ASSESSMENT OF VALUE RELEVANCE OF FINANCIAL REPORTS IN THE NIGERIAN DEPOSIT MONEY BANKS

BY

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MSC/ADMIN/9901/2009-2010.

BEING A THESIS SUBMITTED TO THE POST GRADUATE SCHOOL, AHMADU BELLO UNIVERSITY, ZARIA IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF SCIENCE DEGREE IN ACCOUNTING AND FINANCE

OCTOBER, 2011

DECLARATION

I declare that this thesis is a research conducted and carried out by me, and that to the best of my knowledge, it has never been previously submitted for the award of higher degree before. All works and articles consulted have been duly acknowledged in the bibliography.

AHMAD, Abbas Maska ----------

Date

CERTIFICATION

This thesis titled “An Assessment of Value Relevance of Financial Reports in the Nigerian Deposit Money Banks” by AHMAD, Abbas Maska meets the regulations governing the award of the degree of Master of Science (Accounting and Finance) of Ahmadu Bello University, Zaria and it is approved for its contribution to knowledge and literary presentation

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DEDICATION

This research work is dedicated to my parents Alhaji Ahmad Mai-kayan Fulani Maska and Hajiya Fatima Ahmad.

ACKNOWLEDGEMENT

I must thank almighty Allah for sparing my life and for attaining this level in the research work. My appreciation goes to my parents and other family members whose support and encouragement is of eminence to me. May God almighty continue to bless you all.

I owe thanks to Dr. Akutson my supervisor for having time to go through my work despite his tide schedules and his personal assistant at Kaduna state university for keeping me abreast about his whereabouts. I also wish to thank all my lecturers in the department of accounting, our former programme coordinator Mr. Chandra and the present one Mr. Luka Mailafia for their wonderful support and encouragements.

I owe great debt of gratitude to Dr. Salisu, ,Dr. M.S. Bello, Mr. Akanet (Baba), Dr. L.I.Chechet and Mr. Umar Abubakar, Mal. Kargi, Mal Tijjani, Mal. Shehu Usman,Mal. Salisu Abubakar, Dr. H. Sabari, Dr. Hassan and more importantly our able Head of the depaartment Dr. A. Bello. I must say I am really proud of you people.

My special appreciation goes to my wife who has stood by me all these while. I am also grateful to staff and proprietor of Ihiovi Business Centre, Kongo Campus for typesetting and printing of the research work.

My acknowledgement will be incomplete if it fails to thank late Malam Bashir Ibrahim Bello Funtua (IBB) a former lecturer with the department and my former boss Alhaji salisu Musa Malumfashi for their wonderful support and encouragement.

ABSTRACT

The significance of financial reporting quality cannot be understated in the financial palace. Over the years, users of financial information place relevance on the informational content of financial reports in making decisions. However, the extent to which the information is conveyed in the financial statement remains a subject of concern. The objective of the study is to enhance the understanding of value relevance and empirically investigate value relevance of accounting information of Deposit Money Banks in Nigeria. We limit our research by emphasizing on value relevance of earnings and equity book values. Multiple regressions are used as a tool of analysis. The result reveals that the information contains in the financial statements of Nigerian Deposit Money Banks is of relevance within the period of the study. The study recommends that all the predicted variables under consideration should be maintained by the banks in order to ensure consistence in the value relevance of Nigerian Deposit Money Banks.

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CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

The purpose of accounting information is to provide decision makers like investors, creditors and managers with information to support their decisions. The concept of value relevance originates from the work of Ball and Brown (1968) and Beaver (1968), investigating whether investor's availability on accounting information is useful information when taking investment decisions. The main objective of value relevance research is to examine whether there is a statistical relationship between financial statement variables and market variables.

Financial statements or reports are the building blocks of valuation and investment decisions. They are formal records of business economic activities. In other words, they involve all the relevant financial information of a business enterprise, presented in a structured manner and in a form easy to understand.

It is obviously a fundamental fact that investors, without adequate information cannot properly judge the opportunities and risks of investment alternatives. To make informed decisions, investors rely on a variety of information, including data in the economy, various industries, companies and products. Complete information provided by reliable source enhances the

probability that the best decision will be made. The best source of information is probably the company's own financial reports because this gives you more about a company its current health and its prospects for the future (Johnson, 2001)

In general, there are three channels of firms' financial reporting affecting firms' investment efficiency (Bushman and Smith 2001; Chen *et al*. 2010). Accounting information: reduces capital market imperfections, facilitates internal and external investment decision making (project identification), and enables external capital suppliers to monitor firms' decisions.

Firstly, without financial market imperfections theoretically all investment opportunities with positive net present values are funded and implemented by firms. In reality, financial market imperfections are severe and firms' resources allocation could be inefficient. For example, firms could suffer from financing constraints that limit their ability to fund potential projects suggesting that underinvestment may take place (e.g., Fazzari *et al*. 1988; Hubbard 1998; Petersen and Rajan 1994). Even if financing is available, managers' allocation of resources could be inefficient due to overinvestment (e.g. empire building) resulting in a reduction of profitability and firm value (e.g., Stein 2003; Hope and Thomas 2008; Chen *et al*. 2010). A general purpose of financial accounting information is to reduce adverse selection or moral hazard costs associated with information

asymmetry to foster the efficiency of capital markets (e.g., Fama and Jensen 1983; Diamond and Verrecchia 1991; Bushman and Smith 2001; Beatty *et al*. 2010).

Secondly, financial accounting affects the economic performance of firms by providing information that helps managers to identify investment opportunities. As investment decisions depend on expectations about future growth and product demand, financial accounting information aids stating more precise expectations, and thus helps to distinguish resources from "bad" to "good" projects (e.g., Bushman and Smith 2001; McNichols and Stubben 2008). Hence, higher quality financial reporting should improve firms' investment decisions.

Thirdly, financial accounting information acts as a control mechanism for external capital suppliers. Monitoring the firm through their financial disclosure, capital suppliers could evaluate their future cash flows, assess how risky their capital is invested, and if necessary intervene (e.g., Biddle *et al*. 2009).

Prior research supports these three notions by showing that accounting information can severe investment efficiency by reducing adverse selection, liquidity risk and information risk (Diamond and Verrecchia 1991; Leuz and Verrecchia 2000; Easley and O´Hara 2004; Lambert *et al*. 2007; Biddle and Hilary 2006; Biddle *et al*. 2009). Using a sample of U.S. publicly traded firms Biddle *et al*. (2009) empirically test these predictions and find that higher quality financial

reporting increases investment efficiency in terms of lower overinvestment and lower underinvestment. Specifically, they find that financial reporting quality facilitates investment for constrained firms, and curbs investment for firms that are more likely to over invest. Cheng *et al*. (2010) document this effect for small private firms in emerging markets. Furthermore, they found evidence that the relation between financial reporting quality and investment efficiency is stronger when a firm's investment is funded relatively more through bank financing than other sources of financing. In addition, they show that for firms with the strongest incentive to manage earnings for tax purposes, the positive association between accounting quality and investment efficiency is reduced.

Another growing stream of literature contributes to analyzing accounting quality from the perspective of stock market investors. They examine and establish that firms adopting IAS and/or IFRS are characterized by higher accounting quality (Barth *et al*. 2008; Daske *et al*. 2008; Armstrong *et al*. 2010), a higher market liquidity (Leuz and Verrecchia 2000; Bushee and Leuz 2005), and a lower cost of capital (e.g., Leuz and Verrecchia 2000, Hail and Leuz 2006; Leuz and Schrand 2009) in comparison to firms applying domestic GAAP. Barth *et al*. (2008) found that firms applying IAS in general have higher accounting quality than firms that do not. Armstrong *et al*. (2010) examine stock market reactions to news that change the likelihood of IFRS adoption. They show that capital markets expect net

benefits to flow from IFRS adoption, adding that benefits of the harmonization are expected to be smaller for firms cross-listed in the U.S., since U.S. GAAP is closer to IFRS than most European national GAAP. Daske *et al*. (2008) examine the impact of IFRS adoption on market liquidity, equity valuations and cost of capital. They found an increase in market liquidity and equity valuations and a decrease in cost of capital around the mandatory IFRS adoption. These effects are stronger in countries with larger differences between domestic GAAP and IFRS and exist only in countries with strong legal enforcement and reporting incentives.

The only goal of IFRS is to provide decision useful information (IASB 2001), while the group accounts prepared under domestic GAAP often serves multiple goals. E.g., in several countries, for example Germany, the individual accounts which are influenced by taxation and dividend payout decisions are the basis for deriving the consolidated accounts (e.g., Gassen and Sellhorn, 2006). This might impair their decision-usefulness. In addition, IFRS provides more timely information and more disclosure in comparison to domestic GAAP (Ashbaugh and Pincus 2001; Barth *et al*. 2008; Gassen and Sellhorn 2006). Hence, we expect a higher overall investment efficiency for firms applying IFRS. Managers' overinvestment should decrease after the IFRS adoption because investors are better able to monitor managers. However, for public firms the effect on underinvestment could be muted because their access to external funds is rather

developed. Focusing on the overall effect, we predict that quality financial reporting should lead to higher investment decision making.

1.2 STATEMENT OF THE PROBLEM

Functionally, financial report should reflect economic and business reality as this helps investors formulate their investment decisions. The inability of financial statements to reflect economic and business reality, leads to capital sub-optimally deployed; resource misallocation; investors paying huge opportunity cost by investing in companies with unrealistic, inflated values; and better investments by-passed (Osaze, 1998).

Customers and suppliers make important business and strategic decisions based on a flawed picture of economic reality. Lenders not able to price loans consistent with the real risk assumed. Competitors strive to achieve unrealistic goals. Employees make career, retirement and investment decisions based on a false picture of their employer's financial prospects.

The Eron and WorldCom (2002), scandals in the United States of America raised investor concerns about the veracity of the company disclosures, and they became more apt to questions whether companies' operating results and financial conditions were accurately reflected in their financial statements.

The very painful consequence of the Enron scandal is, whether financial statements are inaccurate because of fraud or complex financial standards, whether financial statement erode investors confidence in the disclosure that fosters investment, and adverse effects on the economy and people's financial wellbeing

From the foregoing, financial reports in the conventional sense seems to live with a number of problems. It is based on the above issues that this study is carried out to assess the value relevance of financial reports in the Nigerian Deposit Money Banks.

1.3 Objectives of the Study

The main objective of this study is to examine the Value relevance of financial reports in the Nigerian Deposit Money Banks. Other objectives include:

(i) To determine the impact of earning per share on the share price of Nigerian deposit money banks.

(ii) To evaluate the effect of book value on the share price of Nigerian deposit money banks.

(iii) To identify the impact of change in earnings per share on share price of Nigerian deposit money banks.

1.4 Research Hypotheses

The study attempts to test the relationship between value relevance and accounting information in the Nigeria deposit money banks

The postulations to be tested are stated thus:

1. Earnings per share has no significant impact on the share price of Nigerian deposit money banks.
2. Book value has no significant impact on the Share price of Nigerian deposit money banks.
3. Change in earnings per share has no significant impact on the share price of Nigerian deposit money banks.

1.5 Significance of the Study

The relevance of any study stem from its importance to respective users or the beneficiaries of such research works. The users of this work should include prospective investors in the Nigerian money and capital markets, fundamental and technical analysts, shareholders and investors in both private and public sector of the economy, creditors and debtors, government and the general public. The study will enable them to assess the benefits available in financial reports and financial reporting.

Policy makers in the banking industry will benefit immensely from the study as it redirects and refocuses their attention to the significance of financial information in the financial service industry.

Government at all levels will find this work very interesting as it reveals the extent and the environment which is conducive enough that will propel investment climate.

Shareholders and all other stakeholders in the industry will be willing to commit their hard earnings into an industry where they are sure of maximizing desirable returns. Hence, this study will reposition the confidence of all the parties in the banking industry and the potential investors as regards their investment decisions in the banking industry.

The study is hoped to add to the existing literature and knowledge in promoting investment decisions in Nigeria. The research work will also be a guide to students wishing to make further research in the field.

1.6 SCOPE OF THE STUDY

The study covers a period of five years that is 2005 to 2009 inclusive. The study restricts itself to financial reports and value relevance on Nigerian Deposit Money Banks listed in the floor of Nigerian Stock Exchange. A total of 5 banks were selected as sample representative using systematic sampling technique. This

represents 24% of the sampled population which is reasonable enough to allow us make some judgements. The Modified Edward Bells Ohlson (Ebo) Model of 1995 was adopted in the study and Price Regression only was considered in the study.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter introduces the idea of value relevance literature and the role of accounting data information. Capital market research is a major area which makes it difficult to recognize value relevance in the financial literature. To give an overview of the value relevance research, the characteristics and a classification of the research area is also introduced. Given the vast amount of value relevance research, it is impossible to adequately summarize the entire field; however, the chapter represents some of the different perspectives in empirical research. The most common methods investigating value relevance of accounting information are presented also in the chapter where the association between stock prices and earnings, and book values are reviewed more extensively. A review of previous research on value relevance and financial health is presented also. We also discussed whether earning's and book value's ability to explain market values has declined over time. Finally, the development of the hypotheses for empirical testing in this study is represented.

2.2 The concept of value relevance literature

This section reviews different preferences towards accounting information and its usefulness to the investor; in addition definitions of value relevance are

presented. And also discussed the characteristics of value relevance studies and will give insight in the classification of research.

2.2.1 Usefulness of accounting data

If investors use conventional accounting data then they must find accounting information useful (Kam, 1990). The usefulness of accounting data is the essential idea in the concept of value relevance. Kam (1990) suggests three directions determining whether accounting data is useful. The first direction focuses on financial statements and determines whether sufficient information is disclosed. Kam concludes that the research on the adequacy of disclosure indicates a significant difference in financial disclosures among firms, implying that larger firms disclose more information. The second direction is to determine the effect on people's decision making. Past empirical findings indicate that investors consider nonfinancial factors more important in making investment decisions. The third and last direction is to determine the correlation between stock prices and accounting data, especially earnings. Kam concludes that an item has "information content" if it affects investor's belief on the security value and he further suggests an examination of the statistical dependency between the item and stock prices. This direction is the most commonly used method in empirical value relevance research (e.g., Ohlson, 1995; Francis & Schipper, 1999; Aboody, Hughes, & Liu, 2002).

Accounting information plays a major role in purchases, sales and other financial processes of the business. The concept of value relevance originates from the idea whether investors availability on accounting information is useful information when taking investment decisions. Observations the last two decades indicate an increase of interest in connecting accounting numbers to market value. The main emphasis in value relevance literature is to empirically examine if financial statement variables can explain the variability in capital market variables. If there exists a relationship, measures are made to interpret how much of the variation in the dependent stock market variable are explained by the independent accounting variables (Beaver, 2002). The definition of value relevance has been interpreted in a number of ways. Theil (1968) was one of the first value relevance researchers and defined information as a change of expectations in the outcome of an event. Within the context of his study, he claimed that a firm's financial statement is value relevant if it leads to a change in investors assessments of the probability distribution of future returns. Beaver (1968) supported this definition and added that a sufficiently large change should exist to induce a change in decision maker's behaviour (Grube, Joy, & Panton, 1979).

Several researchers describe accounting information as value relevant if it significantly relates to equity market value (e.g., Ohlson, 1995; Barth, 2001; Beaver, 2002). Earlier studies relate the value relevance of accounting information

to investor's behaviour and the change in behaviour. More extensively and recent studies relate value relevance to firm value. Francis and Schipper (1999) stated that value relevance is the accounting information's ability to determine firm's value. Aboody, Hughes and Liu (2002) define the relationship between market values and financial numbers as the mapping from accounting information to "intrinsic value" which refers to the present value of expected future dividends additional on all available information. A recent study by Beisland (2009) supports these definitions and further states:

"If there is no association between accounting numbers and company value, accounting information cannot be termed value relevant".

This implies that value relevance research measures the usefulness of accounting information from the perspective of equity investors.

In a historical point of view, value relevance of accounting information is a rather modern concept. The term was first published by Miller and Modigliani (1966) where the earnings-only approach was introduced and characterized value as the present value of permanent future earnings. Miller and Modigliani focused on firm's capital structure and concluded firm value as unaffected by the financial structure. The focus from a firm valuation perspective to a value relevance perspective of accounting information developed shortly after. In 1968, Beaver

published the first research of information content of annual earnings announcements.

Approximately twenty years later Landsman (1986) adopts a balance sheet approach where the book value information is considered. Feltham and Ohlson (1995) based their work on previous literature and adopted the abnormal earnings approach which represents firm value as a linear function of book value of equity. These three valuation models of earnings, book value and abnormal earnings represent the heavy reliability in the value relevance literature. However, the concept became popular within capital market research in the early 1990s and expanded rapidly. Holthausen and Watts (2001) identified 62 value relevance studies where only three were published before 1990. The last ten years, a large number of papers have either expand the traditional model specifications or critically evaluated and discussed earlier empirical research to continuously improve value relevance literature (e.g., Holthausen & Watts, 2001; Beaver, 2002; Ohlson, 2009).

2.2.2 Classifications and characteristics of value relevance studies

Holthausen and Watts (2001) classified value relevance studies into three categories.

i. Relative association studies that compare the relationship between stock market values and alternative bottom line measures. By using different bottom line accounting numbers, researchers tests for differences in the explanatory power R2 applying regression analysis. Accounting numbers with greater R2 are considered as more value relevant. The explanatory power R2 is the most common measurement of value relevance used among researchers and enables them to compare with similar studies to survey their own findings.

ii. Incremental association studies examine whether the accounting number of interest is helpful in explaining value or return given other specified variables. Accounting information is value relevant if estimated regression coefficients are significantly different from zero.

iii. Marginal information content studies represent the final classification and investigate if accounting information provides investors with additional information. If a reaction appears in the market price, it is considered as value relevance evidence. This study falls both into the relative association and incremental association category.

Beaver (2002) has introduced five perspectives in capital market research the ten past years. The perspectives represent research areas which have given

great contribution to accounting knowledge. The five areas are market efficiency, Feltham-Ohlson modelling, value relevance, analysts behaviour and discretionary behaviour. Beaver characterise the two first areas as the fundamentals of understanding accounting in capital markets. The last three areas implicit introduce some form of accounting structure or individual behaviour. Beaver claims that the perspective of value relevance research in capital markets has two distinctive characteristics. The first characteristic represents the requirement of an in-depth knowledge within this area of research and the second characteristic is the issue of timeliness. The issue of timeliness presents value relevance research as level studies where market value at a point in time is treated as a function of a set of accounting variables, such as assets, liabilities, revenues, expenses, and net income. Unlike event study, level study does not take timeliness into consideration. Event study research primary considers the timing of information and examines the stock price reaction over short windows of time centred on announcement dates. While level studies identify drivers of value that may be reflected in price over a longer time period. Beaver further question why timeliness is not the key issue and concludes that researchers are interested in a variety of questions where the importance of timeliness is more or less a dimension of the researcher's problem for discussion. For instance, in the case of examining what type of accounting information is reflected in firm value, timeliness is of less importance, while

investigating changes in value over a specific period of time, timeliness must be considered (Beaver, 2002).

Ball and Brown (1968) illustrated earlier the importance of timeliness in empirical research. They briefly concluded that the content of an income statement was considerable useful. Empirical findings show that fifty percent of all the available information about a firm was captured in that year's income statement. At this point in time, Ball and Brown indicated that the value relevance of earnings information was high.

Francis and Schipper's (1999) suggested four possible alternative interpretations of value relevance. The first interpretation considers accounting information as leading stock prices by capturing intrinsic share values. The measurement of value relevance will then be the profits generated from implementing accounting based trading rules. The second interpretation indicates that if the variables used in valuation models originate from financial statement information, the information is termed value relevant. The third interpretation is based on the statistical association between accounting information and market value where the main objective is to measure whether investors actually use the information in setting prices. Finally, the fourth interpretation is seen in a long window perspective where the correlation between accounting information and market values are statistically examined. Interpretation three and four are the most

common used interpretations in value relevant research in recent studies (e.g., Kothari, 2001; Aboody, Hughes, & Liu, 2002; Dontoh, Radhkrishnan, & Ronen, 2004; El-Gazzar, Finn, & Tang, 2009).

2.3 Empirical research perspectives and evidence

Value relevance research represents several different perspectives and makes it difficult to recognize the most important areas. The section will give a comprehensive review presenting some of the major areas within the field of value relevance. Further, these sections will discuss the foundation of value relevance research, standard-setting, accounting procedures and regulations, and market efficiency.

2.3.1 The foundation of value relevance research

Ball and Brown (1968) defined value relevance research as the use of price or return data to identify value drivers that effect prices or returns on the market value of stocks. Researchers throughout history of empirical investigation have a common understanding that value relevance research empirically investigates the usefulness of accounting information to stock investors (e.g., Collins et.al, 1997; Barth, Beaver, & Landsman, 1998; Francis & Schipper, 1999; Chen, Chen, & Su, 2001; Gjerde et al., 2005). Researchers further claim that accounting information is denoted as value relevant if there is a statistical association between accounting

information and market values of equity. Accounting information reflected in earnings and book equity are widely used in value relevance research because they are summary measures of the income statement and balance sheet. The initial objective in value relevance research is to measure how much of the variability in market values that is explained by accounting variables (Aboody and Hughes, & Liu, 2002). The traditional model specification in value relevance research is the model approach developed by Ohlson (1995). The model measures the association between the dependent variable denoted as market value and independent variables reflected in earnings and book values:

$$MVit = \beta 0t + \beta 1t\ BVit + \beta 2tEit + \varepsilon it,$$

where MVit is the market value of firm i in year t in the fiscal year end, BVit is the book value of equity per share of firm i at year end t, and Eit is the earnings in firm i at year end t. This model has been extended by several researchers resulting in a variety of model approaches. For instance, the model has been extended by adding cash flow, accruals or unrecognized assets into the model (e.g., Misund, Osmundsen, & Asche, 2005; Barth, Beaver, & Landsman, 1998).

Research investigating the relationship between capital markets and financial statements has grown rapidly with over 1000 published papers in leading academic accounting and finance journals in the past three decades (Kothari,

2001). The majority of empirical research and evidence is U.S. studies and has been published in journals such as Journal of Accounting Research, Journal of Accounting & Economics and The Accounting Review. These Journals have served as benchmarks in statistical research of value relevance. There are also other unpublished studies which aggregate the depth in empirical findings. For instance, an unpublished Norwegian study provided by Gjerde, Knivsflå, and Sættem (2005) concluded that the value relevance of earnings financial reporting for investors trading on the OSE (Oslo Stock Exchange) have increased significantly over the past four decades. These findings are inconsistent with a published study of Francis and Schipper (1999) indicating a decrease in the explanatory power of earnings information over time. Questions arise why the findings are characterized different. Is it due to sample differences, long or short window study, or is it explained by differences in the model specification? The following sections in this theoretical review will discuss and introduce different perspectives of empirical research and evidence over time.

2.3.2 Standard-setting

Hayley and Whalen (1998) view standard setters as defining the accounting language used by managers to communicate with the firm's external stakeholders. They further claim that standard setting add value if they enable financial statements to capture the variability in a firm's financial position and performance

in a reliable manner. In fulfilling this objective, standard setters are expected to consider conflicts between the relevance and reliability of accounting information under alternative standards.

Dahmash, Durand and Watson (2009) define the role of value relevance in standard setting: “Value relevance research is designed to provide evidence to accounting standard setters that can update their prior beliefs about how accounting amounts are reflected in share prices and, thus, can be informative to their deliberations and accounting standards”.

Holthausen and Watts (2001) critically evaluated a numerous of studies investigating the statistical relationship between stock market values and accounting information. Their initial objective was to discuss the inferences in value relevance study’s standard settings. They claimed that inferences are likely to be useful to standard setters only if the underlying theories are descriptive. Without descriptive theories to interpret the empirical associations, the value relevance literature’s associations have limited implications. Holthausen and Watts stated that several papers address the empirical relation between accounting numbers and stock market values without drawing standard setting inferences. Their evaluation of the value relevance literature suggest that alternative literature is important to standard setting. The alternative literature is important because it can identify factors that influence accounting standard setting which are not

generally incorporated into value relevance studies. Theories of accounting and standard setting generally do not incorporate factors other than associations with equity value.

Shortly after the publication of Holthausen and Watts (2001) study, another view of the literature was introduced by Barth, Beaver and Landsman (2001). In contrast with the first conclusion, that value relevance research offers little or no insight of standard setting, Barth, Beaver and Landsman claimed that the value relevance literature provides large insight for standard setters and other non-academic constituents. This conclusion is build upon testing of relevance and reliability. However, they also remark that as financial markets expands and become more complex, accounting standards attempt to keep pace with these changes. Hence, it is a challenge for accounting research to make a substantive contribution in addressing questions relevant to standard setting.

2.3.3 Accounting procedures and regulation

Cassidy (1976) questioned whether the accounting procedures had an effect on the market price and hence the utility of financial statements. He claimed that if the market "sees through" accounting procedures, the literature may have little practical significance for the stock market. Cassidy refers to three empirical studies from 1972 addressing accounting procedures where Archibald (1972), Ball (1972)

and Kaplan and Roll (1972) came to similar conclusions that changes in accounting techniques only had a temporary effect. This indicates that whether firms try to manipulate accounting information it will not have a long term affect on the market prices.

The findings may be a result of accounting regulation. IASB (International Accounting Standards Board), GAAP (Generally Accepted Accounting Principles) and FASB (Financial Accounting Standards Board) prevents firms to manipulate accounting information by setting accounting principles and accounting regulations. These organisations main objective is to enhance the usefulness of the financial reports and make it easier for investors to compare information across countries and industries, and thus more relevant (Leuz, 2003).

El-Gazzar et al. (2009) illustrates the effect of regulation through an empirical study, especially in the airline industry. The emergence of the airline industry from regulation to non-regulation market structure provides a unique opportunity to test the value relevance of accounting information. El-Gazzar et al. examines the value relevance of earnings and nonearning (book values) information and shows statistical evidence indicating that security prices are higher aligned with nonearning measurements in regulated markets than in deregulated markets. This can be explained by the high competitiveness in deregulated markets. Earnings measurements empirically show the opposite that earnings did

not have a significant effect on the market value during regulated test periods. In deregulated times, the empirical evidence support the prediction that earnings is a significant variable in explaining the security prices.

2.3.4 Market efficiency

Value relevance studies continuously employ regressions of stock prices or return as dependent variables and determine the explanatory power of the accounting variables as independent variables. Traditional studies within this context do not take market efficiency into consideration and implicit assume that the capital market is efficient in a semi strong form (Aboody, Hughes, & Liu, 2002). The efficient market hypothesis (EMH) suggests three common forms in the market efficiency concept; the weak form, semi strong form and strong form (Madura and Fox, 2007). In a weak form, market values reflect all available information. The semi-strong form reflects all publicly available information and continuously includes new information. And the strong-form assumes that the market reflects all information including inside information. According to Scott (2006) efficiency is the information content of the disclosures, not their form that is valued by the market. If a market is inefficient, the stock prices and return will not reflect available information to the investor, and hence, the value relevance research would be useless. Aboody, Hughes and Liu (2001) addresses whether measures of value relevance are materially affected by market inefficiencies. They

statistically examined the impact of market inefficiencies on the estimation of coefficients in value relevance regressions. They further applied this procedure to three major research areas represented as the value relevance of earnings and book values, residual income value estimates, and finally the value relevance of accruals and cash flows. Aboody, Hughes and Liu concluded that it is important to consider market inefficiency effects when drawing inferences in value relevance studies. The results provide strong evidence that value relevance regressions fail to pick up the price effect of information in accounting variables. Aboody,

Hughes and Liu further suggest that in order to measure value relevance with respect to intrinsic value, stock price needs to be adjusted for predictable future price changes that may be driven by measurement error. They considered the market as inefficient if the stock prices measured the intrinsic value with error. In addition, results indicated that value relevance of earnings and book value by using adjusted stock prices three year ahead increased the coefficients by 90% on earnings and 82% on book value.

2.4 Types of value relevance research

The literature represents a variety of studies but there are especially three types of studies attracting much attention (Aboody & Hughes, 2005):

i. The value relevance of earnings and book values,

ii. The value relevance of residual income value estimates and

iii. The value relevance of accruals and cash flows.

2.4.1 The value relevance of earnings and book values

Earnings and book value of equity are considered as two summary measures of financial statements. The book value is considered as the "bottom line" number in the balance sheet and earnings is the "bottom line" number in the income statement (Penman, 2010). These accounting numbers have therefore been of great interest to value relevance researchers. The majority of studies are measurement studies using regression analysis as the main empirical research tool. Many researchers decompose the combined explanatory power of earnings and book values into three components (Collins et al., 1997):

a. The incremental explanatory power of earnings,

b. The incremental explanatory power of book values, and

c. The explanatory power common to both earnings and book values. The common component consider earnings and book values as substitutes for each other in explaining prices and they also function as complements by providing explanatory power incremental to one another.

2.4.1.1 The value relevance of earnings

Kam (1990) claimed that the income statement is the most important financial report since it reveals results of the operations in a firm. Ball and Brown (1968) stated early the great importance of income statements. Their empirical findings indicate that fifty percent of all available information about a firm is captured in the income statement. Several researchers throughout time have made supportive conclusions about the information content in earnings reports (e.g., Beaver, 1968; Collins, et.al, 1997; Lev & Zarowin, 1999).

Lev and Zarowin (1999) introduce two ways in measuring value relevance of accounting information, the measure of explanatory power R2 and the combined ERC (earnings response coefficient). R2 is a measure generated from the regression analysis and enables to interpret the degree of the association between stock returns and earnings. Combined ERC is defined as the sum of the slope coefficients of the level and change of earnings measuring the sensitivity of the stock price to earnings. This measure reflects the average change in the stock price associated with a dollar change in earnings. A low slope coefficient suggests that reported earnings are not particularly informative to investors. In contrast, a high slope coefficient indicates that a large stock price change is associated with reported earnings reflecting investor's belief that earnings are long run earnings power of the firm (Lev & Zarowin, 1999).

There are two empirical regression models that are widely used among researchers; price regression and return regression (e.g., Francis & Schipper, 1999; Collins et al., 1999; Lev & Zarowin, 1999; Gjerde et al., 2005). Price regression represents th\e stock price as the dependent variable where earnings (often quoted in earnings per share (EPS)) are the independent variable.

The alternative return regression is often applied in addition to price regression where abnormal stock return is denoted as the dependent variable, and the variability in the regression model is explained by the independent variable of unexpected earnings. In addition, some researchers estimate return regression where return received act as the dependent variable and earnings and change in earnings act as independent variables. This paper considers only price regressions.

Easton and Harris (1991) suggested that earnings are an explanatory variable for returns. To confirm the level of earnings and the variability in earnings explaining stock returns, they performed a multiple cross sectional regression of annual returns. Their findings show a significant coefficient on earnings in all 19 years, while the coefficient on the variability in earnings is significant in less than half the years. Studies investigating the relationship between abnormal returns and unexpected earnings might mitigate the effect of measurement errors by including both earnings level and earnings change variables as measures of unexpected

earnings (Easton & Harris, 1991). They assumed in this setting that both earnings variables measure unexpected earnings with errors.

Change in the value relevance of earnings has been investigated in several studies. Collins, Maydew and Weiss (1997) performed an annually cross sectional regression over a 40 year period and concluded that the incremental value relevance of earnings declined over the time period 1953-93. Collins et al. explained the decline in earnings by a shift in value relevance from earnings to book value driven by increasing frequency of onetime items, increasing frequency of negative earnings, intangible development and increasing average firm size. Lev and Zarowin (1999) show supportive evidence of a declining association between reported earnings and stock return. Lev and Zarowin performed a cross sectional regression to measure the association between change in earnings and stock return over a 20 years's time period in the U.S. Their findings show decrease in the relationship between stock returns and earnings measured by R2 in the 1977-96 period from 6-12% in the ten first years to 4-8% in the last ten years. They reported that earnings account for only 5% to 10% of the variation in stock returns in year by year intervals.

Kormendi and Lipe (1987) concluded earlier that poor return earnings association was due to a lack of earnings persistence. Their results suggest that stock returns are not excessively sensitive to earnings innovations. Easton and

Harris (1991) claimed that prior research studies had a lack of a long term perspective. They empirically indicated that the issue of poor return earnings association might be an explanation of applying only short-run data. Empirical testing confirmed their hypothesis that the correlation between returns and earnings will increase using long term accounting data information. Their findings show a dramatically improvement in the return earnings association using long term intervals. An alternative explanation of the poor return earnings association is a matter of model specification, investigated by Beaver, McAnnally and Stinson (1997). They characterize the price earnings relation as a system of a simultaneous equation. In a price regression, the independent variable (earnings) and the dependent variable (price) can act as if they are both endogenously determined because they are affected by information which are explicitly difficult to specify. Beaver, McAnnally and Stinson provide evidence that changes in both the variables, price and earnings, are endogenous implying that a portion of the single equation bias can be mitigated via joint estimation.

Whether earnings management has an effect on the value relevance of accounting information is an issue discussed by Maquardt and Wiedman (2004). They examined firms releasing and not releasing earnings forecasts in a nine month period prior to the offering. They stated that managers have two advantages; the participation in secondary equity issues by selling shares of their own stock.

The second advantage relates to manager's position in the firm which enables them to influence financial reporting. Empirical results show no evidence of significant earnings management and no decreased value relevance of earnings for firms releasing earnings forecasts.

However, Maquardt and Wiedman findings show a decline in value relevance of earnings and additional a significance in earnings management for firms not releasing earnings forecasts. Volume and trading may also influence the results of value relevance reflected in earnings. Beaver (1968) was the first researcher who investigated the issue of volume and trading activity. He predicted that if income statements have information content, the number of shares traded is likely to be higher when the earnings report is released. Beaver tested the relationship between stock price and volume of trading and presented evidence that investors do look at reported earnings and do not use other variables to the exclusion of reported earnings. Cready and Myanatt (1991) also used annual report release dates to discuss whether trading activity is a measure of information content. The empirical research indicated no evidence of a price response and little evidence of a volume of shares response at annual report dates. However, the trading activity increased significantly four to five days after the annual report release date. These results suggest that annual earnings reports contain valuable information to investors. Consistent with Hakansson (1977), Cready and Myanatt

(1991) also concluded that “small” investors rely on the public information system reflected in annual reports, while “large” investors rely more on predisclosure information in making investment decisions.

2.4.1.2 The value relevance of book value

Several research studies containing balance sheet components refer to the valuation model as the market value of equity equalling market value of assets minus market value of liabilities. This is labeled as the balance sheet model (Holthausen & Watts, 2001). Researchers usually apply price level regression to evaluate the value relevance of book value. The most common used method represent stock price as the dependent variable, and book value per share (BVS) as the independent variables. An alternative, quite similar, regression denotes market value as the dependent variable, while assets and liabilities are independent variables (Francis & Schipper, 1999). However, book value of equity has been confirmed in several studies as being highly associated with stock prices. In addition, the statistical association between stock prices and book equity is typically stronger relative to stock returns and earnings (e.g., Collins et al., 1997; Francis & Schipper, 1999; Lev & Zarowin, 1999; Gjerde et al., 2007).

Berk and DeMarzo (2007:24) stated that book value of equity is an inaccurate assessment of the actual value of the firm’s equity. They stated that

market value of a stock is independent on the historical cost of a firm's assets, instead Berk an DeMarzo claimed that market value of stock depends on what investors expect those assets to produce in the future. Horngren and Harrison (2008:703) support this announcement and further claim that many experts believe that book is not useful for investment analysis because it bears no relationship to market value and provides little information beyond what is reported in the balance sheet. But some investors base their investment decisions on book value. According to Horngren and Harrison these investors are called "value" investors in contrast to "growth" investors focusing more on patterns in net income.

The issue of change in value relevance of book value over time has been examined by several researchers (e.g., Collins et al., 1997; Francis & Schipper, 1999; Gjerde et al., 2005). As discussed in section 2.3.1.1, Collins, Maydew, and Weiss (1997) suggest that a decline of value relevance of earnings induces an increase in value relevance of book values. Their findings support similar empirical studies suggesting that book values show a tendency of increased importance relative to earnings when earnings are negative or contain nonrecurring items. Collins, Maydew and Weiss suggest two reasons for explaining book values strength relative to earnings (1) book values serve as a better proxy for future earnings when current earnings contain large transitory components, and (2) book values serve as a proxy for the firm's abandonment option. To give a short

summary, this research suggests that the value relevance of earnings and book values move inversely to one another implying that if value relevance of earnings has decreased over time, value relevance of book values increases.

The issue of intangible assets and value relevance of accounting information has been of interest among several researchers. Dahmash , Durand and Watson (2009) suggest that intangible assets is one of the most controversial topics that standard setters have confronted. They believe that empirical research of value relevance and intangible assets will provide useful information to investors. Corporations spend millions each year to develop new intangible assets. Whether to capitalize or expense these assets is still an ongoing debate in the accounting environment.

Assuming a high level of unrecognized assets, one would expect a higher explanatory power of earnings than equity book value (Beisland, 2009). Barth, Beaver and Landsman (1998) confirm this prediction and conclude that balance sheet and income statements fulfill different roles.

Aboody and Lev (1998) examined the value relevance of intangible assets in the case of software capitalization. Empirical evidence indicates that intangible assets are significantly associated with capital market variables and future earnings. They further conclude that software capitalization summarizes

information relevant to investors. A recent study supporting these results is conducted by Dahmash, Durand and Watson (2009). They present evidence that identifiable intangible assets, including goodwill, are value relevant but not reliable. They assumed that if an asset is reported with bias, the information provided is not reliable.

2.4.2 The value relevance of residual income value estimates

Ohlson's work (1995) reformulated the traditional valuation model and formed the basis for the vast amount of empirical research on the residual income model. This model is primary used when investors estimate company value. Several researchers suggest that the residual income model generate value relevant information to the investor (e.g., Frankel & Lee, 1998; Chen & Dodd, 2001).

Frankel and Lee (1998) examined the usefulness of residual income information in predicting cross sectional stock returns in the U.S. Their empirical result suggest that residual income based valuation predicts future stock returns implying residual (or abnormal) income as value relevant information. Frankel and Lee refer to empirical evidence that the firm value based on the residual income model explains more than 70% of the cross sectional variation in stock prices.

Chen and Dodd (2001) considered three profitability measures and examined which one that was generating most relevant information. The three profitability

measures were introduced as the operating income, the residual income and the EVA (Economic Value Added). Stern, Stewart and Chew (1995) defined operating income as the amount of profit realized from a business's own operations and the EVA as the difference between a company's net operating income after taxes and its cost of capital of both equity and debt. Chen and Dodd do, however, find that residual income has a higher R2 and a stronger model than the EVA regressions, but it should be noted that the operating income regression exceeds with a higher R2 than the residual income regression. Their study also present evidence that residual income measures contain significant incremental information, that is unavailable in operating income measures. In addition, their results indicate that accounting based information explains little of the variation in stock returns between firms where 90% of the variation appears to be explained by non-earnings-based information.

2.4.3 The value relevance of cash flows and accruals

Bowen, Burgstahler, and Daley (1987) examined the role of cash flow data and security prices to find out whether cash flow data have incremental informational content relative to earnings. Their findings, based on samples of 98 U.S. firms in the period 1972-81, confirms their prediction that cash flow are more value relevant than earnings. They also confirm that accrual data have incremental informational content in addition to that contained in cash flow data.

The study of Sloan (1996) investigates information contained in the accrual and cash flow components of earnings and whether this information is reflected in stock prices. Results indicate that accrual component of earnings has a lower degree of reflection in stock prices than the cash flow component of earnings. Test results also report that investors fail to distinguish between the different properties of the accrual and cash flow. Sloan further suggest that firms with high levels of accruals will experience negative future abnormal stock returns that are concentrated around future earnings announcements, and positive returns in the case of low levels of accruals. Past research show no evidence of stock prices responding in a systematic manner to the release of cash flow and accrual information (Bernard & Stober, 1989). However, Sloan emphasizes on the demonstration of his result that the information in these components are different and that stock prices do not reflect this information fully until it influences future earnings. Another study which addresses the issue of cash flow and accruals is done by Pfeiffer and Elgers (1999). They present inconsistent results to Sloan showing no statistical significance of cash flows and accruals in the regression model that relates security returns and changes in these earnings components.

However, when they allow for correcting markets past mispricing and mean revision, their findings indicate a significant difference for cash flows, relative to accrual.

Misund, Osmundsen, and Asche (2005) investigated the value relevance of cash flow and accruals in the international oil and gas industry. Using samples of accounting data and market information in the period 1990-2003 generated results showing that accounting figures calculated before the expensing of depreciation are more value relevant than net figures. This indicates that cash flows and accruals are more value relevant then net income (earnings). This may not be the case for all industries considering that petroleum companies are allowed to use two different accounting methods; the successful effort method and the full cost method.

A more recent study by Beisland (2008) suggests that cash flow and accruals may reveal more relevant information which may say something more precise about the share values. He further claims that cash flow is a significant predictor of short term firm performance as measured by future cash flow and earnings, while the accrual component is also related to future earnings but not to future cash flow.

2.5 Value relevance and financial health

Several researchers have recognized that financial health and the probability of default effects value relevance of accounting information (e.g., Barth, Beaver, & Landsman, 1998; Graham, King, & Bailes, 2000; Davis-Friday & Gordon, 2005). Barth, Beaver, and Landsman (1998) predicted that as financial health decreases,

the explanatory power of book value increases, while explanatory power of earnings decreases. This prediction supports the Collins, Maydew, and Weiss's statement that earnings and book values move inversely to one another. Based on data samples of 396 U.S. firms, Barth, Beaver, and Landsman (1998) report findings indicating that both earnings and book value coefficients will fall as financial health decreases. However, equity book value's coefficient and explanatory power will increase if the liquidation value effects dominate the unrecognized net assets valuation effects. They further classify firms into financial health categories, and a pooled sample of firms indicated that the equity book value are more value relevant for firms classified as being less financial healthy than other firms, while the opposite situation is found for earnings. Graham, King, and Bailes (2000) investigated value relevance of accounting information during a financial crisis. Their main objective was to examine the Thai economy collapse in 1997, and the effect on value relevance of accounting information. Their analysis suggested that the economy collapse caused a significantly decline in value relevance. Despite the decline of total value relevance in the after period, incremental value relevance of book values increased and incremental value relevance of earnings decreased. Graham, King and Bailes define incremental value relevance of book value as the explanatory power of book value over and above that of earnings.

Another study investigating the relation between market value (stock price) and accounting information (book values and earnings) during a financial distress is done by Davis-Friday and Gordon (2005). They examined whether value relevance changed in the case of the Mexican financial currency crisis in 1994. Inconsistent with Graham's et al. (2000) evidence that the relevance of earnings declines, they find remaining significance in coefficient on earnings during the crisis period. This inconsistency of results is explained by the lack of controlling negative earnings in the model specification. After controlling negative earnings, Davis-Friday and Gordon report findings indicating an increase in valuation coefficients of positive earnings during the crisis. Their findings also show that valuation coefficient on book values are similar during and outside of the crisis period while the incremental explanatory power of book values increases relative to earnings during the crisis. However, Davis-Friday and Gordon do not support Collins,

Maydew, and Weiss statement that earnings and book values move inversely. Regression results indicate that the value relevance of accounting information in Mexico does not decrease during times of economic collapse, as Collins et al. claimed. They believe the changes found in value relevance of accounting information are likely attributable to changes in market's valuation of the information rather than to the accounting system poorly measuring economic

conditions during a financial crisis period. A more recent study conducted by Ibrahim et al. study (2009) examines the value relevance of accounting information during the Asian crisis in Malaysia in 1997. They show supportive evidence to Davis-Friday and Gordon that accounting earnings and book value are more valued during a financial crisis period.

2.6 Financial statements declining value relevance

Several empirical studies have questioned whether the accounting information has lost its value relevance over time. The study of Francis and Schipper (1999) is one of the most quoted papers examining changes in value relevance over time. The main objective in their study concerning relevance of financial statement information to investors for valuation purposes ignoring the relevance of accounting information to other users (creditors, unions, managers and other possible uses by equity investors). They applied data samples in a long window perspective from exchange-listed and NASDAQ firms over the period 1952-94 where they distinguished between high-tech and low-technological firms. Francis and Schipper operated with two measures of value relevance; the measure of total return that could be earned from foreknowledge of financial information and the explanatory power of accounting information measuring changes in market value. Over the sample period, test results showed a decline in value relevance of earnings information and an increase in the relevance of book value information. If

any decline would appear, Francis and Schipper expected a higher decline in the high-technology industries but they observed no consistent difference in the relevance of earnings between the two industries. While, book value information reports a significantly higher portion of variability in prices for lowtechnology firms relative to high-technology firms. Collins, Maydew, and Weiss (1997) showed the effect of adding book values as an additional independent variable along with earnings, implying improvement and stability in value relevance over time. However, it should be noted that these studies do not address the questions of a current and future threat of a loss of relevance.

The above discussion illustrates a decline in value relevance over time but what can explain the decreasing value of accounting information? Dontoh, Radhakrishnan, and Ronen (2004) claimed that the financial statements have lost their value relevance due to a shift from a traditional capital intensive economy into a high-technology, service-oriented economy. Their study tested whether the decline in the association between stock prices and accounting information positively correlated with increased non-information-based (NIB) trading activity. Increase in NIB trading is seen as noise in stock prices and thereby reduces the observed association between stock prices and value relevant information. Dontoh, Radhakrishnan and Ronen presented evidence suggesting that the decline is driven by an increase in NIB trading. Another explanation is conducted by Collins,

Maydew, and Weiss (1997) where their results suggest that the decreasing value relevance is driven by increasing frequency of nonrecurring items and negative earnings. Beisland and Hamberg (2008) suggest that researchers share a common explanation that the accounting systems fails to reflect the situation of today's enterprises implying that firm's increasingly rely on resources which cannot be recognized.

Most research that investigates changes in value relevance has been conducted in the U.S. where the majority of results suggest that accounting information has lost some of its relevance over time (e.g., Collins, Maydew, & Weiss, 1997; Ely & Waymire, 1999; Lev & Zarowin, 1999). An increasing number of international studies find no decrease in value relevance. For instance, Gjerde, Knivsflå and Sættem (2005) find a significantly increase in value relevance of financial reporting for investors trading on the Oslo Stock Exchange. Using Chinese data, Sami and Zhou (2004) reports an increase in the usefulness of accounting information in the Chinese emerging market. Similar results are also reported using data from the Czech Republic where value relevance increased over the time period 1994-2001 (Hellström, 2006). However, in a more recent study, Ibrahim et al. (2009) from Malaysia support studies with non-U.S. samples and present evidence that the accounting information reflected in earnings and book value has not declined in value relevance over time.

However, Brown, Kin and Lys (1999) argue that a scale factor common to price per share, EPS, and book value per share, BVS, induces spurious increase in value relevance over time. After controlling for the scale, they find that incremental value relevance of both earnings and book value has declined over time. The nature of scale effect simply refers to the effect of including large firm samples. Firms with high share prices have similar effects due to non-linearity in the relation between market capitalization and the financial statement variables. Easton and Sommers (2003) also investigated the scale effect in price level and return level studies. Their statistical result show that most researchers encounter data samples driven by relatively small subset of the very largest firms in the sample. They suggest that research studies requiring a focus on price levels should run regressions using a deflator to mitigate the scale effects. Easton and Sommers suggest that return regression specification should be used whenever possible because of their capability to address the timeliness of accounting information.

As the section above discusses, there are inconsistent results concerning whether value relevance over time has declined or not. Distinctive statistical results may be explained by country characteristics. Veith and Werner (2009) show that the magnitude of value relevance varies among countries due to size of capital markets and return window applied. They suggest that in countries particularly with small capital markets, such as Norway, value relevance attains its maximum

at a later point in time. This implies that capital market size has an impact on information processing of account information. In addition, Ali and Hwang's (2000) study present evidence based on an examination of 16 countries and find four country characteristics that distinguish the value relevance in the countries examined. First, they suggest that there are lower value relevance in countries with bank-oriented (as opposed to market-oriented) financial systems. Second finding presents lower value relevance for countries where private-sector bodies are not involved in the standard-setting process. Third finding indicates lower value relevance for

Continental model countries relative to British-American model countries. The fourth finding suggests that value relevance is lower when tax rules significantly influence the financial accounting measurements.

2.7 The hypotheses

In the development of our hypotheses, we will recap relevant arguments linked to the emphasis in this study. As mentioned in the previous sections, value relevance literature represents one of the major perspectives in capital market research and has made great contribution to accounting knowledge. The main idea of value relevance research is to determine whether the accounting information is useful to the investor in future decision making. Several researchers have a

common understanding that accounting information is denoted as value relevant if there is a statistical association between accounting information and market values of equity (e.g., Barth, 2001; Beaver, 2002; Aboody et al., 2002). Earnings and book value of equity are considered as two summary measures in financial statements, explaining the great interest among value relevance researchers to investigate such information. Studies indicated early that income statement is the most important financial report (e.g., Ball & Brown, 1968; Beaver, 1968; Kam, 1990). Throughout time, a shift is observed from a traditional capital intensive economy to a high-technology, service-oriented economy which contributes in explaining changes in value relevance over time (Dontoh et al., 2004). Several researchers suggest a decline in financial statements ability to capture and summarise information that determines the firm's value. Collins et al. (1997) indicated that the explanatory power of earnings declined over the past forty years explained by a shift in value relevance from earnings to book values. He further suggest that this is driven by the increasing frequency of negative earnings, average firm size and intangible assets implying an inversely movement in value relevance of earnings and book value. Researcher's evidence of value relevance varies largely among studies and may be explained by differences in, for instance, time intervals (e.g., Easton, Harris & Ohlson, 1992; Lee, 2001), country

characteristics (Veith & Werner, 2009), or differences in financial systems (Ali & Hwang, 2000).

CHAPTER THREE
RESEARCH METHODOLOGY

3.3 Introduction

Research is aimed at finding solutions to problems and the condition under which a certain phenomena occurs as well as the conditions under which it does not occur in what might appear to be similar circumstances – Osuala (2001). Since the outcome of any research depends on the data collected and how it is collected and analyzed, the use of methodology to be adopted is very important and for any methodology to be adopted as a data collection and analysis avenue, it has to be justified.

This chapter examines the specific procedures utilized in the course of obtaining the required data for the research project under discussion. To this end, the chapter deals with the research methods, sources of data collection, and instruments of research, techniques of data analysis and justification of methods of research and techniques of data analysis adopted.

3.4 Research Design

A key consideration for a research is the selection of a primary method of investigation of a given problem. Hence, the knowledge of the various methods that exist is in fact a pre-requisite to a worthwhile research in that it guides towards choosing the one to be used. More often than not, more than one of these research

methods is employed in order to achieve the desired end more effectively. For the purpose of this study, we employed correlational research design.

This is concerned with the collection of data for the purpose of describing and interpreting the relationship between two or more variables. But the central purpose of correlational research is the discovery of meaningful relationship between variables.

3.3 Population and Sample Technique

Ham (1971) defined population as "the group of objects, elements or units about which the study will make some conclusions". It is "a census of all the elements or subjects of interest and may be finite or infinite" (Asika 1991).

For the purpose of this study, our population is defined as all the banks listed on the floor of Nigerian Stock exchange as at December2009. A total of twenty one banks enjoy first tie listing on the Nigerian Stock Exchange as obtain from Nigeria Stock Exchange Fact Book.

In the course of a research work, it is usually not possible to absorb the whole population especially, the case of exceeding large number of individuals, subjects or events in a particular research even when it is finite. This is because the resources and circumstances of research are often tight at the researcher's disposal.

Therefore, sampling is implored as a way of choosing or selecting of desired quantities or proportion as representation (samples) of the whole population.

For the purpose of this study, Yamens sample model was used in selecting the sample representative.

. A total of five (7) banks were selected which represent 33% of the population. By our opinion, this sample size is sufficient to make a generalization of our findings. They are: Access Bank, Diamond Bank, First Bank Nig Plc, Gtbank Plc, UBA Plc and Zenith Bank Plc and Union Bank plc.

3.4 Sources of Data

Research problems could be solved only on the basis of data collected. Therefore, a researcher's responsibility is to make sure that the research design is capable of providing the necessary data to the solution of the stated problem(s). In the conduct of this research work, data was collected from secondary sources of data.

3.4.1 Secondary Sources of Data

The secondary sources of data employed in this research includes available textbooks, journals, newspapers, magazines, workshop materials, seminars papers, past researches, annual reports, websites related to the topic under study among

others. However, this source of data was used with caution as it may contain errors and false statements.

3.5 Techniques of Data Analysis

This section provides the basis or method that was used in the analysis of data gathered in the next chapter. Data collected are usually summarized in some form in order that adequate analysis can be feasible.

However, the annual reports obtained from the above understudy, forms the secondary source of data from the banks. The profit and loss account and the balance sheet were the two sets of statement of accounts obtained from the companies were statistically analyzed with Ordinary Least Square (OLS) model.

3.5.1 Measure of Financial Reporting Relevance

Financial reporting quality is an elusive concept in the accounting literature. Consequently, there is little agreement among researchers about how best to measure financial reporting quality (Dechow, Ge, and Schrand 2009). The scarcity of readily available data in an international setting further complicates this issue. As a result, this study relies on the predictive capability of the Nigerian quoted banks' financial statements using a modified EBO (Edwards Bell Ohlson) model. The Model is presented below:

$SP = \beta_0+\beta_1 BValue +\beta_2 EPS +e$……. (i)

The modified EBO model contains an addition of a variable called changed in earnings. This is for the fact that stock price is to represent the market value of the firm, while accounting figures represent firm value based on accounting procedures. When both concepts are strongly correlated, i.e. changes in accounting information correspond to changes in market value of the firm; it is assumed that earnings information provides relevant and reliable information (Nichols and Wahlen, 2004). This method is also used to examine earnings persistence, predictive ability, and variability, as elements of reporting quality (Schipper and Vincent, 2003; Francis, LaFond, Olsson and Schipper, 2004).

The modified model is presented as follows:

$SP = \beta_0+\beta_1 BValue+\beta_2 EPS+\beta_3 \Delta EPS +e$ ……. (ii)

Where:

SP = Share Price of stock

β_0 = Intercept

β_{1-3} = Coefficient of the independent variables

BValue = Book value of equity capital

EPS = Earnings per Share

ΔEPS = Change in Earnings per Share

e = Residual or error term

In selecting measure of financial reporting relevance, emphasis is made on reported financial accounting data rather than the accounting rules adopted by the sample firms. Prior research shows that stated accounting rules can be

circumvented by insiders and hence do not reflect firms' actual reporting practices (Ball, Robin, and Wu 2003). Therefore, to assess the financial reporting quality of a firm, it is not proper to rely on "what they say" but on "what they do."

However, the regression result of the modified EBO model from perspective of model fitness and significant values will be the basis for determining the quality of financial reporting in this study. Thus, the better the model is fit and the values are significant, the higher the financial reporting quality of Nigerian deposit money banks vice- versa. The result is discussed later.

3.7 Justification of Techniques Adopted

The research method for this study is correlational research design. This enable the researcher established the relationship between the proxies under consideration. Secondary method of data collection was used, the choice of secondary data was that when records are kept for a long period of time, they provide time series data that can be used to provide 'before' and 'after' measurements without a control group.

The study utilized OLS model to evaluate the model specification. This enables us to establish the relationship between dependent and independent variable under consideration.

CHAPTER FOUR
DATA PRESENTATION AND ANALYSIS

4.5 Introduction

This chapter provides the analysis and evaluation of data collected for the purpose of the study. This is so in order to deduce a true picture of the analysis of financial reporting for investment decision discussed includes: accounting policies of the organization, data presentation and test of research hypothesis as well as discussion of research findings.

4.2 DESCRIPTIVE STATISTICS

4.2.2 CORRELATION MATRIX

The correlation matrix is used to determine the relationship between the dependent and independent variables of the study.

Table 4.4 below presents the correlation matrix for the sample observations. The full results are contained in Appendix A.

Table 4.4 Correlation Matrix for the sample Observed

Variable	SP	BVS	EPS	CEPS
SP	1.00			
BVP	0.19	1.00		
EPS	0.604	0.171	1.000	
CEPS	-0.031	0.348	0.499	1.000

Source: Regression Result Using SPSS Version 16

Table 4.4 indicates that there is a positive relationship between Share Price, Book Value per Share and adjusted Earning per share. This shows that the variables under consideration are contributing positively to the value relevance of financial reporting. The association between them is positive and highly significant.

4.3 Relevance of Financial Reporting and Nigerian Deposit Money Banks

This section deals with result presentation and analysis. Multiple regression has been used to estimate the influence of the explanatory variables (firm size, leverage and dispersed shares) on the explained variable (financial reporting quality). First, the result of the modified EBO model (equation 2) is presented and discussed to determine the financial reporting quality as explained variable of equation (3). Then, some descriptive statistics from the sample firms are presented followed by the presentation and analysis of the regression results. Finally, the findings and policy implication of the results are discussed.

Table 4.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.717[a]	.513	.444	9.66616	.513	7.386	3	21	.001

Source: Extract from SPSS printout result.

Table 4.1 above shows the combined correlation of independent variables and dependent variable is 72% indicating strong positive relationship and coefficient of

determination of 51% indicates a strong explanatory power of earnings and book value of stocks over the predictability of their prices. It implies that book value and earnings as well as change in earnings explained the variation in share prices of Nigerian deposit money banks. In addition, the Fishers statistics of 7.4 which is significant at 1% indicates that the modified EBO model is fit. Therefore, the results reveal that the financial reporting of Nigerian deposit money banks is qualitative.

Table4.2: Coefficients of EBO Model (SP = $\beta_0 + \beta_1 BValue + \beta_2 EPS + \beta_3 \Delta EPS + e$)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.337	4.767		.700	.492
	Book Value	0.27	.121	.037	.226	.824
	Earning	16.540	3.521	-.825	4.698	.000
	Change in Earning	-11.621	4.711	-.455	-2.467	.022

Source: Extract from SPSS printout result.

From table 4.2 above the estimated regression modified EBO model is as follows: $SP = 0.08 + 0.57BValue - 0.25EPS + 0.19\Delta EPS + e$

Determination coefficient indicates the variance of dependent variable which is explained by the available independent variables in the regression model. In fact, this coefficient shows the ability to explain the changes in the dependent variables by independent ones of the model. As far as this coefficient is bigger the ability to explain the model is also higher.

Table 4.2 shows that book value with a t-value of 0.226 is not statistically significant therefore this produced evidence of failure to reject hypothesis two of the study which states that share price has no significant on book value of the Nigerian deposit money bank.

Secondly, the result also shows a contrary position in respect of both earnings and change in earnings. It reveals that earnings with a t-value of 4.70 and change in earnings with the t-value of- 2.47 all significant at 1% and 5% respectively. This therefore provided evidence to reject hypotheses one and three of the study. This confirms the high predictability power of the modified EBO model used in this study and its capability to measure financial reporting quality of Nigerian deposit money banks.

The policy implication of this result is that management and potential investors among others of Nigerian money deposit banks should be adopting the model to measure the financial reporting quality of their banks to enable them take useful decisions especially in term of investment decisions. .

Table 4.3: Tolerance and Variable Inflation Factor

Variables	**Tolerance**	**VIF**
b_1	0.879	1.138
b_2	0.751	1.331
b_3	0.680	1.470

Source: Regression Result Using SPSS Version 16

The tolerance value and the variance inflation factor (VIF) are two advanced measures of assessing multicollinearity between the independent variables of the study. In table 4.3, the variance inflation factors were consistently smaller than ten indicating complete absence of multicollinearity (Cassey, et al; 1999 and Neter et al ; 1996). This shows the appropriateness of fitting the model of the study with the three independent variables. In addition, the tolerance values are consistently smaller than 1.00 thus further substantiating the fact that there is complete absence of multicollinearity between independent variables (Tobachmel and fidell, 1996).

4.4 Discussion of Findings

Value relevance models measure the quality of financial reporting information by focusing on the associations between accounting figures and stock-market reactions The stock price is assumed to represent the market value of the firm, while accounting figures represent firm value based on accounting procedures. When both concepts are (strongly) correlated, i.e. changes in accounting information correspond to changes in market value of the firms, it is assumed that earnings information provides relevant and reliable information (Nichols & Wahlen, 2004). This method is also used to examine earnings persistence, predictive ability, and variability, as elements of earnings quality (Schipper & Vincent, 2003; Francis, 2004).

The focus of value relevance literature on relevance and faithful representation (reliability) is consistent with the Exposure Draft, as these notions are defined as the fundamental qualitative characteristics.

However, this literature does not distinguish between relevance and reliability, i.e. does not explicitly show whether or not tradeoffs have been made when constructing accounting figures. In addition, the stock market may not be completely efficient. As a consequence, stock prices may not represent the market value of the firm completely accurate (Nichols & Wahlen, 2004).

The study revealed that all the predictors under consideration are statistically significant in assessing the financial reporting quality in the Nigerian Deposit Money Bank. All the variables are statically significant at 5% leading to rejection of the stated hypotheses. What this finding suggests is that accounting information contained in the financial statement play a vital role in estimating value relevance.

This study provides evidence as documented by Ahmed *et al.* (2006) Barth *et al.* (1996), Eccher *et al.* (1996) and Venkatchalam (1996) using a different methodology. They provided evidence on the effect of recognised and disclosed derivative financial instruments' fair value on investor valuation of these instruments. They pointed out that either cash or accrual earnings have a vital role in estimating the financial reporting quality.

Also revealed in the study is the degree of adjusted earnings per share. The adjusted earnings per share was reading negative indicating that the firms under consideration seems to have their income smoothing. This appeared to reduce the quality of financial reporting. However, the book value and earnings per share result over shadow the effect of adjusted earnings in the result.

The dependent variable exhibited high degree of reliability in relation to the assessment of the financial reporting quality of the Nigeria Deposit Money Bank. The behavioural characteristic of the share price of the study bank seems pointed out the important role or the extent of the Nigeria Capital Market development. The banks under consideration have a robust as compared to their book value.

Finally, the study revealed there are other exogenous variables that hampered the financial reporting quality which could be accounted for about 47.3%. These other factors include macro economic variables such as inflation, foreign exchange, political and social factors.

4.5 SUMMARY

The chapter attempted to analyze and interpret the data collected for the purpose of this study. Effort was made test the hypotheses formulated and discussion of result findings were succinctly stated.

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of the Study

The focus of value relevance in determining the quality of financial information is of paramount importance to service industry particularly Nigeria Money Deposit Banks. All the financial users placed reliance on the informational content of the financial reporting and as such the content of financial reporting supposed be qualitative. The two main issues are the extent to which annual reports provide forward-looking statements. The forward-looking statement usually describes management's expectations for future years of the company. For capital providers and other users of the annual report this information is relevant since management has access to private information to produce a forecast that is not available to other stakeholders (Bartov & Mohanram, 2004).

The second item measures to what extent the annual reports discloses information in terms of business opportunities and risks. Jonas and Blanchet (2000) refer to the complementation of financial information by non-financial information, when referring to predictive value, and the knowledge that can be obtained of business opportunities and risks, since it provides insight into possible future scenarios for the company. The third item measures company's use of fair value. Prior literature usually refers to the use of fair value versus historical cost

when discussing the predictive value of financial reporting information. It is often claimed that fair value accounting provides more relevant information than historical cost because it represents the current value of assets, instead of the purchase price.

In addition, both the FASB and IASB are currently considering new standards to allow more fair value accounting to increase the relevance of financial reporting information, since they consider fair value as one of most important methods to increase relevance.

In this study, attempt was made in chapter one to look at the study in general (an overview of the study). The chapter also contained the statement of the problem, the objective, significance of the study, and the scope of the study. Definitions of some key term that are unavoidable to the research are highlighted.

Chapter two shows how the literatures relevant to this study were reviewed. In this chapter, the historical background and concept of value relevance in Nigeria banks were extensively discussed.

In chapter three, the methodology for this study was extensively elucidated. The source of data as well as the instruments of collection data were discusses. The techniques of data analysis – OLS. The justifications for employing the

aforementioned methods of research and data analysis of techniques were also enumerated.

5.2 Limitations of the Study

The following are the most serious limitations and problems encountered at course of collecting data and in the course of the study;

All the banks have certainly proved to be secretive in giving out information pertaining to their operations. Attempt to obtain the secondary data [financial statement, statistical summary etc] for this research work officially from the bank proved abortive. However, we obtained this data “unofficially”.

5.3 Conclusion

Given the vast amount of value relevance it is impossible to adequately summarize the entire literature; hence, this study reviews some of the main research areas. Questions arise why value relevance literature is characterized by inconsistent empirical results. This has created many discussions where each presents a unique explanation. We cited a variety of reasons illustrating why distinctive empirical evidence appears in the value relevance literature. We believe that empirical evidence is distinctive due to differences in country characteristics, window time perspectives, and model specification.

This study provides an empirical examination of whether investors in the Nigerian stock market perceive accounting information, denoted in earnings and book value, to be value relevant. Using samples of available observations listed on the Nigeria Stock Exchange Benchmark Index (NSEBX) from 2005 to 2009, empirical results support a large number of prior studies suggesting that accounting information is value relevant. Our findings further suggest that book value of equity has a stronger ability to explain the variation in stock prices relative to earning, regardless of which model specification applied. In addition, an inversely movement is observed in the explanatory power of between earnings and book value, implying that when value relevance of earnings decreases, the value relevance of equity book value increases. This relationship is consistent across studies.

There is a lack of studies investigating the value relevance of accounting information in the Nigerian stock market. Hence the main emphasis in this study is to examine the financial reporting quality and value relevance of accounting information in Nigeria Deposit Money Banks during the period of 2005 - 2009.

Our empirical results show that the total value relevance of accounting earnings and book values has increased significantly during the period under consideration, attributable to an increase in the value relevance of book values. As predicted, we find a significantly increase in the explanatory power of book value

and a decrease in the explanatory power of earnings during the period. The change in value relevance may be directly attributable to the dominance of a liquidation effect. This effect suggests that as financial health decreases, equity book value's incremental explanatory power increases while incremental explanatory power for earnings decreases (Barth, Beaver, & Landsman, 1998). As value relevance of earnings decline, shareholders become more likely to value a firm based on liquidation value rather than earnings potential. If the liquidation effect contributed to disruption in the value relevance of accounting information during the crisis, the disruption is likely to be temporary.

Researchers have identified some problems using R2 as a comparison measurement. Hence, this study also tests whether the alternative explanatory power of pricing error suggested by Gu (2007) is a better goodness-of-fit. Our findings indicate that the explanatory power R^2 and pricing error show similar results which may explain the lack of studies using alternative explanatory powers others than R^2 in measuring value relevance. The minority of value relevance studies applying an alternative explanatory power others than R2 may also be explained by the comparability issue to other statistical research. Hence, this creates difficulties in surveying own findings.

5.4 Recommendations

From the above findings, the followings recommendations were made.

i. The banks under consideration should ensure that they maintained the current status of their share price in the stock market. This is to see the market value per share command or sustain the tempo.

ii. The book value of the study need to be worked on as it appeared that the relationship between the market value and book are grossly differs.

iii. The earnings per share also seem encouraging but in order to ensure consistency in the value relevance of the studied banks, the need to improve on the earnings per share should be considered paramount.

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