commercial banks in Kenya there is limited use of level 2 and 3 fair value accounting as evidenced in notes to the financial statements. Where the level have been used there is no clear way of determining from investor perspective how the value was arrived at as the mathematical models are not disclosed.

Fair value accounting is guided by standards that are deeply tied to the prudential regulation of financial institutions (including banks) and, by extension, to assessing the adequacy of bank capital reserves (Michael, 2013).Therefore fair value accounting is of central importance both to investors and regulators in determining the basic informational substrate for evaluating the financial well-being of public companies and banking institutions.

IFRS 13 on fair value measurement indicates the three hierarchical levels on valuation, with emphasis on level 3 disclosures. Despite the disclosure requirements under IFRS 13 there is no convergence on the valuation model / technique to be employed within level 3 hierarchy and partially for level 2 hierarchy. This is left to the discretion of management and the danger is on manipulation for varied reasons. Financial reporting focuses on decision usefulness on aspects of reliability and relevance. The available literature indicate the consensus on what would be relevant and reliable but this is still a subjective matter

depending with the industry and across borders. There is also limited research in the world on the subject of corporate governance influencing the use of fair value with mostly focusing on earnings management without reference to fair value. In Kenya there is no known research on the subject.

1.3 **Research Objective**

To determine whether a relationship exist between corporate governance and fair value adjustment in the case of commercial banks in Kenya.

1.4 **Value of the Study**

First Users of financial statements will have a clear understating on what guides bank in choosing the valuation models to apply for specific financial assets and liabilities. *Secondly* the Central Bank of Kenya may use the findings of the study to guide in the development of guidelines for the adoption and full disclosure of valuation models by commercial banks. *Thirdly,* the study will contribute to the continued debate on the subject of fair value accounting. *Fourthly* the study shall provide shared information by Kenyan banks on the different valuation models under level 2 and 3 valuation hierarchy and the detrimental effects of each. *Finally*, the academia will benefit by having a reference point in future research as this research adds to the existing fair value accounting literature.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter covers theoretical review of fair value accounting, an empirical review of the corporate structure dimensions that impact use of fair value accounting with a summary on literature review.

2.2 Theoretical Framework

The theories relating to fair value accounting or measurements revolve around Agency theory and Positive Accounting Theory (DaiFei, 2014).

2.2.1 Agency Theory

Sutton (2009) while citing Whittington (2008) observes that agency relationship between principal and agent entails that each party would behave as rational economic agents concerned with maximizing their own utility in their mutual relations. Daifei (2014) considers that based on the agency theory, managers and controlling shareholders have incentives to acquire private control benefits to meet their wealth maximization objectives. Level 3 valuations are based on unobservable inputs which are highly subjective and less verifiable, providing bankers with opportunities to mask the profit figures and manage capital ratios especially when active and liquid markets for financial assets do not exist (DaiFei, 2014). Following research by Daifei (2014), legal systems, legal enforcements and investor protections are mechanisms to constrain managers' incentives to opportunistically choose accounting choices that would have negative effects thus minimizing the agency problem. According to agency theory, firms with high leverage ratios, especially those that have almost reached the debt covenant limit, are more likely to

use Level 3 valuation inputs because increasing reported net income will reduce the probability of default (DaiFei, 2014). Daifei (2014) notes that corporate governance is important in valuing Level 3 fair values which likely represent the values with greatest information asymmetry and agency issues.

2.2.2 Positive Accounting Theory

Daifei (2014) cites Watts and Zimmerman (1978) who developed Positive Accounting Theory (PAT) in an attempt to explain why certain companies choose specific accounting choices over others. PAT assumes that incentives to management are the main determinants of accounting choices. Under the opportunistic perspective of positive accounting theory, management is expected to choose an accounting option that will meet their wealth maximization objectives. It is hypothesized that management will choose an income increasing choice that could positively affect their compensation and avoid the violation of debt covenants (DaiFei, 2014). PAT can be used to explain manager's choices of certain accounting methods in terms of self-interest, the existing relationships amongst stakeholders and, how financial accounting can be used to minimize cost by aligning competing interests. The choice to employ fair value accounting is discretionary in nature for level 2 and 3 valuations. The incentives for using Level 3 inputs are however constrained by the strength of the corporate governance mechanisms (DaiFei, 2014). If financial institutions are able to use the discretion available under Level 3 inputs for earnings and capital adequacy managements, the benefits of adopting IFRS will be off-set by the consequences from opportunistic behavior (DaiFei, 2014).

2.3 Determinants of Fair Value Accounting

Center for Excellence in Accounting & Security Analysis [CEASA] (2008) identified five principles of fair value accounting which explain when the fair value accounting is appropriate; the one-to-one principle, the matching principle, the information conservation principle,the no-arbitrage estimation principle and the truing-up principle.

2.3.1 The One-To-One Principle

This principle considers that fair values report value to shareholders only when shareholders' welfare is determined solely by exposure to market prices (CEASA, 2008). Therefore fair value accounting is sufficient when the firm does not add value to the market price through its business enterprise. The principle is employed majorly at level 1 measurement conditions where market prices are available in liquid markets to measure exit values objectively. There is no window to manipulate values for assets and liabilities whose values are based on observable prices. In this case the board will present the financial reports indicative of such assets and liabilities at the prices quoted in active markets and in line with reporting standards.

2.3.2 The Matching Principle

The principle considers that fair value applies to aggregated assets and liabilities employed together (CEASA,2008).

Business enterprise combines assets and liabilities in a particular way to generate value. Fair value to shareholders is therefore not the sum of market values of individual assets and liabilities but their value in joint use.

According to CEASA (2008).The term, "matching principle" is usually applied in historical accounting (to the matching of revenues and expenses). Fair value accounting

also involves matching on a balance sheet level for assets and liabilities and correspondingly, gains and losses on those assets and liabilities must be matched in the income statement (CEASA,2008). In this case the board is responsible to shareholders and ensures that the fair valuations of assets and liabilities are matched in balance sheet with additional disclosures.

2.3.3 The Information Conservation Principle

The principle suggests that prices are typically more informative than historical cost numbers. The information through pricing is also considered timely (CEASA,2008). The principle suggests existence of tension between reporting information in market prices and supplying information for determining market prices. This is exhibited in scenarios where price equals fair value to shareholders and one where it does not. Where price equals fair value happens in efficient active markets and level 1 measuremets will be employed. For inefficient markets or markets where prices cannot be used for fair values then the level 2 and 3 measurements are employed. The use of these valuations in the level 2 and 3 would provide information to shareholders unlike when assets and or liabilities are carried at historical cost (CEASA,2008). Such use of fair value techniques are disclosed in the financial reports to enable shareholders or investors get relevant information.

2.3.4 The No-arbitrage Estimation Principle

CEASA, (2008) suggest that fair value estimates obey no-arbitrage principles with respect to observed prices at level 1 measurement hierarchy. Level 2 and 3 measurements in FASB Statement 157, Fair Value Measurements, admit estimates of hypothetical market prices when prices are not available from liquid markets. There are objections to using subjective estimates. However, all accounting beyond mere cash accounting involves estimates. The

question of where to draw the line on estimates for Level 2 but not Level 3. The estimation rides largely on one's assessment, the integrity of managers, the competence and independence of monitors such as auditors, assessors, valuation committees, and corporate boards. Level 3 measurement hierarchy appears to be permissive rather than restrictive by admitting unobservable inputs that reflect the reporting entity's own assumptions about assumptions that market participants would use in pricing the asset or liability. Those assumptions are to be based on best available information but the reporting entity need not undertake all possible efforts to obtain information. The estimates employed in valuation techniques such as discounted cash flow analysis are notorious for abuse CEASA (2008).

2.3.5 The Truing-up Principle

According to CEASA (2008). To be "fair," accounting for fair values trues up against actual transactions .The principle considers random estimation errors produce balance sheets and income statements that are on average correct. Systematic bias in estimates, however, introduces persistent error in both the balance sheet and (with growth) in the income statement. The principle conludes that if estimated fair values are unbiased then estimated value equals value realized on average. The extent of truth is embodied in the signed statement by board of directors represenattives.

2.4 Empirical Studies

2.4.1 Global Studies

Daifei (2014) conducted a study investigating the accounting choice decisions of banks to employ Level 3 inputs in estimating the value of their financial assets and liabilities. The study sampled 146 bank-year observations from 18 countries over the years 2009-2012.

The study employed pooled ordinary least squares regression model to operationalize the research model. The study findings suggest that banks use the discretion available under Level 3 inputs opportunistically to avoid violating debt covenants limits, to increase earnings and manage their capital ratios. Results of the study also highlight that corporate governance quality at the firm-level e.g. audit committee independence and institutional features can constrain banks' opportunistic behaviors in using the discretion available under Level 3 inputs.

Ermina (2010) conducted a study investigating the relationship between bank performance, Corporate Governance and other financial elements. The study used a sample of 79 banks from Europe, Canada, America, Australia and Japan covering a four year period 2004-2008. The study employed Ordinary Least Squared model. The study concluded that there was no strong evidence that Corporate Governance affects bank performance. Fair value accounting at level 3 and to a large extent level 2 is a matter of discretion which calls for the boards control to ensure that the discretion is not used opportunistically to achieve self-interests.

Bhat (2008) investigated the Impact of Disclosure and Corporate Governance on the Association between Fair Value Gains and Losses and Stock Returns in the Commercial Banking Industry. The study used a sample of 180 USA commercial banks for the period 2003-2005 and employed regression analysis and concluded that disclosure positively moderates the FVGL-returns association, whereas the effect of corporate governance is more subtle, and is evidenced indirectly through the medium of disclosure. Fair value accounting in this case is used to manage losses and gains as reported in the financial

statements. The board is responsible for the published financial report on which there is disclosure to the extent of use of fair value accounting.

Tandelilin et al., (2007) examined the correlation among corporate governance, risk management and bank performance using a sample of 51 Indonesian banks for the period 1999 – 2004. For the empirical study they used a Triangle Gap Model with primary data analysis and secondary data analysis. This study revealed that bank ownership affects both the relationship of corporate governance and bank performance and corporate governance and risk management. From prior research it was observed that bank performance can be as a result of manipulation of accounting figures which is achieved through fair value accounting at level 2 and 3. There are management incentives to report better performance by banks, the board therefore when roped in on ownership through shares or stocks will be forced to work towards common interests by assuming principal / agent positions. Therefore bank ownership by the board will ensure the board performs its supervisory role well leading to reduced manipulation of accounting figures.

Anthony (2006) study investigates the role of boards and CEOs in the performance of the Ghanaian banking sector examining 18 banks both listed and not – listed for the period 1997 – 2004 by adopting panel data to support their model. The conclusion was that the more independent the board is, the worse the profitability of a bank. Also, the regression results showed a positive relationship between the board size and ROA, while on the other hand, they showed that CEO's tenure largely indicated a negative impact on ROA. The board's dimensions are key for the performance of a bank. Based on prior studies it is evident that the performance of the bank reflected through different performance measures can be managed through fair value accounting. The supervisory role of the board is key in ensuring that published financial reports contain valuable information to investors. In achieving this and ensuring that the account balances are not manipulated then the board has to be independent, serve for specific duration and number.

2.4.2 Local Studies

Wepukhulu (2016) study investigates the relationship between corporate governance and performance of commercial Banks in Kenya. The study used a sample of 43 commercial banks for the period 2001 to 2013. The study used descriptive and inferential statistics. The findings of the study revealed that bank size had a positive and significant effect in the relationship between corporate governance and performance of commercial banks, the study also found that there is a negative and significant relationship between board size, institutional ownership and ownership with bank performance in terms of ROE and that there is no relationship between board independence and performance of commercial banks in Kenya.

Wepukhulu (2016) citing Nyarige (2012), sought to analyze how corporate governance structures of commercial banks in Kenya affect their financial performance. The study focused on nine commercial banks listed on NSE between 2005 and 2010. The research was conducted using a Cross-sectional survey that sought to identify differences in corporate governance''s structures between listed banks facing a decline in values, those facing appreciating values and those with stable value on calendar years 2005 to 2010. The findings of the study indicated that board size negatively affects the banks market performance while board independence affects the banks market performance positively. Fair value accounting is dependent on the action of the board which sits at the apex of the corporate governance matrix. Prior research has shown that fair value accounting at level 3 is subject to mnagement discretion and can be manipulated to report better banks perfomance. The indipendence of the board is key in ensuring that such opportunistic reporting by management does not happen.

Ermina (2010) cites research by Barako (2007) which investigated the association between ownership structure and bank performance in Kenya. Their empirical analysis included all financial institutions operating in Kenya and ran a multivariate regression with variables referring to ownership, bank size and ROA. The results provided a strong support that ownership structure influence bank performance. Specifically, board ownership is significantly and negatively associated with performance, institutional shareholders have no significant influence on performance and foreign ownership has a significant positive impact of bank's performance. Fair value accounting is guided by standards (IFRS 13) which guide on level 1, 2 and 3 hierarchy. Level 2 and 3 are based on unobservable inputs and as such subject to manipulation as the valuation technique is dependent on management's judgment and discretion. The management incentive to manipulate accounting figures for small banks is to report growth and where earnings are low is to report better performance. The board is there to perform a supervisory role and thus expected to ensure that no such manipulations occur, the bank ownership by the board is key in ensuring there is minimal or no manipulation or opportunistic reporting by management since the interest of the board and other shareholders align.

2.5 **Conceptual Framework**

Conceptual framework centers on the dependent variable and independent variables established following the literature review.
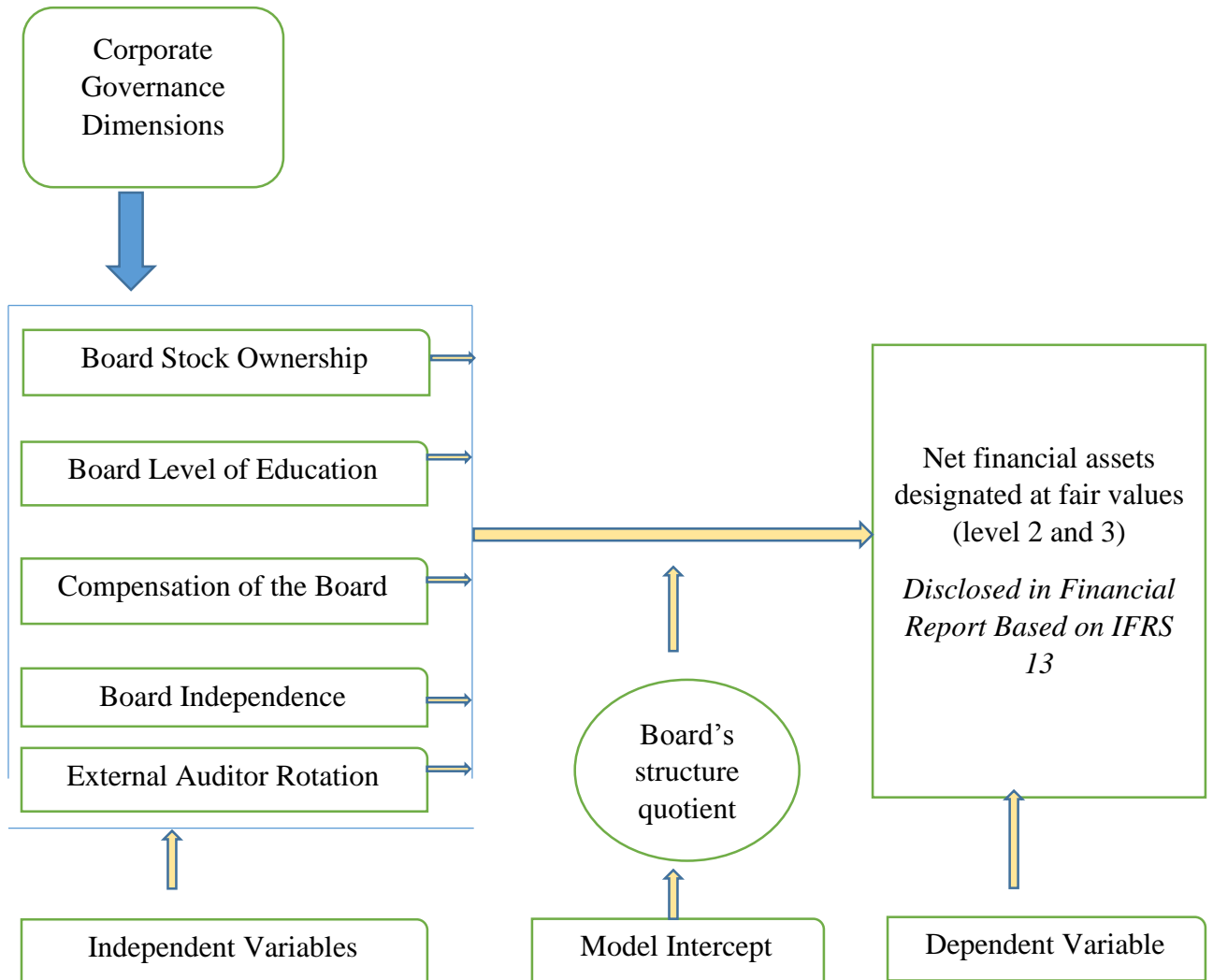
Figure 2.5.1: Conceptual Framework

2.6 **Summary of Literature Review**

Most of the studies and research on the subject have been conducted in developed countries. There is minimal literature in the less developed countries or emerging economies. The research sought to determine whether a relationship exist between corporate governance and fair value adjustment in the case of commercial banks in Kenya.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The research methodology includes the framework employed in solving the research problem. This will include the research design, the population and scope of study, sample and sampling procedure, data collection and analysis procedures.

3.2 Research design

A deductive approach is concerned with developing a hypothesis based on existing theory, and then designing a research strategy to test the hypothesis (Willson, 2010). Deduction begins with a projected pattern that is tested against general observations. Deductive means reasoning from a particular to the general. A deductive design might test to see if this relationship or link did obtain on more general circumstances (Gulati, 2009).The chronology follows from the theory to hypothesis development then observation and finally confirmation or rejection.

This would mean deducting from the existing theory, publications and standards to its specific application as seen from financial reports. The approach is justified by the kind of information required which is readily available from the published financial reports of banks. Since the purpose of this research was to determine the relationship between corporate governance and fair value accounting for listed commercial banks in Kenya, it was suitable to use the deductive approach.

3.3 Population

The research population will be drawn from all the commercial banks listed on the NSE as at 31st December 2015. The population comprises of 11 listed commercial banks licensed

and operating in Kenya. The choice of the NSE as where to draw the population was informed by the availability of published annual reports by the listed commercial in Kenya. The consideration of the listed commercial banks was because of the nature of operations which increases risk exposure and thus could have serious consequences in the economy in the event of financial troubles. The research will employ a census approach and negate the aspect of sampling because of the small number of listed commercial banks on NSE.

3.4 **Data collection**

Data will be collected through secondary sources from the published annual reports of the listed commercial banks at the NSE. These reports are to be accessed from their respective websites and from the Capital Markets Authority. Other critical reports and data will be collected from the CBK, Kenya Bankers Association, Capitals Market Authority and Kenya Insurance Deposit Cooperation. The data to be collected for the project will be on disclosures by these commercial banks on the use of fair value accounting, the application of the hierarchy on the fair value accounting as either level 1, 2 or 3, the board's structural dimensions to be extracted from the board details as published in the financial report, the audit reports to determine auditor over the four years, the compensation of board as disclosed in the financial statements. Data was to be obtained from the 11 listed commercial banks, forming the population of the study, covering the years 2011 to 2015.

3.5 **Data Analysis**

The nature of the data to be collected will mainly be quantitative. Data analysis will thus involve developing data summaries, classifying and establishing patterns and trends while applying statistical analysis techniques to get information. Data will be categorized, ordered, manipulated and eventually summarized to obtain answers to the research

questions. Descriptive statistics, frequency tables, mean and standard deviation will be used to present the research findings as the case may be. The use of excel spreadsheets will be key to prepare for the use of more advanced analytical tools in this case the SPSS (a statistics analytical package).

Regression analysis will be used to establish relationship between the dependent variable net financial assets designated at fair values (level 2 and 3) and independent variables (stock ownership of the board , the boards level of education, the executive and director compensation, independent of the board, the rotation of the external auditors and independence).

3.5.1 Model Description and Operationalization of Variables.

The model to be used will have to bring out the parameters on the dependent and the independent variables.

$FV_{23\%}$ it = $\beta 0$ + $\beta 1 BSO_{it}$ + $\beta 2 LEB_{it}$ + $\beta 3 CoB_{it}$ + $\beta 4\ IB_{it}$ + $\beta 5\ DEA_{it}$ + ε

Where $\beta 0$ represent the constant for FVA regression equation (The board's structure quotient as expected per bank regulation) the quotient will be measured as (aggregate board members in commercial banks in Kenya times the ownership requirement across these banks).

$\beta 1$- $\beta 5$ Represent the respective correlation coefficient's of the independent variables.

ε – Represents the error term of the model.

3.5.1.1 Dependent Variable

This will be measured as the percentage of net financial assets valued using Level 2 and 3 inputs designated as $FV_{23\%}$ at each year end. This variable is measured as financial assets fair values of Level 2 and 3 minus financial liabilities fair values of Level 2 and 3 divided by net fair value assets of Level 1, Level 2 and Level 3.

3.5.1.2 Independent Variables

Variable	Explanation	Measurement
BSO_{it}	Follows disclosed ownership by BOD as required by CBK. Study predicts that banks report based on fair value when % of ownership by board members is high.	Boards Stock/ Share Ownership
LEB_{it}	Board's level of education, study predicts where board is educated in financial and accounting matters supervision is enhanced and management will be deterred from earnings management based on FV measurements. ED is Number of board members educated in finance and accounting, FB is full board members, BP is number of board members in accounting/finance professional body, BSD is the number in years each board member has served.	((ED/FB + BP/FB + BSD/FB)*100%).

CoB$_{it}$	The compensation of each board member will be reflected in the banks published financial reports. Study predicts with increased board compensation there will be reduced use of valuation at level 2 and 3.	% of Board Compensation / bank earnings in the year
IB$_{it}$	Study predicts that banks operation under fair value measurement tended to portray true and fair view when the board is independent. The independence will enhance the board's supervisory role. Independence encompasses the duration board member, number of committees a member serves in, and the knowledge of board. CMF means total number of committees of the board and BC is the number of committees a board serves in.	BSD/FB + BC/CMF + LEBit)*100%
DEA$_{it}$	External Auditor Rotation and Independence, the prolonged stay of the auditor points to independence impairment. Study predicts where there is no external auditor independence then fair value accounting at level 2 and 3 is high.	(No of Years auditor has served + Qualified Opinion/Total Opinions)

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter details the research findings presented by descriptive statistics, regression model analysis and correlation statistics discussions. The census study targeted all the 11 listed commercial banks. The data was analysed to determine whether a relationship exists between corporate governance and fair value adjustment in the case of commercial banks in Kenya.

4.2 Data Validity

Data was collected from published annual financial reports which were audited. The data extracted from this source was considered reliable in all material respects and valid for use in the research model. The regression model was at 95% significance level.

4.3 Descriptive Statistics

4.3.1 Percentage of Net Financial Assets Valued Using Level 2 and 3 Inputs

In the five years under study the listed commercial banks had assets and liabilities designated at fair values at level 2 and 3 ranging from 0.0% to 241.72%. The standard deviation of 60.77 indicates high variation in valuation hierarchy.

Table 1: Descriptive Statistics on Net Financial Assets at level 2 and 3 FV Hierarchy

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
$FV_{23\%}$	55	.00	241.72	45.3964	60.76775	3692.720	1.593	.634
Valid N (listwise)	55							

Source: Research Data, 2016

The net financial assets designated at level 2 and 3 hierarchy is explained further by the frequencies indicting the financial assets and liabilities valuation by listed commercial banks over the five years of study.

Table 2: Statistics On Assets and Liabilities Valued At Fair Values.

	ASSETS AT LEVEL 1	ASSETS AT LEVEL 2	ASSETS AT LEVEL 3	LIABILITIES AT LEVEL 1	LIABILITIES AT LEVEL 2	LIABILITIES AT LEVEL 3
N Valid	55	55	54	54	54	53
Missing	0	0	1	1	1	2
Mean	9679547672.7273	33272115890.9091	17152922888.8889	4442489814.8148	21214362185.1852	4705291641.5094
Sum	532375122000.00	1829966374000.00	926257836000.00	239894450000.00	1145575558000.00	249380457000.00

Source: Research Data, 2016

The output shows level 2 valuation hierarchy as the commonly used both for assets and liabilities.

4.3.2 Board Share Ownership

Board Share Ownership was measured as percentage of the shares owned by the board against the total issued shares of the listed commercial banks. The maximum shareholding

was 70.55% for National Bank of Kenya which was as a result of the government representation in its shareholding. On average board shareholding across the listed commercial banks was at 8.34%. The data is summarized in Table 3 below.

Table 3: Descriptive Statistics on Board Share Ownership.

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
BOARD SHARE OWNERSHIP	55	.00	70.55	8.3405	20.26037	410.483	5.588	.634
Valid N (listwise)	55							

Source: Research Data, 2013

4.3.3 Board's level of education

The level of education for the board was measured as a percentage of; board members educated in finance and accounting, board members in accounting and finance professional bodies against the full board members over the five years of study. From the study it was indicative that at least five Board members in each board were considered educated in finance and accounting.

Table 4: Descriptive Statistics on Boards Level of Education

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
BOARD LEVEL OF EDUCATION	55	.00	10.00	5.5342	3.30174	10.902	-.878	.634

Valid N (listwise)	55							

Source: Research Data, 2016

4.3.4 Compensation of the Board

Board compensation was related to bank earnings over the five years of study. The board across the listed commercial banks on average earned .69% of the total operating income. The highest board compensation of 6.72% to total operating income related to Equity Bank in Year 2013. The data is summarized in Table 5 below:-

Table 5:   Descriptive Statistics on Board Compensation

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
BOARD COMPENSATION	55	.00	6.72	.6927	1.04263	1.087	20.386	.634
Valid N (listwise)	55							

Source: Research Data, 2016

4.3.5 Board Independence

The Independence of the board is key in this study. The independence was measured by relating board level of education, the Committees of the board and the number of committees in which a board member serves, and the number of years a board member has served. The maximum measure of independence is 12.51. The board independence relied on is measured at the median.

Table 6: Descriptive Statistics on Board Independence

	N	Minimum	Maximum	Mean	Median	Std. Deviation	Variance	Kurtosis	
	Statistic	Statistic	Statistic	Statistic	statistic	Statistic	Statistic	Statistic	Std. Error
BOARD INDEPENDENCE	55	.10	12.51	6.3856	6.9300	3.71293	13.786	-.678	.634
Valid N (listwise)	55								

Source: Research Data, 2016

4.3.6 External Auditor Independence.

The variable was measured based on the number the auditor has served and the audit opinions issued during the study period. On average the auditor served for about three years. All the listed banks maintained the same auditors over the study duration with exception of NIC bank which changed from Deloitte to PWC in year 2014. The data can be summarized in table 7 below:-

Table 7: Descriptive Statistics on External Auditor Independence

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
EXTERNAL AUDITOR INDIPENDENCE	55	.10	6.0	3.309	1.7625	3.106	-.741	.634
Valid N (listwise)	55							

Source: Research Data, 2016

4.4 Correlation Analysis

The correlation matrix, in table 8 below, reflects correlations in pair between the dependent variable and the independent variables. The dependent variable is net financial assets designated at fair values level 2 and 3 hierarchy while the independent are; board share ownership, level of education, board compensation, board independence and auditor independence. From the correlation two independent variables are negatively correlated to dependent variable. These variables are board compensation and share ownership while three are positively correlated being; level of education, board independence and External auditor independence, this means with an increase in these variables there will be an increase in the dependent variable.

4.4.1 Test for Multicollinearity

Multicollinearity occurs in the data when two or more independent variables are highly correlated.

The examination of the correlation coefficients helps in accepting or rejecting the null hypothesis that there is no correlation between the explanatory variables. The degree of the linear relationship between two variables in correlation ranges between +1 and -1. A correlation of +1 implies that there is perfect positive linear relationship between variables hence concern of multicollinearity problem (Sekaran, 2003). On overall the correlations were very low. Only board level of education and board independence had a correlation coefficient of .99 which are statistically significant at sig < 0.01 .However the rest of the variables had correlation coefficients that were generally moderate (less than .335). On overall the correlation coefficients were far much less than 0.8 threshold indicating that

there was no concern for multicollinearity (Kennedy, 1985). The correlation coefficients are summarized in table 8 below:-

Table 8 : Correlations Matrix Analysis

		NET PERCENTAGE FAIR VALUE ASSETS AT LEVEL 2&3	BOARD SHARE OWNERSHIP	BOARD LEVEL OF EDUCATION	BOARD COMPENSATION	BOARD INDEPENDENCE	EXTERNAL AUDITOR INDIPENDENCE
NET PERCENTAGE FAIR VALUE ASSETS AT LEVEL 2&3	Pearson Correlation	1	-.031	.101	-.183	.110	.174
	Sig. (2-tailed)		.820	.465	.181	.425	.203
	N	55	55	55	55	55	55
BOARD SHARE OWNERSHIP	Pearson Correlation	-.031	1	-.149	.141	-.070	.156
	Sig. (2-tailed)	.820		.277	.303	.611	.256
	N	55	55	55	55	55	55
BOARD LEVEL OF EDUCATION	Pearson Correlation	.101	-.149	1	.311*	.991**	.222
	Sig. (2-tailed)	.465	.277		.021	.000	.103
	N	55	55	55	55	55	55
BOARD COMPENSATION	Pearson Correlation	-.183	.141	.311*	1	.335*	.040
	Sig. (2-tailed)	.181	.303	.021		.012	.773
	N	55	55	55	55	55	55
BOARD INDEPENDENCE	Pearson Correlation	.110	-.070	.991**	.335*	1	.233
	Sig. (2-tailed)	.425	.611	.000	.012		.086
	N	55	55	55	55	55	55
EXTERNAL AUDITOR INDIPENDENCE	Pearson Correlation	.174	.156	.222	.040	.233	1
	Sig. (2-tailed)	.203	.256	.103	.773	.086	
	N	55	55	55	55	55	55

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

4.5 Regression Analysis and Hypotheses Testing

In the study a linear regression model was used to determine whether a relationship exist between corporate governance and fair value adjustment in the case of listed commercial banks in Kenya. In a regression model, the coefficient of correlation (R) indicates the extent of the relationship between two variables where R =+1 indicates perfect positive correlation, while R = -1 indicates perfect negative correlation between the variables. The regression model applied for the study has coefficient correlation (R) at 0.317 which indicates that net financial assets designated at level 2 and 3 fair values is positively related to the independent variables. The co-efficient of determination (R) is 0.100 and the adjusted (R^2) value of 0.008, meaning that 31.7% of net financial assets designated at level 2 and 3 hierarchy is explained by the model's independent variables while 68.3% is explained by the error term and other independent variables. The standard error of estimate is 60.51 which indicates the deviation from the regression line established by the model. This is summarized in the Table 9 below:-

Table 9 : Regression Analysis Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.317[a]	.100	.008	60.51000	.100	1.092	5	49	.377	1.276

a. Predictors: (Constant), EXTERNAL AUDITOR INDIPENDENCE, BOARD COMPENSATION, BOARD SHARE OWNERSHIP, BOARD INDEPENDENCE, BOARD LEVEL OF EDUCATION

b. Dependent Variable: NET PERCENTAGE FAIR VALUE ASSETS AT LEVEL 2&3

Analysis of Variance (ANOVA)

The F statistic value is 1.092 this is greater than the F value, at α 0.05 at n=5 and 49 degrees of freedom, which gives F value of 0.22. The relationship between Net financial assets

designated at level 2 and 3 valuation hierarchy and the independent variables in this model is significant. This is illustrated by the ANOVA results in Table 10 below:-

Table 10: ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	19995.301	5	3999.060	1.092	.377[b]
	Residual	179411.570	49	3661.461		
	Total	199406.871	54			

a. Dependent Variable: NET PERCENTAGE FAIR VALUE ASSETS AT LEVEL 2&3

b. Predictors: (Constant), EXTERNAL AUDITOR INDIPENDENCE, BOARD COMPENSATION, BOARD SHARE OWNERSHIP, BOARD INDEPENDENCE, BOARD LEVEL OF EDUCATION

From the regression coefficients in Table 11 below, the constant for the Fair Value model 22.686 given that all other factors are held constant. The variables of board share ownership, board level of education and board compensation have negative coefficients of -.280, -19.36 and -14.467 respectively. This means that an increase in any of these variables will lead to a reduction of net financial assets designated at level 2 and 3 fair values and vice versa. The other variables were positively correlated with board independence at 19.490 and external auditor independent at 5.307.

The regression model summarized with coefficients is as indicated $FV23_{\%}$ it = 22.686 - .280BSO_{it} − 19.326LEB_{it} − 14.467$CoBit$ + 19.490IB_{it} + 5.307$DEA_{it.}$

The coefficients are further summarized in table 11 below:-

Table 11: Regression Model Coefficients[a]

	Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
Model	B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1 (Constant)	22.686	20.724		1.095	.279	-18.962	64.333
BOARD SHARE OWNERSHIP	-.280	.514	-.093	-.544	.589	-1.313	.753
BOARD LEVEL OF EDUCATION	-19.326	22.767	-1.050	-.849	.400	-65.077	26.426
BOARD COMPENSATION	-14.467	8.561	-.248	-1.690	.097	-31.671	2.736
BOARD INDEPENDENCE	19.490	20.132	1.191	.968	.338	-20.967	59.947
EXTERNAL AUDITOR INDIPENDENCE	5.307	4.900	.154	1.083	.284	-4.539	15.154

a. Dependent Variable: NET PERCENTAGE FAIR VALUE ASSETS AT LEVEL 2&3

4.6 Discussion of Research Findings

The study used regression and correlation analysis to analyse the findings. Correlation analysis shows the relationship between two variables, linear regression analysis reflects the collective effect of the independent variables on the dependent variable.

The results are discussed in the following section.

4.6.1 Board Share Ownership

Regression results indicate that board share ownership is not significant in explaining the valuation hierarchy chosen by listed banks in Kenya. This is supported by the Correlation analysis (correlation coefficient = -0.31 and sig = 0.820) and regression coefficient (-.093 and sig .589). The correlation results indicate a negative correlation between net financial assets designated at level 2 and 3 fair value hierarchy and board share ownership. The regression results indicate that board share ownership as a corporate governance dimension is not significant in explaining the fair value choice at level 2 and 3. The study predicted that with high share ownership there is an increase in use of fair value accounting at level 2 and 3. The negative correlation suggests the opposite by considering an increase in board share ownership will not increase use of fair value accounting at level 2 and 3 hierarchy. The results went against the researcher expectations and this could be attributed to the strong prudential guidelines instituted by the regulator on one hand and the aligning of board's interest to those of other shareholders.

4.6.2 Board's level of education

Regression results indicate that board level of education is significant in explaining the valuation hierarchy chosen by listed commercial banks in Kenya. This is supported by the Correlation analysis with (correlation coefficient = .101 and sig = 0.465) and regression coefficient (-1.050 and sig .400). The correlation results indicate a negative correlation between net financial assets designated at level 2 and 3 fair value hierarchy and boards level of education. The regression results indicate that fair value choice at level 2 and 3 is influenced by board's level of education. The study predicted that with high levels of board education in finance and accounting there will be reduced opportunistic use of fair value

accounting at level 2 and 3. The correlation analysis supports the prediction by confirming that for increased board's level of education there is a reduction opportunistic use of fair value accounting choice at level 2 and 3.

4.6.3 Compensation of the Board

Regression results indicate that board compensation is significant in explaining the valuation hierarchy chosen by listed commercial banks in Kenya. This is supported by the Correlation analysis with (correlation coefficient = -.183 and sig = 0.181) and regression coefficient (-0.248 and sig .097). The correlation results indicate a negative correlation between net financial assets designated at level 2 and 3 fair value hierarchy and boards compensation. The study predicted that with increased board compensation there will be reduced use of fair value accounting choice at level 2 and 3. The negative correlation explains the inverse relationship which supports the set prediction.

4.6.4 Board Independence

The board independence is key in determining the use of fair value measurement. The study predicted that with the independence of the board there is enhanced use of fair value measurement at level 2 and 3 with accompanying disclosures. Regression and correlation results show board independence is significant in explaining the valuation hierarchy chosen by listed commercial banks in Kenya. This is supported by the correlation analysis with (correlation coefficient = .110 and sig = 0.425) and regression coefficient (1.1918 and sig .338). The correlation results indicate a positive correlation between net financial assets designated at level 2 and 3 fair value hierarchy and boards independence.

4.6.5 External Auditor Independence.

The study predicted that with external auditor independence there is reduced use of fair value measurement at level 2 and 3 with accompanying disclosures. Regression and correlation results show auditor independence is significant in explaining the valuation hierarchy chosen by listed commercial banks in Kenya. This is supported by the correlation analysis with (correlation coefficient = .174 and sig = 0.203) and regression coefficient (0.154 and sig .284). The correlation results indicate a positive correlation between net financial assets designated at level 2 and 3 fair value hierarchy and auditor independence. The study results go against the study expectation and this can be attributed to auditor knowledge in the use of fair value accounting and impacting the same on its clients. The objectivity of the independent auditor could results in deterring the opportunistic reporting by management in use of fair value accounting at level 2 and 3 hierarchy.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1   Introduction

The main objective of this chapter is to provide a summary, draw a conclusion and make necessary recommendations based on the qualitative and quantitative analysis presented in chapter four. The summary of the results are correlated with empirical and available theoretical literature. The conclusion relates directly to the specific objective. Whereas the recommendations are deducted from the conclusion and discussion of the findings. The chapter is structured in five sections; summary of findings, conclusion, recommendations, limitation of study and Suggestions for Further Research.

5.2   Summary of Findings

The study sought to determine whether a relationship exist between corporate governance and fair value adjustment in the case of commercial banks in Kenya. The study employed deductive approach moving from the general theories to specific research question. The study was a census by focused on 11 commercial banks listed on the NSE for a period range of five years (2011- 2015). The data was collected from the published annual financial reports got from respective banks websites. Descriptive statistics for each variable was used to explain some variables before employing linear regression and correlation analysis to analyze the data.

The results indicate that the highest use of fair value hierarchy was on level 2. Fair value assets and liabilities designated at level 2 were higher than the ones at level 1 and 3. Assets at level 2 stood at Kshs 1,829,966,374,000 and liabilities at level 2 Kshs 1,145,575,558,000 while the rest at level 1 and 2 were below a cumulative sum of a trillion shillings.

The linear regression models coefficient of correlation (R) is 0.317 and coefficient of determination (R2) is 0.100 implying that 31.7% of the variation in net financial assets designated at level 2 and 3 fair value hierarchy can be explained by the variables in the study, while 68.3% variance is explained by the error term and other factors. The model is statistically significant as indicated by the F value of 1.092 and significance value of 0.377. The results indicate that the model accounts to a smaller percentage in explaining the use of fair value choice at level 2 and 3 hierarchy.

The study however did establish existence of positive relationship between net financial assets designated at level 2 and 3 fair values and board independence and external auditor independence. The negative relationship established by the study model and supported by both regression and correlation analysis related to board share ownership and board compensation. Board level of education was found to have a positive coefficient in regression model but with a positive correlation of .101 at sig .465.

5.3   Conclusion

The empirical findings have revealed a number of critical issues as regards corporate governance practices in the Kenyan banking industry and fair value accounting. The findings reveal that of all the financial assets and liabilities disclosed in banks annual reports a bigger percentage is reported under level 2 hierarchy. The use of level 2 hierarchy opens up the valuation to estimates and judgments of management which can be used to for opportunistic reporting.

The study findings show that the model is not exhaustive and the relationship will be explained further by other variables not considered. This is explained by the regression coefficient (R) at 0.317.

The empirical results also indicate the existence of positive and negative relationships for some variables. I can therefore conclude that on the basis of my findings; board's level of education, board compensation, board independence and external auditor independence are significant in explaining the relationship between corporate governance and the net financial assets designated at level 2 and 3 fair values. The study however finds board share ownership not to play a significant role in explaining the study relationship which goes against my earlier prediction.

5.4   Recommendations

Based on the findings of this study, the researcher presents recommendations for action as follows; disclosure of valuation techniques used by banks when measuring financial assets and liabilities at level 2 and 3 hierarchy, for the benefit of the investors the listed commercial banks should disclose the assumptions made in arriving at fair values at level 2 and 3 hierarchy and finally the regulator being central bank of Kenya should move to cap the duration independent board member serves in the board. The regulator should move to limit the number of committees of the board that a member serves in this will enhance internal checks within the board.

5.5   Limitations of the Study

The limitations encountered during the study are; the study focused on only commercial banks ignoring other entities besides banks that report based on fair values, the duration of study of five years not factoring from when the concept of fair value accounting was first used and adopted in Kenya, the data collected from financial statements did not reveal the assumptions made and valuation techniques used by banks in use of fair value accounting at level 2 and 3, the study did not categorize the banks into Tier 1, 2 and or 3. Finally there

is a limitation on comparison on the relationship since the focus is in Kenya and not relating to other developing or developed countries.

5.6   Suggestions for Further Research

First, the study focused only on a few corporate governance dimensions which were considered important. Other dimensions as capital structure, family ownership, private banks ownership, loan loss provisions and movement from one bank board to another should be considered for further studies. Secondly, further studies should also focus on corporate governance structure of other financial institutions to establish the existence of any relationship impacting fair value accounting at level 2 and 3. Finally there should be studies on the use of fair value accounting and how it affects banks performance over the years.

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APPENDICES

Appendix I -   List of Commercial Banks to be analyzed in the Study

No	**Listed Commercial Banks in Kenya**
1	Barclays Bank of Kenya
2	CfC Stanbic Holdings
3	Cooperative Bank of Kenya
4	Diamond Trust Bank
5	Equity Bank
6	Housing Finance Company of Kenya
7	I&M Bank
8	Kenya Commercial Bank
9	National Bank of Kenya
10	NIC Bank
11	Standard Chartered Kenya