DISPOSITION AND MOMENTUM EFFECT ON EQUITY SHARES IN NIGERIA: THE MENTAL ACCOUNTING AND PROSPECT THEORY APPROACH

BY

ONUORA JOSHUA KENECHUKWU
2006407001P

(Ph.D.) DEGREE IN ACCOUNTANCY

JUNE, 2017

THE DISPOSITION AND MOMENTUM EFFECT ON EQUITY SHARES IN NIGERIA: THE MENTAL ACCOUNTING AND PROSPECT THEORY APPROACH

BY

ONUORA JOSHUA KENECHUKWU
2006407001P

BEING A DISSERTATION PRESENTED TO THESCHOOL OF POSTGRADUATE STUDIES, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF DOCTOR OF PHILOSOPY (PH.D.) DEGREE IN ACCOUNTANCY

DEPARTMENT OF ACCOUNTANCY
FACULTY OF MANAGEMENT SCIENCES
NNAMDI AZIKIWE UNIVERSITY, AWKA
ANAMBRA STSTE, NIGERIA

JUNE, 2017

DEDICATION

This work is dedicated to the Almighty God, the author of all wisdom and Knowledge.

DECLARATION

I here declare that this PhD Dissertation titled "The Disposition and Momentum Effect on Equity Shares in Nigeria: The Mental Accounting and Prospect Theory Approach" is the product of my own research efforts, undertaken under the supervision of Prof. Emma I. Okoye, to the best of my knowledge has not been presented elsewhere for the award of a degree or certificate. All sources have been duly distinguished and appropriately acknowledged.

ONUORA JOSHUA K.
2006407001P

CERTIFICATION

This Dissertation on "Disposition and Momentum Effect on Equity Shares in Nigeria: The Mental Accounting and Prospect Theory Approach" meets the regulations governing the award of Doctor of Philosophy (Ph,D) degree in Accountancy, of the School of Postgraduate Studies of Nnamdi Azikiwe University, Awka for its contribution to knowledge and literary presentation.

_____ _____

Professor Emma. Okoye Date
(Supervisor)

_____ _____

Dr. P. A. Egbunike Date
(Head of Department)

_____ _____

Rev.Can.Prof.A.D.Nkamnebe Date
(Dean, Faculty of Management Sc.)

_____ _____

Date

(External Examiner)

_____ _____

Professor I. Odimegwu Date
(Dean, School of Postgraduate Studies)

ACKNOWLEDGEMENT

The successful conduct and completion of any research undertaken especially at the Post Graduate level has never been a one man affair. I wish at this point to give recognition to all that in one way or the other contributed to this research work in particular and my PhD programme in general

In reverence and in deep sense of gratitude, I give God Almighty all the praise and adoration for keeping me alive and in good health condition to see the completion of this research undertaking.

I am specifically thankful to my supervisor, Prof. Emma. Ik. Okoye for his guidance, close supervision at every stage and meaningful suggestions right from the point of conception of this research undertaking up to its final completion. Your patience, immeasurable judgements, constructive criticisms, advice and directives not only gave this work the quality it currently exhibits, but however, gave me the needed courage to achieve this feat. I am indeed very grateful to you Sir.

I also wish to appreciate the efforts of a true mentor, Prof. B.C.Osisioma (the Doyen of Accounting Profession). Your words in our undergraduate days spur in us the determination to achieve great heights in life. My prayer is that God will reward you richly for helping me in picking the right ideals that has brought me thus far in life.

I will always remain grateful to Prof. M.S. Ifurueze, Prof. C.M. Ekwueme, Dr. P.A. Egbunike, Dr. Okaro, Dr. O.G.Okafor, Dr.P.V.C.Okoye, Dr. C. Ezeagba and other academic staff of the Department of Accountancy who at different points in time made useful suggestions right from the beginning of this work. My prayer is that God will bless you immensely for helping me with the right ideas that have brought this thesis in its current form.

The corrections, suggestions and constructive criticisms of Dr. Nk. Offor (Department of Accountancy COOU) and that of Dr. E. Jeroh (Delta State University Abraka) would always be remembered and appreciated. I also wish to appreciate the contributions of Prof. Henry, Mr. Omor, and Mr. Alex. Iheanacho, whose efforts, energy and time especially at the data gathering and analysis stage of this research could not be quantified.

I am indeed very grateful to my precious wife, Engr. Ogechukwu Onuora for her relentless support, prayers and encouragement all through the period of this research undertaking. Of a truth, you are God-sent and in all measures. I really cannot thank you enough for your contributions towards my Ph.D programme generally, and to this research undertaking in particular. May God really bless you.

Finally, the entire staff and Post Graduate students of Accountancy Department, UNIZIK, had always been helpful and very friendly. May God bless you all.

Onuora, Joshua
2017

TABLE OF CONTENTS

LIST OF TABLES

ABSTRACT

This study examined the relationship between the disposition and momentum effect on equity shares in Nigeria based on the prospect theory and mental accounting. Specifically, this study was designed to assess the extent to which rising stock prices increase the sales and purchases of shares, as well as determining whether accounting information interaction with disposition effect has any relationship with the sale and purchase of stocks. To attain these objectives, research questions and hypotheses were formulated and tested. Related literature to this study were reviewed and the study used Ex post-facto research design. Data were sourced from Nigerian Stock Exchange (NSE) official publications on daily volume of shares traded, Securities and Exchange Commission (SEC), and the Nigerian Bureau of Statistics (NBS). The population of this study comprised all listed companies in Nigerian Stock Exchange as at December 31, 2014 that are current in terms of filing reports through the period(2007 to 2014). The data collected were analysed using panel data regression analysis. It was empirically determined that, positive share price Returns have a negative influence on share prices and there is no significant relationship between momentum effect and share prices in the Nigerian stock market in the period under review. The implication is that momentum is not a general feature of the Nigerian stock market, but is only apparent over certain time periods when considered on sector basis. It is recommended that when there is a progressive increase in the movements in earning per share for a period of time, companies should present their shares for sale, because it will attract the momentum traders to make investments in such companies.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

One of the most important issues in exploring and discovering patterns and rules governing market is the way of pricing tradedsecurities. Most studies on financial issues place emphasis on active economic rationality and market efficiency. However, recent empirical research has shown that some of the behaviours of investors are in contrast with modern financial and neoclassic paradigms; therefore, researchers were faced with a lot of exceptions that were not explainable in terms of theoretical models in the form of modern financial theory or were not compatible with theories of efficient market. Therefore, a new theory called behavioural paradigm was presented to explain investors' behaviour (Somayeh, Vahideh, Mahdieh, & Mohammad, 2013). This was also supported by Schütte &Gregory-Smith (2015) who stated that there are an increasing number of ethically minded investors, and that, a broader shift in investment behaviour is mitigated by the attitude-behaviour gap or due to inconsistency in behaviours (Schütte & Gregory-Smith, 2015). These tendencies can be noticed in some investors holding on to their declining stocks, which is driven by prospect theory and mental accounting, and creates a spread between a stock's fundamental value and its equilibrium price, as well

as price under-reaction to information. This spread convergence, arising from the random evolution of fundamental values and updating of reference prices, generates predictable equilibrium prices that will be interpreted as possessing momentum (Gginblatt & Bring, 2004).

However,Selling and holding decisions on stock should chiefly depend on the perceived future value of a security, but not the purchase price. This concept was captured by Disposition Effect (DE) which presents a case considered an irrational behaviour; the tendency of investors to hold losers too long and sell winners too soon, that is, investors willing to realize gains but are reluctant to realize losses. Disposition effect, which was first introduced by Shefrin &Stateman (1985), is one of the most attractive and well-documented behavioural heuristic theories among investors. It is based directly on prospect theory (kahneman &Tversky 1979) and mental accounting (Thaler 1985). Under prospect theory, investors employ an S-shaped value function to evaluate their potential gains and losses to maximize their utility. Under mental accounting, investors are more likely to assign their assets into different accounts for different stock positions, and then employ the prospect theory to keep track of financial activities. In their model, Shefrin & Stateman (1985) posit that investors maintain a separate mental account for each stock position, and are keen to maximize an S-shaped value function that is convex for losses and concave for gains.The implication of this is that investors seem to be risk-

averse in the domain of gains, whereas, in the domain of losses, they tend to be risk-seeking.

The prospect theory and mental accounting have also been used to explain the cross-sectional expected return patterns. For instance, Barberis & Huang (2001) find that the prospect theory combined with the concept of individual mental accounting, works the best in explaining the cross-sectional expected return patterns, such as the profitability of momentum strategy. Frazzini (2006) finds that prospect theory and mental accounting framework plays a leading role in explaining the cross-section of stock returns. Grinblatatt &Han (2002) also show that the prospect theory and mental accounting can explain the profitability momentum strategy or persistence in the returns of over horizons between three months and one year.

Grinblatt & Han (2002, 2005), developed a theoretical model of equilibrium prices where a group of investors have preference that combine the prospect theory with mental accounting. They suggested that investors with the disposition effect cause momentum in stock prices. That is, the demand for a stock by a prospect theory/mental accounting agent deviates from that of a fully rational investor, with the distortions being inversely related to the unrealized profit experienced on the stock. A stock that has been privy to prior good news has excess selling pressure relative to a stock that has been privy to adverse information. Such demand perturbation tends to generate a price which

under-reacts to public information. This distorts equilibrium prices relative to those predicted by standard utility theory. In equilibrium, past winners tend to be undervalued and past losers tend to be overvalued. As the above mispricing gets corrected, return predictability arises. That is, past winners will continue going up and losers will continue going down. This leads to momentum which is also well documented by Jegadeesh & Titman (1993). Grinblatt & Han's theoretical model (2002, 2005), further stressed that the disposition effect is estimated by using unrealized capital gain (losses) on past prices and stock turnover. The paper suggested that the unrealized capital gain variable is positively related to past returns. The unrealized capital gain is the main cause behind the profitability of a momentum strategy (investing in past winners and shorting past losers, expecting that winners will outperform losers). Moreover, the momentum effect disappears when the prospect theory and mental accounting (PT/MA) disposition effect is controlled for with a regressor which proxies for the aggregate capital gain.

1.2 Statement of Problem

Prior studies in the area on mental accounting paved way for empirical researches that explored the relation between disposition effect and stock returns. Recent empirical studies have also documented a number of irregularities in the behaviour of investors that seem to be at variance with the rational expectations paradigm. One of the most striking patterns is the

tendency of investors to sell their winners and to hold on to their losers (Somayeh, Vahideh, Mahdieh, & Mohammad, 2013). Such behaviour termed the "disposition effect" by Shefrin &Statman (1985), has been uncovered in a variety of data sets and time periods.

The existence of the disposition effect seems undisputed, however there has not been an agreement among investment professionals on an explanation for this phenomenon. The empirical literature favours a behavioural explanation offered by Shefrin &Statman (1985), which combines the ideas of mental accounting (Thaler 1985) and prospect theory (Kahneman &Tversky 1979). Shefrin & Statman (1985) argue that investors keep a separate mental account for each stock. Within that account, investors maximize an "S"-shaped valuation function, which is similar to a standard utility function except that it is defined on gains and losses relative to a reference point (usually the purchase price), rather than on absolute wealth. This valuation function is concave in the gains region and convex in the loss region. Thus, if a stock appreciates in price, the investor's wealth will be in a more risk-averse part of her valuation function, this makes a sale more likely. In contrast, if the stock is trading below its purchase price, the investor becomes risk-loving, and will hold on to the stock for a chance to break even. In addition, there are rational explanations for the disposition effect. First, portfolio rebalancing considerations suggest that investors who do not hold the market portfolio should respond to large price

increases by selling some of the shares they hold in these stocks to restore diversification (Lakonishok & Smidt 1986). Second, since transaction costs tend to be higher for lower priced stocks, and since losing investments are more likely to be lower priced, investors may refrain from selling losing investments simply to avoid the higher transaction costs (Harris 1988). Finally, disposition behaviour may result from informational differences across investors (Lakonishok & Smidt 1986).

An investor who purchased a stock on favourable information may sell it when the price goes up because she rationally believes that the stock price now reflects this information. On the other hand, if the price goes down, the investor may continue to hold it, rationally believing that her information has not yet been incorporated into the price (Lakonishok & Smidt 1986). These alternative rational explanations have been challenged by recent empirical studies. Odean (1998) argued that investors who sell their entire holdings of a stock — and who are thus unlikely to be motivated by diversification — continue to prefer selling winners. In addition, he provides evidence against the hypothesis that higher trading costs for lower priced stocks are responsible for the disposition effect. Even when differences in transaction costs are controlled, investors appear to be reluctant to realize their losses. Moreover, Odean (1998) & Brown et al. (2002) further argued that the investors' preference for realizing winners rather than losers does not appear to be justified by the subsequent stock

performance. Both studies find that, on average, winners that are sold, out perform over the subsequent six (6) to twenty four (24) months, losers that are not sold, which leads them to reject the information-based explanation suggested by Lakonishok &Smidt (1986).

Evidently, large majority of investors exhibit the disposition effect and they also suggest that disposition does indeed drive momentum, however, their study is based on a relatively small sample with a short time frame. (Shumway & Wu: 2006). It seems that they have not enough statistical power to estimate the relation between the disposition effect and momentum very precisely.

Moreover, most of the studies reviewed, followed Odean's (1998) methodology based on individual trading data and this was supported by classical researchers (Feng & Seashole 2003; Chen et al 2004; Ng & Wu 2007). Brown, Chappel Rosa, and Walter (2002), further argued that Odean methodology suffer from range of limitations. For instance they did not use aggregate market data to examine the relation between the disposition effect and momentum. It sets reference price as the average of the purchase price.. Also this approach does not consider the mental accounting theory.

More so, most work on momentum and disposition effect have not incorporated sufficient vital accounting information in their studies, hence

behavioural reaction in stock prices due to changes in accounting numbers is lacking in momentum and disposition effect literatures.

Therefore, to empirically ascertain the relation between the disposition effect and momentum effect in the Nigerian stock market based on the combined framework of prospect theory and mental accounting (PA/MA) is a very important issue because it will incorporate sufficient vital accounting information which will give more understanding to behavioural reaction in stock prices due to changes in accounting numbers and no such work has been done in Nigeria to the best of the researcher's knowledge.

Therefore this work is an attempt to shed light on relationship between the disposition effect and momentum effect in the Nigerian stock market using a relatively large aggregate market-wide dataset based on the combined framework of prospect theory and mental accounting.This is one of the gaps in knowledge which this work intends to fill in.

1.3 Objectives of the study

The main objective of this study is to examine the relationship between the disposition and momentum effect on equity shares in Nigerian based on the prospect theory and mental accounting. This objective is pursued through the following specific objectives:

1. To determine the extent to which rising stock prices increase the sales of shares

2. To investigate the extent to which rising stock prices increase purchases of shares

3. To ascertain if accounting information interaction with disposition effect has any relationship with the sale of stocks

4. To determine the extent accounting information interaction with momentum effect has any relationship with the purchase of stock

1.4 Research Questions

Given the specific objectives of this study, the following research questions have been formulated to guide this study

1. To what extent do rising stock prices increase the sales of shares?

2. To what extent do rising stock prices increase purchases of shares?

3. How does accounting information interaction with disposition effect affect the selling of stocks?

4. To what extent does accounting information interaction with momentum effect affect the purchase of stock?

1.5 Research Hypotheses

In light of the research questions formulated in this study, the following hypotheses have been formulated and stated in their null form as follows:

H_{01}: Rising stock prices are not significantly related to increase in the sales of shares.

H_{02}: Rising stock prices are not significantly related to increase in the purchases of shares

H_{03}: Accounting information interacting with disposition effect has no significant effect on the selling of shares in the Nigeria stock market

H_{04}: Accounting information interacting with momentum effect has no significant effect on the purchase of shares in the Nigeria stock market

1.6 Significance of the Study

This study will be of interest to the various stakeholders explained in the section below:

Investors: This work will be of great benefit to investors in stock market in that it will help them in proper analysis of the events of the stock market in other to know when best to sell or buy stock for maximum profitability.

Financial Advisers/Analysts: It will also help the financial advisers / analysts in that it will serve as raw materials in their financial analysis in portfolio management.

Executives Of Companies: It will help the executives of companies to know when to make its stock available for a subsequent, or follow-on, offering, so as to optimize profit because if investors are optimistic about the company's future they will have the tendency to trade on the stock, even in the face of stock prices declined.

Day Traders: It will be of great benefit to day traders in that it will help in providing answers to the anomalies in stock trading and improve on their forecast and predictions in the hope that their stocks will continue climbing in value for the seconds to minutes they own the stock, allowing them to lock in quick profits so as not to run into extreme risks

Emerging Countries: It has been said that there is no reliable investment risk predictive tools in emerging countries. With the expected success of this study and taking into account the local environments, it is believed that other emerging countries will adopt the tools in their risk assessment process.

Government: The Nigerian stock market is classified as one of the world's emerging markets hence; information from this study may assist in repositioning the market.

Stock Market Authority: This group might find the results helpful in avoiding any unexpected market catastrophe, controlling market strategies, improving the stock market industry, and assessing the degree to which the stock market may need to be reformed.

Researchers: This research contributes to existing financial knowledge, especially in the area of understanding the relationship between mental accounting analysis of disposition and momentum effect in Nigerian stock market. This study also contributes to a new research direction for future researchers.

1.7 Scope of Study

This study is entirely centred on identifying the anomaly discovered in behavioural Accounting/finance; the tendency of investors to sell shares whose price has increased, while keeping assets that have dropped in value. To this end, time series data covering the period from 2007-2014wasadopted. This base period of 2007 was chosen because that was the period of the great decline in the capital market. The data consist of the Nigerian Stock Exchange (NSE) official publication on daily volume of shares traded, data from the

Securities and Exchange Commission (SEC), Nigerian Stock Exchange (NSE) and the Nigerian Bureau of Statistics (NBS).

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter reviewed relevant literatures, organized and presented under three major headings as follows:Conceptual Review, theoretical framework, empirical review and summary of reviewed literature.

2.2 Conceptual Review

This section of literature review is discussed here bearing in mind different constructs and concepts raised with regard to the subject of the research. The review is here broken into the following sub-sections:

2.2.1 Disposition Effect defined

The ‘Disposition Effect’ is the tendency to sell assets that have gained value (‘winners’) and keep assets that have lost value (‘losers’). (Weber &Camererb 1998). Disposition effect is shown to be inconsistent with explanations based on information, rebalancing, or tax considerations. It is an anomaly discovered

in behavioural Accounting/finance. It can be explained by the idea that people value gains and losses relative to a reference point and the tendency to seek risk when faced with possible losses, and avoid risk when a certain gain is possible, this is an aspect of prospect theory.

Investors are willing to realize gains but are reluctant to realize losses. This is irrational behaviour, as the future performance of equity is unrelated to its purchase price,(Camerer 2000). It is considered an irrational behaviour, because selling and holding decisions should depend on the perceived future value of a security, but not the purchase price.

2.2.2 Description of Disposition Effect

Investors are less willing to recognize losses (which they would be forced to do if they sold assets which had fallen in value), but are more willing to recognize gains. If anything, investors should be more likely to sell "losers" in order to exploit tax reductions on capital gains. (Barberis & Xiong 2009). In a study by Odean (1998), this tax-motivated selling is only observed in December, the final opportunity to claim tax cuts by unloading losing stocks; in other months, the disposition effect is typically observed. (Odean 1998). The disposition effect can be partially explained using loss aversion as in the work of Weber & Camerer (1998). More comprehensive explanations like Shefrin & Statman

(1985) Frazzini (2006) also used other aspects of prospect theory, such as reflection effect.

2.2.3 Concept of 'momentum'

Momentum is the rate of acceleration of a security's price or volume; it refers to the anomaly that past winners continue to outperform past losers. Momentum is the phenomenon that securities which have performed well relative to peers (winners) on average continue to outperform, and securities that have performed relatively poorly (losers) tend to continue to underperform. The idea of momentum in securities is that their price is more likely to keep moving in the same direction than to change directions. In technical analysis, momentum is considered an oscillator and is used to help identify trend lines. Once a momentum trader sees acceleration in a stock's price, earnings or revenues, the trader will often take a long or short position in the stock in the hope that its momentum will continue in either an upward or downward direction. This strategy relies on short-term movements in a stock's price rather than fundamental value, and it is not recommended for novices. (Muga & Santamaria 2007)

2.2.4 Momentum effects

The momentum effect in the stock market refers to the tendency for a share's price to continue in the same direction. More specifically, shares that

performed well in the past tend to continue performing well and shares that performed poorly in the past tend to continue performing poorly. The momentum effect implies that stock returns is predictable based on past returns to some extent. Since Jegadeesh &Titman (1993) demonstrate that momentum trading strategies that are designed to exploit the momentum effect by buying past winners and selling past losers generate significant profits in the US stock market, a great deal of research has reported the momentum effect in various stock markets, such as European stock markets [(Rouwenhorse 1998), (Griffin, Ji & Martin 2003), (Antoniou . 2007), (Asness, Moskowitz, & Pedersen. 2013)], Asian stock markets [(Chui, Titman & Wei 2000), (Griffin et al. 2003)], African stock markets (Griffin et al. 2003), and Latin American emerging markets (Muga &Santamaria 2007). Thus, there is sufficient evidence that shows the momentum effect is not an artefact of data snooping. Indeed, the momentum effect has become one of most puzzling and intriguing financial phenomena.

The existence of momentum is a well-established empirical fact. The return premium is evident in 212 years of U.S. equity data,(Geczy &Samonov 2013) dating back to the Victorian age in U.K equity data,(Chabot, et al 2009) in over 20 years of out-of-sample evidence from its original discovery, in 40 other countries, and in more than a dozen other asset classes.(Asness, et al 2013). Some of this evidence predates academic research in financial economics,

suggesting that the momentum premium has been a part of markets since their very existence, well before researchers studied them as a science.

However, it is known that value stocks produce superior returns over long investment horizons, but in the short run the opposite seems to hold. Jegadeesh &Titman (1993) find that portfolios with high returns in the recent past continue to produce above-average returns over a three to twelve month horizon. Chan, Jegadeesh &Lakonishok (1996) provide evidence that this momentum in stock returns can be partially accounted for by the slow adjustment of the market to past earnings surprises mentioned earlier. They also show that stock prices under react to information and respond gradually to earnings news, and that a substantial portion of the momentum effect is concentrated around subsequent earnings announcements. Hong, Lim, &Stein (1999) find that an under reaction of stock prices depends on analyst coverage, which is pronounced with bad news.

An extensive body of recent finance literature documents that stock returns are predictable based on past price history. Numerous studies examine the profitability of trading strategies that exploit interdependence of time-series returns and show that these strategies could lead to abnormal returns.

Also, investors tend to "flock" together. The herding behaviour is documented by several studies. For example, Grinblatt, Titman, &Wermers (1995) find that

the majority of mutual funds purchase stocks based on their past returns, namely by buying past "winners", and that funds showing the greatest tendency to buy past winners also tend to invest more intensely "with the crowd" than other funds do. Also, Lakonishok, Shleifer, &Vishny (1992) find evidence of pension fund managers either buying or selling in herds, with slightly stronger evidence that they heard around small stocks.

Several recent studies evaluate the profitability of the strategy for international equities. Rouwenhorst (1997) finds that momentum strategies are profitable for equities in 12 European markets, and Rouwenhorst (1999) also reports that emerging market stocks exhibit momentum. On the other hand, Bekaert, et al (1997) find that momentum strategies are not consistently profitable for emerging markets, although they perform better when the investable indexes are examined.

Hameed&Yuanto (2003) state no momentum effect by examining the profitability of relative strength strategies over intermediate horizons in six Asian stock markets (Hong Kong, Singapore, Malaysia, South Koria, Taiwan & Thailand).

However for the Chinese stock markets, King (2002) examined whether past returns predict future price movements over a horizon of 1 to 26 weeks and report some evidence of return continuations over the holding period of 20 to

26 weeks. Surprisingly, their evidence on intermediate- horizon return momentum is different from that of other Chinese market studies. In the study by Shumway &Wu (2006), the authors examined the nature of momentum effect in Shanghai Stock Exchange, stock during the period from the beginning of 2001 to March, 2004. They stated that there is no apparent momentum in their Chinese data as past returns do not forecast future returns. Moreover, Wu (2002) found that the pure momentum strategy in general does not yield excess returns in the Chinese stock markets. Wang (2004) also documented no intermediate-horizon momentum return but contrarian profits in the Chinese stock markets by examining the role of past stock performance in the prediction of intermediate – and long- horizon returns for individual stocks over a period from July 1994 to December 2000.

2.2.5 Value relevance of accounting information

Value relevance of accounting information addresses the degree to which accounting information summarizes the information that is impounded in share prices. However, Francis &Schipper (1999) defined market value relevance as a statistical association between financial information and prices or returns, and that accounting based measures explain market prices in a good way, under the efficient market assumption that pricing reflects available information (McLean & Zhao, 2014). Similarly, Vishnani & Kr.shah (2008) posited that value relevance implies ability of the financial information contained in the

financial statements to explain stock market measures. The key commonality in these definitions is that an accounting amount is deemed value relevant if it has a significant association with security market value.

In a more thorough explanation, Francis & Schipper (1999) advocatedfour approaches for examining the value relevance of accounting information and they are (i) the fundamental analysis view of value relevance (ii) the prediction view of value relevance (iii) the information view of value relevance and (iv) the measurement view of value relevance(Cheng, Ioannou, & Serafeim, 2014).

The first approach is that financial statement information influences stock prices by capturing intrinsic share values toward which stock prices drift. According to this approach, accounting information causes change in share price trend in a similar way and with the same direction of market prices through its inherent value (Malherbe, 2014). Under the second approach, financial information is to be value relevant if it contains the variables used in a valuation model or assists in predicting those variables (Hartzell & Starks, 2014). In this regard, if financial statement information helps forecasting the inherent value characteristics, it is considered as relevant values. The third approach interprets information to be value relevant when it is used by investors for share pricing (Holderness, 2014). The general purpose of such studies is examining the capital market reaction against disclosure of accounting information within short time periods like few days or several

weeks before or after announcing the profit rate. In the fourth approach, information is equally considered value relevant if there is a statistical association between financial information and firm value. It is characterized by analysis of long term relationships, known as association studies (Beisland, 2009).Association studies are not concerned with how fast the market reacts to new information, as their horizon ranges from three or four months to several years(Cheng et al., 2014).

There have been numerous pragmatic and practical studies which have talked about value relevance in developed countries and now there is a growing literature of value relevance for the emerging economies too, like Nigeria.

Holthausen &Watts, (2001) indicated that the valuation research which aims at investigating the empirical relation between stock market values and particular accounting numbers for the purpose of assessing an accounting standard are broadly categorized as the 'value relevance' literature".

Various academicians Penman (1989), Harris & Ohlson (1990), Francis & Schipper (1999), Barth, Beaver & Landsman (2001) have given their interpretation of the term value relevance. However the key commonality in all the definitions remains that an accounting amount is deemed to be value relevant if it has a significant association with equity market value.

According to "Ou & Penman,(1989,1996) and Harris & Ohlson (1990), The variable is value relevant if it enables the prediction of stock price by capturing the intrinsic value of the stock and therefore value relevance is measured as the profits generated from implementing accounting based trading rules".

According to Beaver (2002), "value relevance research investigated the association between a security price dependent variable and a set of independent accounting variables".

Value Relevance means the accounting amount is associated with some measure of value. In simple words it implies ability of the financial information contained in the Financial Statements to explain the stock market measures. Simplifying it still further, by value we mean creation of wealth and relevance means the information that has the ability to influence decisions.

In a study by Svensson & Larsson (2009) value relevance was described as the ability of accounting figures to capture and summarize information that affects stock prices.

In line with the ideas of Svensson & Larsson (2009), Kees & Praag (2007) affirmed that information disclosed by an event should be termed value relevant if it updates investor's beliefs about the value of the firm. These definitions are consistent with earlier studies (e.g. Shevlin, 1996; Heflin & Shaw, 2000).

From the literature we can say that value relevance is not just the ability of accounting information but also of non-financial information which is available to equity shareholders directly or indirectly and that affect stock prices.

2.2.6 Review of Accounting Information

Nilsson (2003) mentioned that there is a large body of literature studying the relationship between accounting information and the stock market because of the importance of accounting information to equity investors

Ball & Brown (1968) were among the first who brought to light the relationship between stock prices and information disclosed in the financial statements. They were the pioneers for studying the relationship between earnings and returns and showed a significant relationship between them. This study was path breaking and since then various studies were undertaken in various aspects of value relevance. Following this study various studies were done in the developed countries and the results confirmed the positive association between stock returns and earnings.

The other break through study was done by Ohlson (1995) who depicted in his work that the value of a firm can be expressed as a linear function of book value, earnings and other value relevant information. Ohlson (1995) models became the focal point of most accounting based research.

Amir,Harris, & Venuti (1993) were among the first who used the term “value relevance” in the context of information content of accounting figures. An accounting figure or accounting ratio is value relevant if it has the significant strong predicted association with the stock prices and stock market indicators such, price-earnings (P/E) or price to book (P/B) ratios.

The primary purpose of the value relevance studies is to find whether the financial statements published by the companies provides the investors and other stake holders the necessary, reliable and qualitative information for decision making or not. There has been an increase in the research of value relevance of financial statements as listed companies use financial statements to communicate with the various stakeholders and moreover lot of emphasis has been done by the various regulatory authorities on improving the quality and transparency of the financial reporting. The statistical association measures whether investors actually use the information in question in setting prices or not. According to the International Accounting standard Board 1989, the purpose of financial statement is to provide information about the financial position of the company which is useful to the investors and if the information is useful to the investors it would be of help and of need to other users also. Hendricks (1976) mentioned the main purpose of the financial statements is to provide information about a company in order to make better decisions for users particularly the investors.

According to Swati (2015) in his study on "A Review on the Literature of Value Relevance of Financial and Accounting Variables", stated that different stock markets have different value relevance and association between accounting numbers and stock prices is declining over time but at the same time there are contradictory views declaring and affirming the claim that accounting information is losing its value relevance is precipitate and early. He further stated that the inclusion of intangible assets as non-reporting of such assets in the financial statements is becoming the major cause of declining relevance. (Swati 2015).

Also in the work of Latifat, (2015) the earnings per share and book value of equity are relevant in determining the value of shares in Nigerian Company in the post IFRS era. (Latifat 2015)

Angaha (2015) in his work 'the relationship between earnings and changes in earnings to stock returns in the Nigerian stock market' finds out that, there is a significant relationship between accounting information and stock prices in the NSE. The conclusion drawn is that there is a significant relationship between earnings and stock returns in the Nigerian stock market, hence earnings are related to both price and return in the Nigerian stock market, while change in earnings is not significantly related to stock return (Angaha 2015)

Omokhudu & Ibadin also said that earnings, cash flow and dividends were statistically significantly associated with firm value but book value was related but not statistically significant. This was in their paper The Value Relevance of Accounting Information: Evidence from Nigeria (Omokhudu & Ibadin 2015)

Germon & Meek (2001) stated that financial statements should also increase the knowledge of the users and give a decision maker the capacity to predict future actions.Oyerinde (2009) described financial statement as an indispensable requirement for stock market growth.

Dung (2010) tested the value-relevance of financial statement information on the Vietnamese stock market. The results showed that the value relevance of accounting was statistically meaningful, though somewhat weaker than in other developed and emerging markets.

According to Dechow (1994), earnings had a stronger association with returns as compared to cash flows. The other study by Cheng et al (1996) also asserted that both earnings and earnings changes are value relevant.

Studies by Kothari (2001), Haley & Palepu (2001) have extensively reviewed studies examining the relation between accounting information and security prices. These studies concluded that financial reports provide new and relevant information to investors although the relevance has considerably come down.

Value relevance of book value, earnings and cash flows has also been studied by Gee Jung & Kwon (2009) in Korean stock market, and he stated that book value is the most value relevant variable and cash flow is more value relevant than earnings. Lev (1989) found that the correlation between earnings and stock returns is very low and instable over time. The value relevance research for earnings also affected by the quality of earnings and Persistence in earnings determines the quality of it. It is a fact that higher the persistence and consistency in earnings higher would be the quality of earnings. A firm's earnings are more value relevant if they are permanent and less volatile.

Brief & Zarowin (1999), in their study on value relevance of dividends, book value and earnings, pointed out that the variables, book value and dividends, have almost the same explanatory power as book value and reported earnings. Hartono (2004) examines the effect of a sequence of positive and negative dividend and earning information on stock prices. Data for this study was collected from Centre for Research in Security Prices (CRSP) tapes in the US from 1979 to 1993. Results show that the positive recent earning information has significant relation with stock prices when it follows negative dividend information, and the negative recent earning information has significant relation with stock prices when it follows positive dividend information. Molodovsky (1995) discussed dividends as the hard core of stock value. In the generating and communicating of wealth of companies, accounting plays a

very important role and the information associated with it should reach to the investing community.

Martani, Mulyono & Khairurizka (2009) in their study titled "The effect of financial ratios, firm size and cash flow from operating activities in the interim report to the stock return" examined the value relevance of accounting information in explaining stock return. The study used profitability, liquidity, leverage, market ratio, size and cash flow as proxy of accounting information. The samples of the study are listed companies in manufacturing industries that actively trading in period 2003-2006 on Indonesia Stock Market. The study found that NPM, ROE, DER, PBV have positive effect to the market adjusted return as stock return variable.

Ball & Brown (1968) and many more have examined the value relevance of book value, earnings and cash flows. A lot of studies report that book values and earnings have significant information content in equity valuation (Lev 1989; Ou & Penman 1989; Barth 1991; Easton & Harris 1991; Penman 1991; Easton, Harris & Ohlson (1992); Ou & Penman 1993; Dechow 1994; Ohlson 1995; Feltham & Ohlson 1995; Penman 1996; Barth & Kallapur 1996; Easton 1999 et.al.).

Abhijit Dutta (2001) has examined the investors reaction to information using primary data collected from 600 individual investors and observes that the

individual investors are less reactive to bad news as they invest for longer period.

Various studies have tried to associate the accounting variables with the share price but the results are mixed and do not lead to any firm conclusions. Studies relate to the developed nations has a mixed result where as studies relating to developing economies like Nigeria, Srilanka, Vietnam, India, shows the accounting variables or information is value relevant.

2.2.7 Concept of Value

Lawani, Umanhonlen & Okolie (2015), Posited that firm value as the total value of a company's stock and accounting figures are value relevant if they can capture information that affects the value of a company's stock. However, firms and other assets are valued differently depending on the context. Runstem (1998) as cited in Lawani, at al (2015) defined three value concepts: economic value, market value, and accounting value. Economic value refers to the notion that the value of any asset equals the future cash flows that can be gained from the asset. This value concept is consistent with the discounted cash flow model, which states that the value of an asset equals all future cash flows discounted to present value. Market value is the value of a firm on the stock market and is based on trade and investors' consensus beliefs about firm value. Barthet al (2001) as referenced in Lawani, at al (2015) opines also that,

information is often assumed to be the basis on which investors' beliefs and expectations about market value are formed, arguing that observed stock prices could be viewed as a measure of the market's valuation of the claim on companies' future value creation and concludes that stock prices serve as indicators of the market's expectations of the future success of the firm. Accounting value refers to the book value of equity found in the statement of financial position. While information is often assumed to be the basis on which investors' beliefs and expectations about market value are formed. Accounting value is the result of a measurement procedure that corresponds to accounting regulations and law. Accounting generates a description of the firm in an attempt to measure and describe its financial position and performance.

2.2.8 Accounting Regulations and Value Relevance

According to Beaver (2002) as referenced in Lawani, at al (2015), value relevance research requires an in-depth knowledge of accounting institutions and accounting standards. He argues that differences in accounting regulations between countries favour research based on case country studies rather than comparative studies where the researcher has limited possibilities to understand the accounting institutions and standards of all countries researched.

2.3 Theoretical framework

According to the rational decision-making theory, investors tend to make rational decision based on the trade-off between the risk and return (Chui, 2001). However, this theory cannot explain the substantial impact of investors' behaviour, such as the disposition effect. There have been four major theories employed to elucidate the disposition effect in conjunction with theories borrowed from psychology (Shefrin & Statman, 1985). A discussion on these theories is briefly clarified below as follows:

2.3.1 The prospect theory

The most widely accepted among the theories as regard disposition effect is the prospect theory (Kahneman & Tversky, 1979). It is a descriptive model trying to describe how investors evaluate potential gains and losses with uncertain outcomes. It states that there are two stages in the decision-making process for investors. One is called the "editing stage". That is, investors distinguish losses from gains based on the notion of reference point, which commonly refers to the purchase price. The second phase is labelled the "evaluation stage". Investors employ an S-shaped value function to calculate and maximize their utility. The S-shaped value function is concave in the gains region, but convex in the losses region, implying risk aversion for winning stock and risk seeking for losing stocks, relative to a reference point which is usually the price at which the stocks have been bought. Risk aversion causes the trader to realize any profit quickly to avoid them turning into losses while risk seeking causes

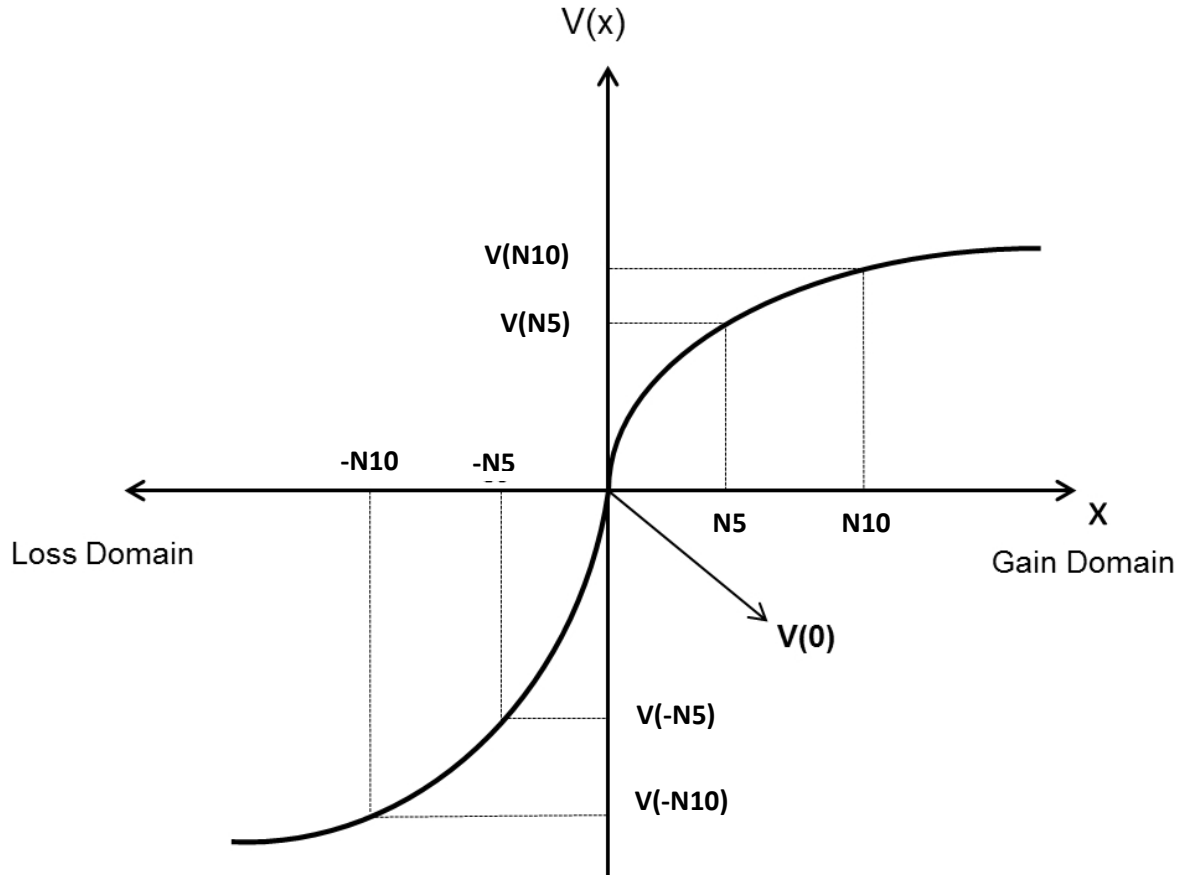
the trader to have a greater appetite for large losers than for small losers and to let losses run in hope of a recovery, thus inducing the observed disposition effect (Shefrin & Statman 1985; Weber & Camerer 1998; Odean 1998; Grinblatt & Han 2005). Particularly, comparing with the purchase price, investors with gaining stocks are assigned in the domain of gains. They are tending to profit their winners because they prefer to lock in the domain of gains. In contrast, investors with losing stock are assigned in the domain of losses. They are inclined to hold on to their paper losses and reluctant to realize their losers because of the hope that the prices will head back.

2.3.2 Prospect Theory and the Disposition Effect

Here we talk about the coherence of the disposition effect and prospect theory. The disposition effect describes the phenomenon that investors predominately sell stocks which have increased in value, whereas they tend to keep capital losses (Shefrin & Statman, 1985). It builds on Kahneman's & Tversky's (1979) prospect theory assuming that subjects are sensitive to reference points. The utility is described by an S-shaped value function: V (x). It values all wealth changes (x) in relation to the reference point. The reference point is the starting point of no wealth change. The function is convex in the loss domain and concave in the gain domain. Assume that an investor purchased one stock for ₦60 which is the reference point (see figure 2.1 below). A negative wealth change of ₦5 occurs in period one. According to the reference-point concept,

the investor finds oneself in the “Loss Domain”. The aforementioned situation is depicted in the “Loss Domain” segment (left part). If the investor sells the stock, this would be a certain loss and yields a utility of *V* (-₦5). Assume for period two that the stock's price can either increase back to ₦60, or further decrease to ₦50. The chances for both events are equal.

Figure 2.1: The influence of a reference point on the disposition effect.



Source:Frydman and Rangel 2014(Adopted)

If the stock "breaks even" to ₦60, the utility would be: V (0). If the stocks decrease to ₦50, the utility is: V (-₦10). The utility change of the "break even" can be written as: Δ_1 = V (-₦5)-V (0), whereas the utility change of a further decrease is: Δ_2 = V (-₦10) - V (₦5). The diagram shows that: $\Delta_1 > \Delta_2$. Hence, the potential utility increase of the "break even" is higher than the potential utility loss of a further decline. The convex shape of the utility function leads to this disparity. Investors become risk-seeking whenever they are in the loss domain. The reason is that the utility gain of breaking even is higher than the utility loss of a further decline. This example justifies why investors avoid realizing capital losses and showing disposition effects.

Now think of the case of capital gains. Assume that an investor has bought a stock at a price of ₦60. In this case the stock's price has increased to ₦65 in period one. In period two the stock's price can either fall back to the purchase price (₦60) or it further increases to ₦70. The chances of both events are identical. This scenario is depicted in the "Gain Domain" segment of Figure 2.1 (right part). If the investor sells the stock at ₦65, her utility will be V (₦5). By contrast, if the stock price decreases, her utility will decline to V (0). The wealth change of the decrease (to ₦60) can be written as: Δ_3 = V (₦5) - V (0). However, if the stock further increases to ₦70, this will yield a utility of V (₦10). The wealth change of the increase can be expressed as: Δ_4 =V (₦10) - V (₦5). The diagram in figure 2.1 illustrates that: $\Delta_3 > \Delta_4$. Thus, the drop in profits leads to a utility decrease which is more pronounced than the utility change resulting from a stock increase by the same magnitude. This is due to the concave shape of the function in the gain domain. Investors therefore behave risk averse, i.e., they tend to realize their gains. This example shows why investors tend to realize capital gains immediately. The phenomenon of reference-point dependent risk preferences is called "refection effect" (Kahneman & Tversky, 1979). Figure 2.1 has demonstrated how reference points and the refection effect can lead to investors exhibiting a disposition effect.

2.3.3 Mental Accounting Theory

The second theory trying to clarify the disposition effect is mental accounting. Grinblatt & Han (2005) suggest that the leading explanation for the disposition effect is prospect theory combined with a behavioural phenomenon known as 'mental accounting'. According to Thelar (1980) Mental Accounting is the process that investors set reference points for their accounts to determine gains and losses. Then, they keep track of gains and losses in their mind on (each) individual stock they invested rather than at the portfolio level. According to Thaler (1985), the main idea of mental accounting is that when investor invests in stock, she/he opens a mental account. The framework of mental accounting was constructed by Thaler (1985) as a foundation for the way decision-makers frame decisions. Thaler (1985) developed the model using a hybrid of cognitive psychology and microeconomics, and suggests that a mental accounting system induces individuals to violate simple economic principles. Accordingly, decision-makers tend to segregate the different types of decisions into separate mental accounts, before applying prospect theoretic decision rules to each account separately, ignoring possible interactions. In the world of finance, a new mental account is opened when a stock is purchased, and the asset purchase price serves as a reference point for indicating gains and losses (Shefrin & Statman, 1985). In addition, the normative principle of fungibility, where money is not supposed to have labels attached, is relaxed in the mental accounting framework (Thaler, 1985). Consequently, even when an investor trades several stocks, he receives a separate component of utility from the

trading profit of each stock (Barberis & Xiong, 2009). This sort of sequential analysis seems to be a good description of behaviour (Thaler, 1985). As shares are exchanged between investors, the reference point is updated (Grinblatt & Han, 2005). Thus, an investor's behaviour is altered by his current position in wealth, not by either his lifetime winnings or losing nor by some event allocated to a different account altogether such as an increase in salary (Thaler, 1985). By using a reference point, the theory also capture 'mere' framing effects that affect choices, since choices often depend on the way a problem is posed as much as on the objective features of the problem (Thaler, 1985). In addition, the loss aversion feature can illustrate mental accounting, since one of the major obstacles standing in the way of loss realization of a particular investment is the reluctance to close a mental account at a loss (Shefrin & Statman, 1985).

Thaler (1985) investigated values of outcomes, and specifically whether jointly or separate valuation of gains and losses produces greater utility, referred to as integration or segregation of outcomes. He presents four principles: segregate gains, integrate losses, cancel losses against larger gains and segregate 'silver linings' (losses and gains of similar amounts). In the case of gains, it is desirable to have each gain evaluated separately, and in the case of losses the concavity of the loss function implies that adding a loss to an existing loss will have smaller impact. In fact, mental accounting can be regarded as part of an

individual's solution to self-control problems. Barberis & Xiong (2009) also suggests that mental accounting can explain why investors are reluctant to immediately transfer the proceeds from selling a stock to another similar stock (called 'tax swaps'). In theory, loss aversion from selling a losing stock could be reconciled by a purchase of a stock with similar characteristics, so that a tax loss could be realized while the risk exposure is maintained. However, since the stocks are segregated into separate mental accounts, such a tax swap requires that one mental account is closed at a loss, which people are reluctant to do (Odean, 1998).

2.3.4 Seeking Pride and Avoiding Regret

Seeking pride and avoiding regret is the theory attempting to explicate the disposition effect, which has been demonstrated by Thaler (1985), Kahneman & Tversky (1979), Shefrin & Statman (1985) and further discussed by Shiller (1999). These works clearly verify that investors who are seeking pride and to avoid regret will generate a disposition to liquidate their successful investments quickly and hold on their losers to delay the feeling of regret.

2.3.5 Mean Reversion

The forth explanation theory of the disposition effect is mean revision. Mean revision states that investors believe poorer-performing stocks will rebound, and better-performing stock will decline in price. Andreassen (1988) states that

investors are inclined to accelerate winners too soon because they are afraid of expected lower future returns. On the other hand, investors tend to hold to the losers too long because they believe that prices will increase up to the average level or even above that level. As discussed by Odean (1998) & Camerer (1998), an irrational belief in mean revision leads to the disposition effect.

2.3.6 The prospect theory / mental accounting Framework

As indicated by Grinblatt & Han (2002, 2005) in their report, combining the prospect theory with mental accounting (PT/MA) framework works the best in explaining and clarifying the disposition effect and the profitability momentum strategy. Similarly, Frazzini (2006) also confirms that the prospect theory and mental accounting framework can act as a most effective way in explaining the disposition effect and the cross-section of stock return. There are three reasons to support the PT/MA framework.

One is that prospect theory alone is insufficient to explain the disposition effect and a full explanation of the disposition effect should include mental accounting (Zuchel, 2001; Kaustia. 2004). Shefrin & Statman (1985) states that the discussion of prospect theory emphasizes the importance attached to the editing phase (framing) as well as to the location of the reference point. It only explains the reluctance to sell a stock and realize a loss. However, it does not explain which gains and losses investors pay attention to changes in their total

wealth or changes in their individual stocks (Barberis & Huang, 2001). To solve these questions, mental accounting provides a process for investors to think about and evaluate their financial transactions. In particular, it shows investors how to set reference points for the accounts, how to determine gains and losses and how often to group and evaluate their stocks.

The second reason it that the PT/MA framework represents seeking pride and avoiding regret. As indicated by Thaler (1999), the mental accounting of paper gains and losses is tricky. That is, a realized loss is more painful than a paper loss. The author illustrates that one prediction of mental accounting is that it is very painful for investors to close a mental account at a loss as it is painful for them to accept their wrong judgements. They wish to avoid regret. Moreover, Hirshlefer (2001) illustrates that investors want their good decisions to be recognized immediately in their mental accounts so that they can feel good about themselves. On the other hand, they postpone acknowledging their unsuccessful decisions because they are not ready to acknowledge that they have made a mistake. It suggests that mental accounting represent seeking pride and avoiding regret.

The third reason is that the PT/MA framework reflects mean reversion. The PA/MA framework suggests that an S-shaped value function differs from a standard utility function. It implies that winners are less describing than losers and there is a greater appetite for large losers than for small losers. In

particular, as investors are risk averse for winners, they will try to realize profits quickly to avoid decline in value. On the other hand, as investors are risk seeking for losers, they will take additional buying of losers in hope that prices will recover so they can break even in the future. As discussed earlier, mean revision states that investors believe poorer-performing stocks will rebound, and that better-performing stocks will decline in price. Thus, the PT/MA framework reflects mean reversion in explaining the disposition effect. This is also pointed out by Grinblatt & Han (2002), their findings show that disposition investors will sell their shares as prices rise when good news is revealed, while they will buy their shares as prices drop when bad news is exposed.

2.4 Empirical Review

2.4.1 The Disposition Effect Studies

Weber & Camerer (1998) was among the first study analysing disposition effects in the lab. Their major finding is that the majority of the subjects exhibit disposition effects. Chui (2001) replicates these findings for subjects in Macau. Weber & Welfens (2007) empirically and experimentally confirm that the disposition effect is stable across different tasks. Goulart et al. (2013) find that the disposition effect is higher for subjects who sweat more. Other experiments demonstrate that nudging helps to attenuate the bias. Frydman & Rangel (2014)

find that the effect decreases by 25% when subjects are presented purchase prices by the trading software. Fischbacher et al. (2014) pointed out that an automatic-selling option leads to more realized capital losses. The disposition effect also differs for various investors types. Da Costa Jr et al. (2008) & Rau (2014) found that significant gender differences between male and female investors exist. Da Costa Jr et al. (2013) revealed that the heuristic is weaker for experienced investors.

2.4.2 Book Value and Momentum Effect

Banz (1981) found that stocks with lower market capitalization (small stocks) tend to have higher average returns. There is also evidence that value stocks, that is, stocks with high ratios of a fundamental like book value or cash flow to price, have higher average returns than growth stocks, which have low ratios of fundamentals to price (DeBondt & Thaler, 1985; Fama & French, 1992; Lakonishok, Shleifer, & Vishny, 1994). Jegadeesh & Titman (1993) showed that U.S. stock returns also exhibit momentum: stocks that have done well over the past year tend to continue to do well. The value premium (higher average returns of value stocks relative to growth stocks) and momentum are also observed in international returns (Chan, Hamao, & Lakonishok, 1991; Fama & French, 1998; Rouwenhorst, 1998; Griffin, Ji, & Martin, 2003; Asness, Moskowitz, & Pedersen, 2009; Chui, Titman, & Wei, 2010).

However from the ongoing trend on capital market phenomena, it is discovered that, two of the most studied phenomena are the relation between an asset's return and the ratio of its "long-run" (or book) value relative to its current market value, termed as "value" effect, and the relation between an asset's return and its recent relative performance history, termed as "momentum" effect.

2.4.3 Momentum factor studies

The momentum factor is based on the observation by Jagadeesh & Titman (1993) that stocks with a high past performance (winners) outperforms stocks with a low past performance (losers) in the short-term horizon. The momentum strategy relay on buying the winner portfolio and shorting the loser portfolio.

The initial study of this pattern in stock returns was the work of DeBondt & Thaler (1985). They found strong evidence that recent good performing stocks become poor performers over 3-year and 5-year holdings. Jagadeesh & Titman (1993, 2001) performed an analysis similar to DeBondt & Thaler (1985) but with focus on a short-term investment horizon.

The evidence of momentum factor in returns of stocks in the international markets was proved by Asness [1994], Fama & French [1998, 2011], Rouwenhorst [1998], Liew & Vassalou [2000], Griffin, Ji, & Martin [2003],

Grinblatt & Moskowitz [2004], Chui, Wei, & Titman [2010], Vu [2012], Groot et al. [2012], & Asness, Moskowitz, & Pedersen [2013].

2.4.4 Value Factor Studies

The value effect is tendency of value stocks (stocks with low prices relative to their fundamentals) to outperform growth stocks (stocks with high prices relative to their fundamentals). Alternative value measures used in the literatures (The value factor derived from the research on the so-called value effect) are:

- B/M – the book value of equity divided by the market value of equity;
- E/P – the earnings after taxes divided by the market value of company's shares;
- Past sales growth – the compounded growth rate in net sale for three years prior to portfolio formation.

Formal statistical evidence of the value effect were presented by Stattman (1980) & Rosenberg (1985). They used the book to market ratio as a value indicator. Davis et al. (1994) confirmed the value effect in US stock markets. Chan et al. (1991) & Capaul et al. (1993) confirmed the value effect, but in outside the US markets.

The value effect was observed in stocks returns by Chan, Hamao & Lakonishok (1991), Fama & French (1998, 2011), Rouwenhorst (1999), Lam (2002), Ghargohori (2009), Chui, Titman, & Wei (2010), Asness, Moskowitz, & Pedersen (2013). Lischewski & Voronkova (2012), Kowerski (2006), Kowerski (2008), Żarnowski (2007), Czapkiewicz & Skalna (2010), & Borys & Zamcik (2011), confirmed the value effect on the Polish equity market.

Here also we briefly introduces the historical field from value investing and then discusses more deeply the previous findings related to momentum investing strategy and market liquidity.

2.4.5 Momentum and value

A fundamentally different kind of study by Asness, Moskowitz & Pedersen (2013) studied the global market portfolio of stocks, bonds, currencies and commodities jointly and finds significant cross correlation between value strategy (and momentum strategy) between these global asset classes. They also document a negative correlation between momentum strategy and value strategy within and across these asset classes. This was also supported by Clifford et al (2013) who stated that, value and momentum returns correlate more strongly across asset classes than passive exposures to the asset classes, but value and momentum are negatively correlated with each other, both within and across asset classes. They document a positive relation between liquidity

risk and value and negative with liquidity risk and momentum, and claim that this may indicate that liquidity risk could be "*an important common component of value and momentum*" (Asness, Moskowitz & Pedersen: 2013). They argued for the limits of arbitrage as an important factor behind this phenomenon as momentum returns seem to be highest during times of low liquidity when trading costs are to be the largest and thus the net profits remain the same for arbitrageurs.

The differences and similarities of liquidity proxies are nicely demonstrated by the Asness, Moskowitz & Pedersen (2013). First, they find only little correlation between different liquidity proxies. This offers the explanation why their results from the relationship between liquidity and momentum differ from some of the earlier results (Pastor & Stambaugh, 2003; Sadka, 2006). Second, and much more interesting, result is that all of the liquidity proxies load negatively on the value returns and somewhat negatively on the momentum returns (Asness, Moskowitz & Pedersen, 2013). When these two results are combined it seems that even with the differences these liquidity proxies have, they are all connected to the value and momentum effects by some larger underlining effect. One explanation offered by Asness, Moskowitz & Pedersen (2013) is the restrictions that arbitrageurs may face during illiquid times and this explanation would also be in line with the limited arbitrage by Shleifer &

Vishny (1997) and slow moving capital by Mitchell, Pedersen & Pulvino (2007).

2.4.6 Share price and disposition effect

Research in behavioural finance demonstrated early that investors are prone to judgmental biases (Gärling et al., 2009; Hirshleifer, 2001) that are potential threats to the efficiency of financial markets (Fama, 1970, 1998). This motivated additional research showing that judgmental biases are less frequent among professional investors than among lay people investing in stock markets or among non-investors (example, students) (Feng & Seaholes, 2005; Hon-Snir et al., 2012). Judgmental biases may then not be a threat to market efficiency unless the number of lay investors is large. This still remains to be determined, for instance in stock markets where judgmental biases may influence trading volume and price volatility (Coval & Shumway, 2005; Gärling, 2011).

In recent years the research by Gigerenzer and his collaborators (Gigerenzer & Gaissmaier, 2011; Todd et al., 2012) has clarified that judgmental biases are frequently the outcomes of fast and frugal heuristics that are adaptive under the circumstances they are applied. It may be argued that when full information is not available (as seldom is the case), investors applying such heuristics in financial markets would outperform investors using analytical methods (e.g.

Bayesian updating, expected-value maximization). Also for this reason it is important to assess the influences lay investors have in financial markets.

Here we want to review why and how prices are influenced by one of the most well-documented judgmental biases in stock markets, the disposition effect referring to the common observation that winners are hold too short and losers too long (Shefrin & Statman, 1985). Here we see an affect account of the disposition effect followed by an individual-level analysis of the consequences the disposition effect may have for stock market prices.

In the prospect-theory explanation of the disposition effect, different definitions of the reference point have been evoked. The most common definition (e.g. Henderson, 2012; Odean, 1998; Shefrin & Statman, 1985) is the purchase price (selling at this price is referred to as the break-even price). This is an economic sound definition if the inflation is minimal during the holding period. Other definitions are still conceivable. If the purchase price is not remembered (not unlikely in an experimental setting), the reference point may be an average of previous prices (Weber & Camerer, 1998). Another possibility is that the highest or lowest previous price is the reference point. The reference point may also depend on the price trend, raising when it is upward and falling when it is downward. Baucells et al., (2011) developed and tested a model of reference point updating. Neugebauer & Selten (2006) find support that feedback has an impact on investors' decision. Kliger &

Kudryavtsev (2008) showed empirically that updated reference points based on quarterly earnings announcements accounted for the disposition effect. In our proposed affect account, an accepted realized gain or unacceptable potential loss corresponding to an aspiration price that varies dynamically with stock-price movements over time is based on the difference between the current price and the purchase price.

In order to understand the consequences the disposition effect has for stock prices, both the availability of sellers and buyers and their interaction need to be considered. Since the disposition effect is observed for selling stocks, in the work of Tommy Gärling & Mary Blomman (2014) they distinguish between the role of seller (in which some are prone to the disposition effect) from the role of buyer in which some execute a momentum strategy of buying winners (Hong & Stein, 1999) and others, believing in price reversion, execute a contrarian strategy of buying losers (Grinblatt & Keloharju, 2000). Furthermore, investors similarly believe that prices follow an upward, downward or no trend(Andreassen, 1990; Barberis et al., 1996). In the case of a trend with increasing prices, the disposition effect implies that stock shares are sold to momentum buyers at a price which is higher than the purchase price. Shareholders prone to the disposition effect sell the stock earlier at a price below the highest price at which shareholders not prone to the disposition effect sell. In the case of a downward price trend, the disposition effect implies

that stocks are either not sold or sold to contrarian buyers willing to buy at a lower price than the purchase price and lower than the price at which shareholders not prone to the disposition effect sell the stock. From the above as discussed by Tommy Gärling and Mary Blomman, they analyzed the interaction between sellers (prone to the disposition effect) and (momentum or contrarian) buyers when there is an upward or downward price trend. Their conjecture was that if there are enough buyers the prevalence of the disposition effect intensifies an upward price trend and attenuates a downward price trend. It seems to follow straight-forwardly from the definition of the disposition effect that if there is a sufficient number of (momentum) buyers when the prices go up, the prices would increase further. In contrast, when the trend is downward the prices will be upheld if the number of sellers is insufficient despite there are (contrarian) buyers willing to buy. The strength of the influence depends on the proportion of shareholders prone to the disposition effect. They also attempted to show how stock prices are affected by shareholders prone to the disposition effect. Positive or negative news (e.g. announcements of company earnings) start and maintain price trends in stock markets (Cutler et al., 1989). Thus, they do not claim that such price trends are caused by the disposition effect. Yet, they argue that there are conditions under which the disposition effect has consequences for the strength and duration of both upward and downward price trends. These consequences are most likely

changing over time due to changes in relative demand, that is, the balance between the number of buyers and sellers.

A role of the disposition effect may also be observed in stock markets when price movements occur for other than fundamental reasons (e.g. war threats, bank crises). If such upward price movements are large enough to make shareholders prone to the disposition effect offer their stock shares for sale, then a sufficient number of momentum buyers would likely intensify the upward price movement. Conversely, shareholders prone to the disposition effect would attenuate a downward price movement by not offering their stock shares for sale. however if the whole market turns upwards, more investors prone to the disposition effect would likely be attracted to buy, thus increasing the influence of the disposition effect on stock prices. A herding tendency among these shareholders (Hirshleifer & Teoh, 2003; Sias, 2004) may further strengthen the influence of the disposition effect.

2.4.7 Price Momentum Investment Strategy

Levy (1967) proposed the relative strength strategy, suggesting that it is unable to reject the random walk hypothesis of share price change in the short term. However, the relative strength of shares does exist in the long term. Jegadeesh & Titman (1993) found that investors can buy winner and sell loser portfolios to gain excess returns according to the short-term price continuation, which is

known as the momentum investment strategy. However, Debondt & Thaler (1985) proposed the contrarian strategy, arguing that the market has the over-reactions, namely, stocks of previous better performance will have reverse returns in the future; on the contrary, stocks of weaker performance may gradually rise in price in the future. Rouwenhorst (1998) found the existence of price momentum profits in 11 out of 12 European countries' stock markets. The findings are consistent with Jegadeesh & Titman (1993) on the U.S. stocks. Using NYSE, AMEX and NASDAQ markets during the period from 1977 to 1993 as the research subjects, Chan *et al.* (1996) developed the momentum investment strategy by four indicators including the stock returns of the past 6 months, the cumulative abnormal returns around the announcement of earnings, standardized unexpected earnings, and the earnings corrected amplitude by analysts in the past 6 months. The empirical results indicated that the price continuation does exist in the stock market. Mu-Lan Wang et al (2015).

In recent asset pricing literature that examines the effect of frictions on capital asset prices, Grinblatt et al. (1995) discovered that about 77% of the mutual funds in their sample use momentum strategies in their investment portfolios. Academic interest in the analysis of price momentum originated in the late 1980s/early 1990s due to the influence of explanatory power in the variation in stock returns and the failure of efficient market hypotheses. The first papers

were written by De Bondt & Thaler (1985, 1987), & Jegadeesh & Titman (1993). In the 1980-90s, it was proposed that the under reaction of stock prices to information contained in past stock returns led to excess return momentum. Stock price momentum investment strategies can be implemented on a single asset (trend-following strategy) or on a cross section of the same class of assets by creating long-short momentum portfolios based on relative past stock's performance. (National Research University "Higher School of Economics", Russia Research & Training Laboratory of Financial Markets Analysis, http://www.fmlab.hse.ru/ Investor is simultaneously buying past winners and selling past losers). The trend-following style uses different indicators (past average returns, moving average, ratios) to obtain signals to buy or sell the security by comparing with the current performance. The cross section momentum effect is observed among portfolios of the same class of assets (bonds, stocks) and based on their past relative performance (e.g. prior returns or measures of risk and return). An important element for the analysis of the cross section momentum effect is the method of portfolio formation. RSS (Relative Strength Strategies) and WRSS (Weighted Relative Strength Strategies) are used to form the momentum portfolios. It is clear there is a need for additional research to understand stock pricing in various capital markets and its anomalies, the role of momentum strategies in markets with specific macro conditions and relatively closed stock markets, as well as the role of momentum strategies during financial crisis periods.

Chui, Titman & Wei (2000) examined eight Asian markets, i.e. Hong Kong, Indonesia, Japan, Korea, Malaysia, Singapore, Taiwan & Thailand, with data from 1980 to 2000 documented that the momentum effect is relatively stronger for firms with smaller market capitalizations, lower book to- market ratios and higher turnover ratios.

The idea of constructing portfolios based on the inclusion of assets in the light of their past investment belongs to De Bondt & Thaler (1985, 1987). These authors on U.S. stocks showed that long-term past losers tend to outperform long-term past winners over the subsequent three to five years. This style of investing is called contrarian strategy. Jegadeesh & Titman (1993) discovered a price momentum strategy for portfolios' returns on U.S. stocks during the period from 1965 to 1989. They documented that portfolios with stocks that have performed well in the past continue to earn relatively high returns over 3 to 12 months. The stocks that have performed badly over the 3 to 12 month period tend to earn low returns in the future. The pioneering work of Jegadeesh & Titman (1993) inspired a vast number of academic papers devoted to the momentum effect, predominantly on the U.S. stock market. To prevent the possibility that the observed momentum phenomenon is simply a result of data snooping, researchers started to focus on international markets, examining different time periods. Numerous researchers have documented the momentum effect across different markets throughout the world (developed and emerging)

during different time periods and in a number of asset classes. Advocates of the rational approach contend that abnormal momentum returns are primarily attributable to bearing higher risk for investors. However, it still seems difficult to explain why the momentum effect occurs. There are several possible explanations, both for and against momentum, that are broadly divided into rational and irrational reasons. Adherents to the rational financial theories try to relate the momentum effect to risk-based explanations (Conrad & Kaul, 1998; Fama & French, 1996), the result of data-mining or data snooping bias and the underestimation of transaction costs and short-selling constraints (Korajczyk & Sadka, 2004). Fama & French (1996) attempted to explain the momentum effect by traditional asset pricing models (CAPM and 3FF models) but had to admit that significant abnormal returns from the momentum strategy still existed even after controlling for size and value factors. Korajczyk & Sadka (2004) concluded that trading costs in the form of bid - ask spread and price impact cannot fully explain the momentum anomaly. The failure of the search for an appropriate model with a rational explanation for the momentum effect has induced researchers to incorporate psychological aspects in their models. The irrational explanation can be described in behavioural models that are based on the way people behave. Over reaction and under reaction became extremely important concepts in behavioural Accounting and finance. According to Chan, Jegadeesh & Lakonishok (1996), & Daniel, Hirschleifer & Subrahmanyam (1998), the conservatism and representativeness biases can

explain the median-term (within one year) momentum effect. Conservatism bias supposes that investors are too slow in changing their opinions and are opposed to new information. Such under reaction to new information causes the positive serial returns correlations or a momentum effect. Hong & Stein (1999) predicted that stocks with slow information diffusion should exhibit stronger momentum. The authors propose a model describing the interaction between two types of investor: news watchers and noisy (momentum) traders. The former group makes forecasts based on fundamental analysis, ignoring the past price changes, whereas the latter condition their demand on past prices. Hong & Stein (1999) assume that fundamental information distributed gradually among news watchers results in an initial under reaction of the entire market, causing the momentum to begin. Momentum traders interpret this as a signal, pushing the price of past winners (losers) above (below) the fundamental value. The growing mispricing stimulates news watchers to take action in order to prevent it. Overreaction produces a long-term reserve on stock price. Therefore the Hong & Stein (1999) model explains both short-term continuation and long-term reversal. In contrast to previous theories based on under reaction, Daniel,Hirshleifer,& Subrahmanyam,(1998) developed a theory which argues that price momentum results from delayed overreactions induced by investor over-confidence and biased self-attribution. Irregularity in stock returns on different days of the week and months of the year has been featured on the U.S. market in the 1930s. Fred Kelly (1930) noticed that the worst day

for buying stocks is at the beginning of the week, (i.e. Monday is the day the price falls). Historically, the U.S. market has demonstrated that the maximum average market stock returns are recorded in December and January, zero returns in the summer months, and negative in September-October. Another January effect, called the January Barometer, has shown that investment results in January have some predictive power for the following 11 months. Grundy & Martin (2001) & Jegadeesh & Titman (1993, 2001), found an interesting seasonality in price momentum profits in the U.S. stock market. They document that the Winners outperform the Losers in all months except January, and the momentum portfolio earns significantly negative returns in January and significantly positive returns in months other than January. So, in the U.S. market, momentum strategies exhibit an interesting pattern of seasonality in January. The January effect refers to the most popular seasonal anomaly exhibited by stocks generating abnormal returns (predominantly for small-cap stocks). This pattern occurs in the last trading days in December and then continues to rally during the first weeks in January of the following year. The strategy based on the January effect implements buying small firms with negative annual returns in the prior period and selling them at the beginning of the year. Jegadeesh & Titman (2001) examined the momentum effect in January and on an entire sample, except for January, of the U.S. market. The obtained results confirm the January seasonality.

James & Roger (2013) in their work 'the impact of accelerated stock price increases on future performance' concluded that accelerated stock price increases are a strong contributor to both poor future performance and a higher probability of reversals. It implies that accelerated growth is not sustainable and can lead to drops. The acceleration mechanism is also able to reconcile the well-documented 2-12 month momentum phenomenon and one-month reversal.

2.4.8 Cash Flow from Operation, Disposition and Momentum Effect

Growth stocks, defined as stocks with low book-to-market ratios, clearly have lower future returns. But do growth stocks really have substantially higher future cash-flow growth rates and substantially longer cash-flow durations? This question is interesting in its own right, and is also important for the following two reasons. First, a series of recent papers provides an influential *duration-based explanation* of the value premium (Lettau & Wachter 2007, 2011 & Croce, Lettau, & Ludvigson 2010). Such an explanation has two key ingredients: the term structure of equity is downward sloping (long-duration assets earn lower expected returns); and growth and value stocks differ substantially in the timing of cash flows, in that cash flows of growth stocks grow faster. This explanation seems particularly promising, given that Binsbergen, Brandt, & Koijen (2010) found a downward sloping term structure of equity in the market portfolio. Is there enough difference between the timing

of cash flows of growth and value stocks to explain the value premium? Second, a class of asset pricing models (such as Campbell & Cochrane 1999 & Bansal & Yaron 2004) featured countercyclical risk premiums, which tend to make the term structure of equity upward sloping (long-duration assets earn higher expected returns). When applied to a cross section of assets with constant but different cash-flow growth rates, this feature implies that there is a "growth premium". That is, assets with higher expected cash-flow growth rates (and therefore longer cash-flow durations) have higher expected returns, after controlling for cash-flow risks. Alternatively, this implication can be driven by procyclical expected growth rates, as in Johnson (2002) & Bansal & Yaron (2004). Johnson (2002) used the growth premium driven by procyclical expected growth rates to explain the momentum effect. For ease of disposition, I only refer to countercyclical risk premiums in the work.

As regard to any setting in which we can observe growth premium, the existing empirical evidence paints a puzzling picture on whether cash flows of growth stocks grow faster. While several authors find that dividends of value stocks grow faster in rebalanced portfolios, conventional wisdom holds that in buy-and-hold portfolios (or at the firm level), growth stocks have substantially higher future cash-flow growth rates and substantially longer cash-flow durations than value stocks. This view is suggested by the name "growth stocks" and is apparently backed by empirical results. A number of authors,

including Chen (2004), have expressed views in line with the conventional wisdom. Dechow, Sloan, & Soliman (2004) & Da (2009) found that growth stocks have longer cash-flow durations. Fama & French did a classic paper on the value premium, (Fama & French (1992)).

Consistent with existing studies Huafeng (2013)found that in rebalanced portfolios, cash flows of value stocks robustly grow faster than growth stocks. But Contrary to conventional wisdom, growth stocks (low book-to-market stocks) do not have substantially higher future cash-flow growth rates or substantially longer cash-flow durations than value stocks, in both rebalanced and buy-and-hold portfolios. (Huafeng 2013).

2.4.9 Momentum strategy and operating cash flow

The momentum strategy is one of the best known technical trading strategies. Nevertheless there is an ongoing debate whether momentum profits suffice to cover the incurred transaction costs. Korajczyk & Sadka (2004) showed that momentum returns exceed transaction costs as long as up to US$5 billion are invested. Lesmond, Schill, & Zhou (2004) stated in contrast that momentum profits do not exceed their costs. Also according to Qinghao (2009) Momentum profits do not come from the expected return component. Instead, momentum

profits are mainly contributed by a large cash flow return component and partially offset by the negative discount rate return component. The cash flow return component is quite persistent both during the pre- and post-formation periods. This debate has according to Bonenkamp, Ute & Platz (2008) encouraged their research to finding a way to increase momentum returns so that they are undoubtedly realizable, choosing the operating cash flow as additional filtering variable, their results shows that the short-term momentum effect leads to high abnormal returns and high operating cash flows act as a safety net avoiding high negative returns. Other researchers investigates on the momentum effect (Sagi & Seasholes (2007)) showed that the momentum effect is stronger for firms with high revenue growth volatility, low costs, or valuable growth options. Figelman (2007) demonstrated that high return on equity and high earnings quality increase momentum returns.

2.4.10 Mental Accounting and Fundamentals of Stock Return

(a) Earnings per Share and Change in Stock Price

According Ahmed , Muhammad , Muhammad , Sabih & Umer (2014) In their study Impact of Dividend Policy, Earning per Share, Return on Equity, Profit after Tax on Stock Prices, discovered that dividend yield and dividend pay-out ratio which are both measures of dividend policy have significant impact on stock price. Dividend yield is negatively related with stock price and dividend

pay-out ratio is positively related with stock price which means that these results are against dividend irrelevance theory. Also Placido & Menaje, (2012) in his study on the Impact of Selected Financial Variables on Share Price of Publicly Listed Firms, discovered a strong positive correlation of EPS with share price.

In the same vain, Bangladesh et al (2015) in their study on Stock Price Adjustment to Corporate Accounting Disclosure: A Quantitative Study on Dhaka Stock Exchange. The resulting output revealed that "Earning per share", "Return on equity" and "Net asset value per share" (book value) positively influenced stock price movement. More so in the work of Etengu &Nasieku (2015), the study sought to empirically examine the relationship between earnings per share, return on equity, price earnings ratio and investment decisions as measured by market price per share. Generally, the findings of the study revealed a strong relationship between earnings per share, return on equity, price earnings ratio and share prices. Stresing further, Adebisi & Lawal (2015) whose study reviewed the factors that determine the firms' equity share price with special focus on the microeconomic factors. Dividend per share, earning per share, book value per share, dividend pay-out, price earnings ratio, and size of the firm have been identified as significant factors impacting the firm's equity share price. Also Anwaar (2016) Results shows that net profit

margin, return on assets has got significant positive impact on stock returns while earnings per share has got significant negative impact on stock returns.

Placido & Menaje, (2012) in their study on Impact of Selected Financial Variables on Share Price of Publicly Listed Firms in the Philippines, states that share investing is taking a risk and investors seek those financial measures that have significant impact on share price. Their paper aims to determine whether earnings per share (EPS) and return on assets (ROA) have significant influence on share price of publicly listed firms in the Philippines. Result disclosed strong positive correlation of EPS with share price. Also Ghosh (2015) in his study; Stock Price Adjustment to Corporate Accounting Disclosure: A Quantitative Study on Dhaka Stock Exchange (DSE) discovered that, the resulting output revealed that "Earning per share", "Return on equity" and "Net asset value per share" (book value) positively influenced stock price movement but "Earning per share" and "Net asset value per share" jointly can explain highest variation in stock price movement in Dhaka Stock Exchange (DSE)

In line with the above, Margaretha &; Firzitya (2014) in their study, The Effect Of Cash Dividend, Retained Earnings, And Stock Price Of manufacturing Company, indicate that cash dividends per share, retained earnings per share, earnings per share, and leverage has significant effect on the stock price. It is therefore believed that higher stock price will attract investors to invest their money. Hence, companies and investors need to attend cash dividends per

share, retained earnings per share, earnings per share, and leverage as factors that affect the increase or decrease of the stock price.

Inyiama &Ozouli (2014) in their study aimed at determining the direction and significance of the interactions between earnings per share and market price of ordinary shares in the Nigeria brewery industry from 2000 to 2013, discovered that Market Price of Shares has a short term positive and significant effect on Earnings Per Share while the long run coefficient shows a negative and insignificant influence. Also Iqbal, Ahmed & Zaidi (2015)which explored & examined the determinants of share price in Karachi Stock Exchange`s (KSE) oil & gas and cement sector, reveals that earning per share and book value per share are positive and significant determinants of share price in both sectors while dividend yield is negatively significant in cement sector. Also variables return on equity, book value per share, dividend per share, dividend yield, price earnings, and firm size are significant determinants of share prices in the Bahrain market. (Sharif, Purohit & Pillai 2015)

Kodithuwakku (2015) found a positive relationship between the selected firm specific factors of Dividend per Share (DPS), Earning per Share (EPS) and Net Assets Value per Share (NAVS) and stock price. In their study on Impact of Firm Specific Factors on the Stock Prices: A Case Study on Listed Manufacturing Companies in Colombo Stock Exchange.(Sujeewa 2015)

Also in the work of John (2015), on Stock Market Price and Its Determinants: A Case Study of Nigerian Banks,the results indicate that, net asset value per share and price-book value ratio are strongly correlated with stock market price, and are having significant influence on the stock price (John 2015). Also Inyiama (2015) result in the study -Does Earning per Share Determine Market Price of Ordinary Shares? Evidence from Nigeria Banking Sector (2000 – 2013), reveals that earnings per share significantly and positively influence the market price of ordinary shares; with a strong and positive association too. Earnings per share also granger causes market price of ordinary shares and these characteristics are sustainable in the long run in Nigerian banking sector. The implication of the findings is that an increase in earnings has the tendency of increasing significantly the market price of shares and earnings per share is one of the key factors responsible for fluctuations in market price of ordinary shares in Nigerian banking sector. In a related study by same author, it was found that only EPS, amongst the other variables has both positive and significant relationship with MPS. About 33% of the variations in market price of ordinary shares could be explained by changes in earnings per share, returns on assets and the age of the banks and there is a fairly strong relationship between MPS and earnings per share (55%). There is a unidirectional granger causality running from market price to earnings per share and a bidirectional granger causality running from return on assets to earnings per share and from earnings per share to return on assets. (Inyiama 2015)

Solomon, Memba, & Muturi (2016) investigated the influence of earnings per share on equity share investment decision makings. The findings of the study revealed that there is a significant relationship between accounting information and equity share investment in the listed companies in Nigeria. Specifically, the findings showed that accounting information variable, earnings per share, is positively correlated with equity share investment in the listed companies in Nigeria. Findings also suggest that earnings per share have a significant influence on equity share investment in the companies listed on Nigerian Stock Exchange. (Solomon, A. Z. Memba, F. S. & Muturi, W.2016). Furthermore in the study of Zeeshan A et al,(2015) on Determinants of Share Prices of listed Commercial Banks in Pakistan, the results indicate that earning per share has more influence on share prices and it has positive and significant relationship with share prices, book to market value ratio and interest rate have also significant but negative relation with share prices while other variables (gross domestic product, price earnings ratio, dividend per share, leverage) have no relationship with share prices. (Zeeshan Arshad1, Ali Raza Arshaad, Sohail Yousaf, Sulaman Jamil, Scholar 2015)

Mahmoud, Mohammadreza, & Pervaneh (2013) in their study on Accounting performance measures (Earning per Share 'EPS' and Cash Flow from Operating 'CFO') in Tehran Stock Exchange, indicated that, there is not significant relationship between Cash Flow from Operating and Shareholder

Value Added (SVA) while there is a positive significant relationship between Earning per Share and SVA. It was found that an increase in EPS is a weak positively -to- impact on Shareholder Value Added. (Mahmoud Samadi Largani, Mohammadreza Lotfi, & Pervaneh Ghadiri2 2013)

In Ahmed ,Muhammad, Muhammad, Umer (2014) results of their study Impact of Dividend Policy, Earning per Share, Return on Equity, Profit after Tax on Stock Prices , indicated that dividend yield and dividend payout ratio which are both measures of dividend policy have significant impact on stock price. Dividend yield is negatively related with stock price and dividend pay-out ratio is positively related with stock price which means that these results are against dividend irrelevance theory. (Ahmed ,Muhammad, Muhammad, Umer 2014). Also Using the panel-data approach, the empirical result of the study on Effect of dividend decision on stock price changes: further Nigerian evidence by Sulaiman & Migiro (2015) revealed that a linkage exists between dividend decision and the changes in the price of stock vis-à-vis earning per share, size of the companies, and the dividend per share. The dividend per share and earnings per share indicated a major positive connection with stock price. (Sulaiman & Migiro 2015)

Umar & Musa (2013) in their study The relationship between stock prices and firm earning per share (EPS) appeared to be contestable like any other performance measures which examine the relationship between stock prices,

they discovered that an insignificant relationship exists between stock prices and firm EPS in Nigeria. In fact, firm EPS has no predictive power on stock prices. It was suggested that firm EPS should not be relied upon for the prediction of the behaviour of stock prices in Nigeria. (Umar &Musa 2013). On the contrary according to Hidayat &Shahab (2015) observed thatDividend payout ratio significantly affect the stock price. (Hidayat &Shahab 2015). Also according to Pushpa & Sumangala (2012) EPS impacts the market value of an equity share in the Indian context. (Pushpa, & Sumangala 2012)

(b) Cash flow of operations and Share Price

According to Dechow & Watts (1998) in their work The Relation between Share Price and Cash Flows, they discovered that, there is a strong forecast implications and Correlation between them Share Price and Cash Flows. Also Chu (1997) who examined the influences of the market's characteristics on the relationship between stock returns and fundamental accounting information, such as earnings, dividends and cash flows using Taiwan's stock market from 1990 to 1994, observed that both operating income and non-operating income are positively related to stock returns.

Agana, Mireku & Appiah (2015) examined the comparative predictive ability of earnings and operating cash flows variables on future operating cash flows within a developing economy's setting. Results from the regression analysis

reveals earnings and operating cash flows are significant in predicting future operating cash flows but have different predictive powers with earnings providing a superior comparative predictive ability on future cash flows. The paper therefore concludes that earnings are a better predictor of future operating cash flows than historical operating cash flows itself. Furthermore Jiang(2009) discovered that accounting earnings and cash flows all have relevant relations to stock prices; however, the relevance between cash flow and stock price is stronger, and cash flows have higher information quality. This was in their work on the comparative study of information content between accounting earnings and cash flows. The paper utilizes the financial data of Chinese listed company in manufacturing industry from 2003 to 2005.

Maksy & Chen (2015) whose study was to empirically identify which accounting definition of free cash flow (FCF) is the most value relevant for the energy industry. Using correlations and multiple regression analysis on a sample of 5,954 observations covering the 23-year period from 1988 to 2010, the study empirically shows that the FCF has the most significant association with stock price changes, after controlling for many factors that may affect stock prices, is the one defined as cash flow from operations less capital expenditures less cash outflow for preferred stock dividends.

Sloan (1996) in their study whichinvestigates whether stock prices reflect information about future earnings contained in the accrual and cash flow

components of current earnings. It was discovered that the extent to which current earnings performance persists into the future is shown to depend on the relative magnitudes of the cash and accrual components of current earnings. However, stock prices are found to act as if investors "fixate" on earnings, failing to reflect fully information contained in the accrual and cash flow components of current earnings until that information impacts future earnings.

Ruixue (2008) worked on The Relationship between Share Price and Operating Cash Flow under the Casual Theme Restaurant Setting. He discovered a strong relationship between the two variables; cash flow and share price.

(c) Book Value and Share Price

Ahmed(2015) in his paper that focused on identifying the relationship among the firms' earnings, economic value added and the shareholders' value of the selected Islamic Banks in Bangladesh from 2009 to 2013, discovered that there is strong association among the firms' earnings per share, Book Value. Also Malhotra & Tandon, (2013) discovered in their work on determining that firms' book value, earning per share and price-earnings ratio are having a significant positive association with firm's stock price while dividend yield is having a significant inverse association with the market price of the firm's stock.

In a related study by Adebisi & Lawal (2015) they stated that, Dividend per share, earning per share, book value per share, dividend payout, price earnings ratio, and size of the firm have been identified as significant factors impacting the firm's equity share price by the corporate finance scholars. Furthermore according to Sharif, Purohit & Pillai (2015) in their study which is aimed at identifying the main determinants affecting share prices in the Bahrain financial market, the results indicate that the variables return on equity, book value per share, dividend per share, dividend yield, price earnings, and firm size are significant determinants of share prices in the Bahrain market. Stressing further, Almumani (2014) in his study to identify the quantitative factors that influence share prices for the listed banks in Amman Stock Exchange over the period 2005-2011, discovered that, there is a positive correlation between Dividend per Share, Earning per Share and Book Value. Tahir, Sabir & Ismail (2013) also attempt to bridge the gap in the literature by offering empirical evidence about firm's characteristics and their effect to stock returns. They discovered from his study of 307 Non-financial companies listed in Karachi Stock Exchange from 2000 to 2012, that Market Capitalization MC, Earnings per Share (EPS) and Book to Market value (BMV) had significant impact on stock market returns.

According to Ghosh & Ghosh (2015) in their study was designed to detect whether corporate accounting disclosures through annual report influence stock

price movement in Dhaka Stock Exchange. Their data were gathered from 2010 through 2014 of 25 private commercial banks. The resulting output revealed that “Earning per share”, “Return on equity” and “Net asset value per share” (book value) positively influenced stock price movement but “Earning per share” and “Net asset value per share” jointly can explain highest variation in stock price movement in DSE.

Glezakos (2012) in his study examined the impact of earnings and book value in the formulation of stock prices on a sample of 38 companies listed in the Athens Stock Market during the 1996-2008 period. The resulting evidence suggests that the joint explanatory power of the above parameters in the formation of stock prices increases over time. However, the impact of earnings is diminishing, compared to the book value, while investors strive towards analysing the fundamental parameters of businesses

Egbunike, & Udeh, (2015) in their work The effect of earnings management on EPS and BVPS noticed that for firms with high discretionary accruals, earnings management positively affects earnings per share; and, book value per share of the firms. Nassar & İsmail (2016) who also investigated the factors affecting share liquidity of industrial companies in Turkey, shows that there is an insignificant relation with each of debt ratio, earning per share, and book to market ratio.

Menike & Prabath (2014) examined the impact of dividend per share, earnings per share and book value per share of stock price on a sample of 100 companies listed in the Colombo Stock Exchange from 2008 to 2012. The results reveals that EPS, DPS, BVPS were positive and had a significant impact on the stock price in the Colombo Stock Exchange.

According to Mgbame & Ikhatua (2013) whose broad objective was to ascertain if accounting information contributes to stock volatility in the Nigerian Capital Market. They further examines if Book value per share, Dividend per share and Earnings per share have a sign effect on stock volatility in Nigeria. Findings reveal that there are enough evidences to reject the assumptions of conditional normality in stock prices data series and accept the existence of stock volatility in Nigerian stock market. The study concludes that accounting information of which book value is prominent influences stock volatility and as such the regulation of disclosures may be an area for consideration by the relevant agencies alongside the need to address volatility issues in the Nigerian capital market.

More so Anita & Yadav (2014) who studied the influence of book value per share, earning per share, market capitalization, price to book value and dividend yield on stock price of Tata motors Ltd, discovered that stock price is significantly affected by the book value. Also Marangu&Jagongo (2014) in their study set out to establish the relationship between price to book value

ratio and the following financial statement variables: dividend payout ratio, return on total assets, return on equity, return per share, dividend per share and growth rate of earnings after tax for companies quoted at the Nairobi Securities Exchange (NSE). They concluded that there was a statistically significant relationship between price to book value ratio and the following financial statement variables: return on total assets, return on equity, return per share and dividend per share at the NSE, Kenya. The study also concluded that return on total assets, return on equity and return per share all had a positive relationship (positively affected) the price to book value ratio while dividend per share had a negative relationship (negatively affected) the price to book value ratio.

Riyath&Jahfer (2015) in their own study which examined weather value effect is exist on stocks returns in the Colombo stock market as an emerging capital market. The sample of study includes all non-financial companies listed on main board of Colombo stock exchange during the period from 2000 to 2013. It was found that the highest decile portfolio of stocks earns higher return than lowest decile portfolio of stocks. Therefore, the study concludes that value effect exist in the Colombo stock market during the study period and the finding consistent with the previous studies.

2.5 Summary of Reviewed Literature

The various sections of this literature reviewed were based on the objectives of the study with more attention being paid to the variables as contained in the key words, the constructs and the concept at the conceptual framework.

Empirical review covers the similar works on the main objective of the study carried out elsewhere outside the shores of Nigeria. Also works carried out in specific components of the study within and outside the country were also discussed. Such empirical studies on disposition effect studies, momentum effect studies, momentum factor studies, value relevance of accounting information studies, share price and disposition effect, Share price and momentum effect, EPS growth and momentum effect, EPS growth and disposition effect, book value and momentum effect, Book value and disposition effect, Cash flow from operation and momentum effect, Cash flow from operation and disposition effect were succinctly reviewed with due considerations.

Four theories were considered relevant to the study including, prospect theory; which only explains the reluctance to sell a stock and realize a loss. However, it does not explain which gains and losses investors pay attention to changes in their total wealth or changes in their individual stocks, seeking pride and avoiding regret theory, mean reversion, and mental accounting theory. This study therefore will be anchored on the prospect theory with mental accounting (PT/MA) framework the best in explaining and clarifying the disposition effect

and the profitability momentum strategy in that, mental accounting provides a process for investors to think about and evaluate their financial transactions. PT/MA framework represents seeking pride and avoiding regret; also PT/MA framework reflects mean reversion.

From the reviewed litratures, it was noticed that there id no agreement among investment professionals on an explanation for disposition and momentum effect also the alternative rational explanations have been challenged by recent empirical studies. Most study are based on a relatively small sample with a short time frame. Thus It seems that they have not enough statistical power to estimate the relation between the disposition effect and momentum very precisely.Moreso, most of the studies follow Odean's methodology based on individual trading. They did not use aggregate market data to examine the relation between the disposition effect and momentum, also it did not consider the mental accounting theory. Finally, most work on momentum and disposition effect have not incorporated sufficient vital accounting information in their studies, hence behavioural reaction in stock prices due to changes in accounting numbers is lacking in momentum and disposition effect literatures.

CHAPTER THREE

METHODOLOGY APPLIED IN THE STUDY

3.1 Introduction

This chapter deals with the research methodology and procedure that was used in carrying out this study, showing details of the various steps adopted in the research. It dwells on the methodology used for the research work generally and specifically on the empirical investigation carried out. Most researches are built from previous knowledge obtained from existing literature which are related to the focus of the study. Hence this research work involved both quantitative and qualitative analysis of data and other information obtained from secondary sources with the aim of producing positive outcome, that would be consulted as reference material to practitioners and researchers.

Thus this chapter covers specific areas such as research design, population of the study, sampling and sample size, sources of data for the study, validity and reliability of the instrument for data collection, and the methods of data presentation and analysis. Also, the statistical tools used for testing the hypotheses were described. Our aim here is to sharpen the focus of the study and hence add credibility to the results from our analyses.

3.2 Research Design

The research design for this study is*Ex post-facto* research design. According to Apere (2004), a research design guides every research in the process of

analyzing, collecting and interpreting observations. Also, research design means the type or plan of the research work (Agu, 2007).A research could either be experimental, historical, descriptive, survey, and descriptive case study. Others are observational and correlation studies, (Agu, 2007).Also according to Nzelibe & Ilogu, (1996), research design is a schematic plan of all one wants to do in given investigation. It involves the specification or formulation of the research problem, the identification of the research questions, objectives and hypotheses. It is the blueprint which determines the nature and scope of the work carried out.

*Ex post-facto*research is ideal when it is not possible or acceptable to manipulate the characteristics of human participants in a research. It is a substitute for true experimental research and can be used to test hypotheses about cause –and-effect or correlation relationships, where it is not practical or ethical to apply a true experimental, or even quasi-experimental, design.

Despite studying facts that have already occurred, *Ex post-facto*research shares with experimental research design some of its basic logic of inquiry. For example, attempts are made to: explain a consequence based on antecedent conditions; determine the influence of a variable on another variable, and test a claim using statistical hypothesis testing techniques. Kerlinger & Rint (1986) as cited by Simon & Goes (2013) explained that an ex post facto investigation

seeks to reveal possible relationships by observing an existing condition or state of affairs and searching back in time for plausible contributing factors.

Ex post facto research uses data already collected, but not necessarily amassed for research purposes. It literally means; from what is done afterwards. This research design according to Cohen et al (2000) begins with groups that are already different in some respect (instead of taking groups that are equivalent and subject them to different treatments to determine differences in the variable) and searches in retrospect for factors that brought about those differences. Thus it is a method of teasing out antecedents of events that happened but cannot, be manipulated by the investigator. The researcher is thus examining, retrospectively, the effects of a naturally occurring event on a subsequent outcome with a view of establishing a causal or co relational link between them

3.3 Population and Sample Size

The population of this study consist of all listed companies in Nigerian Stock Exchange as at December 31, 2014. There are 198 quoted active companies (NSE, Factbook 2014). The companies in this study were drawn from the following sectors: Agriculture Sector, Conglomerates, Construction/Real Estate, Consumer Goods, Health Care, Financial Services, ICT, Industrial Goods, Natural Resources, Oil and Gas, Services. These sectors were further

regrouped into four major sectors, Financial, Services, Industrial, and Consumer. (See appendix I)

The sample of one hundred and thirteen companies were used for this study using purposive sampling technique , these where the companies who have finished their obligation in delivering annual report for the year ended 2007 to 2014 which gave us a total of nine hundred and two (902) observations.

3.4 Source of Data

The nature of this study necessitated the use of secondary data only. These data included data from MACHAMESTAT® and NSE official publication on daily volume of shares traded.

3.5 Model specification

In the light of empirical literature in our previous chapters, two regression models were formulated. The first regression model focused on disposition effect, while the second model focused on momentum effect. A regression model is one that seeks to explain change or variation in the value of one variable called dependent variable on the basis of changes in other variables known as the independent or explanatory variables

DISPOSITION EFFECT MODEL (1)

$$\Delta P -_{it} = \alpha_0 + \beta_1 P_{it} + \beta_2 EPSG + \beta_3 BV_{it} + \beta_4 CFO_{it} + \beta_5 Fsize_{it} + \varepsilon_{it} \ldots (1)$$

This model was further decomposed as stated below:

$$DECCP_{it} = \alpha_0 + \beta_1 RMINUS_{it} + \beta_2 EPERS + \beta_3 BVKPS_{it} + \beta_4 CASPS_{it} + \beta_5 FSIZE_{it} + \varepsilon_{it} \ldots (2)$$

MOMENTUM EFFECT MODEL (2)

$$\Delta P +_{it} = \alpha_0 + \beta_1 P_{it} + \beta_2 EPSG + \beta_3 BV_{it} + \beta_4 CFO_{it} + \beta_5 Fsize_{it} + \varepsilon_{it} \ldots (1)$$

Also the momentum effect model was further decomposed to read

$$DECCP_{it} = \alpha_0 + \beta_1 RPLUS_{it} + \beta_2 EPERS + \beta_3 BVKPS_{it} + \beta_4 CASPS_{it} + \beta_5 FSIZE_{it} + \varepsilon_{it} \ldots (2)$$

INTERACTION OF ACCOUNTING INFORMATION WITHDISPOSITION EFFECT MODEL (3)

$$DECCP_{it} = \alpha_0 + \beta_1 RMINUS_{it} + \beta_2 EPERS * RMINUS + \beta_3 BVKPS * RMINUS_{it} + \beta_4 CASPS * RMINUS_{it} + \beta_5 FSIZE_{it} + \varepsilon_{it}$$

INTERACTION OF ACCOUNTING INFORMATION WITHMOMENTUMEFFECT MODEL (4)

$$DECCP_{it} = \alpha_0 + \beta_1 RPLUS_{it} + \beta_2 EPERS * RPLUS + \beta_3 BVKPS * RPLUS_{it} + \beta_4 CASPS * RPLUS_{it} + \beta_5 FSIZE_{it} + \varepsilon_{it}$$

Where; -

$\Delta P -$ = negative annual change in Stock price

$\Delta P +$ = positive annual change in Stock price

P = annual closing share prices;

EPSG = earnings per share growth;

BV = book value Per Share;

CFO = Cash flow from operations Per Share;

ε = ERROR TERM

Where; -

The models above with their variables were operationalized as follows:

FUNCTIONAL DEFINITIONS OF THE VARIABLES

DEPENDENT VARIABLES

$\Delta P-$ = *negative annual change in Stock price – Proxy Selling of Stock*

$\Delta P+$ = *Positive annual change in Stock price – Proxy Buying of Stock*

INDEPENDENT VARIABLES

P = *annual closing share prices*

$$\text{EPSG} = \left[\frac{EPS_t - EPS_{t-1}}{EPS_{t-1}} \right]$$

$$\text{BV} = \frac{Networth}{Outstanding\ Shares}$$

$$\text{CFO} = \frac{Cash\ flow\ from\ operations}{Outstanding\ Shares}$$

For the decomposed model,

DECCP = Share price

RMINUS = Negative Share Price Return Dummy (Disposition effect), value of 1 for negative returns and 0 otherwise

RPLUS = Positive Share Price Return Dummy (Momentum effect), value of 1 for positive returns and 0 otherwise

EPERS = Accounting Earnings per Share, Proxy for Income Statement

BVKPS = Accounting Book value per Share, Proxy for Statement of financial position

CASPS = Accounting Cash flow per Share, Proxy for Cash flow Statement

FSIZE = Firm Size, Measured as log of Total Asset

Added to the above, the variables for this study include share price (DECCP) is the dependent variable while the independent variables are positive Share price return for momentum effect (RPLUS), negative share price for disposition effect (RMINUS), Accounting earnings per share; a proxy for income statement (EPERS), Accounting book value per share; proxy for statement of

financial position (BVKPS), accounting cash flow per share; proxy for cash flow statement (CASPS) and firm size (FSIZE).

3.6 Method of Data Analysis

Generally, there are legal differences, defined in terms of corporate policies and specificities in the way companies do business. This suggests that the quoted companies in Nigeria are very different from each other. This is coupled with the fact that the degrees of operating practices, nature of business, innovation drive focus and risk profiles of shareholders and management differs. Consequently, it is likely that the consideration of momentum and disposition effect of Nigerian quoted companies, without considering such differences, no doubt, would impair our generalization and even our estimation process.

On this note, panel data is preferred as it considers the cross-sectional and time-series characteristics of the sample data. In essence, the panel data analysis accommodates 'time as well as the heterogeneity' effects of the quoted companies. However, for ease of comparison, the simple pooled ordinary least square (OLS) was employed in this work holding the pooling assumption constant. Regression models were adopted in this study.

The panel data econometric techniques adopted in this study was the unbalanced or balanced panel data regression techniques based on the

possibility of some missing data. The use of panel data regression methodology in this study was based on three fundamental justifications: (1) the data collected were subject to time and cross sectional attributes and this enabled us to study innovation and performance of firms over time (time series) as well as across the sampled quoted companies (cross-section), (2) the panel data regression provides better results since it increases sample size and reduces the problem of degree of freedom, and (3) the use of panel regression caters for the problem of multicollinearity, aggregation bias and endogeneity problems (Greene, 2002).

The estimation results were evaluated based on individual statistical significance test (t-test) and overall statistical significance test (F-test). The goodness of fit of the model was also tested using the coefficient of determination . In this study, we conducted the descriptive statistics and correlation analysis to properly describe the nature of our data. In conducting all our data analyses, we used Microsoft Excel, Eviews 9 and Stata 13 software packages.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSSION OF RESULTS

4.1 Introduction

This study, investigated the effects of momentum and disposition effect in the Nigeria stock market from 2007 to 2014. This study sampled the market in general and then went ahead to study the various sectors independently.

We adopted a panel data analysis to identify the possible firm's specific determinants of momentum and disposition effect in Nigerian stock market and some selected sectors in the market. To this end, we conducted descriptive statistics, correlation matrix and variance inflation test. Panel data regression corrected for heteroscedasticity was also conducted to determine the effect of the independent variables in the models.

Added to the above, the variables for this study include banks Share price (DECCP) is the dependent variable while the independent variables are positive Share price return for momentum effect (RPLUS), negative share price for disposition effect (RMINUS), Accounting earnings per share; a proxy for income statement (EPERS), Accounting book value per share; proxy for statement of financial position (BVKPS), accounting cash flow per share; proxy for cash flow statement (CASPS) and firm size (FSIZE). Below is the descriptive statistics of the general market sample for 2007 to 2014.

4.2 Momentum Effect Results and Interpretation

The results and interpretations below are for the momentum results as revealed by our first result in the work.

TABLE 1 Descriptive Statistics (General)

Variables	Mean	Std.Dev	Jarque-Bera
BVKPS	7.04	13.56	144,467.00(0.00)**
CASPS	2.21	8.36	104,180.10(0.00)**
DECCP	4.00	17.67	308,706.50(0.00)**
EPERS	1.00	3.05	21,249.61(0.00)**
FSIZE	4.17	0.89	49.25(0.00)**
RMINUS	0.55	0.50	149.56(0.00)**
RPLUS	0.31	0.46	166.10(0.00)**
All data observation	897.00	897.00	897.00(0.00)**

Source: Stata Output, 2016

Table 1 shows the mean (average) for each of the variable, their standard deviation (degree of dispersion) and Jarque-Bera (JB) statistics (normality test). The results in table 1 provided some insight into the nature of the selected companies that were used in this study. Firstly, the accounting book value per share (BVKPS) shows the highest average in the study with a mean value of 7.04. This is followed by share prices and firm size.

The accounting book value per share (BVKPS) shows the highest dispersion in the study with a standard deviation value of 13.56.while the momentum effect shows the least dispersion with a standard deviation value of 0.46.

The dispersion of firm size shows that the companies sampled are not too dispersed from each other as the standard deviation is very small.

Lastly, the Jarque-Bera (JB) statistics in table 1 shows that most of the variables are normally distributed at 1% level of significance.

In examining the relationship among the variables, we employed the Pearson correlation coefficient matrix and the results are presented in table 2.

BVKPS	1.00						
CASPS	0.55	1.00					
DECCP	0.21	0.26	1.00				
EPERS	0.43	0.49	0.40	1.00			
FSIZE	0.32	0.15	0.13	0.26	1.00		
RMINUS	-0.05	-0.08	-0.06	-0.09	-0.04	1.00	
RPLUS	0.14	0.15	0.12	0.20	0.18	-0.74	1.00
N	897.00	897.00	897.00	897.00	897.00	897.00	897.00

Table 2Correlation Analysis (General)

Source: Stata Output, 2016

In Table 2, Share price (DECCP) was again, taken as the dependent variable while the independent variables are positive Share price return for momentum effect (RPLUS), negative share price for disposition effect (RMINUS), Accounting earnings per share; a proxy for income statement (EPERS), accounting book

value per share; proxy for Statement of financial position (BVKPS), accounting cash flow per share; proxy for cash flow statement (CASPS) and firm size (FSIZE).

The result shows that share price (DECCP) is positively related to accounting earnings per share (EPERS), firm size (FSIZE), momentum effect(REPLUS), accounting book value per share(BVKPS) and accounting cash flow per share (CASPS); while it is negatively related to disposition effect (RMINUS).

The correlation matrix also revealed that no two explanatory variables were perfectly correlated.

Table 3Multicollinearity test (general)

Variance Inflation Factors

Date: 06/21/16 Time: 01:15
Sample: 1 952
Included observations: 902

Variable	Coefficient Variance	Centered VIF
C	2.296523	NA
RPLUS	1.295322	2.043666
BVKPS*RPLUS	0.006151	1.439029
EPERS*RPLUS	1.495459	3.189406
CASPS*RPLUS	0.09024	2.032081
FSIZE	0.211864	1.457928
Mean VIF		2.032422

Source: Stata Output, 2016

The table above shows the multicollinearity result for our data. The result of VIF=2.0 is less than the accepted VIF value of 10 for multicollinearity. This means that there is the absence of multicollinearity problem in our model. Multicollinearity between explanatory variables may result to wrong signs or implausible magnitudes, in the estimated model coefficients, and the bias of the standard errors of the coefficients.

4.2.1 Mental Accounting & Momentum Model Regression Results (General)

To examine the relationship between the dependent variable and independent variables and to test our formulated hypotheses we used panel data regression. The panel data regression for the general sampled companies results obtained are presented is presented in table 4.

Table 4Mental Accounting & Momentum Model Regression Results (General)

VARIABLES	coefficients
C	-2.51 (-1.65) [0.09]***
RPLUS	-0.20 (-0.18) [0.85]
BVKPS*RPLUS	0.02 (0.32) [0.74]
EPERS*RPLUS	2.11 (1.72) [0.08]**
CASPS*RPLUS	0.03 (0.12) [0.90]
FSIZE	1.25 (2.72) [0.00]*
R-Squared	0.0998
Adj-R-Squared	0.0948
F-Statistic	19.86(0.0)*
(n)	902

Note: (1) Parentheses ( ) are t-statistic while bracket [ ] are p-values
(2) * and ** and *** are % and 5% and 10% level of significance accordingly.

Source: Stata Output, 2016

4.2.2 Discussion of Regression Results (Mental Accounting & Momentum Model)

This study adopted the pooled regression analysis which has been corrected for heteroschadastcity using the White Method. In table 4, we presented an OLS pooled regression.

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (9%) and (9%) respectively. This indicates that all the independent variables jointly explain about 9% of the systematic variations in the model for the sampled period (2008-2014). The low value of R square shows that there are more excluded variables that drive the dependent variable. The F-statistics (19.86) with a p-value of 0.00 shows that the model is generally significant at 1% level which means that the model was well specified.

Regression models for MENTAL ACCOUNTING & MOMENTUM MODEL (GENERAL) provided the following results; *positive share price Returns (momentum Effect) (RPLUS)* has a negative influence on share prices but was statistically insignificant even at 10 percent. This result suggests that there is no significant relationship between momentum effect and share prices in the Nigerian stock market under the period under review. *Book Value interaction with momentum effect (BVKPS*RPLUS)* was found to be positive but

statistically insignificant in driving share prices in Nigeria. *Earnings per share interaction with momentum effect (EPERS*RPLUS)* showed a positive and significant impact on share prices in the Nigeria stock market. *Accounting Cash Flow per share interaction with momentum effect (CASPS*RPLUS) is* positive but insignificant in driving stock prices in Nigeria stock market, while *Firm Size (FSIZE)* has a positive and statisticaly significant relationship with share prices of sampled companies in Nigeria stock market.

4.3 Momentum Effect Results and Interpretation (Financial Sector)

TABLE 5Descriptive Statistics (Financial Sector)

Variables	Mean	Std.Dev	Jarque-Bera
BVKPS	4.91	11.39	105,692.90(0.00)**
CASPS	0.34	6.27	19,895.65(0.00)**
DECCP	1.30	3.51	3,022.41(0.00)**
EPERS	0.25	1.53	24,672.36(0.00)**
FSIZE	4.67	0.98	22.62(0.00)**
RMINUS	0.50	0.50	46.17(0.00)**
RPLUS	0.26	0.44	64.09(0.00)**
All data observation	277.00	277.00	277.00

Source: Stata Output, 2016

Table above shows the mean (average) for each of the variable, their standard deviation (degree of dispersion) and Jarque-Bera (JB) statistics (normality test). The results in table 5 provided some insight into the nature of the selected companies that were used in this study. Firstly, the accounting book value per share (BVKPS) shows the highest average in the study with a mean value of 4.91. This is followed by firm size.

The accounting book value per share (BVKPS) shows the highest dispersion in the study with a standard deviation value of 11.39, while the disposition effect shows the least dispersion with a standard deviation value of 0.44. The dispersion of firm size shows that the companies sampled are fairly dispersed.Lastly, the Jarque-Bera (JB) statistics in the table shows that the variables are normally distributed at 1% level of significance.In examining the relationship among the variables, we employed the Pearson correlation coefficient (correlation matrix) and the results are presented in table 6.

Table 6Correlation Analysis (Finance)

Financial Sector

Correlation	BVKPS	CASPS	DECCP	EPERS	FSIZE	RMINUS	RPLUS
BVKPS	1.00						
CASPS	-0.10	1.00					
DECCP	0.22	0.11	1.00				
EPERS	-0.17	0.27	0.21	1.00			
FSIZE	0.26	0.05	0.46	0.33	1.00		
RMINUS	-0.06	-0.04	0.03	0.02	0.11	1.00	
RPLUS	0.14	0.07	0.15	0.10	0.28	-0.58	1.00
N	277.00	277.00	277.00	277.00	277.00	277.00	277.00

Source: Stata Output, 2016

In Table 6, Share price (DECCP) was the dependent variable while the independent variables were positive Share price return for momentum effect (RPLUS), negative share price for disposition effect (RMINUS), Accounting earnings per share; a proxy for income statement (EPERS), accounting book value per share; proxy for statement of financial position (BVKPS), accounting cash flow per share; proxy for cash flow statement (CASPS) and firm size (FSIZE).

The result shows that share price (DECCP) is positively related to accounting earnings per share (EPERS), firm size (FSIZE), momentum effect(REPLUS), accounting book value per share(BVKPS), and accounting cash flow per share(CASPS) and disposition effect (RMINUS).

The correlation matrix also revealed that no two explanatory variables were perfectly correlated.

Table 7Multicollinearity and Heteroscedasticity Test (Financial)

Variance Inflation Factors
Date: 06/21/16 Time: 01:46
Sample: 1 290
Included observations: 278

Variable	Coefficient Variance	Centered VIF
C	0.892613	NA
RPLUS	0.241132	1.304186
BVKPS*RPLUS	0.000472	1.228339
EPERS*RPLUS	0.086321	2.258429
CASPS*RPLUS	0.00542	2.04047
FSIZE	0.041525	1.120733
Mean VIF		1.590431

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	11.39071	Prob. F(5,272)	0
Obs*R-squared	48.13168	Prob. Chi-Square(5)	0
Scaled explained SS	319.2308	Prob. Chi-Square(5)	0

Source: Stata Output, 2016

The table above shows the multicollinearity and Heteroscedasticity test result for our data. The result of VIF=1.59 is less than the accepted VIF value of 10 for multicollinearity. This means that there is the absence of multicollinearity problem in our model. Multicollinearity between explanatory variables may result to wrong signs or implausible magnitudes, in the estimated model coefficients, and the bias of the standard errors of the coefficients. Also, the Berusch Pagan test is statistically significant at 1% level of significance signifying the absence of Heteroscedasticity in the variables.

4.3.1 Mental Accounting & Momentum Model Regression Results (Financial)

However, to examine the relationship between the dependent variable and independent variables and to test our formulated hypotheses we used panel data regression. The panel data regression for the financial sector sampled companies results obtained are presented in table 8.

Table 8Mental Accounting & Momentum Model Regression Results (Financial)

VARIABLES	coefficients
C	-6.3 (-5.24) [0.00]*
RPLUS	0.10 (0.22) [0.82]
BVKPS*RPLUS	0.02 (0.82) [0.41]
EPERS*RPLUS	-0.11 (-0.22) [0.82]
CASPS*RPLUS	-0.00 (-0.09) [0.92]
FSIZE	1.62 (5.37) [0.00]*
R-Squared	0.21
Adj-R-Squared	0.20
F-Statistic	15.09(0.0)*
(n)	278

Note: (1) Parentheses ( ) are t-statistic while bracket [ ] are p-values
(2) * and ** and *** are1 % and 5% and 10% level of significance accordingly.

Source: Stata Output, 2016

4.3.2 Discussion of Financial Sector Regression Results (Mental Accounting & Momentum Model)

This study adopted the pooled regression analysis which has been corrected for Heteroscedasticity using the White Method. In table 8, we presented an OLS pooled regression.

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (21%) and (20%) respectively. This indicates that all the independent variables jointly explain about 20% of the systematic variations in the model for the sampled period (2008-2014). The low value of R square shows that there are more excluded variables that drive the dependent variable. The F-statistics (15.09) with a p-value of 0.00 shows that the model is generally significant at 1% level which means that the model was well specified.

Regression models for Mental Accounting & Momentum Model (Financial) provided the following results; *positive share price Returns (momentum Effect) (RPLUS)* has a positive influence on share prices but was statistically insignificant even at 10 percent. This result suggests that there is no significant relationship between momentum effect and share prices in the financial sector in the Nigerian stock market under the period under review. *Book Value interaction with momentum effect (BVKPS*RPLUS)* was found to be positive

but statistically insignificant in driving share prices in the financial sector in Nigeria. *Earnings per share interaction with momentum effect (EPERS*RPLUS)* showed a negative and significant impact of share prices in the financial sector. *Accounting Cash Flow per share interaction with momentum effect (CASPS*RPLUS) is* negative but insignificant in driving stock prices in financial sector of the Nigerian stock market in the period under study.

Firm Size (FSIZE) has a positive and statistically significant relationship with share prices of sampled financial companies in the Nigerian stock market.

4.4 Momentum Effect Results and Interpretation (Service Sector)

TABLE 9Descriptive Statistics (Service Sector*)*

Variables	Mean	Std.Dev	Jarque-Bera
BVKPS	3.30	5.73	1,170.01(0.00)**
CASPS	0.85	2.14	2,020.33(0.00)**
DECCP	1.44	3.51	4,093.66(0.00)**
EPERS	0.22	1.46	4,241.06(0.00)**
FSIZE	3.66	0.56	0.76(0.00)**
RMINUS	0.62	0.49	36.75(0.00)**
RPLUS	0.25	0.43	52.64(0.00)**
All data observation	217.00	217.00	217.00

Source: Stata Output, 2016

Table above shows the mean (average) for each of the variable, their standard deviation (degree of dispersion) and Jarque-Bera (JB) statistics (normality test). The results in table 9 provided some insight into the nature of the selected companies that were used in this study. Firstly, the firm size (FSIZE) shows the highest average in the study with a mean value of 3.66. This is followed by Book Value per share (BVKPS) with a mean value of 3.30.

The accounting book value per share (BVKPS) shows the highest dispersion in the study with a standard deviation value of 5.73 while the disposition effect shows the least dispersion with a standard deviation value of 0.43

Lastly, the Jarque-Bera (JB) statistics in the table shows that the variables are normally distributed at 1% level of significance.

In examining the relationship among the variables, we employed the Pearson correlation coefficient (correlation matrix) and the results are presented in table 10

Services Sector

Correlation	BVKPS	CASPS	DECCP	EPERS	FSIZE	RMINUS	RPLUS
BVKPS	1.00						
CASPS	0.39	1.00					
DECCP	0.54	0.23	1.00				
EPERS	0.31	0.01	0.21	1.00			
FSIZE	0.42	0.21	0.20	0.05	1.00		
RMINUS	0.02	-0.07	0.01	-0.03	-0.08	1.00	
RPLUS	0.07	0.12	0.10	0.08	0.11	-0.74	1.00
N	217.00	217.00	217.00	217.00	217.00	217.00	217.00

Table 10Correlation Analysis (Service)

Source: Stata Output, 2016

In Table 10, Share price (DECCP) is the dependent variable while the independent variables are positive Share price return for momentum effect (RPLUS), negative share price for disposition effect (RMINUS), Accounting earnings per share; a proxy for income statement (EPERS), accounting book value per share; proxy for statement of financial position (BVKPS), accounting cash flow per share; proxy for cash flow statement (CASPS) and firm size (FSIZE).

The result shows that share price (DECCP) is positively related to accounting earnings per share (EPERS), firm size (FSIZE), momentum effect(REPLUS), accounting book value per share(BVKPS), and accounting cash flow per share(CASPS) and disposition effect (RMINUS).

The correlation matrix also revealed that no two explanatory variables were perfectly correlated.

Variance Inflation Factors

Date: 06/21/16 Time: 01:50
Sample: 291 517
Included observations: 217

Variable	Coefficient Variance	Centered VIF
C	2.143567	NA
RPLUS	0.329692	1.408882
BVKPS*RPLUS	0.012641	3.063282
EPERS*RPLUS	0.057496	1.397268
CASPS*RPLUS	0.036189	2.050826
FSIZE	0.158498	1.11285
Mean VIF		1.806622

Table 11Multicollinearity and Heteroscedasticity test (services)

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	4.675019	Prob. F(5,211)	0.0005
Obs*R-squared	21.64221	Prob. Chi-Square(5)	0.0006
Scaled explained SS	122.0339	Prob. Chi-Square(5)	0

Source: Stata Output, 2016

The table above shows the multicollinearity and Heteroscedasticity test result for our data. The result of VIF=1.80 is less than the accepted VIF value of 10 for multicollinearity. This means that there is the absence of multicollinearity

problem in our model. Multicollinearity between explanatory variables may result to wrong signs or implausible magnitudes, in the estimated model coefficients, and the bias of the standard errors of the coefficients. Also, the Berusch Pagan test is statistically significant at 1% level of significance signifying the absence of Heteroscedasticity in the variables.

4.4.1 Mental Accounting & Momentum Model Regression Results (Service)

However, to examine the relationship between the dependent variable and independent variables and to test our formulated hypotheses we used panel data regression the panel data regression for the service sector sampled companies results obtained are presented is presented in table 12.

Table 12Mental Accounting & Momentum Model Regression Results (Service)

VARIABLES	coefficients
C	-0.35 (-0.16) [0.87]
RPLUS	-1.65 (-2.50) [0.01]*
BVKPS*RPLUS	0.64 (4.37) [0.00]*
EPERS*RPLUS	-0.13 (-0.60) [0.54]
CASPS*RPLUS	-0.11 (-0.41) [0.68]
FSIZE	0.44 (0.67) [0.49]
R-Squared	0.24
Adj-R-Squared	0.23
F-Statistic	13.95(0.0)*
(n)	217

Note: (1) Parentheses ( ) are t-statistic while bracket [ ] are p-values
(2) * and ** and *** are1 % and 5% and 10% level of significance accordingly.

Source: Stata Output, 2016

4.4.2 Discussion of Service Sector Regression Results (Mental Accounting & Momentum Model)

This study adopted the pooled regression analysis which has been corrected for Heteroscedasticity using the White Method. In table 12, we presented an OLS pooled regression.

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (24%) and (23%) respectively. This indicates that all the independent variables jointly explain about 24% of the systematic variations in the model for the sampled period (2008-2014). The low value of R square shows that there are more excluded variables that drive the dependent variable. The F-statistics (13.95) with a p-value of 0.00 shows that the model is generally significant at 1% level which means that the model was well specified.

Regression models for MENTAL ACCOUNTING & MOMENTUM MODEL (SERVICE) provided the following results; *positive share price Returns (momentum Effect) (RPLUS)* has a negative and statistically significant at 1% level. This result suggests that there is a significant relationship between momentum effect and share prices in the service sector in the Nigerian stock market under the period under review. *Book Value interaction with momentum effect (BVKPS*RPLUS)* was found to be positive and statistically significant at

1% level in driving share prices in the financial service sector in Nigeria. *Earnings per share interaction with momentum effect (EPERS*RPLUS)* showed a negative but insignificant impact of share prices in the service sector. *Accounting Cash Flow per share interaction with momentum effect (CASPS*RPLUS) is* negative and insignificant in driving stock prices in service sector of the Nigerian stock market in the period under study.

Firm Size (FSIZE) has a positive but statistically significant relationship with share prices of sampled service sector in the Nigerian stock market.

4.5 Momentum Effect Results and Interpretation (Consumer Sector)

TABLE 13Descriptive Statistics (Consumer Sector)

Variables	Mean	Std.Dev	Jarque-Bera
BVKPS	9.50	14.29	7,550.38(0.00)**
CASPS	3.61	8.00	9,421.90(0.00)**
DECCP	6.18	17.22	13,226.75(0.00)**
EPERS	1.94	4.25	2,322.41(0.00)**
FSIZE	4.29	0.64	5.75(0.00)**
RMINUS	0.51	0.50	31.17(0.00)**
RPLUS	0.45	0.50	31.18(0.00)**
All data observation	187.00	187.00	187.00

Source: Stata Output, 2016

Table above shows the mean (average) for each of the variable, their standard deviation (degree of dispersion) and Jarque-Bera (JB) statistics (normality test). The results in table 1 provided some insight into the nature of the selected companies that were used in this study. Firstly, Book Value per share (BVKPS) with a mean value of 9.50 has the highest mean value in our sample of the consumer sector. This is followed by share prices (DECCP) and the firm size (FSIZE) .share prices (DECCP) shows the highest dispersion with a standard deviation of 17.22. This is followed by accounting book value per share (BVKPS). Lastly, the Jarque-Bera (JB) statistics in the table shows that the variables are normally distributed at 1% level of significance.

In examining the relationship among the variables, we employed the Pearson correlation coefficient (correlation matrix) and the results are presented in table 14

Table 14Correlation Analysis (Consumer)

Correlation	BVKPS	CASPS	DECCP	EPERS	FSIZE	RMINUS	RPLUS
BVKPS	1.00						
CASPS	0.77	1.00					
DECCP	0.16	0.28	1.00				
EPERS	0.59	0.74	0.17	1.00			
FSIZE	0.46	0.38	0.23	0.41	1.00		
RMINUS	-0.12	-0.16	-0.17	-0.16	-0.08	1.00	
RPLUS	0.15	0.20	0.20	0.20	0.16	-0.92	1.00
N	187.00	187.00	187.00	187.00	187.00	187.00	187.00

Source: Stata Output, 2016

In Table 14, Share price (DECCP) is the dependent variable while the independent variables are positive Share price return for momentum effect (RPLUS), negative share price for disposition effect (RMINUS), Accounting earnings per share; a proxy for income statement (EPERS), accounting book value per share; proxy for statement of financial position (BVKPS), accounting cash flow per share; proxy for cash flow statement (CASPS) and firm size (FSIZE).

The result shows that share price (DECCP) is positively related to accounting earnings per share (EPERS), firm size (FSIZE), momentum effect(REPLUS), accounting book value per share(BVKPS), and accounting cash flow per share(CASPS) but negatively with disposition effect (RMINUS). The correlation matrix also revealed that no two explanatory variables were perfectly correlated.

Table 15Multicollinearity and Heteroscedasticity test (consumer)

Variance Inflation Factors

Date: 06/21/16 Time: 01:53
Sample: 518 716
Included observations: 191

Variable	Coefficient Variance	Centered VIF
C	52.28254	NA
RPLUS	7.076501	1.306371
BVKPS*RPLUS	0.024302	3.306344
EPERS*RPLUS	0.269691	2.535067
CASPS*RPLUS	0.103523	4.392637
FSIZE	2.952446	1.134977
Mean VIF		2.535079

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	7.356952	Prob. F(5,185)	0
Obs*R-squared	31.67887	Prob. Chi-Square(5)	0
Scaled explained SS	447.9192	Prob. Chi-Square(5)	0

Source: Stata Output, 2016

The table above shows the multicollinearity and Heteroscedasticity test result for our data. The result of VIF=2.53 is less than the accepted VIF value of 10 for multicollinearity. This means that there is the absence of multicollinearity problem in our model. Multicollinearity between explanatory variables may result to wrong signs or implausible magnitudes, in the estimated model coefficients, and the bias of the standard errors of the coefficients. Also, the Berusch Pagan test is statistically significant at 1% level of significance signifying the absence of Heteroscedasticity in the variables.

4.5.1 Mental Accounting & Momentum Model Regression Results (Consumer)

However, to examine the relationship between the dependent variable and independent variables and to test our formulated hypotheses we used panel data regression. The panel data regression for the consumer sector sampled companies results obtained are presented is presented in table 16.

Table 16Mental Accounting & Momentum Model Regression Results (Consumer)

VARIABLES	coefficients
C	-12.03 (-2.50) [0.01]*
RPLUS	5.83 (2.46) [0.01]*
BVKPS*RPLUS	-0.39 (-1.27) [0.20]
EPERS*RPLUS	-0.74 (-0.841) [0.40]
CASPS*RPLUS	1.26 (1.35) [1.35]
FSIZE	3.69 (3.01) [0.00]*
R-Squared	0.14
Adj-R-Squared	0.12
F-Statistic	6.27 (0.0)*
(n)	217

Note: (1) Parentheses ( ) are t-statistic while bracket [ ] are p-values
(2) * and ** and *** are1 % and 5% and 10% level of significance accordingly.

Source: Stata Output, 2016

4.5.2 Discussion of Consumer Sector Regression Results (Mental Accounting & Momentum Model)

This study adopted the pooled regression analysis which has been corrected for Heteroscedasticity using the White Method. In table 16, we presented an OLS pooled regression.

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (14%) and (12%) respectively. This indicates that all the independent variables jointly explain about 14% of the systematic variations in the model for the sampled period (2008-2014). The low value of R square shows that there are more excluded variables that drive the dependent variable. The F-statistics (6.27) with a p-value of 0.00 shows that the model is generally significant at 1% level which means that the model was well specified.

Regression models for MENTAL ACCOUNTING & MOMENTUM MODEL (CONSUMER) provided the following results; *positive share price Returns (momentum Effect) (RPLUS)* has a positive and statistically significant at 1% level. This result suggests that there is a significant relationship between momentum effect and share prices in the consumer in the Nigerian stock market under the period under review. *Book Value interaction with momentum*

*effect (BVKPS*RPLUS)* was found to be negatively and statistically insignificant at 1% level in driving share prices in the consumer sector in Nigeria. *Earnings per share interaction with momentum effect (EPERS*RPLUS)* showed a negative but insignificant impact of share prices in the consumer sector. *Accounting Cash Flow per share interaction with momentum effect (CASPS*RPLUS) is* positive and insignificant in driving stock prices in consumer sector of the Nigerian stock market in the period under study.

Firm Size (FSIZE) has a positive but statistically significant relationship with share prices of sampled service consumer in the Nigerian stock market.

4.6 Momentum Effect Results and Interpretation (Industrial Sector)

TABLE 17Descriptive Statistics (Industrial Sector)

Variables	Mean	Std.Dev	Jarque-Bera
BVKPS	11.42	18.59	15,406.010.00)**
CASPS	4.75	12.89	6,512.29(0.00)**
DECCP	8.13	31.29	8,935.65(0.00)**
EPERS	1.94	3.86	549.58(0.00)**
FSIZE	3.93	0.87	6.13(0.00)**
RMINUS	0.58	0.49	36.12(0.00)**
RPLUS	0.32	0.47	38.87(0.00)**
All data observation	216.00	216.00	216.00

Source: Stata Output, 2016

Table above shows the mean (average) for each of the variable, their standard deviation (degree of dispersion) and Jarque-Bera (JB) statistics (normality test). The results in table 17 provided some insight into the nature of the selected companies that were used in this study. Firstly, Book Value per share (BVKPS) with a mean value of 11.42 has the highest mean value in our sample of the industrial sector. This is followed by share prices (DECCP), accounting cash flow per share (CASPS) and firm size (FSIZE).

Accounting cash flow per share (CASPS) shows the highest dispersion with a standard deviation of 31.29. This is followed by accounting book value per share (BVKPS). The average age of the industrial companies as sampled is 4 years. Lastly, the Jarque-Bera (JB) statistics in the table shows that the variables are normally distributed at 1% level of significance.

In examining the relationship among the variables, we employed the Pearson correlation coefficient (correlation matrix) and the results are presented in table 18

Table 18Correlation Analysis (Industrial Sector)

Correlation	BVKPS	CASPS	DECCP	EPERS	FSIZE	RMINUS	RPLUS
BVKPS	1.00						
CASPS	0.68	1.00					
DECCP	0.20	0.24	1.00				
EPERS	0.45	0.42	0.54	1.00			
FSIZE	0.47	0.29	0.18	0.44	1.00		
RMINUS	-0.01	-0.10	-0.06	-0.13	-0.04	1.00	
RPLUS	0.10	0.16	0.11	0.23	0.18	-0.82	1.00
N	216.00	216.00	216.00	216.00	216.00	216.00	216.00

Source: Stata Output, 2016

In Table 18, Share price (DECCP) is the dependent variable while the independent variables are positive Share price return for momentum effect (RPLUS), negative share price for disposition effect (RMINUS), Accounting earnings per share; a proxy for income statement (EPERS), accounting book value per share; proxy for statement of financial position (BVKPS), accounting cash flow per share; proxy for cash flow statement (CASPS) and firm size (FSIZE).

The result shows that share price (DECCP) is positively related to accounting earnings per share (EPERS), firm size (FSIZE), momentum effect(RPLUS), accounting book value per share(BVKPS), and accounting cash flow per share(CASPS) but negatively with disposition effect (RMINUS).

The correlation matrix also revealed that no two explanatory variables were highly correlated.

Table 19Multicollinearity and Heteroscedasticity Test (Industrial Sector)

Variance Inflation Factors

Date: 06/21/16 Time: 01:57
Sample: 717 952
Included observations: 216

Variable	Coefficient Variance	Centered VIF
C	95.09162	NA
RPLUS	28.74197	1.671781
BVKPS*RPLUS	0.124631	3.830512
EPERS*RPLUS	1.161723	2.647348
CASPS*RPLUS	0.137864	2.571147
FSIZE	6.128765	1.220637
Mean VIF		2.388285

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	10.8049	Prob. F(5,210)	0
Obs*R-squared	44.19777	Prob. Chi-Square(5)	0
Scaled explained SS	443.2027	Prob. Chi-Square(5)	0

Source: Stata Output, 2016

The table above shows the multicollinearity and Heteroscedasticity test result for our data. The result of VIF=2.38 is less than the accepted VIF value of 10 for multicollinearity. This means that there is the absence of multicollinearity problem in our model. Multicollinearity between explanatory variables may result to wrong signs or implausible magnitudes, in the estimated model

coefficients, and the bias of the standard errors of the coefficients. Also, the Berusch Pagan test is statistically significant at 1% level of significance signifying the absence of Heteroscedasticity in the variables.

4.6.1 Mental Accounting & Momentum Model Regression Results (Industrial Sector)

However, to examine the relationship between the dependent variable and independent variables and to test our formulated hypotheses we used panel data regression the panel data regression for the Industrial sector sampled companies results obtained are presented is presented in table 20.

Table 20:Mental Accounting & Momentum Model Regression Results (Industrial Sector)

VARIABLES	coefficients
C	-3.17 (-0.37) [0.70]
RPLUS	-6.22 (-1.48) [0.13]
BVKPS*RPLUS	-0.30 (-0.90) [0.36]
EPERS*RPLUS	6.19 (2.02) [0.04]**
CASPS*RPLUS	-0.41 (-0.85) [0.39]
FSIZE	2.35 (0.89) [0.37]
R-Squared	0.18
Adj-R-Squared	0.16
F-Statistic	9.74(0.0)*
(n)	216

Note: (1) Parentheses ( ) are t-statistic while bracket [ ] are p-values
(2) * and ** and *** are1 % and 5% and 10% level of significance accordingly.

Source: Stata Output, 2016

4.6.2 Discussion of Industrial Sector Regression Results (Mental Accounting & Momentum Model)

This study adopted the pooled regression analysis which has been corrected for Heteroscedasticity using the White Method. In table 20, we presented an OLS pooled regression.

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (18%) and (16%) respectively. This indicates that all the independent variables jointly explain about 18% of the systematic variations in the model for the sampled period (2008-2014). The low value of R square shows that there are more excluded variables that drive the dependent variable. The F-statistics (9.74) with a p-value of 0.00 shows that the model is generally significant at 1% level which means that the model was well specified.

Regression models for MENTAL ACCOUNTING & MOMENTUM MODEL (INDUSTRIAL) provided the following results; *positive share price Returns (momentum Effect) (RPLUS)* has a negative and insignificant effect on share price. This result suggests that there is no significant relationship between momentum effect and share prices in the industrial sector in the Nigerian stock market under the period under review. *Book Value interaction with momentum effect (BVKPS*RPLUS)* was found to be negative and statistically insignificant

in driving share prices in the industrial sector in Nigeria. *Earnings per share interaction with momentum effect (EPERS*RPLUS)* showed a positive and statistically significant impact of share prices in the industrial sector. *Accounting Cash Flow per share interaction with momentum effect (CASPS*RPLUS) is* negative and insignificant in driving stock prices in consumer sector of the Nigerian stock market in the period under study.

Firm Size (FSIZE) has a positive but statistically insignificant relationship with share prices of sampled industrial sector in the Nigerian stock market.

4.7 Disposition Effect Results and Interpretation

The results and interpretations below are for the disposition effect results as revealed by our second result in the work.

TABLE 21Descriptive Statistics (General)

Variables	Mean	Std.Dev	Jarque-Bera
BVKPS	7.04	13.56	144,467.00(0.00)**
CASPS	2.21	8.36	104,180.10(0.00)**
DECCP	4.00	17.67	308,706.50(0.00)**
EPERS	1.00	3.05	21,249.61(0.00)**
FSIZE	4.17	0.89	49.25(0.00)**
RMINUS	0.55	0.50	149.56(0.00)**
RPLUS	0.31	0.46	166.10(0.00)**
All data observation	897.00	897.00	897.00(0.00)**

Source: Stata Output, 2016

Table 21 shows the mean (average) for each of the variable, their standard deviation (degree of dispersion) and Jarque-Bera (JB) statistics (normality test). The results in table 21 provided some insight into the nature of the selected companies that were used in this study. Firstly, the accounting book value per share (BVKPS) shows the highest average in the study with a mean value of 7.04. This is followed by share prices and firm size.

The accounting book value per share (BVKPS) shows the highest dispersion in the study with a standard deviation value of 13.56.while the momentum effect shows the least dispersion with a standard deviation value of 0.46.

The dispersion of firm size shows that the companies sampled are not too dispersed from each other as the standard deviation is very small.

Lastly, the Jarque-Bera (JB) statistics in table 21 shows that most of the variables are normally distributed at 1% level of significance.

In examining the relationship among the variables, we employed the Pearson correlation coefficient (correlation matrix) and the results are presented in table 22.

Table 22Correlation Analysis (General)

Correlation	BVKPS	CASPS	DECCP	EPERS	FSIZE	RMINUS	RPLUS
BVKPS	1.00						
CASPS	0.55	1.00					
DECCP	0.21	0.26	1.00				
EPERS	0.43	0.49	0.40	1.00			
FSIZE	0.32	0.15	0.13	0.26	1.00		
RMINUS	-0.05	-0.08	-0.06	-0.09	-0.04	1.00	
RPLUS	0.14	0.15	0.12	0.20	0.18	-0.74	1.00
N	897.00	897.00	897.00	897.00	897.00	897.00	897.00

Source: Stata Output, 2016

In Table 22, Share price (DECCP) is the dependent variable while the independent variables are positive Share price return for momentum effect (RPLUS), negative share price for disposition effect (RMINUS), Accounting earnings per share; a proxy for income statement (EPERS), accounting book value per share; proxy for statement of financial position (BVKPS), accounting cash flow per share; proxy for cash flow statement (CASPS) and firm size (FSIZE).

The result shows that share price (DECCP) is positively related to accounting earnings per share (EPERS), firm size (FSIZE), momentum effect(REPLUS), accounting book value per share(BVKPS) and accounting cash flow per share(CASPS) While it is negatively related to disposition effect (RMINUS).

The correlation matrix also revealed that no two explanatory variables were perfectly correlated.

Table 23Multicollinearity and Heteroscedasticity Test (General)

Multicolinearity Test

Variance Inflation Factors

Date: 06/21/16 Time: 01:26
Sample: 1 952
Included observations: 902

Variable	Coefficient Variance	Centered VIF
C	8.263529	NA
RMINUS	1.470703	1.137755
BVKPS*RMINUS	0.005652	1.790691
EPERS*RMINUS	0.097282	1.25759
CASPS*RMINUS	0.012675	1.463997
FSIZE	0.427392	1.082727
Mean VIF		1.346552

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	6.165418	Prob. F(5,896)	0
Obs*R-squared	30.00132	Prob. Chi-Square(5)	0
Scaled explained SS	1321.06	Prob. Chi-Square(5)	0

Source: Stata Output, 2016

The table above shows the multicollinearity and Heteroscedasticity test result for our data. The result of VIF= 1.34 is less than the accepted VIF value of 10 for multicollinearity. This means that there is the absence of multicollinearity problem in our model. Multicollinearity between explanatory variables may

result to wrong signs or implausible magnitudes, in the estimated model coefficients, and the bias of the standard errors of the coefficients. Also, the Berusch Pagan test is statistically significant at 1% level of significance signifying the absence of Heteroscedasticity in the variables.

4.7.1 Mental Accounting & Disposition Model Regression Results (General)

However, to examine the relationship between the dependent variable and independent variables and to test our formulated hypotheses we used panel data regression the panel data regression for the general sector sampled companies results obtained are presented is presented in table 24.

Table 24:Mental Accounting & Disposition Model Regression Results (General)

VARIABLES	coefficients
C	-1.97
	(-1.32)
	[0.18]
RMINUS	-3.33
	(-3.09)
	[0.00]*
BVKPS*RMINUS	-0.05
	(-0.49)
	[0.61]
EPERS*RMINUS	1.90
	(2.07)
	[0.03]**
CASPS*RMINUS	0.27
	(-0.92)
	[0.35
FSIZE	1.67
	(3.51)
	[0.00]*
R-Squared	0.07
Adj-R-Squared	0.07
F-Statistic	14.83 (0.0)*
(n)	902

Note: (1) Parentheses ( ) are t-statistic while bracket [ ] are p-values
(2) * and ** and *** are1 % and 5% and 10% level of significance accordingly.

Source: Stata Output, 2016

4.7.2 Discussion of General Sector Regression Results (Mental Accounting & Disposition Effect Model)

This study adopted the pooled regression analysis which has been corrected for Heteroscedasticity using the White Method. In table 24, we presented an OLS pooled regression.

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (7%) and (7%) respectively. This indicates that all the independent variables jointly explain about 7% of the systematic variations in the model for the sampled period (2008-2014). The low value of R square shows that there are more excluded variables that drive the dependent variable which have been excluded from the model. The F-statistics (14.83) with a p-value of 0.00 shows that the model is generally significant at 1% level which means that the model was well specified.

Regression models for MENTAL ACCOUNTING & DISPOSITION MODEL (GENERAL) provided the following results; *negative share price Returns (Disposition Effect) (*RMINUS*)* has a negative and significant effect on share price. This result suggests that there is a significant relationship between disposition effect and share prices in the general sector of the Nigerian stock market in the period under review. *Book Value interaction with disposition effect (BVKPS** RMINUS*)* was found to be negative but statistically

insignificant in driving share prices in the general sector in Nigeria. *Earnings per share interaction with disposition effect (EPERS** RMINUS)showed a negative and statistically insignificant impact of share prices in the sector. *Accounting Cash Flow per share interaction with disposition effect (CASPS** RMINUS*) is* positive but insignificant in driving stock prices in the general sector of the Nigerian stock market in the period under study.

Firm Size (FSIZE) has a positive statistically significant relationship with share prices of sampled companies in the Nigerian stock market.

4.8 Disposition Effect Results and Interpretation (Financial Sector)

TABLE 25Descriptive Statistics (Financial Sector)

Variables	Mean	Std.Dev	Jarque-Bera
BVKPS	4.91	11.39	105,692.90(0.00)**
CASPS	0.34	6.27	19,895.65(0.00)**
DECCP	1.30	3.51	3,022.41(0.00)**
EPERS	0.25	1.53	24,672.36(0.00)**
FSIZE	4.67	0.98	22.62(0.00)**
RMINUS	0.50	0.50	46.17(0.00)**
RPLUS	0.26	0.44	64.09(0.00)**
All data observation	277.00	277.00	277.00

Source: Stata Output, 2016

Table above shows the mean (average) for each of the variable, their standard deviation (degree of dispersion) and Jarque-Bera (JB) statistics (normality test). The results in table 1 provided some insight into the nature of the selected companies that were used in this study. Firstly, the accounting book value per share (BVKPS) shows the highest average in the study with a mean value of 4.91. This is followed by firm size.

The accounting book value per share (BVKPS) shows the highest dispersion in the study with a standard deviation value of 11.39.while the disposition effect shows the least dispersion with a standard deviation value of 0.44

The dispersion of firm size shows that the companies sampled are fairly dispersed.

Lastly, the Jarque-Bera (JB) statistics in the table shows that the variables are normally distributed at 1% level of significance.

In examining the relationship among the variables, we employed the Pearson correlation coefficient (correlation matrix) and the results are presented in table 26.

Financial Sector

Correlation	BVKPS	CASPS	DECCP	EPERS	FSIZE	RMINUS	RPLUS
BVKPS	1.00						
CASPS	-0.10	1.00					
DECCP	0.22	0.11	1.00				
EPERS	-0.17	0.27	0.21	1.00			
FSIZE	0.26	0.05	0.46	0.33	1.00		
RMINUS	-0.06	-0.04	0.03	0.02	0.11	1.00	
RPLUS	0.14	0.07	0.15	0.10	0.28	-0.58	1.00
N	277.00	277.00	277.00	277.00	277.00	277.00	277.00

Table 26Correlation Analysis (Finance)

Source: Stata Output, 2016

In Table 26, Share price (DECCP) is the dependent variable while the independent variables are positive Share price return for momentum effect (RPLUS), negative share price for disposition effect (RMINUS), Accounting earnings per share; a proxy for income statement (EPERS), accounting book value per share; proxy for statement of financial position (BVKPS), accounting cash flow per share; proxy for cash flow statement (CASPS) and firm size (FSIZE).

The result shows that share price (DECCP) is positively related to accounting earnings per share (EPERS), firm size (FSIZE), momentum effect(REPLUS), accounting book value per share(BVKPS), and accounting cash flow per share(CASPS) and disposition effect (RMINUS).

The correlation matrix also revealed that no two explanatory variables were perfectly correlated.

Table 27Multicollinearity and Heteroscedasticity test (financial)

Variance Inflation Factors

Date: 06/21/16 Time: 01:29
Sample: 1 290
Included observations: 278

Variable	Coefficient Variance	Centered VIF
C	0.991759	NA
RMINUS	0.160103	1.238574
BVKPS*RMINUS	0.001826	1.541694
EPERS*RMINUS	0.02775	1.123469
CASPS*RMINUS	0.001378	1.088388
FSIZE	0.044422	1.304422
Mean VIF		1.2593094

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	13.67308	Prob. F(5,272)	0
Obs*R-squared	55.83877	Prob. Chi-Square(5)	0
Scaled explained SS	317.7094	Prob. Chi-Square(5)	0

Source: Stata Output, 2016

The table above shows the multicollinearity and Heteroscedasticity test result for our data. The result of VIF=1.25 is less than the accepted VIF value of 10 for multicollinearity. This means that there is the absence of multicollinearity problem in our model. Multicollinearity between explanatory variables may result to wrong signs or implausible magnitudes, in the estimated model coefficients, and the bias of the standard errors of the coefficients. Also, the Berusch Pagan test is statistically significant at 1% level of significance signifying the absence of Heteroscedasticity in the variables.

4.8.1 Mental Accounting & Disposition Model Regression Results (Financial Sector)

To examine the relationship between the dependent variable and independent variables and to test our formulated hypotheses we used panel data regression. The panel data regression result for the financial sector relating to the sampled companies are presented in table 28.

Table 28:Mental Accounting & Disposition Model Regression Results (Financial Sector)

VARIABLES	coefficients
C	-4.37 (-3.40) [0.00]*
RMINUS	-0.86 (-2.63) [0.00]*
BVKPS*RMINUS	0.16 (2.08) [0.03]*
EPERS*RMINUS	0.47 (2.24) [0.02]*
CASPS*RMINUS	0.12 (1.72) [0.08]***
FSIZE	1.21 (3.71) [0.00]*
R-Squared	0.28
Adj-R-Squared	0.26
F-Statistic	21.20 (0.0)*
(n)	278

Note: (1) In Parentheses ( ) are t-statistics while bracket [ ] are p-values
(2) * and ** and *** are1 % and 5% and 10% level of significance accordingly

Source: Stata Output, 2016

4.8.2 Discussion of Financial Sector Regression Results (Mental Accounting & Disposition Effect Model)

This study adopted the pooled regression analysis which has been corrected for Heteroscedasticity using the White Method. In table 28, we presented an OLS pooled regression.

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (28%) and (26%) respectively. This indicates that all the independent variables jointly explain about 28% of the systematic variations in the model for the sampled period (2008-2014). The R square shows that there are more excluded variables that drive disposition effect in the financial sector of the Nigerian stock market. The F-statistics (21.20) with a p-value of 0.00 shows that the model is generally significant at 1% level which means that the model was well specified.

Regression models for MENTAL ACCOUNTING & Disposition MODEL (Financial) provided the following results; *negative share price Returns (Disposition Effect) (*RMINUS*)* has a negative and significant effect on share price. This result suggests that there is a negative and significant relationship between disposition effect and share prices in the financial sector of the Nigerian stock market in the period under review. *Book Value interaction with disposition effect (BVKPS** RMINUS*)* was found to be positive and statistically

significant in driving share prices in the financial sector in Nigeria. *Earnings per share interaction with disposition effect (EPERS** RMINUS)showed a positive and statistically significant impact of share prices in the sector. *Accounting Cash Flow per share interaction with disposition effect (CASPS** RMINUS*)* shows a positive and significant impact on stock prices in the financial sector of the Nigerian stock market in the period under study.

Firm Size (FSIZE) has a positive and statistically significant relationship with share prices of sampled companies in the Nigerian stock market.

4.9 Disposition Effect Results and Interpretation (Service Sector)

TABLE 29 Descriptive Statistics (Service Sector)

Variables	Mean	Std.Dev	Jarque-Bera
BVKPS	3.30	5.73	1,170.01(0.00)**
CASPS	0.85	2.14	2,020.33(0.00)**
DECCP	1.44	3.51	4,093.66(0.00)**
EPERS	0.22	1.46	4,241.06(0.00)**
FSIZE	3.66	0.56	0.76(0.00)**
RMINUS	0.62	0.49	36.75(0.00)**
RPLUS	0.25	0.43	52.64(0.00)**
All data observation	217.00	217.00	217.00

Source: Stata Output, 2016

Table above shows the mean (average) for each of the variable, their standard deviation (degree of dispersion) and Jarque-Bera (JB) statistics (normality test). The results in table 29 provided some insight into the nature of the selected companies that were used in this study. Firstly, the firm size (FSIZE) shows the highest average in the study with a mean value of 3.66. This is followed by Book Value per share (BVKPS) with a mean value of 3.30.

The accounting book value per share (BVKPS) shows the highest dispersion in the study with a standard deviation value of 5.73 while the disposition effect shows the least dispersion with a standard deviation value of 0.43

Lastly, the Jarque-Bera (JB) statistics in the table shows that the variables are normally distributed at 1% level of significance.

In examining the relationship among the variables, we employed the Pearson correlation coefficient (correlation matrix) and the results are presented in table 30.

Table 30Correlation Analysis (Service)

Services Sector

Correlation	BVKPS	CASPS	DECCP	EPERS	FSIZE	RMINUS	RPLUS
BVKPS	1.00						
CASPS	0.39	1.00					
DECCP	0.54	0.23	1.00				
EPERS	0.31	0.01	0.21	1.00			
FSIZE	0.42	0.21	0.20	0.05	1.00		
RMINUS	0.02	-0.07	0.01	-0.03	-0.08	1.00	
RPLUS	0.07	0.12	0.10	0.08	0.11	-0.74	1.00
N	217.00	217.00	217.00	217.00	217.00	217.00	217.00

Source: Stata Output, 2016

In Table 30, Share price (DECCP) is the dependent variable while the independent variables are positive Share price return for momentum effect (RPLUS), negative share price for disposition effect (RMINUS), Accounting earnings per share; a proxy for income statement (EPERS), accounting book value per share; proxy for statement of financial position (BVKPS), accounting cash flow per share; proxy for cash flow statement (CASPS) and firm size (FSIZE).

The result shows that share price (DECCP) is positively related to accounting earnings per share (EPERS), firm size (FSIZE), momentum effect(REPLUS), accounting book value per share(BVKPS), and accounting cash flow per share(CASPS) and disposition effect (RMINUS).

The correlation matrix also revealed that no two explanatory variables were highly correlated.

Table 31multicollinearity and Heteroscedasticity test (services)

Variance Inflation Factors

Date: 06/21/16 Time: 01:33
Sample: 291 517
Included observations: 217

Variable	Coefficient Variance	Centered VIF
C	2.708183	NA
RMINUS	0.253756	1.179774
BVKPS*RMINUS	0.002743	1.448471
EPERS*RMINUS	0.052045	1.104121
CASPS*RMINUS	0.025985	1.15397
FSIZE	0.186508	1.132816
Mean VIF		1.2038304

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	2.824005	Prob. F(5,211)	0.0172
Obs*R-squared	13.61072	Prob. Chi-Square(5)	0.0183
Scaled explained SS	133.4058	Prob. Chi-Square(5)	0

Source: Stata Output, 2016

The table above shows the multicollinearity and Heteroscedasticity test result for our data. The result of VIF=1.20 is less than the accepted VIF value of 10 for multicollinearity. This means that there is the absence of multicollinearity problem in our model. Multicollinearity between explanatory variables may result to wrong signs or implausible magnitudes, in the estimated model coefficients, and the bias of the standard errors of the coefficients. Also, the Berusch Pagan test is statistically significant at 1% level of significance signifying the absence of Heteroscedasticity in the variables.

4.9.1 Mental Accounting & Disposition Model Regression Results (Service Sector:)

However, to examine the relationship between the dependent variable and independent variables and to test our formulated hypotheses we used panel data regression the panel data regression for the service sector sampled companies results obtained are presented is presented in table 32.

Table 32:Mental Accounting & Disposition Model Regression Results (Service Sector)

VARIABLES	coefficients
C	-1.06 (--0.47) [0.63]
RMINUS	-0.56 (-1.18) [0.23]
BVKPS*RMINUS	0.22 (2.13) [0.03]**
EPERS*RMINUS	0.15 (0.74) [0.45]
CASPS*RMINUS	-0.14 (-0.61) [0.53]
FSIZE	0.66 (0.98) [0.32]
R-Squared	0.13
Adj-R-Squared	0.11
F-Statistic	6.31 (0.0)*
(n)	217

Note: (1) In Parentheses ( ) are t-statistic while bracket [ ] are p-values
(2) * and ** and *** are1 % and 5% and 10% level of significance accordingly

Source: Stata Output, 2016

4.9.2 Discussion of Service Sector Regression Results (Mental Accounting & Disposition Effect Model

This study adopted the pooled regression analysis which has been corrected for Heteroscedasticity using the White Method. In table 32, we presented an OLS pooled regression.

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (13%) and (11%) respectively. This indicates that all the independent variables jointly explain about 13% of the systematic variations in the model for the sampled period (2008-2014). The low value of R square shows that there are more excluded variables that drive the dependent variable. The F-statistics (6.31) with a p-value of 0.00 shows that the model is generally significant at 1% level which means that the model was well specified.

Regression models for MENTAL ACCOUNTING & Disposition MODEL (service) provided the following results; *negative share price Returns (Disposition Effect) (*RMINUS*)* has a negative but insignificant effect on share price of the service sector. This result suggests that there is no significant relationship between disposition effect and share prices in the service sector of the Nigerian stock market in the period under review. *Book Value interaction with disposition effect (BVKPS** RMINUS*)* was found to be positive and

statistically significant in driving share prices in the service sector in Nigeria. *Earnings per share interaction with disposition effect (EPERS** RMINUS)showed a positive but statistically insignificant impact on share prices in the sector. *Accounting Cash Flow per share interaction with disposition effect (CASPS** RMINUS*)* appear to have a negative and insignificant impact on stock prices in the service sector of the Nigerian stock market in the period under study.

Firm Size (FSIZE) has a positive but statistically insignificant relationship with share prices of sampled companies in the Nigerian stock market.

4.10 Disposition Effect Results and Interpretation (Consumer Sector)

TABLE 33Descriptive Statistics (Consumer Sector)

Variables	Mean	Std.Dev	Jarque-Bera
BVKPS	3.30	5.73	1,170.01(0.00)**
CASPS	0.85	2.14	2,020.33(0.00)**
DECCP	1.44	3.51	4,093.66(0.00)**
EPERS	0.22	1.46	4,241.06(0.00)**
FSIZE	3.66	0.56	0.76(0.00)**
RMINUS	0.62	0.49	36.75(0.00)**
RPLUS	0.25	0.43	52.64(0.00)**
All data observation	217.00	217.00	217.00

Source: Stata Output, 2016

Table above shows the mean (average) for each of the variable, their standard deviation (degree of dispersion) and Jarque-Bera (JB) statistics (normality test). The results in table 33 provided some insight into the nature of the selected companies that were used in this study. Firstly, the firm size (FSIZE) shows the highest average in the study with a mean value of 3.66. This is followed by Book Value per share (BVKPS) with a mean value of 3.30.

The accounting book value per share (BVKPS) shows the highest dispersion in the study with a standard deviation value of 5.73 while the disposition effect shows the least dispersion with a standard deviation value of 0.43

Lastly, the Jarque-Bera (JB) statistics in the table shows that the variables are normally distributed at 1% level of significance.

In examining the relationship among the variables, we employed the Pearson correlation coefficient (correlation matrix) and the results are presented in table 34.

Services Sector

Correlation	BVKPS	CASPS	DECCP	EPERS	FSIZE	RMINUS	RPLUS
BVKPS	1.00						
CASPS	0.39	1.00					
DECCP	0.54	0.23	1.00				
EPERS	0.31	0.01	0.21	1.00			
FSIZE	0.42	0.21	0.20	0.05	1.00		
RMINUS	0.02	-0.07	0.01	-0.03	-0.08	1.00	
RPLUS	0.07	0.12	0.10	0.08	0.11	-0.74	1.00
N	217.00	217.00	217.00	217.00	217.00	217.00	217.00

Table 34Correlation Analysis (Consumer)

Source: Stata Output, 2016

In Table 34, Share price (DECCP) is the dependent variable while the independent variables are positive Share price return for momentum effect (RPLUS), negative share price for disposition effect (RMINUS), Accounting earnings per share; a proxy for income statement (EPERS), accounting book value per share; proxy for statement of financial position (BVKPS), accounting cash flow per share; proxy for cash flow statement (CASPS) and firm size (FSIZE).

The result shows that share price (DECCP) is positively related to accounting earnings per share (EPERS), firm size (FSIZE), momentum effect(REPLUS), accounting book value per share(BVKPS), and accounting cash flow per share(CASPS) and disposition effect (RMINUS).

The correlation matrix also revealed that no two explanatory variables were perfectly correlated.

Variance Inflation Factors

Date: 06/21/16 Time: 01:38
Sample: 518 716
Included observations: 191

Variable	Coefficient Variance	Centered VIF
C	68.54135	NA
RMINUS	8.610911	1.472487
BVKPS*RMINUS	0.07394	3.157512
EPERS*RMINUS	0.736002	3.397725
CASPS*RMINUS	0.506932	3.98945
FSIZE	3.522785	1.237085
Mean VIF		2.6508518

Table 35Multicollinearity and Heteroscedasticity Test (Consumer)

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.859573	Prob. F(5,185)	0.5094
Obs*R-squared	4.336511	Prob. Chi-Square(5)	0.5021
Scaled explained SS	86.24382	Prob. Chi-Square(5)	0

Source: Stata Output, 2016

The table above shows the multicollinearity and Heteroscedasticity test result for our data. The result of VIF=2.65 is less than the accepted VIF value of 10 for multicollinearity. This means that there is the absence of multicollinearity problem in our model. Multicollinearity between explanatory variables may result to wrong signs or implausible magnitudes, in the estimated model coefficients, and the bias of the standard errors of the coefficients. Also, the

Berusch Pagan test is statistically significant at 1% level of significance signifying the absence of Heteroscedasticity in the variables.

4.10.1 Mental Accounting & Disposition Model Regression Results (Consumer Sector)

To examine the relationship between the dependent variable and independent variables and to test our formulated hypotheses we used panel data regression the panel data regression for the Consumer sector sampled companies results obtained are presented is presented in table 36.

Table 36:Mental Accounting & Disposition Model Regression Results (Consumer Sector)

VARIABLES	coefficients
C	-9.48 (-1.14) [0.25]
RMINUS	-5.39 (-1.83) [0.06]**
BVKPS*RMINUS	-0.02 (-0.09) [0.92]
EPERS*RMINUS	-0.23 (-0.27) [0.78]
CASPS*RMINUS	0.33 (0.47) [0.63]
FSIZE	4.31 (2.29) [0.02]*
R-Squared	0.06
Adj-R-Squared	0.03
F-Statistic	2.53 (0.0)*
(n)	191

Note: (1) Parentheses ( ) are t-statistic while bracket [ ] are p-values
(2) * and ** and *** are1 % and 5% and 10% level of significance accordingly

Source: Stata Output, 2016

4.10.2 Discussion of Consumer Sector Regression Results (Mental Accounting & Disposition Effect Model)

This study adopted the pooled regression analysis which has been corrected for Heteroscedasticity using the White Method. In table 36, we presented an OLS pooled regression.

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (6%) and (3%) respectively. This indicates that all the independent variables jointly explain about 6% of the systematic variations in the model for the sampled period (2008-2014). The low value of R square shows that there are more excluded variables that drive disposition effect in the Nigerian consumer sector. The F-statistics (2.53) with a p-value of 0.00 shows that the model is generally significant at 1% level which means that the model was well specified.

Regression models for MENTAL ACCOUNTING & Disposition MODEL (service) provided the following results; *negative share price Returns (Disposition Effect) (*RMINUS*)* has a negative but significant effect on share price of the consumer sector. This result suggests that there is a significant relationship between disposition effect and share prices in the consumer sector of the Nigerian stock market in the period under review. *Book Value interaction with disposition effect (BVKPS** RMINUS*)* was found to be

negative and statistically insignificant in driving share prices in the consumer sector in Nigeria. *Earnings per share interaction with disposition effect (EPERS** RMINUS)showed a negative and statistically insignificant impact on share prices in the sector. *Accounting Cash Flow per share interaction with disposition effect (CASPS** RMINUS*)* shows a negative but insignificant impact on stock prices in the service sector of the Nigerian stock market in the period under study.

Firm Size (FSIZE) has a positive and statistically significant relationship with share prices of sampled companies in the Nigerian stock market.

4.11 Disposition Effect Results and Interpretation (Industrial Sector*)*

TABLE 37Descriptive Statistics (Industrial Sector)

Variables	Mean	Std.Dev	Jarque-Bera
BVKPS	9.50	14.29	7,550.38(0.00)**
CASPS	3.61	8.00	9,421.90(0.00)**
DECCP	6.18	17.22	13,226.75(0.00)**
EPERS	1.94	4.25	2,322.41(0.00)**
FSIZE	4.29	0.64	5.75(0.00)**
RMINUS	0.51	0.50	31.17(0.00)**
RPLUS	0.45	0.50	31.18(0.00)**
All data observation	187.00	187.00	187.00

Source: Stata Output, 2016

Table above shows the mean (average) for each of the variable, their standard deviation (degree of dispersion) and Jarque-Bera (JB) statistics (normality test). The results in table 1 provided some insight into the nature of the selected companies that were used in this study. Firstly, Book Value per share (BVKPS) with a mean value of 9.50 has the highest mean value in our sample of the consumer sector. This is followed by share prices (DECCP) and the firm size (FSIZE) .share prices (DECCP) shows the highest dispersion with a standard deviation of 17.22. This is followed by accounting book value per share (BVKPS). Lastly, the Jarque-Bera (JB) statistics in the table shows that the variables are normally distributed at 1% level of significance.

In examining the relationship among the variables, we employed the Pearson correlation coefficient (correlation matrix) and the results are presented in table 38.

Table 38Correlation Analysis (Industrial*)*

Correlation	BVKPS	CASPS	DECCP	EPERS	FSIZE	RMINUS	RPLUS
BVKPS	1.00						
CASPS	0.77	1.00					
DECCP	0.16	0.28	1.00				
EPERS	0.59	0.74	0.17	1.00			
FSIZE	0.46	0.38	0.23	0.41	1.00		
RMINUS	-0.12	-0.16	-0.17	-0.16	-0.08	1.00	
RPLUS	0.15	0.20	0.20	0.20	0.16	-0.92	1.00
N	187.00	187.00	187.00	187.00	187.00	187.00	187.00

Source: Stata Output, 2016

In Table 38, Share price (DECCP) is the dependent variable while the independent variables are positive Share price return for momentum effect (RPLUS), negative share price for disposition effect (RMINUS), Accounting earnings per share; a proxy for income statement (EPERS), accounting book value per share; proxy for statement of financial position (BVKPS), accounting cash flow per share; proxy for cash flow statement (CASPS) and firm size (FSIZE).

The result shows that share price (DECCP) is positively related to accounting earnings per share (EPERS), firm size (FSIZE), momentum effect(REPLUS), accounting book value per share(BVKPS), and accounting cash flow per share(CASPS) but negatively with disposition effect (RMINUS).

The correlation matrix also revealed that no two explanatory variables were perfectly correlated.

Table 39Multicollinearity andHeteroscedasticity Test (Industrial)

Variance Inflation Factors

Date: 06/21/16 Time: 01:41
Sample: 717 952
Included observations: 216

Variable	Coefficient Variance	Centered VIF
C	103.6578	NA
RMINUS	19.15639	1.182851
BVKPS*RMINUS	0.03191	2.366053
EPERS*RMINUS	0.617943	1.267353
CASPS*RMINUS	0.071778	1.934642
FSIZE	5.981172	1.139702
Mean VIF		1.5781202

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	2.367516	Prob. F(5,210)	0.0407
Obs*R-squared	11.52608	Prob. Chi-Square(5)	0.0419
Scaled explained SS	169.406	Prob. Chi-Square(5)	0

Source: Stata Output, 2016

The table above shows the multicollinearity and Heteroscedasticity test result for our data. The result of VIF=1.57 is less than the accepted VIF value of 10 for multicollinearity. This means that there is the absence of multicollinearity problem in our model. Multicollinearity between explanatory variables may result to wrong signs or implausible magnitudes, in the estimated model coefficients, and the bias of the standard errors of the coefficients. Also, the Berusch Pagan test is statistically significant at 1% level of significance signifying the absence of Heteroscedasticity in the variables.

4.11.1 Mental Accounting & Disposition Model Regression Results (Industrial Sector)

To examine the relationship between the dependent variable and independent variables and to test our formulated hypotheses we used panel data regression the panel data regression for the Industrial sector sampled companies results obtained are presented is presented in table 40.

Table 40:Mental Accounting & Disposition Model Regression Results (Industrial Sector)

VARIABLES	coefficients
C	-7.40 (-0.85) [0.39]
RMINUS	-7.35 (-1.81) [0.07]**
BVKPS*RMINUS	-0.34 (-1.50) [0.13]
EPERS*RMINUS	3.79 (2.11) [0.03]**
CASPS*RMINUS	0.56 (1.18) [0.23]
FSIZE	4.44 (1.63) [0.10]
R-Squared	0.15
Adj-R-Squared	0.13
F-Statistic	7.50 (0.0)*
(n)	216

Note: (1) Parentheses ( ) are t-statistic while bracket [ ] are p-values
(2) * and ** and *** are1 % and 5% and 10% level of significance accordingly

Source: Stata Output, 2016

4.11.2 Discussion of Industrial Sector Regression Results (Mental Accounting & Disposition Effect Model)

This study adopted the pooled regression analysis which has been corrected for Heteroscedasticity using the White Method. In table 40, we presented an OLS pooled regression.

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (15%) and (13%) respectively. This indicates that all the independent variables jointly explain about 15% of the systematic variations in the model for the sampled period (2008-2014). The low value of R square shows that there are more excluded variables that drive the dependent variable. The F-statistics (7.50) with a p-value of 0.00 shows that the model is generally significant at 1% level which means that the model was well specified.

Regression models for *Mental Accounting &Disposition Model (Industrial)*provided the following results; *positive share price Returns (Disposition Effect) (Rminus)* has a negative but significant effect on share price. This result suggests that there is a significant relationship between disposition effect and share prices in the industrial sector in the Nigerian stock market under the period under review. *Book Value interaction with Disposition Effect (BVKPS*Rminus)*was found to be negative but statistically insignificant

in driving share prices in the industrial sector in Nigeria. *Earnings per share interaction with Disposition Effect (EPERS** Rminus*)* show a positive and statistically significant impact of share prices in the industrial sector. *Accounting Cash Flow per share interaction with Disposition Effect (CASPS**Rminus*)* is negative and insignificant in driving stock prices in consumer sector of the Nigerian stock market in the period under study. *Firm Size (FSIZE)* has a positive but statistically insignificant relationship with share prices of sampled industrial sector in the Nigerian stock market

4.12 Test of Hypotheses

In this section, we tested the research hypotheses formulated in earlier chapter of the study. Four (4) research hypotheses were formulated and they are hereby restated and tested as follows:

4.12.1 Test of Hypothesis I (General)

H_1: Rising stock prices are not significantly related to increase in the sales of shares.

In order to test the hypothesis 1 of this study, we analysed the relationship between rising stock prices and increase in the sales of shares. The result is summarized in Table 41 below.

Table 41: Summary of Regression Result for Test of Hypotheses 1 & 3 (General)

General Negative Returns Model After Correction of Heteroscedaticty

Dependent Variable: DECCP				
Method: Least Squares				
Date: 06/21/16 Time: 01:22				
Sample: 1 952				
Included observations: 902				
White heteroskedasticity-consistent standard errors & covariance				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.978836	1.495188	-1.32347	0.186
RMINUS	-3.336127	1.076813	-3.098148	0.002
BVKPS*RMINUS	-0.05528	0.110679	-0.499465	0.6176
EPERS*RMINUS	1.900512	0.914402	2.078421	0.038
CASPS*RMINUS	0.275204	0.297629	0.924654	0.3554
FSIZE	1.67831	0.476836	3.519679	0.0005
R-squared	0.076467	Mean dependent var		4.001785
Adjusted R-squared	0.071313	S.D. dependent var		17.61999
S.E. of regression	16.9801	Akaike info criterion		8.508591
Sum squared resid	258338.1	Schwarz criterion		8.540551
Log likelihood	-3831.374	Hannan-Quinn criter.		8.520798
F-statistic	14.83738	Durbin-Watson stat		0.556929
Prob(F-statistic)	0	Wald F-statistic		5.00616
Prob(Wald F-statistic)	0.000157			

Source: Stata Output, 2016

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (7%) and (7%) respectively. This indicates that all the independent variables jointly explain about 7% of the systematic variations in the model for the sampled period (2008-2014). The low value of R square shows that there are more excluded variables that drive the dependent variable which have been excluded from the model. The F-statistics (14.83)

with a p-value of 0.00 shows that the model is generally significant at 1% level which means that the model was well specified.

Decision

Since the computed value P-value is 0.002 less than .10, and with a negative coefficient, the hypothesis that rising stock prices are not significantly related to increase in the sales of shares is thus rejected. The conclusion is that rising stock prices are negatively and significantly related to increase in the sales of shares in Nigeria.

4.12.2 Test of Hypothesis 2 (General)

H_2: Rising stock prices are not significant related to increase in the purchases of shares

In order to test the hypothesis 2 of this study, we analysed the relationship between rising stock prices and increase in the purchases of shares. The result is summarized in Table 42 below.

Table 42 Summary of Regression Result for Test of Hypotheses 2 & 4 (General)

MENTAL ACCOUNTING & MOMENTUM MODEL				
General Positive Returns Model After Correction of Heteroscedaticty				
Dependent Variable: DECCP				
Method: Least Squares				
Date: 06/21/16 Time: 01:10				
Sample: 1 952				
Included observations: 902				
White heteroskedasticity-consistent standard errors & covariance				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.511892	1.515428	-1.657546	0.0978
RPLUS	-0.206024	1.138122	-0.181021	0.8564
BVKPS*RPLUS	0.025519	0.078431	0.325371	0.745
EPERS*RPLUS	2.113127	1.22289	1.727978	0.0843
CASPS*RPLUS	0.036814	0.3004	0.12255	0.9025
FSIZE	1.253488	0.460286	2.723279	0.0066
R-squared	0.099779	Mean dependent var		4.00179
Adjusted R-squared	0.094755	S.D. dependent var		17.62
S.E. of regression	16.76442	Akaike info criterion		8.48302
Sum squared resid	251817	Schwarz criterion		8.51498
Log likelihood	-3819.844	Hannan-Quinn criter.		8.49523
F-statistic	19.86219	Durbin-Watson stat		0.37251
Prob(F-statistic)	0	Wald F-statistic		6.59589
Prob(Wald F-statistic)	0.000005			

Source: Stata Output, 2016

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (9%) and (9%) respectively. This indicates that all the independent variables jointly explain about 9% of the systematic variations in the model for the sampled period (2008-2014). The low value of R square shows that there are more excluded variables that drive the dependent variable. The F-statistics (19.86) with a p-value of 0.00 shows that the model is

generally significant at 1% level which means that the model was well specified.

Decision

Since the computed value P-value is 0.8564 and more than .10, and with a negative coefficient, the hypothesis that rising stock prices are not significant related to increase in the purchases of shares is thus accepted. The conclusion is that rising stock prices are negatively and insignificantly related to increase in the purchases of shares in Nigeria.

4.12.3 Test of Hypothesis 3 (General)

H_3: Accounting information interacting with disposition effect has no significant effect on the selling of shares in the Nigeria stock market

In order to test the hypothesis 3 of this study, we analysed the Accounting information interacting with disposition effect. Three accounting variables were used for the analysis namely *BVKPS*, EPERS, and *CASPS (*Refer to table 41 above for the analysis)

Decision

*Book Value interaction with disposition effect (BVKPS** RMINUS*)* was found to be negative but statistically insignificant in driving share prices in the general sector in Nigeria, so we accepted the hypothesis. *Earnings per share interaction with disposition effect (EPERS** RMINUS)showed a negative and

statistically insignificant impact of share prices in the sector so we accepted the hypothesis. *Accounting Cash Flow per share interaction with disposition effect (CASPS**RMINUS*) is* positive but insignificant in driving stock prices in the general sector of the Nigerian stock market in the period under study so we accepted the hypothesis.

4.12.4 Test of Hypothesis 4 (General)

H_4: Accounting information interacting with momentum effect has no significant effect on the buying of shares in the Nigeria stock market

In order to test the hypothesis 4 of this study, we analysed the Accounting information interacting with disposition effect. Three accounting variables were used for the analysis namely *BVKPS*, EPERS, and *CASPS (*Refer to table 42 above for the analysis)

Decision

Book Value interaction with momentum effect (BVKPS*RPLUS) was found to be positive but statistically insignificant in driving share prices in Nigeria, so we accepted the hypothesis. Earnings per share interaction with momentum effect (EPERS*RPLUS) showed a positive and significant impact on share prices in the Nigeria stock market, so we rejected the hypothesis. Accounting Cash Flow per share interaction with momentum effect (CASPS*RPLUS) is positive but insignificant in driving stock prices in Nigeria stock market, so we accepted the hypothesis

4.12.5 Test of hypothesis 1 (Financial Sector)

H_1: Rising stock prices are not significantly related to increase in the sales of shares.

In order to test the hypothesis 1 of this study, we analysed the relationship between rising stock prices and increase in the sales of shares. The result is summarized in Table 43 below.

Table 43:Summary of Regression Result for Test of Hypotheses 1 & 3 (Financial Sector)

Financial Sector				
Dependent Variable: DECCP				
Method: Least Squares				
Date: 06/21/16 Time: 01:31				
Sample: 1 290				
Included observations: 278				
White heteroskedasticity-consistent standard errors & covariance				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4.373095	1.28591	-3.400778	0.0008
RMINUS	-0.862648	0.327162	-2.636758	0.0089
BVKPS*RMINUS	0.163691	0.078521	2.084661	0.038
EPERS*RMINUS	0.475721	0.211716	2.246979	0.0254
CASPS*RMINUS	0.12713	0.073671	1.725639	0.0855
FSIZE	1.218182	0.327752	3.716785	0.0002
R-squared	0.280496	Mean dependent var		1.298201
Adjusted R-squared	0.267269	S.D. dependent var		3.501541
S.E. of regression	2.997308	Akaike info criterion		5.054653
Sum squared resid	2443.609	Schwarz criterion		5.132947
Log likelihood	-696.5967	Hannan-Quinn criter.		5.086064
F-statistic	21.20759	Durbin-Watson stat		0.457819
Prob(F-statistic)	0	Wald F-statistic		7.072715
Prob(Wald F-statistic)	0.000003			

Source: Stata Output, 2016

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (28%) and (26%) respectively. This indicates that all the independent variables jointly explain about 28% of the systematic variations in the model for the sampled period (2008-2014). The R square shows that there are more excluded variables that drive disposition effect in the financial sector of the Nigerian stock market. The F-statistics (21.20) with a p-value of 0.00 shows that the model is generally significant at 1% level which means that the model was well specified.

Decision

Since the computed value P-value is 0.0089less than .10, and with a negative coefficient, the hypothesis that rising stock prices are not significantly related to increase in the sales of shares is thus rejected. The conclusion is that rising stock prices are negatively and significantly related to increase in the sales of shares in Nigeria.

4.12.6 Test of hypothesis 2 (Financial Sector)

H_2: Rising stock prices are not significant related to increase in the purchases of shares

In order to test the hypothesis 2 of this study, we analysed the relationship between rising stock prices and increase in the purchases of shares. The result is summarized in Table 44 below.

Table 44 Summary of Regression Result for Test of Hypotheses 2 & 4 (Financial Sector)

Financial Sector				
Dependent Variable: DECCP				
Method: Least Squares				
Date: 06/21/16 Time: 01:48				
Sample: 1 290				
Included observations: 278				
White heteroskedasticity-consistent standard errors & covariance				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.338991	1.207494	-5.24971	0
RPLUS	0.103816	0.468997	0.221357	0.825
BVKPS*RPLUS	0.023308	0.028381	0.821258	0.4122
EPERS*RPLUS	-0.117785	0.527293	-0.223376	0.8234
CASPS*RPLUS	-0.009383	0.102968	-0.091124	0.9275
FSIZE	1.622513	0.301978	5.372949	0
R-squared	0.217166	Mean dependent var		1.2982
Adjusted R-squared	0.202775	S.D. dependent var		3.50154
S.E. of regression	3.126436	Akaike info criterion		5.13901
Sum squared resid	2658.692	Schwarz criterion		5.21731
Log likelihood	-708.3225	Hannan-Quinn criter.		5.17042
F-statistic	15.09107	Durbin-Watson stat		0.44445
Prob(F-statistic)	0	Wald F-statistic		7.37564
Prob(Wald F-statistic)	0.000002			

Source: Stata Output, 2016

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (21%) and (20%) respectively. This indicates that all the independent variables jointly explain about 20% of the systematic variations in the model for the sampled period (2008-2014). The low value of R square shows that there are more excluded variables that drive the dependent variable. The F-statistics (15.09) with a p-value of 0.00 shows

that the model is generally significant at 1% level which means that the model was well specified.

Decision

Since the computed value P-value is 0.825and more than .10, and with a positive coefficient, the hypothesis that rising stock prices are not significant related to increase in the purchases of shares is thus accepted. The conclusion is that rising stock prices are positively and insignificantly related to increase in the purchases of shares in Nigeria.

4.12.7 Test of hypothesis 3 (Financial Sector)

H_3: Accounting information interacting with disposition effect has no significant effect on the selling of shares in the Nigeria stock market

In order to test the hypothesis 3 of this study, we analysed the Accounting information interacting with disposition effect. Three accounting variables were used for the analysis namely *BVKPS*, EPERS, and *CASPS (*Refer to table 43 above for the analysis)

Decision

*Book Value interaction with disposition effect (BVKPS** RMINUS*)* was found to be positive and statistically insignificant in driving share prices in the financial sector in Nigeria, so we accepted the hypothesis. *Earnings per share interaction with disposition effect (EPERS** RMINUS)showed a positive and

statistically significant impact of share prices in the sector so we rejected the hypothesis.*Accounting Cash Flow per share interaction with disposition effect (CASPS**RMINUS*)* is positive to have a positive significant impact on stock prices in the financial sector of the Nigerian stock market in the period under study so we rejected the hypothesis..

4.12.8 Test of hypothesis 4 (Financial Sector)

H_4: Accounting information interacting with momentum effect has no significant effect on the buying of shares in the Nigeria stock market

In order to test the hypothesis 4 of this study, we analysed the Accounting information interacting with disposition effect. Three accounting variables were used for the analysis namely *BVKPS*, EPERS, and *CASPS (*Refer to table 44 above for the analysis)

Decision

*Book Value interaction with momentum effect (BVKPS*RPLUS)* was found to be positive but statistically insignificant in driving share prices in the financial sector in Nigeria so we accepted the hypothesis. *Earnings per share interaction with momentum effect (EPERS*RPLUS)* showed a negative and significant impact of share prices in the financial sector. *Accounting Cash Flow per share interaction with momentum effect (CASPS*RPLUS) is* negative but insignificant in driving stock prices in financial sector of the Nigerian stock market in the period under study so we accepted the hypothesis .

4.12.9 The test of hypotheses 1 (Service Sector)

H_1: Rising stock prices are not significantly related to increase in the sales of shares.

In order to test the hypothesis 1 of this study, we analysed the relationship between rising stock prices and increase in the sales of shares. The result is summarized in Table 45 below.

Table 45:Summary of Regression Result for Test of Hypotheses 1 & 3 (Service Sector)

Services Sector				
Dependent Variable: DECCP				
Method: Least Squares				
Date: 06/21/16 Time: 01:35				
Sample: 291 517				
Included observations: 217				
White heteroskedasticity-consistent standard errors & covariance				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.066521	2.244511	-0.475169	0.6352
RMINUS	-0.567907	0.478551	-1.186722	0.2367
BVKPS*RMINUS	0.221637	0.103825	2.134717	0.0339
EPERS*RMINUS	0.157932	0.213282	0.740485	0.4598
CASPS*RMINUS	-0.146601	0.238487	-0.614712	0.5394
FSIZE	0.667109	0.679571	0.981661	0.3274
R-squared	0.131262	Mean dependent var		1.441244
Adjusted R-squared	0.110676	S.D. dependent var		3.51255
S.E. of regression	3.312475	Akaike info criterion		5.260529
Sum squared resid	2315.196	Schwarz criterion		5.353982
Log likelihood	-564.7674	Hannan-Quinn criter.		5.29828
F-statistic	6.376204	Durbin-Watson stat		0.767175
Prob(F-statistic)	0.000015	Wald F-statistic		1.855816
Prob(Wald F-statistic)	0.093419			

Source: Stata Output, 2016

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (13%) and (11%) respectively. This indicates that all the independent variables jointly explain about 13% of the systematic variations in the model for the sampled period (2008-2014). The low value of R square shows that there are more excluded variables that drive the dependent variable. The F-statistics (6.31) with a p-value of 0.00 shows that the model is generally significant at 1% level which means that the model was well specified.

Decision

Since the computed value P-value is 0.2367more than .10, and with a negative coefficient, the hypothesis that rising stock prices are not significantly related to increase in the sales of shares is thus accept. The conclusion is that rising stock prices are negatively and insignificantly related to increase in the sales of shares in Nigeria.

4.12.10 Test of hypothesis 2 (Service Sector)

H_2: Rising stock prices are not significant related to increase in the purchases of shares

In order to test the hypothesis 2 of this study, we analysed the relationship between rising stock prices and increase in the purchases of shares. The result is summarized in Table 46 below.

Table 46 Summary of Regression Result for Test of Hypotheses 2 & 4 (Service Sector)

Services Sector				
Dependent Variable: DECCP				
Method: Least Squares				
Date: 06/21/16 Time: 01:52				
Sample: 291 517				
Included observations: 217				
White heteroskedasticity-consistent standard errors & covariance				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.359296	2.217852	-0.162002	0.8715
RPLUS	-1.650944	0.66021	-2.500635	0.0132
BVKPS*RPLUS	0.643381	0.147042	4.375487	0
EPERS*RPLUS	-0.131647	0.215985	-0.60952	0.5428
CASPS*RPLUS	-0.111435	0.270381	-0.412142	0.6807
FSIZE	0.441065	0.649288	0.679305	0.4977
R-squared	0.248484	Mean dependent var		1.44124
Adjusted R-squared	0.230675	S.D. dependent var		3.51255
S.E. of regression	3.080898	Akaike info criterion		5.11558
Sum squared resid	2002.798	Schwarz criterion		5.20903
Log likelihood	-549.0404	Hannan-Quinn criter.		5.15333
F-statistic	13.95314	Durbin-Watson stat		0.5461
Prob(F-statistic)	0	Wald F-statistic		5.30773
Prob(Wald F-statistic)	0.000129			

Source: Stata Output, 2016

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (24%) and (23%) respectively. This indicates that all the independent variables jointly explain about 24% of the systematic variations in the model for the sampled period (2008-2014). The low value of R square shows that there are more excluded variables that drive the dependent variable. The F-statistics (13.95) with a p-value of 0.00 shows

that the model is generally significant at 1% level which means that the model was well specified.

Decision

Since the computed value P-value is 0.0132and less than .10, and with a negative coefficient, the hypothesis that rising stock prices are not significantly related to increase in the purchases of shares is thus rejected. The conclusion is that rising stock prices are negatively and significantly related to increase in the purchases of shares in Nigeria.

4.12.11 The test of hypothesis 3 (Service Sector)

H_3: Accounting information interacting with disposition effect has no significant effect on the selling of shares in the Nigeria stock market

In order to test the hypothesis 3 of this study, we analysed the Accounting information interacting with disposition effect. Three accounting variables were used for the analysis namely *BVKPS*, EPERS, and *CASPS (*Refer to table 45 above for the analysis)

Decision

*Book Value interaction with disposition effect (BVKPS** RMINUS*)* was found to be positive and statistically significant in driving share prices in the service sector in Nigeria so we rejected the hypothesis.*Earnings per share interaction with disposition effect (EPERS** RMINUS)showed a positive but has

statistically insignificant impact of share prices in the sector so we accepted the hypothesis.*Accounting Cash Flow per share interaction with disposition effect (CASPS** RMINUS*)* shows a negative and insignificant impact on stock prices in the service sector of the Nigerian stock market in the period under study so we accepted the hypothesis..

4.12.12 Test of hypothesis 4 (Service Sector)

H_4: Accounting information interacting with momentum effect has no significant effect on the buying of shares in the Nigeria stock market

In order to test the hypothesis 4 of this study, we analysed the Accounting information interacting with disposition effect. Three accounting variables were used for the analysis namely *BVKPS*, EPERS, and *CASPS (*Refer to table 46 above for the analysis)

Decision

*Book Value interaction with momentum effect (BVKPS*RPLUS)* was found to be positive and statistically significant even at 1% level in driving share prices in the financial service sector in Nigeria so we rejected the hypothesis.. *Earnings per share interaction with momentum effect (EPERS*RPLUS)* showed a negative but insignificant impact of share prices in the service sector so we accepted the hypothesis.*Accounting Cash Flow per share interaction*

*with momentum effect (CASPS*RPLUS) is* negative and insignificant in driving stock prices in service sector of the Nigerian stock market in the period under study so we accepted the hypothesis .

4.12.13 Test of hypothesis 1 (Consumer Sector)

H_1: Rising stock prices are not significantly related to increase in the sales of shares.

In order to test the hypothesis 1 of this study, we analysed the relationship between rising stock prices and increase in the sales of shares. The result is summarized in Table 47 below.

Table 47:Summary of Regression Result for Test of Hypotheses 1 & 3 (Consumer Sector)

Consumer Sector				
Dependent Variable: DECCP				
Method: Least Squares				
Date: 06/21/16 Time: 01:37				
Sample: 518 716				
Included observations: 191				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-9.483597	8.27897	-1.145504	0.2535
RMINUS	-5.395478	2.934435	-1.838677	0.0676
BVKPS*RMINUS	-0.025288	0.271919	-0.092998	0.926
EPERS*RMINUS	-0.233084	0.857906	-0.27169	0.7862
CASPS*RMINUS	0.338523	0.711992	0.47546	0.635
FSIZE	4.311723	1.876908	2.297247	0.0227
R-squared	0.064107	Mean dependent var		6.175969
Adjusted R-squared	0.038812	S.D. dependent var		17.03855
S.E. of regression	16.70462	Akaike info criterion		8.500158
Sum squared resid	51623.21	Schwarz criterion		8.602323
Log likelihood	-805.7651	Hannan-Quinn criter.		8.541539
F-statistic	2.534415	Durbin-Watson stat		0.791628
Prob(F-statistic)	0.030229			

Source: Stata Output, 2016

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (6%) and (3%) respectively. This indicates that all the independent variables jointly explain about 6% of the systematic variations in the model for the sampled period (2008-2014). The low value of R square shows that there are more excluded variables that drive disposition effect in the Nigerian consumer sector. The F-statistics (2.53) with a p-value of 0.00 shows that the model is generally significant at 1% level which means that the model was well specified.

Decision

Since the computed value P-value is 0.0676less than .10, and with a negative coefficient, the hypothesis that rising stock prices are not significantly related to increase in the sales of shares is thus rejected. The conclusion is that rising stock prices are negatively and significantly related to increase in the sales of shares in Nigeria.

4.12.14 Test of hypothesis 2 (Consumer Sector)

H_2: Rising stock prices are not significant related to increase in the purchases of shares

In order to test the hypothesis 2 of this study, we analysed the relationship between rising stock prices and increase in the purchases of shares. The result is summarized in Table 48 below.

Table 48 Summary of Regression Result for Test of Hypotheses 2 & 4 (Consumer Sector)

Consumer Sector				
Dependent Variable: DECCP				
Method: Least Squares				
Date: 06/21/16 Time: 01:55				
Sample: 518 716				
Included observations: 191				
White heteroskedasticity-consistent standard errors & covariance				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-12.0317	4.806308	-2.503314	0.0132
RPLUS	5.83481	2.365591	2.466534	0.0146
BVKPS*RPLUS	-0.394572	0.308443	-1.279237	0.2024
EPERS*RPLUS	-0.742797	0.882362	-0.841828	0.401
CASPS*RPLUS	1.263068	0.929624	1.358687	0.1759
FSIZE	3.699474	1.225686	3.018288	0.0029
R-squared	0.145062	Mean dependent var		6.17597
Adjusted R-squared	0.121955	S.D. dependent var		17.0386
S.E. of regression	15.9658	Akaike info criterion		8.40969
Sum squared resid	47157.78	Schwarz criterion		8.51185
Log likelihood	-797.1249	Hannan-Quinn criter.		8.45107
F-statistic	6.277987	Durbin-Watson stat		0.83371
Prob(F-statistic)	0.000021	Wald F-statistic		2.90355
Prob(Wald F-statistic)	0.015057			

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (14%) and (12%) respectively. This indicates that all the independent variables jointly explain about 14% of the systematic variations in the model for the sampled period (2008-2014). The low value of R square shows that there are more excluded variables that drive

the dependent variable. The F-statistics (6.27) with a p-value of 0.00 shows that the model is generally significant at 1% level which means that the model was well specified.

Decision

Since the computed value P-value is 0.0146and less than .10, and with a positive coefficient, the hypothesis that rising stock prices are not significant related to increase in the purchases of shares is thus rejected. The conclusion is that rising stock prices are positively and significantly related to increase in the purchases of shares in Nigeria.

4.12.15 Test of hypothesis 3 (Consumer Sector)

H_3: Accounting information interacting with disposition effect has no significant effect on the selling of shares in the Nigeria stock market

In order to test the hypothesis 3 of this study, we analysed the Accounting information interacting with disposition effect. Three accounting variables were used for the analysis namely *BVKPS*, EPERS, and *CASPS (*Refer to table 47 above for the analysis)

Decision

*Book Value interaction with disposition effect (BVKPS** RMINUS*)* was found to be negative and statistically insignificant in driving share prices in the

consumer sector in Nigeria so we accepted the hypothesis. *Earnings per share interaction with disposition effect (EPERS** RMINUS)showed a negative and statistically insignificant impact on the share prices in the sector so we accepted the hypothesis*Accounting Cash Flow per share interaction with disposition effect (CASPS** RMINUS*)* shows a negative but insignificant impact on stock prices in the service sector of the Nigerian stock market in the period under study so we accepted the hypothesis.

4.12.16 Test of hypothesis 4 (Consumer Sector)

H_4: Accounting information interacting with momentum effect has no significant effect on the buying of shares in the Nigeria stock market

In order to test the hypothesis 4 of this study, we analysed the Accounting information interacting with disposition effect. Three accounting variables were used for the analysis namely *BVKPS*, EPERS, and *CASPS (*Refer to table 48 above for the analysis)

Decision

*Book Value interaction with momentum effect (BVKPS*RPLUS)* was found to be negatively but statistically insignificant in driving share prices in the financial consumer sector in Nigeria so we accepted the hypothesis. *Earnings per share interaction with momentum effect (EPERS*RPLUS)* showed a

negative but insignificant impact of share prices in the consumer sector so we accepted the hypothesis. *Accounting Cash Flow per share interaction with momentum effect (CASPS*RPLUS) is* positive and insignificant in driving stock prices in consumer sector of the Nigerian stock market in the period under study so we accepted the hypothesis .

4.12.17 Test of hypothesis1 (Industrial Sector)

H_1: Rising stock prices are not significantly related to increase in the sales of shares.

In order to test the hypothesis 1 of this study, we analysed the relationship between rising stock prices and increase in the sales of shares. The result is summarized in Table 49 below.

Table 49:Summary of Regression Result for Test of Hypotheses 1 & 3 (Industrial Sector)

Industrial Sector				
	Dependent Variable: DECCP			
	Method: Least Squares			
	Date: 06/21/16 Time: 01:43			
Sample: 717 952				
	Included observations: 216			
	White heteroskedasticity-consistent standard errors & covariance			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.406895	8.653703	-0.855922	0.393
RMINUS	-7.358747	4.056525	-1.814052	0.0711
BVKPS*RMINUS	-0.34234	0.227805	-1.502778	0.1344
EPERS*RMINUS	3.796797	1.797656	2.112082	0.0359
CASPS*RMINUS	0.565146	0.478416	1.181286	0.2388
FSIZE	4.445311	2.719867	1.634385	0.1037
R-squared	0.151642	Mean dependent var		8.13125
Adjusted R-squared	0.131443	S.D. dependent var		31.2876

S.E. of regression	29.15892	Akaike info criterion	9.610783
Sum squared resid	178550.9	Schwarz criterion	9.704541
Log likelihood	-1031.965	Hannan-Quinn criter.	9.648662
F-statistic	7.507398	Durbin-Watson stat	0.690009
Prob(F-statistic)	0.000002	Wald F-statistic	2.163717
Prob(Wald F-statistic)	0.059367		

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (15%) and (13%) respectively. This indicates that all the independent variables jointly explain about 15% of the systematic variations in the model for the sampled period (2008-2014). The low value of R square shows that there are more excluded variables that drive the dependent variable. The F-statistics (7.50) with a p-value of 0.00 shows that the model is generally significant at 1% level which means that the model was well specified.

Decision

Since the computed value P-value is 0.0711less than .10, and with a negative coefficient, the hypothesis that rising stock prices are not significantly related to increase in the sales of shares is thus rejected. The conclusion is that rising stock prices are negatively and significantly related to increase in the sales of shares in Nigeria.

4.12.18 Test of hypothesis 2 (Industrial Sector)

H_2: Rising stock prices are not significant related to increase in the purchases of shares

In order to test the hypothesis 2 of this study, we analysed the relationship between rising stock prices and increase in the purchases of shares. The result is summarized in Table 50 below.

Table 50:Summary of Regression Result for Test of Hypotheses 2 & 4 (Industrial Sector)

Industrial Sector				
Dependent Variable: DECCP				
Method: Least Squares				
Date: 06/21/16 Time: 01:58				
Sample: 717 952				
Included observations: 216				
White heteroskedasticity-consistent standard errors & covariance				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.173998	8.504443	-0.373216	0.7094
RPLUS	-6.228856	4.201626	-1.482487	0.1397
BVKPS*RPLUS	-0.308029	0.34181	-0.901171	0.3685
EPERS*RPLUS	6.198996	3.057981	2.027153	0.0439
CASPS*RPLUS	-0.415535	0.485283	-0.856273	0.3928
FSIZE	2.358042	2.648126	0.890457	0.3742
R-squared	0.188347	Mean dependent var		8.13125
Adjusted R-squared	0.169022	S.D. dependent var		31.2876
S.E. of regression	28.52115	Akaike info criterion		9.56655
Sum squared resid	170825.8	Schwarz criterion		9.66031
Log likelihood	-1027.188	Hannan-Quinn criter.		9.60443
F-statistic	9.746241	Durbin-Watson stat		0.38128
Prob(F-statistic)	0	Wald F-statistic		1.55258
Prob(Wald F-statistic)	0.17496			

Source: Stata Output, 2016

From the Table above, we observed that the results show that the R-squared and adjusted R-squared values were (18%) and (16%) respectively. This

indicates that all the independent variables jointly explain about 18% of the systematic variations in the model for the sampled period (2008-2014). The low value of R square shows that there are more excluded variables that drive the dependent variable. The F-statistics (9.74) with a p-value of 0.00 shows that the model is generally significant at 1% level which means that the model was well specified.

Decision

Since the computed value P-value is 0.1397and more than .10, and with a negative coefficient, the hypothesis that rising stock prices are not significant related to increase in the purchases of shares is thus accepted. The conclusion is that rising stock prices are negatively and insignificantly related to increase in the purchases of shares in Nigeria.

4.12.19 Test of hypothesis 3 (Industrial Sector)

H_3: Accounting information interacting with disposition effect has no significant effect on the selling of shares in the Nigeria stock market

In order to test the hypothesis 3 of this study, we analysed the Accounting information interacting with disposition effect. Three accounting variables were used for the analysis namely *BVKPS*, EPERS, and *CASPS (*Refer to table 49 above for the analysis)

Decision

*Book Value interaction with Disposition Effect (BVKPS*Rminus)* was found to be negative but statistically insignificant in driving share prices in the industrial sector in Nigeria so we accepted the hypothesis.*Earnings per share interaction with Disposition Effect (EPERS** Rminus*)* show a positive and statistically significant impact of share prices in the industrial sector so we rejected the hypothesis. . *Accounting Cash Flow per share interaction with Disposition Effect (CASPS**Rminus*)* is negative and insignificant in driving stock prices in consumer sector of the Nigerian stock market in the period under study so we accepted the hypothesis.

4.12.20 Test of hypothesis 4 (Industrial Sector)

H_4: Accounting information interacting with momentum effect has no significant effect on the buying of shares in the Nigeria stock market

In order to test the hypothesis 4 of this study, we analysed the Accounting information interacting with disposition effect. Three accounting variables were used for the analysis namely *BVKPS*, EPERS, and *CASPS (*Refer to table 50 above for the analysis)

Decision

*Book Value interaction with momentum effect (BVKPS*RPLUS)* was found to be negative and statistically insignificant in driving share prices in the industrial sector in Nigeria so we accepted the hypothesis. *Earnings per share interaction with momentum effect (EPERS*RPLUS)* showed a positive and

statistically significant impact of share prices in the industrial sector so we rejected the hypothesis. *Accounting Cash Flow per share interaction with momentum effect (CASPS*RPLUS) is* negative and insignificant in driving stock prices in consumer sector of the Nigerian stock market in the period under study so we accepted the hypothesis .

CHAPTER 5

SUMMARY OF FINDINGS, CONCLUSIONAND RECOMMENDATIONS

This chapter summarizes the main research findings, highlights its contributions, and presents recommendations for future studies.

5.1 Summary of Findings

The results of this study are categorized into two sections. The first considered the general market sample and the second considered sector by sector sample with regard to momentum and disposition effects.

(a) Momentum Effects.

In the general market, the result indicate that positive share price Returns (momentum Effect) (RPLUS) has a negative influence on share prices and there is no significant relationship between momentum effect and share prices in the Nigerian stock market in the period under review. Book Value interaction with momentum effect (BVKPS*RPLUS) and Accounting Cash

Flow per share interaction with momentum effect (CASPS*RPLUS) has a positive effect but is statistically insignificant in driving stock prices in Nigeria stock market prices while Earnings per share interaction with momentum effect (EPERS*RPLUS) has a positive and significant impact on share prices in the Nigeria stock market.

For the financial sector, positive share price Returns (momentum Effect) (RPLUS) has a positive influence on share prices but there is no significant relationship between momentum effect and share prices In the financial sector in the Nigerian stock market in the period under review. Also Book Value interaction with momentum effect (BVKPS*RPLUS) was found to be positive but statistically insignificant in driving share prices in the financial sector in Nigeria.

Earnings per share interaction with momentum effect (EPERS*RPLUS) has a negative and significant impact on share prices in the financial sector.Accounting Cash Flow per share interaction with momentum effect (CASPS*RPLUS) is negative but insignificant in driving stock prices in financial sector of the Nigerian stock market in the period under study.

For service sector, positive share price Returns (momentum Effect) (RPLUS) has a negative and a significant relationship between momentum effect and share prices in the service sector in the Nigerian stock market under the period

under review. Book Value interaction with momentum effect (BVKPS*RPLUS) was found to be positive and significant in driving share prices in the service sector in Nigeria. Earnings per share interaction with momentum effect (EPERS*RPLUS) and Accounting Cash Flow per share interaction with momentum effect (CASPS*RPLUS) is negative and insignificant in driving stock prices in service sector of the Nigerian stock market in the period under study.

In the Consumer Sector, positive share price Returns (momentum Effect) (RPLUS) has a positive effect and has significant relationship between momentum effect and share prices in the consumer sector in the Nigerian stock market under the period under review. Book Value interaction with momentum effect (BVKPS*RPLUS) and Earnings per share interaction with momentum effect (EPERS*RPLUS) were found to have negative and insignificant impacton share prices in the consumer sector in Nigeria. Accounting Cash Flow per share interaction with momentum effect (CASPS*RPLUS) has a positive and insignificant impact on stock prices in consumer sector of the Nigerian stock market in the period under study.

Then for industrial sector, positive share price Returns (momentum Effect) (RPLUS) there is a negative impact and insignificant relationship between momentum effect and share prices in the industrial sector in the Nigerian stock market under the period under review. Book Value interaction with momentum

effect (BVKPS*RPLUS) and Accounting Cash Flow per share interaction with momentum effect (CASPS*RPLUS) are negative and insignificant in driving stock prices in industrial sector of the Nigerian stock market in the period under study.Earnings per share interaction with momentum effect (EPERS*RPLUS) has a positive and significant impact on share prices in the industrial sector.

(b) Disposition Effects.

As regard disposition effect in the general sector, negative share price Returns (Disposition Effect) (RMINUS) is negative and has a significant relationship between disposition effect and share prices in the general sector of the Nigerian stock market in the period under review. Book Value interaction with disposition effect (BVKPS* RMINUS) and Earnings per share interaction with disposition effect (EPERS* RMINUS) were found to be negative but insignificant in driving share prices in the general sector in Nigeria. Accounting Cash Flow per share interaction with disposition effect (CASPS* RMINUS) has a positive but insignificant effect in driving stock prices in the general sector of the Nigerian stock market in the period under study.

Negative share price Returns (Disposition Effect) (RMINUS) has a negative impact and there is a significant relationship between disposition effect and share prices in the financial sector of the Nigerian stock market in the period

under review. Book Value interaction with disposition effect (BVKPS* RMINUS) was found to be positive and insignificant in driving share prices in the financial sector in Nigeria. Earnings per share interaction with disposition effect (EPERS* RMINUS) and Accounting Cash Flow per share interaction with disposition effect (CASPS* RMINUS) has a positive and significant impact on stock prices in the financial sector of the Nigerian stock market in the period under study

Negative share price Returns (Disposition Effect) (RMINUS) has a negative but no significant relationship between disposition effect and share prices in the service sector of the Nigerian stock market in the period under review. Book Value interaction with disposition effect (BVKPS* RMINUS) was found to be positive and significant in driving share prices in the service sector in Nigeria. Earnings per share interaction with disposition effect (EPERS* RMINUS)has a positive but insignificant impact on share prices in the sector. Accounting Cash Flow per share interaction with disposition effect (CASPS* RMINUS) has a negative and insignificant impact on stock prices in the service sector of the Nigerian stock market in the period under study.

Negative share price Returns (Disposition Effect) (RMINUS) has a negative but also has significant relationship between disposition effect and share prices in the consumer sector of the Nigerian stock market in the period under review. Book Value interaction with disposition effect (BVKPS* RMINUS), Earnings

per share interaction with disposition effect (EPERS* RMINUS) and Accounting Cash Flow per share interaction with disposition effect (CASPS* RMINUSwere found to be negative and insignificant in driving share prices in the consumer sector in Nigeria.

Positive share price Returns (disposition Effect) (RMinus) has negative but significant relationship between disposition effect and share prices in the industrial sector in the Nigerian stock market under the period under review. Book Value interaction with disposition effect (BVKPS* Rminus) and Accounting Cash Flow per share interaction with disposition effect (CASPS*Rminus) were found to be negative but statistically insignificant in driving share prices in the industrial sector in Nigeria. Earnings per share interaction with disposition effect (EPERS* Rminus) show a positive and significant impact of share prices in the industrial sector.

5.2 Conclusion

This study is to examined the relationship between the disposition and momentum effect on equity shares in Nigerian based on the prospect theory and mental accounting. It was empirically verified that, positive share price Returns have a negative influence on share prices and there is no significant relationship between momentum effect and share prices in the Nigerian stock market in the period under review. The implication is that momentum is not a

general feature of the Nigerian stock market, but is only apparent over certain time periods when considered on sector basis.

Also momentum interaction with accounting information, is positively insignificant save in earning per share. This means that good statement of financial position content can statistically motivate the market to favourably price shares in the Nigerian stock market.Therefore movements in earning per share should be one of the major indicator for stock investors. Once a momentum trader sees acceleration in earning per share or revenues, the trader need to take a long or short position in the stock in the hope that its momentum will continue in either an upward or downward direction. This strategy relies on short-term movements in a stock's price rather than fundamental value, this is not recommended for novices.

In the financial sector, the study concluded that improved cash flow content and stock returns reduces stock pricing though not significantly, so for momentum buyers, improved cash flow and stock returns should be a critical factor to study before investing, an indicator for momentum traders to restrict investing, though the effect is not significant but should not be neglected.

Also, the researcher concluded that market listens to other signals in the service sector other than their stock returns. However, Book Value interaction with momentum effect shows that the market pays a serious attention to the

statement of financial position content. So it should be an issue to critically analyse by the momentum traders.

In the Consumer Sector, extent to which rising stock prices increase purchases of shares is significant, so momentum traders should study and identify trend lines in other to determine their action, momentum trading strategies should be seriously applied i.e. buying past winners and selling past losers.

Furthermore, in the industrial sector, it is concluded that momentum is not a feature; that is, share price is not driven by momentum effect in the Nigerian stock market but Earnings per share interaction with momentum effect has a positive and significant impact on share prices. It is them suggests that earnings per share should be one of the major motivation for momentum traders in this sector.

When considering disposition effect regarding the general sector, it was concluded that negative share price Returns has a negative influence on share prices and there is a significant relationship between disposition effect and share prices in the Nigerian stock market in the period under review. Also with its interaction with accounting information, it was concluded that, it is negatively related save in Accounting Cash Flow per share which is positively related but is insignificant in driving stock prices. The implication however is that disposing stock that a losing price is a general phenomenon in Nigerian

stock market. This can really be misleading because, that a price is losing price may not necessary mean that it is not viable, it may only be an existence of a systematic mispricing.

Regarding the sector by sector analysis of accounting information interactions, it was concluded that Earnings per share interaction with disposition effect and Accounting Cash Flow per share interaction with disposition effect has a positive significant impact on stock prices in the financial sector of the Nigerian stock market in the period under study, Book Value interaction with disposition effect was found to be positive and significant in driving share prices in the service sector in Nigeria. Earnings per share interaction with disposition effect show a positive and significant impact on share prices in the industrial sector. This means that negative stock returns with strong income statement content can significantly increase the prices of the sampled companies in the sector. Hence, though the sector makes negative returns, when the market believes in the integrity of the income statement, they will always judge the stock price favourably.

Disposition effects can directly affect the stock price. If the disposition effect holds in aggregate, it can cause the positive relations between stock prices and volume. Moreover, disposition effects can act as a stock price stabilizer that can inhibit the possibility of stock increases and decreases.

On the other hand, it was concluded that, if stock prices increase, the effect makes investors more ready to sell the winner; accordingly, stock supplies increase and it slows down the process of stock increases.

Therefore, the research concludes that, if there is abnormal market trading volumes, we can expect that the market or a particular stock price will have some resistance to increases or decreases some days after. Hence, the disposition effect can explain the correlation between stock changes and volume of exchange. Thus disposition effects means that stock prices cannot quickly adjust to information; consequently, it causes a systematic mispricing.

It is however concluded that, holding the loser too long in the hope that the stock will recover is just frivolous. Investors will lose other investment opportunities. Similarly, selling the winner too soon, investors will have to reinvest the money and also incur the opportunity cost of returning the stock sold. Apparently, investors should avoid falling into the "disposition effect". However, it is very difficult for investors to correct and even be fully informed about the consequences.

We suggest that investors set a maximum loss and set an investment horizon for investing. If the loss reaches the threshold, investors should not hesitate to sell the unprofitable stocks.

Furthermore, investors should sell stocks after a predetermined investment horizon regardless for gain or loss. It is hoped that this strategy will improve the trading performances of investors.

5.3 Recommendations.

From the findings and conclusion of this study, the following recommendations are proffered. These would be useful to stakeholders such as; Investors, Financial Advisers/Analysts, Executives of Companies, Day Traders, Emerging Countries, Government, Stock Market Authority, Researchers

i. Movements in earning per share should be one of the major indicator for stock investors. Once a momentum trader sees acceleration in earning per share or revenues, the trader need to take a long or short position in the stock in the hope that its momentum will continue in either an upward or downward direction.

ii. In the financial sector, whenever there is improved cash flow content and stock returns, investors should reduce their investment momentum, this is because, it reduces stock pricing though not significantly, so for momentum investors, improved cash flow and stock returns should be a critical factor to study before investing, an indicator for momentum traders to restrict investing,

iii. In the Consumer Sector, extent to which rising stock prices increase purchases of shares is significant, so momentum traders should study and identify trend lines in other to determine their action, momentum trading strategies should be seriously applied i.e. buying past winners and selling past losers.

iv. In the industrial sector, when there is an increase in Earnings per share it is a right time for investment because it has a positive and significant impact on share prices. So it should be one of the major motivation for momentum traders in industrial sector.

v. We therefore advice that movements in earning per share should be one of the key factor to be considered by financial analysts and advisers for a better financial advice to their clients.

vi. We recommend that in the service sector, stock returns should not be a major factor to consider in that, Market listens to other signals other than their stock returns. However, a serious attention should be paid to the statement of financial position content.

vii. People should not be quick in disposing stock that are losing price, though this is a general phenomenon in Nigerian stock market. However it is discovered that it does not mean that the stock is not viable, it may only be an existence of a systematic mispricing.

viii. It is however recommended that losers should not be held for too long in the hope that the stock will recover is may not materialize soon. Investors may lose others investment opportunities

ix. We recommend investors to "Cut losses and let the profits run". We suggest that investors set a maximum loss and set an investment horizon for investing. If the loss reaches the threshold, investors should not hesitate to sell the unprofitable stocks.

x. Furthermore, investors should sell stocks after a predetermined investment horizon regardless for gain or loss. We hope that with this strategy, investors' will improve their trading performances.

xi. When there is a progressive increase in the movements in earning per share for a period of time, we advise that company should put forth their shares for sale, because it will attract the momentum traders to make investment in such company.

xii. To a day trader, once a day trader sees acceleration in earning per share or revenues, the trader need to take a short position in the stock in the hope that its momentum will continue upward direction. This strategy relies on short-term movements in a stock's price rather than fundamental value, this is not recommended for novices.

5.4 Contribution to Knowledge

This study was able to affirm the importance of disposition and momentum effect on equity shares in Nigeria due to an increasing number of ethically minded investors. In this regard, the study was able to clarify that momentum is not a general feature of the Nigerian stock market, but is only apparent over certain time periods and sectors of the market.

In addition, it added to current literature because disposition and momentum and its influence on equity shares in developing country like Nigeria is relatively new agitation to gain ground in other to appreciate the significant influence of behavioural accounting/ finance in portfolio management.

It also added to the current literature in that it provides a platform of the use of accounting information in market psychology predictionsnot just in the aggregate sense, but also in sector by sector platform.

This study contributes to the literature in that it provides evidence that good Statement of financial position content can statistically motivate the market to favourably price shares in the Nigerian stock market. Once a momentum trader sees acceleration in earning per share or revenues, the trader need to take a long or short position in the stock in the hope that its momentum will continue in either an upward or downward direction.

This study was able to provide systematic recognition in the financial sector that improved cash flow content and stock returns reduces stock pricing though

not significantly, so improved cash flow and stock returns should be an indicator to restrict investment.

The study also contributes to the literature in that negative stock returns with strong income statement content can significantly increase the prices of the companies in the industrial sector. Hence, though the sector makes negative returns, when the market believes in the integrity of the income statement, they will always judge the stock price favourably.

5.5 Suggestions for further study

Based on the limitation faced by the researchers, it was impossible to carry out a research that is fully exhaustive of all the various variables and participating roles in the field of disposition and momentum effect on equity shares in Nigerian stock market. Therefore, the following suggestions are recommended for further study;

1. This study selected only quoted companies in Nigeria, future research could investigate some selected corporations of countries in the West African region on the same subject matter.

2. The period of this runs for 7 years period (2008-2014). Further studies could consider a longitudinal study of 15 to 20 years or more.
3. This study addressed two major effects (disposition and momentum). Future researchers can consider a separate study for each of the effects.
4. Further comparative analysis research could be undertaken to explore the effect of the disposition and momentum effect on equity shares in financial and non- financial industries.

REFERENCES

Adebisi, O. S. & Lawal, K.O.(2015). Equity share price determinants: A survey of literature.*Arabian Journal of Business and Management Review, 5*(3),38-48

Ahmed, H. (2015). Impact of firms' earnings and economic value added on the market share value: An empirical study on the Islamic banks in Bangladesh.*Global Journal of Management and Business Research: Accounting and Auditing, 15*(2), 56-64.

Agana,J.A, Mireku,K & Appiah,K.O.(2015). Comparative predictive abilities of earnings and operating cash flows on future cash flows: Empirical evidence from Ghana. *Accounting and Finance Research,4*,3-5

Andreassen, P.A. (1988). Explaining the price-volume relationship: the difference between price changes and changing prices, Organizational Behaviour and Human Decision Process.*Journal of Behavioral Decision Making, 41*, 371-389.

Andreassen, P. A. (1990). Judgmental extrapolation and market overreaction: On the use and disuse of news. *Journal of Behavioral Decision Making*, *3*(3), 153-174.

Angahar P. A. & Malizu J. (2015).The Relationship between Accounting Information and stock market returns on the Nigerian Stock Exchange *Management and Administrative Sciences Review,4*(1) 76-86.

Anita & Yadav, P (2014). Influenceof selected financial indicators on stock price of Tata Motors Ltd.*International Journal of Application or Innovation in Engineering & Management,3* (7).

Antoniou, A. (2007). Profitability of momentum strategies in international markets: The role of business cycle variables and behavioural biases. *Journal of Banking & Finance,31*(3), 955–972.

Anwaar, M.(2016). Impact of firms' performance on stock returns; evidence from listed companies of FTSE-100 Index London, UK.*Global Journal of Management and Business Research: D Accounting and Auditing, 16*, (1)

Amir, E., Harris, T. S., & Venuti, E. K. (1993). A comparison of the value-relevance of US versus non-U.S. GAAP accounting measures using

Form 20-F reconciliations. *Journal of Accounting Research*, *31*, 230–264.

Arshad, Z. Arshaad, A. R. Yousaf, S. Jamil,S.(2015).Determinants of share prices of listed commercial banks in Pakistan. *Journal of Economics and Finance*, *6,* (2) 56-64

Asness C. S., Moskowitz T. J.,& Pedersen L. H. (2013).Value and momentum everywhere, *Journal of Finance*,*68*(3)929-985.http://dx.doi.org/10.1111/jofi.12021.

Asness, C. S., Moskowitz, T. J., & Pedersen, L. H., (2009). Value and momentum everywhere. AQR Capital Management, LLC, and New York University. *Unpublished working paper*,

Asness, C. S., (1994).Variables that explain stock returns.*Ph.D. Dissertation, University of Chicago.*

Ball, R., & Brown P., (1968). An empirical evaluation of accounting income numbers.*Journal of Accounting Research*,*6,* 159–178.

Bansal, R. & Amir Y. (2004).Risks for the long run: a potential resolution of asset pricing puzzles.*Journal of Finance*,*35*(1)54-56.

Banz R.W. (1981).The relation between return and market value of common stocks.*Journal of Financial Economics*,*9*,3-18, http://dx.doi.org/10.1016/0304-405x(81) 90018-0.

Basu, S., (1977). Investment performance of common stocks in relation to their price earnings ratios: A test of the efficient market hypothesis.*Journal of Finance*,*32*, 663–682.

Barberis N, Huang M. (2001). Mental accounting, loss aversion, and individual stock returns. *Journal of Finance*,*56*,1247-1292.

BarberisN,ShleiferA. &VishnyR**. (**1998). A model of investor sentiment. *Journal of Financial Economics*,*49*,307–343.

Barberis, N. & Wei X. (2009). What drives the disposition effect? An analysis of a long-standing preference-based explanation. *Journal of Finance*,*64*(2)751-784.

Barth, M. (1991). Relative measurement errors among alternative pension assets and liability measures.*The Accounting Review*,*69*, 1-25.

Barth, E. Mary, H. William, B. & Wayne R. L. (2001). The relevance of the value relevance literature for financial accounting standard setting: another view, http://www.SSRN.com

Barth, M.E., Beaver, W.H. & Landsman, W.R. (2001). The relevance of value relevance literature for financial accounting standard setting: another view. *Journal of Accounting and Economics, 31,* 77-104. http://dx.doi.org/10.2139/ssrn.246861

Barth, M. E., & Kallapur S. (1996). The effects of cross-sectional scale differences on regression results in empirical accounting research.*Contemporary Accounting Research,13,* 527–567.

Baucells, M., Weber, M., Welfens, F. (2011). Reference-point formation and updating. *Management Science,57*(3) 506-519.

Beaver W.H. (2002). Perspective of recent capital market research.*The Accounting Review [On-line],77*. 187-215.

Beisland, L.A. (2009). A review of the value relevance literature. *The Open Business Journal, 2,* 7-27.

Bekaert, G., Erb, C. B., Harvey, C. R., & Viskanta, T. E. (1997). What matters for emerging equity market investments. *Emerging Markets Quarterly, 1,* 17-46.

Borys M., Zemcik P. (2011).Size and Value Effects in Visegrad Countries. Emerging Markets Finance and Trade, *47,* 50-68, http://dx.doi.org/10.2753/ree1540-496x470 303.

Binsbergen, J. H. V, Michael W. B, & Ralph S. J. K., (2010). On the timing and pricing of dividends.*American Economic Review,*forthcoming.

Binsbergen, J. H. V, & Ralph S. J. K., (2010). Predictive Regressions: A present-value approach.*Journal of Finance.65,* 1439-1471.

Brief, R. P. & Zarowin, P. (1999).The value relevance of dividends, book value and earnings.*New York University Dept. of accounting Working Paper* No. 99- Available at SSRN.

Brown, P., N. Chappel, R. Da Silva, R., & Walter T., (2002). The reach of the disposition effect: Large sample evidence across investor classes.*Working Paper, University of Western Australia*.

Bondt, W., F. M. De, & Thaler, R.H. (1987). Further evidence on investor overreaction and stock market seasonality. *The Journal of Finance*,*42*(3), 557–581. http://dx.doi.org/10.2307/2328371

Brown, S., Lo, K. & Lys, T. (1999). Use of R2 in Accounting Research: Measuring changes in value relevance over the last four decades. *Journal of Accounting and Economics, 28*, 83 – 115.

Camerer, C & Weber M. (1998). The Disposition Effect in Securities Trading: An Experimental Analysis. *Journal of Economic Behavior & Organization*,*33*(2):167-184.

Campbell, J. Y., & John C., (1999). By Force of Habit: A Consumption-Based explanation of aggregate stock market behaviour.*Journal of Political Economy*,*107*, 205-251

Capaul C., Rowley I., Sharpe W. (1993).International value and growth stock returns.*Financial Analysts Journal*,*49*,27-36, http://dx.doi.org/10.2469/faj.v49. n1.27.

Chabot, B., Ghysels E. & Jagannathan R. (2009). Price momentum in stocks: insights from Victorian age data. *National Bureau of Economic Research Working Papers* 14500.

Chan L.K.C, Hamao Y., Lakonishok. J. (1991). Fundamentals and stock returns in Japan.*Journal of Finance*,*46*, 1739-1764, http://dx.doi.org/10.2307/2328571.

Chan, L. K. C., Jegadeesh, N., & Lakonishok, J. (1996). Momentum strategies; *The Journal of Finance*, *51*, 1681-1713.

Chen, G., O.M. Rui & Y. Xu (2004). When will investors herd?. *Working Paper*.

Chen, H., (2004). Expected dividend growth rates and stock returns.*Working paper, University of Chicago.*

Cheng, A., Liu, C.S. & Schaefer T (1996). Earnings permanence and the incremental information content of cash flows from operations.*Journal of Accounting Research*,*34*, 173–181.

Cheng, A. Liu, C.S. & Schaefer T (2014). Corporate social responsibility and access to finance. *Strategic Management Journal, 35*(1), 1-23.

Chu, E. L. (1997). Impact of earnings, dividends and cash flows on stock returns: Case of Taiwan's Stock Market.*Review of Quantitative Finance and Accounting*. *9,* 181–202

Chui, P. (2001). An experimental study of the disposition effect: Evidence from Macau. *The Journal of Psychology and Financial Markets*, *2*, 216–222.

Chui, A .C.W., Titman S., Wei K.C.J. (2000). Momentum, legal systems and ownership structure: An analysis of Asian Stock Markets.*Hong Kong Polytechnic University, working paper*.http://dx.doi.org/10.2139/ssrn.265848

Chui A.C.W., Titman S., Wei K.C.J. (2010).Individualism and momentum around the world.*Journal of Finance,65*, 361-392, http://dx.doi.org/10.1111/j.1540-6261.2009. 01532.x.

Clifford S. et al (2013). Value and momentum everywhere. *The Journal of Finance,68*(3)931-985

Conrad, J., Kaul, G., (1998). An anatomy of trading strategies. *Review of Financial Studies*, *11*, 489-519.

Coval, J. & Shumway T.(2000). Do behavioral biases affect prices? *Journal of Finance,60*(1)1-34.

Croce, M. et al, (2010). Investor information, long-run risk, and the duration of risky cash flows.*Working paper, UNC Chapel Hill.*

Cutler, D. M., Poterba, J. M., & Summers, L. M. (1989). What moves stock prices? *Journal of Portfolio Management*, *15*(3) 4-11.

Czapkiewicz A., Skalna I. (2010).The CAPM and Fama-French Models in Poland. "*Przegląd Statystyczny",57* (4)128-141.

Da Costa, N., Goulart, M., Cupertino, C., Macedo, J., & Da Silva, S. (2013). The disposition effect and investor experience. *Journal of Banking and Finance*, 37(5), 1669–1675.

Da Costa Jr, N., C. Mineto, & S. Da Silva (2008). Disposition effect and gender. *Applied Economics Letters,15*, 411–416.

Da, Z., (2009). Cash Flow, Consumption Risk, and the Cross-section of Stock Returns.*Journal of Finance,64*, 923-956.

Daniel, K., Hirshleifer, D., Subrahmanyam, A., (1998). A theory of overconfidence, self-attribution, and security market under- and over-reactions.*Journal of Finance,53*, 1839-1885.

Davis, J. L. (1994). The cross-section of realized stock returns: The pre-compustat evidence. *Journal of Finance,49*, 1579-1593.

De Bondt W., Thaler R. (1985).Does the stock market overreact?*The Journal of Finance,40* (3),793-805, http://dx.doi.org/10.2307/2327804.

De Bondt, W., Thaler, R., (1987). Further evidence of investor overreaction and stock market seasonality.*Journal of Finance,42*, 557-581.

Dechow, P.M. (1994). Accounting earnings and cash flow as measures of firm performance: The role of accounting accruals. *Journal of Accounting and Economics,18*, 3-42. http://dx.doi.org/10.1016/0165-4101(94)90016-7

Dechow, P M. & Watts, R L. (1998).The relation between earnings and cash flow. *Journal of Accounting and Economics,16*,424-437

Dechow, P., Sloan R., & Soliman M., (2004). Implied equity duration: Anew measure of equity security risk.*Review of Accounting Studies,9*, 197-228.

Dung, N. V. (2010).Value relevance of financial statement information: A flexible application of modern theories to the Vietnamese Stock Market.*Paper presented at the Development and Policies Research Centre, Vietnam.*

Easton, P. & Harris, T. (1991). Earnings as an explanatory variable for returns.*Journal of Accounting Research,29*, 19-36.

Easton, P.D., Harris, T.S., & Ohlson, J. (1992). Aggregate accounting earnings can explain most of security returns.*Journal of Accounting and Economics,15*, 119-142.

Easton, P. (1999). Security returns and the value relevance of accounting data.*Accounting Horizons,13*, 399-412.

Egbunike, F & Udeh, F N.P (2015). The effect of earnings management on earnings and book-value per share: A study of selected quoted companies in Nigeria. *Research Journal of Finance and Accounting, 6*(21)37-43

Ejaz, A. , Pola, P.K(2014)Short -term momentum effect: A Case Of Middle East Stock Markets Verslas: Teorija ir praktika / Business: Theory and PracticeIssn 1648-0627 / eIssn 1822-4202 *http://www.btp.vgtu.lt*2015 16(1)104–112 doi:10.3846/btp.2015.438

Etengu, R. O & Nasieku, T. (2015). The relationship between accounting based performance measures and investment decisions: A theoretical review.*International Journal of Contemporary Applied Sciences, 2* (12) 62-69.

Fama, E.F., & French K.R., (1992). The cross-section of expected stock returns. *The Journal of Finance,47*(2): 427-65.

Fama E.F., French K.R. (1998).Value versus growth: The International evidence.*Journal of Finance,53*, 1975-1999, http://dx.doi.org/10.1111/0022-1082.00080.

Fama, E., (1970). Efficient capital markets: A review of theory and empirical work.*Journal of Finance,25*, 383-417.

Fama, E., French, K., (1996). Multifactor explanations of asset pricing anomalies, *Journal of Finance,51*, 55-84.

Fama, E. F., (1998). Market efficiency, long-term returns and behavioral finance, *Journal of Financial Economics*,49, 283-306.

Fama, E. F., French, K. R., (2011). Size, value, and momentum in international stock returns. *Unpublished working paper, Booth School of Business, University of Chicago.*

Feltham, G., & Ohlson, J. A. (1995). Valuation and clean surplus accounting for operating and financial activities. *Contemporary Accounting Research, 11,* 689–731.

Feng, L. & Seasholes M. (2005). Do investor sophistication and trading experience eliminate behavioral biases in financial markets*? Review of Finance,9,*(3),305-351.

Figelman, I. (2007). Interaction of stock return momentum with earnings measures.*Financial Analysts Journal,63*, 71-78.

Fischbacher, U., Hoffmann G., & Schudy S. (2014). The causal effect of stop-loss and take-gain orders on the disposition effect. *Technical report, Thurgauer Wirtschaftsinstitut, Universit¨at Konstanz.*

Francis J & Schipper K (1999). Have financial statements lost their relevance?*Journal of Accounting Research, 37,*(2), 319-52.

Frazzini, A. (2006). The disposition effect and under reaction to news. *Journal of Finance,61,*(4),2017-2046.

Frydman, C. & Rangel A. (2014). Debiasing the disposition effect by reducing the saliency of information about a stock's purchase price. *Journal of Economic Behavior & Organization,107,* 541–552.

Gärling, T. (2011). Heuristics and biases making people rich or poor: A psychological account of stock market anomalies. In W. Brun, G. Keren, G. Kirkeboen & H. Montgomery (Eds.), *Perspectives on thinking, judging, and decision making* (146-156). Oslo: Universitetsforlaget.

Gärling, T., Kirchler, E., Lewis, A., & van Raaij, F. (2009). Psychology, financial decision making, and financial crises. *Psychological Science in the Public Interest, 10*(1),1-47.

Gee-Jung, K. (2009).The value relevance of book values, earnings and cash flows: Evidence from Korea. *International Journal of Business and Management,4,*(10)

Geczy, C. & Mikhail S. (2013). 212 Years of price momentum (The World's Longest Backtest: 1801-2012), *Working Paper, University of Pennsylvania (The Wharton School), OctoQuant.com.*

Germon, H., Meek, G.., (2001). Accounting: An international perspective, mcgraw hill.

Ghosh, P K & Ghosh, S K (2015).Stock price adjustment to corporate accounting disclosure: A quantitative study on Dhaka Stock Exchange (DSE), Bangladesh. *International Journal of Accounting and Financial Reporting, 5,* (2)122-129

Gigerenzer, G., & Gaissmaier, W. (2011). Heuristic decision making. *Annual Review of Psychology, 62,* 451-482.

Ginblatt, M., & Bring, H. (2004). Prospect Theory, Mental Accounting and Momentum. 2-4.

Glezakos,M.& Mylonakis,J. (2012).The impact of accounting information on stock prices: Evidence from the Athens Stock Exchange. *International Journal of Economics and Finance, 4*,(2)56-63

Goulart, M., et al (2013). Psychophysiological correlates of the disposition effect. PloS one 8, e54542.

Graham, B & Dodd, D (1934).Security Analysis: Principles and Technique.*New York: McGraw-Hill.*

.Griffin J.M., Ji X., Martin J.S. (2003).Momentum investing and business cycle risk: Evidence from pole to pole.*Journal of Finance,58*, 2515-2547, http://dx.doi.org/10.2139/ssrn.291225.

Grinblatt M., Moskowitz T.J. (2004).Predicting stock price movements from past returns: The role of consistency and tax-loss selling.*Journal of Financial Economics,71*, 541-579, http://dx.doi.org/10.1016/s0304-405x(03)00176-4.

Grinblatt, M., Han, B., (2005). Prospect theory, mental accounting and momentum.*Journal of Financial Economics,78*, 311-339.

Grinblatt, M, Sheridan T., & Russ W., (1995). Momentum investment strategies, portfolio performance, and herding: A study of mutual fund behaviour.*American Economic Review,85*, 1088–1105.

Griblatt, M., & Han, B., (2002). The disposition effect and momentum.*Working paper, UCLA*

Grinblatt, M. & Keloharju, M. (2000). The investment behavior and performance of various investor types: A study of Finland's unique data set. *Journal of FinancialEconomics,55*. 43-67.

Grinblatt, M. & Han B.. (2002). The disposition effect and momentum. *NBER Working Paper*.

Groot, W., Huij, J., Zhou, W., (2012). Another look at trading costs and short-term reversal profits. *Journal of Banking and Finance 36*, 371-382.

Grundy, B. D. & Martin, J. S. (2001). Understanding the nature of the risks and the source of the rewards to momentum investing.*The Review of Financial Studies*, *14*, 29-78.

Harris, X. & Ohlson J. (1990). Accounting disclosures and the market's valuation of oil and gas properties: Evaluation of market efficiency and functional fixation.*The Accounting Review,*764-800

Harris, L., (1988). Discussion of predicting contemporary volume with historic volume at differential price levels: Evidence supporting the disposition effect.*The Journal of Finance,43,* 698-699.

Hartzell, Jay C, & Starks, Laura T. (2014). Institutional investors and executive compensation redux: A comment on do concentrated institutional investors really reduce executive compensation whilst raising incentives. *Critical Finance Review, 3*(1), 85-97.

Hartono, J. (2004). The recency effect of accounting information.*Gadjah Mada International Journal of Business, 6* (1),85-116.

Healy, P. M. & Palepu, K.G. (2001). Information asymmetry, corporate disclosure and the capital markets : A review of the empirical disclosure literature. *Journal of Accounting and Economics*, *31*, 405–440

Heflin, F. & Shaw K. (2000). Blockholder ownership and market liquidity.*Journal of Financial and Quantitative Analysis*, *35*(4), 621-633.

Hendrick J.A., (1976). The impact of human resources accounting information on stock investment decisions-An empirical study. *The Accounting Review, 51*(2), 37- 292.

Henderson, V. (2012). Prospect theory, liquidation, and the disposition effect. *Management Science*, *58*(2), 445-460.

Hirshleifer, D., (2001). Investor psychology and asset pricing.*Journal of Finance,64,* 1533–1597.

Hirshleifer D, Teoh S.H. (2003). Limited attention, information disclosure, and financial reporting. *Journal of Accounting & Economics,36*,337-386.

Holderness, C. G. (2014). Problems with using aggregate data to infer individual behavior: Evidence from law, finance, and ownership. *Critical Finance Review, forthcoming*.

Hon-Snir, S., Kudryavtsev, A., & Cohen, G. (2012). Stock market investors: who is more rational, and who relies on intuition? *International Journal of Economics and Finance, 4(5),* 56-72.

Hong, H., & Stein J., (1999). A unified theory of underreaction, momentum trading, and overreaction in asset markets.*Journal of Finance,54*, 2143–2184.

Holthousen, R.W. & Watts, R.L (2001). The relevance of the value relevance literature for financial accounting standard setting.*Journal of Accounting and Economics, 31*, 266-276

Holderness, C. G. (2014). Problems with using aggregate data to infer individual behavior: Evidence from law, finance, and ownership. *Critical Finance Review, forthcoming*.

Houge, T. & Loughran, T. (2000). Cash flow is king? Cognitive errors by investors.*Journal of Psychology and Financial Markets, 1*, 161-175.

Huafeng J. C. (2013) Do cash flows of growth stocks really grow faster? *March 8, PDF*

Hunjra ,A;Ijaz, M S;Chani,M;Hassan, S and Mustafa,*U.* (2014).Impact of dividend policy, earning per share, return on equity, profit after tax on stock prices.*The International Journal of Applied Economics and Finance, 5* (2) 114-126

Inyiama, O. I. & Ozouli, C.(2014). Interactions between Earnings and Share Prices in Nigeria Brewery Industry.*Research Journal of Finance and Accounting ,5*, (22)177-182

Inyiama ,O. I. (2015).Does earning per share determine market price of ordinary shares? Evidence from Nigeria banking sector (2000 – 2013). *European Journal of Accounting Auditing and Finance Research, 3, (*6) 91-102

Inyiama ,O. I. (2015).Effect of banks' financial performance on share prices: evidence from nigerian banking industry (2004 – 2013).*European Journal of Research and Reflection in Management Sciences 3,* (3), 69-75.

Iqbal,A. Ahmed,F. Zaidi,S S Z & Raza,H(2015).Determinants of share prices, evidence from oil & gas and cement sector of Karachi Stock Exchange (A Panel Data Approach). *Journal of Poverty, Investment and Development, 8*, 14-21

Jaffe, J., Keim, D., Westerfield, R., (1989). Earnings yields, market values, and stock returns.*Journal of Finance 44*, 135–148.

Jatoi, M. Z. Shabir, G. Hamad, N. Iqbal,N. Muhammad,.(2014). A regressional impact of earning per share on market value of share: A case study cement industry of Pakistan.*International Journal of Academic Research in Accounting, Finance and Management Sciences,4,* (4)221–227

Jegadeesh N. & Titman S. (2001).Profitability of momentum strategies: an evaluation of alternative explanations.*The Journal of Finance ,56,* (2), 699–720,http://dx.doi.org/10.1111/0022-1082.00342.

Jegadeesh, N., Titman S. (1996). Momentum strategies.*Journal of Finance 51*, 1681–1713

Jegadeesh, N. & Titman S. (1993). Returns to buying winners and selling losers: Implications for stock market efficiency.*The Journal of Finance*, *48*, (1), 65-91, http://dx.doi.org/10.2307/2328882.

Jiang, B(2009). An empirical study on information content of accounting earnings and cash flow.*Journal of Modern Accounting and Auditing 5*, 7-9

John O. O.(2015).Stock market price and its determinants: A case study of Nigerian banks.*Journal of Advance Research in Business, Management and Accounting ,1* (12)25-31

Johnson, T., (2002). Rational momentum effects.*Journal of Finance,57,* 585–608.

Kahneman, D. & Tversky, A. (1979). Prospect theory: An analysis of decision under risk.*Econometrica, 47,* 263-291.

Kaustia, M. (2004). Market-wide impact of the disposition effect: Evidence from IPO trading volume. *Journal of Financial Markets, 7(2)*, 207-235.

Kees C & Mirjam van Praag C. (2007). The value relevance of top executive departures: Evidence from the Netherlands. *University of Groningen, the Netherlands University of Amsterdam, The Boston Consulting Group Tinbergen Institute, the Netherlands*

Kliger, D., & Kudryavtsev, A. (2008). Reference point formation by market investors. *Journal of Banking and Finance, 32(9)*, 1783-1794.

Kodithuwakku, S. (2014).Impact of firm specific factors on the stock prices: a case study on listed manufacturing companies in Colombo Stock

Exchange.*International Journal for Research in Business, Management and Accounting 4*, (4) 221–227

Kowerski M.(2006).*Efekt wartości księgowej do rynkowej na Giełdzie Papierów Wartościowych w Warszawie*, „Finansowy Kwartalnik Internetowy eFinanse", 1/2006, http://www.e-finanse.com/artykuly/42.pdf.

Kowerski M., (2008).The Fama and French Tree-Factor Model for Warsaw Stock Exchange *(Trójczynnikowy model Famy i Frencha dla Giełdy Papierów Wartościowych w Warszawie)*, *„Przegląd Statystyczny", 55(4),*131-148.

Korajczyk, R., Sadka, R., (2004). Are momentum profits robust to trading costs?*Journal of Finance,59,* 1039-1082.

Kothari, S.P. (2001). Capital markets research in accounting.*Journal of Accounting and Economics, 31*, 105–231.

Lakonishok, J. & Seymour S. (1986). Volume for winners and losers: taxation and other motives for stock trading. *Journal of Finance41(4),*951-974.

Lakonishok, J., Shleifer A., & Vishny R. W. (1992). The impact of institutional trading on stock prices. *Journal of Financial Economics*, *32* (1), 23–43.

Lakonishok, J., Shleifer, A. & Vishny, R. (1992). The structure and performance of the money management industry. *Brookings Papers on Economic Activity, Microeconomics*.

Lakonishok, J., Shleifer A., & Vishny R. W. (1994). Contrarian investment, extrapolation, and risk. *The Journal of Finance, 49,* (5),1541- 1578.

Lakonishok, J., & S. Smidt, (1986). Volume for winners and losers: Taxation and other motives for stock trading.*Journal of Finance, 41,* 951–974.

Lam K.S.K. (2002).The relationship between size, book-to-market equity ratio, earnings-price ratio, and return for the Hong Kong Stock Market.*Global Finance Journal*, *13* (2), 163-179, http://dx.doi.org/10.1016/s1044-0283(02)00049-2.

Larissa Schütte & Diana Gregory-Smith . (2015). Neutralisation and mental accounting in ethical consumption. *Sustainability*, 2-3.

Latifat M. (2015).International financial reporting standard and value

relevance of accounting information in quoted cement firms in Nigeria. *International Journal of Sciences: Basic and Applied Research 22*,(1),

Lawani R., Umanhonlen O. F. & Okolie R. O.. (2015). Conservatism and value relevance of accounting information in quoted firms in Nigeria. *International journal of finance and accounting, [On-line]*. *4*(1), 21-39. Doi:10.5923/j.ijfa.20150401.03.

Lesmond, D. A. Et al (2004). The illusory nature of momentum profits.*Journal of Financial Economics*, *71*, 349-380.

Lettau, M., & Wachter J. A., (2007). Why is long-horizon equity less risky? A Duration-based explanation of the value premium.*Journal of Finance*, *62*, 55-92.

Lettau, M., & Wachter J. A., (2011). The term structures of equity and interest rates, *Journal of Financial Economics*,*101*, 90-113.

Lev, B. (1989). On the usefulness of earnings and earnings research: Lessons and directions from two decades of empirical research.*Journal of Accounting Research*, *27*, 153-193

Levy, R., (1967). Relative strength as a criterion for investment selection.*Journal of Finance*,*22*,595-610.

Liew J., & Vassalou M. (2000).Can book-to-market, size and momentum be risk factors that predict economic growth?*Journal of Financial Economics*,*57*,(2),221-245, http://dx.doi.org/10.1016/s0304-405x(00)00056-8.

Lischewski J., Voronkova S. (2012).Size, value and liquidity. Do they really matter on an emerging stock market*? Emerging Markets Review*, *13*, 8-25, http://dx.doi.org/10.1016/j.ememar.2011.09.002.

Mahmoud, S , Mohammadreza l, & Pervaneh, G.(2013).Study of information content Earning per Share and Cash Flow from Operating in the relationship with Shareholder Value Added (SVA) Evidence from Iran Stock Exchange.*International Journal of Business and Behavioral Sciences*, *3*, (1)1-7

Malhotra, N &Tandon,K (2013). Determinants of stock prices: Empirical evidence from NSE 100 Companies.*International Journal of Research in Management & Technology*, *3,(3)* 86-94

Malherbe, F. (2014). Self-fulfilling liquidity dry-ups. *The Journal of Finance, 69*(2), 947-970.

Maksy, M. M. & Chen, G.T. (2015). Which free cash flow is value relevant? The case of the energy industry.*Journal of Finance and Accountancy, 33,*334-356

Martani, Mulyono & Khairurizka (2009). The effect of financial ratios, firm size and cash flow from operating activities in the interim report to the stock return.*Chinese business review, 8,*(6)72-86

Menaje, P. M. J.(2012).Impact of selected financial variables on share price of publicly listed firms in the Philippines.*American International Journal of Contemporary Research 2, (9)* 98 – 104

Menike M. G. P. D. & Prabath U. S. (2014).The impact of accounting variables on stock price: Evidence from the Colombo Stock Exchange, Sri Lanka. *International Journal of Business and Management 9,(5)* 125-134

Mgbame,C.O. & Ikhatua,O. J. (2013). Accounting information and stock volatility in the Nigerian Capital Market: A Garch Analysis Approach. *International Review of Management and Business Research 2 (1*) 4-10

McLean, R D., & Zhao, M. (2014). The business cycle, investor sentiment, and costly external finance. *The Journal of Finance, 69*(3), 1377-1409.

Mitchell, M. et al (2007). Slow Moving Capital.*The American Economic Review, 97,*(2), 215-220.

Molodovsky, N. (1995). A theory of price-earnings ratios.*FinancialAnalysts 49. Journal, 51*(1), 29-43.

Mu-Lan, W. C., Wang, S-Y L. (2015). An analysis for credit rating and momentum strategy.*Asian Economic and Financial Review*, 2015, 5(1): 127-144.http://www.aessweb.com/journals/5002

Muga, L. & Santamaria, R. (2007). The momentum effect in Latin American emerging markets. *Emerging Markets Finance and Trade 43* (4), 24-45.

Nassar S & Namık R (2016).Investigate the factors affecting share liquidity: evidence from Istanbul Stock Exchange (ISE).*Research Journal of Finance and Accounting,7(6)*71-77

Neugebauer, T., & Selten, R. (2006). Individual behavior of first-price auctions: The importance of information feedback in computerized experimental markets. *Games and Economic Behavior, 54(1),* 183-204.

Nilson, H.(2003). Essays on the value relevance of financial statement information.*Working Paper*, print and media 2003.

Odean, T. (1998). Are investors reluctant to realize their losses ? *Journal of Finance53*(5),1775-1798

Ohlson, J. A. (1995). Earnings, book values and dividends in equity valuation.*Contemporary Accounting Research, 11*,661-687.

Okuns O. O.(2015). The value relevance of accounting information: Evidence from Nigeria.*Accounting and Finance Research* 4, (3) www.sciedupress.com/afr

Ou, J. A., & Penman S. H. (1989). Financial statement analysis and the prediction of stock returns. *Journal of Accounting and Economics, 11*, 295-329.

Ou, J.,& Penman S. (1989). Accounting measurement, price earnings ratio, and the information content of security prices.*Journal of Accounting Research*,111-152.

Ou, J. A. & Penman, S. H. (1993). Fundamental statement analysis and the evaluation of market-to-book ratio.*Working Paper. Santa Clara, CA: Santa Clara University.*

Oyerinde D.T.,(2009). Value relevance of accounting information in emerging stock market in Nigeria.*Proceedings of the 10th Annual International Conference, International Academy of African Business and Development* (IAABD), Uganda.

Pastor, L. & Stambaugh R. F. (2003). Liquidity risk and expected stock returns.*Journal of Political Economy,111,* (3), 642-685

Penman, S. (1991). An evaluation of accounting rate of return.*Journal of Accounting, Auditing and Finance, 2,*233– 256.

Penman, S. (1996). The articulation of price-earnings ratios and market-to-book ratios and the evaluation of growth.*Journal of Accounting Research,34,* 235-259.

Pushpa B,& Sumangala JK (2012). Impact of earnings per share on market value of an equity share: an empirical study in Indian Capital Market.*Journal of Finance, Accounting and Management*, *3*(2), 1-14

Qinghao Mao K.C. Wei J. (2009).Price and earnings momentum: An explanation using return decomposition.*Department of finance Hong Kong University of Science and Technology Clear Water Bay, Kowloon, Hong Kong*

Rau, H. A. (2014). The disposition effect and loss aversion: Do gender differences matter? *Economics Letters* 123.

Reinganum M.R. (1981).Misspecification of Capital Asset Pricing: Empirical Anomalies Based on Earning' Yield and Market Values, *Journal of Financial Economic*s, *9*(1), 19-46,http://dx.doi.org/10.1016/0304-405x(81)90019-2.

Riyath ,M. I. M. & Jahfer, A (2015).Value effect on stock returns: An empirical study on the Colombo Stock Market. *5th International Symposium – IntSym 2015, SEUSL* 47-59

Rosenberg B., Reid K., & Lanstein. R. (1985) Persuasive evidence of market inefficiency.*Journal of Portfolio Management*,*11*,9–17, http://dx.doi.org/10.3905/ jpm.1985.409007.

Rouwenhorst K.G. (1999).Local returns factors and turnover in emerging stock markets.*Journal of Finance*,*54*, 1439-1464, http://dx.doi.org/10.1111/0022-1082.00151.

Rouwenhorst K.G. (1998).International momentum strategies.*Journal of Finance 53*, 267- 284, http://dx.doi.org/10.1111/0022-1082.95722.

Rouwenhorst, K. G., (1997). International momentum strategies. *Journal of Finance*, *53*, 267-284.

Ruixue Du (2008).The relationship between share price and operating cash flow under the casual theme restaurant setting.*Thesis submitted to the Faculty of the Virginia Polytechnic Institute and State University*

Runstem M.. (1998). The association between accounting information and stock prices. As cited by Elanders Gotab. Skogsvik, S. Redovisningmatt (2002). Varderelevans. ochinformations effektivitet. *Ph.D Thesis. Stockholm School of Economics.*

Sadka, R., (2006). Momentum and post-earnings-announcement drift anomalies: The role of liquidity risk.*Journal of Financial Economics,80*, 309–349.

Sagi, J., & Seasholes M., (2007). Firm-specific attributes and the cross-section of momentum.*Journal of Financial Economics84*, 389–434.

Sharif, T. Purohit, H. & Pillai, R. (2015). Analysis of factors affecting share prices: The case of Bahrain Stock Exchange.*International Journal of Economics and Finance, 7, (3*) 207-215

Shefrin, H. & Statman M. (1985). The disposition to sell winners too early and ride losers too long: Theory and Evidence. *Journal of Finance40,* 777–791.

Shevlin, T., (1996). The value-relevance of non-financial information: a discussion.*Journal of Accounting and Economics22*, 31-42.

Shleifer, A., Vishny, R., (1997). The limits of arbitrage.*Journal of Finance, 52*, 35-55.

Shiller R.J. (1999). Human behaviour and the efficiency of the financial system. *The Handbook of Microeconomics, North-Holland, Amsterdam*, 1305-1340

Shumway, T. & Wu G. (2007). Does disposition drive momentum.*University of Michigan Working Paper*.

Sias, R.W. (2004). Institutional herding. *Review of Financial Studies, 17(1)*, 165-206.

Sloan, R.G. (1996). Do stock prices fully reflect information in accruals and cash flows about future earnings? *The Accounting Review,71*, 289-315.

Solomon, A. Z. Memba, F. S. & Dr. Muturi, W. (2016).Earnings per share and equity share investment in companies listed on Nigerian Stock Exchange.*European Journal of Business, Economics and Accountancy, 4*, (1) 68-76

Stattman, D. (1980). Book values and stock returns.*A Journal ofSelected Papers, 5*, 25-45.

Sulaiman,L. A.; Migiro S. O. (2015).Effect of dividend decision on stock price changes: further Nigerian Evidence.*Investment Management and Financial Innovations, 12, (1*), 330-336

Swati D. M. (2015).A review on the literature of value relevance of financial and accounting variables.*The International Journal Of Business & Management95* (3) 2321 –8916 (ISSN) www.theijbm.com

Tahir, S H., Sabir, H. M. Alam,T. &Ismail, A.(2013). Impact of firm's characteristics on stock return: A case of non-financial listed companies in Pakistan.*Asian Economic and Financial Review,3*(1)51-61

Thaler, R.H., (1980). Toward a positive theory of consumer choice.*Journal of Economic Behavior and Organization*, *1*, 39-60.

Thaler, R.H., (1985). Mental accounting and consumer choice.*Marketing Science4*, 199-214.

Todd, P. M., Gigerenzer, G., & the ABC Research Group (2012). *Ecological rationality: Intelligence in the world*. *New York: Oxford University Press.*

Todd H., Henry B. & Tim L. (2000).Cash flow is king: Cognitive errors by investors.*Journal of Psychology and Financial Markets,22*, 200-215

Tommy Gärling Tim A. C. & Blomman M. (2014). Running head: Affect account of disposition effect and consequences for stock prices.*University of Gothenburg, Göteborg, Sweden*

Ullah ,H. Saqib, S. &Usman, H.(2015).The impact of dividend policy on stock price volatility: A case study of selected firms from textile industry in Pakistan.*International Journal of Academic Research in Economics and Management Sciences*, *4,(3)* 40-48

Umar, M. S. & MusaT. B. (2013).Stock prices and firm earning per share in Nigeria.*JORINDJournals* ,*11*(2) 187-193

Ute B. & Platz A. M. (2008).Fundamental information in technical trading strategies draft.*December 2008 Conference of the European Accounting Association for helpful comments.*

Vishnani, S. & Kr. Shah, B. (2008). Value relevance of published financial statements – with special emphasis on impact of cash flow reporting. *International Research Journal of Finance and Economics*, *17*, 84 – 90.

Vu, J. D. (2012). Do momentum strategies generate profits in emerging stock markets?*Problems and Perspectives in Management*,*10*,(3), 9–22.

Wang, C. (2004). Relative strength strategies in China's stock market: 1994–2000. *Pacific-Basin Finance Journal*, *12*(2), 159-177.

Weber, M. & Zuchel H.. (2002). The disposition effect and momentum. *SFB 504 discussion paper 01-26.*

Weber, M., & Camerer C. F. (1998). The disposition effect in securities trading: An experimental analysis. *Journal of Economic Behavior & Organization*, *33*(2), 167–184.

Weber, M. & Welfens F. (2007). An individual level analysis of the disposition effect: Empirical and experimental evidence. *Working Paper University of Mannheim.*

Wu, Y.R. (2002).Momentum and Reversal in the Chinese Stock Market.*Shanghi Stock Exchange research Paper.*

Żarnowski J. (2007).Próba ustalenia przydatności zmiennych fundamentalnych do konstrukcji wielowskaźnikowego modelu rynku w warunkach polskich. *Conference Proceedings Chair of Financial Markets Jagielonski University Cracow*. http://janek.ae.krakow.pl/~fkrk/pliki/jz.pdf

Zuchel, H. (2001).What Drives the Disposition Effect?*Working Paper, University of Mannheim*

Appendix I

List of the Companies for the study

FINANCIAL SECTOR

1	Abbey Building Society	Financial
2	Access Bank	Financial
3	African Alliance Insurance	Financial
4	Africa Prudential Registrar	Financial
5	Aiico	Financial
6	Aso Savings & Loans	Financial
7	Consolidated Hallmark	Financial
8	Contiental Reinsurance	Financial
9	Cornerstone Insurance	Financial
10	Custodian & Allied Insurance	Financial
11	Diamond Bank	Financial
12	Equity Assurance	Financial
13	Fidelity Bank	Financial
14	First Bank Holding	Financial
15	First City Monumental Bank	Financial
16	Fortis Microfinance Bank	Financial
17	Great Nig Insurance	Financial
18	Guaranty Trust Bank	Financial
19	Guinea Insurance	Financial
20	Infinity Trust Mortgage Bank	Financial
21	International Energy Insurance	Financial
22	Lasasco Assurance	Financial
23	Lawunion & Rock	Financial
24	Linkage Assurance	Financial
25	Nem Insurance	Financial
26	Niger Insurance	Financial
27	Npf Microfinance	Financial
28	Oasis Insuraance	Financial
29	Prestige Assurance	Financial
30	Regency Aliance Ins	Financial
31	Resort Savings & Loans	Financial
32	Royal Exchange	Financial
33	Skye Bank	Financial
34	Smart Product	Financial
35	Sovereign Trust	Financial
36	Staco Insurance	Financial
37	Stanbic Ibtc Holding	Financial
38	Standard Alliance Insurance	Financial
39	Sterling Bank	Financial
40	Unic Insurance	Financial
41	Union Bank Of Nig	Financial

42	Union Homes Savings & Loans	Financial
43	United Bank For Africa	Financial
44	Unity Bank	Financial
45	Unitykapital Assurance	Financial
46	Universal Insurance	Financial
47	Wapic Insurance	Financial
48	Wema Bank	Financial
49	Zenith Bank	Financial

SERVICES SECTOR

50	Academy	Services
51	Afromedia	Services
52	Air& Logistic Services	Transport
53	Associated Bus Company	Transport
54	Capital Hotel	Services
55	Chams	Services
56	Ci Leasing	Services
57	Computer Warehouse Group	Services
58	Courtville Investment	Services
59	Daar Commuunictions	Services
60	Dn Tyre & Rubber (Dunlop)	Services
61	Ekocorp	Healthcare
62	Etranzact Interntional	Services
63	Evans Medical	Healthcare
64	Fidson Healthcare	Healthcare
65	Glaxosmithkline Nig	Healthcare
66	Ihs Nig	Services
67	Ikeja Hotel	Services
68	Interlinked Technologies	Services
69	May & Baker Nig	Healthcare
70	Mcnichols Consolidated	Healthcare
71	Morison Industries	Healthcare
72	National Aviation Handling	Transport
73	Ncr Nigeria	Services
74	Neimeth Int Pharm	Healthcare
75	Nigerian-German Ch	Healthcare
76	Pharma-Deko	Healthcare
77	R.T Briscoe Nig	Services
78	Redstar Express	Transport
79	Secure Electronic Technology	Services
80	Starcoms	Services
81	Tantalizer	Services
82	Thomas Wyatt	Services
83	Tourist Company Of Nigeria	Services

84	Transcorp Hotels	Services
85	Trans-Nationwide Express	Transport
86	Tripple Gee & Company	Services
87	Uac-Propety	Real Estate
88	Union Diagnostic & Clinical Sev	Healthcare
89	University Press	Services

CONSUMER SECTOR

90	7Up Nigeria	Consumer
91	A.G.Leventis Nig	Conglomerate
92	Cadbury Nig	Consumer
93	Champion Breweries	Consumer
94	Chellarams	Conglomerate
95	Dangote Sugar	Consumer
96	Ellah Lakes	Agriculture
97	Flour Mills Of Nigeria	Consumer
98	Ftn Cocoa Processors	Agriculture
99	Guinness Nig	Consumer
100	Honywell Flour Mill	Consumer
101	International Breweries	Consumer
102	John Holt	Conglomerate
103	Livestock Feeds	Agriculture
104	Multi- Trex Food	Consumer
105	National Salt Company	Consumer
106	Nestle Nig	Consumer
107	Nigeria Breweries	Consumer
108	Nigerian Northen Flour Mill	Consumer
109	Okomu Oil Palm	Agriculture
110	Presco	Agriculture
111	Pz Cussons	Consumer
112	Scoa Nig	Conglomerate
113	Tiger Branded (Dangote Flour)	Consumer
114	Transcorp Nig	Conglomerate
115	Uac Of Nig	Conglomerate
116	Unilever Nig	Consumer
117	Union Dicon Salt	Consumer
118	Utc	Consumer
119	Vitafoam Nig	Consumer
120	Vono Products	Consumer

INDUSTRIAL SECTOR

121	African Paints Nig	Construction
122	Aluminium Extrusion Indus	Industrial
123	Arbico	Construction
124	Ashaka Cement	Construction
125	Austin Laz & Co	Industrial
126	B.O.C Gases Nig	Industrial
127	Beco Petroleum Nig	Energy
128	Berger Paints Nig	Construction
129	Beta Glass Company	Industrial
130	Capital Oil	Energy
131	Caverton Offshore	Energy
132	Cement Comy Of Northern Nig	Construction
133	Chemical & Allied Product	Construction
134	Conoil	Energy
135	Costain West Africa	Construction
136	Cutix	Industrial
137	Dangote Cement	Construction
138	Dn Meyer	Construction
139	Eternaoil	Energy
140	First Alumminium Nig	Industrial
141	Forte Oil (Ap)	Energy
142	Greif Nig	Industrial
143	Ipwa	Construction
144	Japaul Oil & Maritime Serv	Energy
145	Julius Berger	Construction
146	Lafarge Cement Wapco Nig	Construction
147	Mobil Nig	Energy
148	Mrs(Texaco Chevron)	Energy
149	Multiverse	Materials
150	Nigeria Ropes	Industrial
151	Nigerian Enamelware	Industrial
152	Oando	Energy
153	Paints & Coatings Man	Construction
154	Portland Paint Nig	Construction
155	Premier Paints	Construction
156	Roads Construction	Construction
157	Studio Press Nig	Industrial
158	Total Nigeria	Energy

Appendix 2

MENTAL ACCOUNTING & MOMENTUM MODEL
General Positive Returns Model

Dependent Variable: DECCP

Method: Least Squares
Date: 06/21/16 Time: 01:07
Sample: 1 952
Included observations: 902

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.512	2.685584	-0.935325	0.3499
RPLUS	-0.206	1.380273	-0.149263	0.8814
BVKPS*RPLUS	0.0255	0.076738	0.332552	0.7396
EPERS*RPLUS	2.1131	0.345939	6.108372	0.000
CASPS*RPLUS	0.0368	0.144379	0.25498	0.7988
FSIZE	1.2535	0.642044	1.952339	0.0512

R-squared	0.0998	Mean dependent var	4.001785
Adjusted R-squared	0.0948	S.D. dependent var	17.61999
S.E. of regression	16.764	Akaike info criterion	8.483024
Sum squared resid	251817	Schwarz criterion	8.514984
Log likelihood	-3820	Hannan-Quinn criter.	8.495232
F-statistic	19.862	Durbin-Watson stat	0.372513
Prob(F-statistic)	0.000		

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	22.173	Prob. F(5,896)	0.000
Obs*R-squared	99.317	Prob. Chi-Square(5)	0.000
Scaled explained SS	3604.1	Prob. Chi-Square(5)	0.000

Multicolinearity Test

Variance Inflation Factors

Date: 06/21/16 Time: 01:15
Sample: 1 952

Included observations: 902

Variable	Coefficient Variance	Centered VIF
C	2.2965	NA
RPLUS	1.2953	2.043666
BVKPS*RPLUS	0.0062	1.439029
EPERS*RPLUS	1.4955	3.189406
CASPS*RPLUS	0.0902	2.032081
FSIZE	0.2119	1.457928
Mean VIF		2.032422

General Positive Returns Model After Correction of Heteroscedaticty

Dependent Variable: DECCP

Method: Least Squares
Date: 06/21/16 Time: 01:10
Sample: 1 952
Included observations: 902
White Heteroscedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.512	1.515428	-1.657546	0.0978
RPLUS	-0.206	1.138122	-0.181021	0.8564
BVKPS*RPLUS	0.0255	0.078431	0.325371	0.745
EPERS*RPLUS	2.1131	1.22289	1.727978	0.0843
CASPS*RPLUS	0.0368	0.3004	0.12255	0.9025
FSIZE	1.2535	0.460286	2.723279	0.0066
R-squared	0.0998	Mean dependent var		4.001785
Adjusted R-squared	0.0948	S.D. dependent var		17.61999
S.E. of regression	16.764	Akaike info criterion		8.483024
Sum squared resid	251817	Schwarz criterion		8.514984
Log likelihood	-3820	Hannan-Quinn criter.		8.495232
F-statistic	19.862	Durbin-Watson stat		0.372513
Prob(F-statistic)	0	Wald F-statistic		6.595892
Prob(Wald F-statistic)	5E-06			

Financial Sector

Dependent Variable: DECCP
Method: Least Squares
Date: 06/21/16 Time: 01:46
Sample: 1 290
Included observations: 278

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.339	0.944782	-6.709477	0
RPLUS	0.1038	0.491052	0.211415	0.8327
BVKPS*RPLUS	0.0233	0.021717	1.073233	0.2841
EPERS*RPLUS	-0.118	0.293804	-0.400895	0.6888
CASPS*RPLUS	-0.009	0.073618	-0.127454	0.8987
FSIZE	1.6225	0.203778	7.962162	0

R-squared	0.2172	Mean dependent var	1.298201
Adjusted R-squared	0.2028	S.D. dependent var	3.501541
S.E. of regression	3.1264	Akaike info criterion	5.139011
Sum squared resid	2658.7	Schwarz criterion	5.217305
Log likelihood	-708.3	Hannan-Quinn criter.	5.170422
F-statistic	15.091	Durbin-Watson stat	0.444454
Prob(F-statistic)	0		

Variance Inflation Factors

Date: 06/21/16 Time: 01:46
Sample: 1 290
Included observations: 278

Variable	Coefficient Variance	Centered VIF
C	0.8926	NA
RPLUS	0.2411	1.304186
BVKPS*RPLUS	0.0005	1.228339
EPERS*RPLUS	0.0863	2.258429
CASPS*RPLUS	0.0054	2.04047
FSIZE	0.0415	1.120733
Mean VIF		1.590431

Heteroscedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	11.391	Prob. F(5,272)	0
Obs*R-squared	48.132	Prob. Chi-Square(5)	0
Scaled explained SS	319.23	Prob. Chi-Square(5)	0

Dependent Variable: DECCP
Method: Least Squares
Date: 06/21/16 Time: 01:48
Sample: 1 290
Included observations: 278
White Heteroscedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.339	1.207494	-5.24971	0
RPLUS	0.1038	0.468997	0.221357	0.825
BVKPS*RPLUS	0.0233	0.028381	0.821258	0.4122
EPERS*RPLUS	-0.118	0.527293	-0.223376	0.8234
CASPS*RPLUS	-0.009	0.102968	-0.091124	0.9275
FSIZE	1.6225	0.301978	5.372949	0

R-squared	0.2172	Mean dependent var	1.298201
Adjusted R-squared	0.2028	S.D. dependent var	3.501541
S.E. of regression	3.1264	Akaike info criterion	5.139011
Sum squared resid	2658.7	Schwarz criterion	5.217305
Log likelihood	-708.3	Hannan-Quinn criter.	5.170422
F-statistic	15.091	Durbin-Watson stat	0.444454
Prob(F-statistic)	0	Wald F-statistic	7.37564
Prob(Wald F-statistic)	2E-06		

Services Sector
Dependent Variable: DECCP
Method: Least Squares
Date: 06/21/16 Time: 01:50
Sample: 291 517
Included observations: 217

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.359	1.464093	-0.245405	0.8064
RPLUS	-1.651	0.574188	-2.875269	0.0045
BVKPS*RPLUS	0.6434	0.112433	5.72234	0
EPERS*RPLUS	-0.132	0.239783	-0.549024	0.5836
CASPS*RPLUS	-0.111	0.190233	-0.585784	0.5586
FSIZE	0.4411	0.398118	1.107875	0.2692

R-squared	0.2485	Mean dependent var	1.441244
Adjusted R-squared	0.2307	S.D. dependent var	3.51255
S.E. of regression	3.0809	Akaike info criterion	5.11558
Sum squared resid	2002.8	Schwarz criterion	5.209033
Log likelihood	-549	Hannan-Quinn criter.	5.153331
F-statistic	13.953	Durbin-Watson stat	0.546097
Prob(F-statistic)	0		

Variance Inflation Factors

Date: 06/21/16 Time: 01:50
Sample: 291 517
Included observations: 217

Variable	Coefficient Variance	Centered VIF
C	2.1436	NA
RPLUS	0.3297	1.408882
BVKPS*RPLUS	0.0126	3.063282
EPERS*RPLUS	0.0575	1.397268
CASPS*RPLUS	0.0362	2.050826
FSIZE	0.1585	1.11285
Mean VIF		1.806622

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	4.675	Prob. F(5,211)	0.0005
Obs*R-squared	21.642	Prob. Chi-Square(5)	0.0006
Scaled explained SS	122.03	Prob. Chi-	0

Square(5)

Dependent Variable: DECCP
Method: Least Squares
Date: 06/21/16 Time: 01:52
Sample: 291 517
Included observations: 217
White Heteroscedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.359	2.217852	-0.162002	0.8715
RPLUS	-1.651	0.66021	-2.500635	0.0132
BVKPS*RPLUS	0.6434	0.147042	4.375487	0
EPERS*RPLUS	-0.132	0.215985	-0.60952	0.5428
CASPS*RPLUS	-0.111	0.270381	-0.412142	0.6807
FSIZE	0.4411	0.649288	0.679305	0.4977

R-squared	0.2485	Mean dependent var	1.441244
Adjusted R-squared	0.2307	S.D. dependent var	3.51255
S.E. of regression	3.0809	Akaike info criterion	5.11558
Sum squared resid	2002.8	Schwarz criterion	5.209033
Log likelihood	-549	Hannan-Quinn criter.	5.153331
F-statistic	13.953	Durbin-Watson stat	0.546097
Prob(F-statistic)	0	Wald F-statistic	5.307728
Prob(Wald F-statistic)	0.0001		

Consumer Sector

Dependent Variable: DECCP
Method: Least Squares
Date: 06/21/16 Time: 01:53
Sample: 518 716
Included observations: 191

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-12.03	7.230667	-1.663982	0.0978
RPLUS	5.8348	2.660169	2.193398	0.0295

BVKPS*RPLUS	-0.395	0.15589	-2.53109	0.0122
EPERS*RPLUS	-0.743	0.519318	-1.430332	0.1543
CASPS*RPLUS	1.2631	0.321749	3.925625	0.0001
FSIZE	3.6995	1.718268	2.153025	0.0326

R-squared	0.1451	Mean dependent var	6.175969
Adjusted R-squared	0.122	S.D. dependent var	17.03855
S.E. of regression	15.966	Akaike info criterion	8.409685
Sum squared resid	47158	Schwarz criterion	8.511851
Log likelihood	-797.1	Hannan-Quinn criter.	8.451067
F-statistic	6.278	Durbin-Watson stat	0.833711
Prob(F-statistic)	2E-05		

Variance Inflation Factors

Date: 06/21/16 Time: 01:53
Sample: 518 716
Included observations: 191

Variable	Coefficient Variance	Centered VIF
C	52.283	NA
RPLUS	7.0765	1.306371
BVKPS*RPLUS	0.0243	3.306344
EPERS*RPLUS	0.2697	2.535067
CASPS*RPLUS	0.1035	4.392637
FSIZE	2.9524	1.134977
Mean VIF		2.535079

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	7.357	Prob. F(5,185)	0
Obs*R-squared	31.679	Prob. Chi-Square(5)	0
Scaled explained SS	447.92	Prob. Chi-Square(5)	0

Dependent Variable: DECCP

Method: Least Squares
Date: 06/21/16 Time: 01:55

Sample: 518 716
Included observations: 191
White Heteroscedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-12.03	4.806308	-2.503314	0.0132
RPLUS	5.8348	2.365591	2.466534	0.0146
BVKPS*RPLUS	-0.395	0.308443	-1.279237	0.2024
EPERS*RPLUS	-0.743	0.882362	-0.841828	0.401
CASPS*RPLUS	1.2631	0.929624	1.358687	0.1759
FSIZE	3.6995	1.225686	3.018288	0.0029

R-squared	0.1451	Mean dependent var	6.175969
Adjusted R-squared	0.122	S.D. dependent var	17.03855
S.E. of regression	15.966	Akaike info criterion	8.409685
Sum squared resid	47158	Schwarz criterion	8.511851
Log likelihood	-797.1	Hannan-Quinn criter.	8.451067
F-statistic	6.278	Durbin-Watson stat	0.833711
Prob(F-statistic)	2E-05	Wald F-statistic	2.903546
Prob(Wald F-statistic)	0.0151		

Industrial Sector

Dependent Variable: DECCP
Method: Least Squares
Date: 06/21/16 Time: 01:56
Sample: 717 952
Included observations: 216

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.174	9.751493	-0.325488	0.7451
RPLUS	-6.229	5.361153	-1.16185	0.2466
BVKPS*RPLUS	-0.308	0.353031	-0.872526	0.3839
EPERS*RPLUS	6.199	1.077833	5.751352	0
CASPS*RPLUS	-0.416	0.371301	-1.119133	0.2644
FSIZE	2.358	2.475634	0.9525	0.3419

R-squared	0.1883	Mean dependent	8.13125

		var	
		S.D. dependent	
Adjusted R-squared	0.169	var	31.2876
		Akaike info	
S.E. of regression	28.521	criterion	9.566554
Sum squared resid	170826	Schwarz criterion	9.660312
		Hannan-Quinn	
Log likelihood	-1027	criter.	9.604432
		Durbin-Watson	
F-statistic	9.7462	stat	0.381282
Prob(F-statistic)	0		

Variance Inflation Factors

Date: 06/21/16 Time: 01:57
Sample: 717 952
Included observations: 216

Variable	Coefficient Variance	Centered VIF
C	95.092	NA
RPLUS	28.742	1.671781
BVKPS*RPLUS	0.1246	3.830512
EPERS*RPLUS	1.1617	2.647348
CASPS*RPLUS	0.1379	2.571147
FSIZE	6.1288	1.220637
Mean VIF		2.388285

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	10.805	Prob. F(5,210)	0
		Prob. Chi-	
Obs*R-squared	44.198	Square(5)	0
		Prob. Chi-	
Scaled explained SS	443.2	Square(5)	0

Dependent Variable: DECCP

Method: Least Squares
Date: 06/21/16 Time: 01:58
Sample: 717 952
Included observations: 216
White Heteroscedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.174	8.504443	-0.373216	0.7094
RPLUS	-6.229	4.201626	-	0.1397

			1.482487	
BVKPS*RPLUS	-0.308	0.34181	-0.901171	0.3685
EPERS*RPLUS	6.199	3.057981	2.027153	0.0439
CASPS*RPLUS	-0.416	0.485283	-0.856273	0.3928
FSIZE	2.358	2.648126	0.890457	0.3742
R-squared	0.1883	Mean dependent var		8.13125
Adjusted R-squared	0.169	S.D. dependent var		31.2876
S.E. of regression	28.521	Akaike info criterion		9.566554
Sum squared resid	170826	Schwarz criterion		9.660312
Log likelihood	-1027	Hannan-Quinn criter.		9.604432
F-statistic	9.7462	Durbin-Watson stat		0.381282
Prob(F-statistic)	0	Wald F-statistic		1.552577
Prob(Wald F-statistic)	0.175			

Appendix 3

MENTAL ACCOUNTING & DISPOSITION MODEL

General Negative Returns Model

Dependent Variable: DECCP

Method: Least Squares
Date: 06/21/16 Time: 01:20
Sample: 1 952
Included observations: 902

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.979	2.8746	-0.688378	0.4914
RMINUS	-3.336	1.2127	-2.750933	0.0061
BVKPS*RMINUS	-0.055	0.0752	-0.735276	0.4624
EPERS*RMINUS	1.9005	0.3119	6.093309	0
CASPS*RMINUS	0.2752	0.1126	2.444449	0.0147
FSIZE	1.6783	0.6538	2.567196	0.0104

R-squared	0.0765	Mean dependent var	4.0018
Adjusted R-squared	0.0713	S.D. dependent var	17.628
S.E. of regression	16.98	Akaike info criterion	8.5086
Sum squared resid	258338	Schwarz criterion	8.5406
Log likelihood	-3831	Hannan-Quinn criter.	8.5208
F-statistic	14.837	Durbin-Watson stat	0.5569
Prob(F-statistic)	0		

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	6.1654	Prob. F(5,896)	0
Obs*R-squared	30.001	Prob. Chi-Square(5)	0
Scaled explained SS	1321.1	Prob. Chi-Square(5)	0

Multicolinearity Test

Variance Inflation Factors

Date: 06/21/16 Time: 01:26
Sample: 1 952
Included observations: 902

Variable	Coefficient Variance	Centered VIF
C	8.2635	NA
RMINUS	1.4707	1.1378
BVKPS*RMINUS	0.0057	1.7907
EPERS*RMINUS	0.0973	1.2576
CASPS*RMINUS	0.0127	1.464
FSIZE	0.4274	1.0827
Mean VIF		1.3466

General Negative Returns Model After Correction of Heteroscedaticty

Dependent Variable: DECCP
Method: Least Squares
Date: 06/21/16 Time: 01:22
Sample: 1 952
Included observations: 902
White Heteroscedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.979	1.4952	-1.32347	0.186
RMINUS	-3.336	1.0768	-3.098148	0.002
BVKPS*RMINUS	-0.055	0.1107	-0.49946	0.6176
EPERS*RMINUS	1.9005	0.9144	2.078421	0.038
CASPS*RMINUS	0.2752	0.2976	0.924654	0.3554
FSIZE	1.6783	0.4768	3.519679	0.0005
R-squared	0.0765	Mean dependent var		4.0018
Adjusted R-squared	0.0713	S.D. dependent		17.62

		var	
		Akaike info	8.508
S.E. of regression	16.98	criterion	6
		Schwarz	8.540
Sum squared resid	258338	criterion	6
		Hannan-Quinn	8.520
Log likelihood	-3831	criter.	8
		Durbin-Watson	0.556
F-statistic	14.837	stat	9
			5.006
Prob(F-statistic)	0	Wald F-statistic	2
Prob(Wald F-statistic)	0.0002		

Financial Sector

Dependent Variable: DECCP
Method: Least Squares
Date: 06/21/16 Time: 01:28
Sample: 1 290
Included observations: 278

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4.373	0.9959	-4.391226	0
RMINUS	-0.863	0.4001	-2.155925	0.032
BVKPS*RMINUS	0.1637	0.0427	3.831052	0.0002
EPERS*RMINUS	0.4757	0.1666	2.85574	0.0046
CASPS*RMINUS	0.1271	0.0371	3.424803	0.0007
FSIZE	1.2182	0.2108	5.779833	0

		Mean	1.298
R-squared	0.2805	dependent var	2
		S.D. dependent	3.501
Adjusted R-squared	0.2673	var	5
		Akaike info	5.054
S.E. of regression	2.9973	criterion	7
		Schwarz	5.132
Sum squared resid	2443.6	criterion	9
		Hannan-Quinn	5.086
Log likelihood	-696.6	criter.	1
		Durbin-Watson	0.457
F-statistic	21.208	stat	8
Prob(F-statistic)	0		

Variance Inflation Factors

Date: 06/21/16 Time: 01:29
Sample: 1 290
Included observations: 278

Variable	Coefficient Variance	Centered VIF
C	0.9918	NA
RMINUS	0.1601	1.2386
BVKPS*RMINUS	0.0018	1.5417
EPERS*RMINUS	0.0278	1.1235
CASPS*RMINUS	0.0014	1.0884
FSIZE	0.0444	1.3044
Mean VIF		1.2593

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	13.673	Prob. F(5,272)	0
Obs*R-squared	55.839	Prob. Chi-Square(5)	0
Scaled explained SS	317.71	Prob. Chi-Square(5)	0

Dependent Variable: DECCP

Method: Least Squares
Date: 06/21/16 Time: 01:31
Sample: 1 290
Included observations: 278
White Heteroscedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4.373	1.2859	-3.400778	0.0008
RMINUS	-0.863	0.3272	-2.63675	0.0089

			8	
BVKPS*RMINUS	0.1637	0.0785	2.084661	0.0381
EPERS*RMINUS	0.4757	0.2117	2.246979	0.0254
CASPS*RMINUS	0.1271	0.0737	1.725639	0.0855
FSIZE	1.2182	0.3278	3.716785	0.0002

R-squared	0.2805	Mean dependent var	1.2982
Adjusted R-squared	0.2673	S.D. dependent var	3.5015
S.E. of regression	2.9973	Akaike info criterion	5.0547
Sum squared resid	2443.6	Schwarz criterion	5.1329
Log likelihood	-696.6	Hannan-Quinn criter.	5.0861
F-statistic	21.208	Durbin-Watson stat	0.4578
Prob(F-statistic)	0	Wald F-statistic	7.0727
Prob(Wald F-statistic)	3E-06		

Services Sector

Dependent Variable: DECCP
Method: Least Squares
Date: 06/21/16 Time: 01:32
Sample: 291 517
Included observations: 217

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.067	1.6457	-0.648083	0.5176
RMINUS	-0.568	0.5037	-1.127378	0.2609
BVKPS*RMINUS	0.2216	0.0524	4.231878	0
EPERS*RMINUS	0.1579	0.2281	0.692279	0.4895
CASPS*RMINUS	-0.147	0.1612	-0.909452	0.3642
FSIZE	0.6671	0.4319	1.544715	0.1239

R-squared	0.1313	Mean dependent var	1.4412
Adjusted R-squared	0.1107	S.D. dependent var	3.5126
S.E. of regression	3.3125	Akaike info criterion	5.2605
Sum squared resid	2315.2	Schwarz criterion	5.3543
Log likelihood	-564.8	Hannan-Quinn criter.	5.2983
F-statistic	6.3762	Durbin-Watson stat	0.7672
Prob(F-statistic)	2E-05		

Variance Inflation Factors

Date: 06/21/16 Time: 01:33
Sample: 291 517
Included observations: 217

Variable	Coefficient Variance	Centered VIF
C	2.7082	NA
RMINUS	0.2538	1.1798
BVKPS*RMINUS	0.0027	1.4485
EPERS*RMINUS	0.052	1.1041
CASPS*RMINUS	0.026	1.154
FSIZE	0.1865	1.1328
Mean VIF		1.2038

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	2.824	Prob. F(5,211)	0.0172
Obs*R-squared	13.611	Prob. Chi-Square(5)	0.0183
Scaled explained SS	133.41	Prob. Chi-Square(5)	0

Dependent Variable: DECCP

Method: Least Squares
Date: 06/21/16 Time: 01:35
Sample: 291 517

Included observations: 217
White Heteroscedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.067	2.2445	-0.475169	0.6352
RMINUS	-0.568	0.4786	-1.186722	0.2367
BVKPS*RMINUS	0.2216	0.1038	2.134717	0.0339
EPERS*RMINUS	0.1579	0.2133	0.740485	0.4598
CASPS*RMINUS	-0.147	0.2385	-0.614712	0.5394
FSIZE	0.6671	0.6796	0.981661	0.3274

R-squared	0.1313	Mean dependent var	1.4412
Adjusted R-squared	0.1107	S.D. dependent var	3.5126
S.E. of regression	3.3125	Akaike info criterion	5.2605
Sum squared resid	2315.2	Schwarz criterion	5.354
Log likelihood	-564.8	Hannan-Quinn criter.	5.2983
F-statistic	6.3762	Durbin-Watson stat	0.7672
Prob(F-statistic)	2E-05	Wald F-statistic	1.8558
Prob(Wald F-statistic)	0.0934		

Consumer Sector

Dependent Variable: DECCP
Method: Least Squares
Date: 06/21/16 Time: 01:37
Sample: 518 716
Included observations: 191

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-9.484	8.279	-1.145504	0.2535

RMINUS	-5.395	-2.9344	-1.838677	0.0676
BVKPS*RMINUS	-0.025	-0.2719	-0.092998	0.9260
EPERS*RMINUS	-0.233	0.8579	-0.27169	0.7862
CASPS*RMINUS	0.3385	0.712	0.47546	0.6357
FSIZE	4.3117	1.8769	2.297247	0.0227

R-squared	0.0641	Mean dependent var	6.176
Adjusted R-squared	0.0388	S.D. dependent var	17.039
S.E. of regression	16.705	Akaike info criterion	8.5002
Sum squared resid	51623	Schwarz criterion	8.6023
Log likelihood	-805.8	Hannan-Quinn criter.	8.5415
F-statistic	2.5344	Durbin-Watson stat	0.7916
Prob(F-statistic)	0.0302		

Variance Inflation Factors

Date: 06/21/16 Time: 01:38
Sample: 518 716
Included observations: 191

Variable	Coefficient Variance	Centered VIF
C	68.541	NA
RMINUS	8.6109	1.4725
BVKPS*RMINUS	0.0739	3.1575
EPERS*RMINUS	0.736	3.3977
CASPS*RMINUS	0.5069	3.9895
FSIZE	3.5228	1.2371
Mean VIF		2.6509

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.8596	Prob. F(5,185)	0.5094
Obs*R-squared	4.3365	Prob. Chi-Square(5)	0.5021
Scaled explained SS	86.244	Prob. Chi-Square(5)	0

Industrial Sector				
Dependent Variable: DECCP				
Method: Least Squares				
Date: 06/21/16 Time: 01:41				
Sample: 717 952				
Included observations: 216				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.407	10.181	-0.727504	0.4677
RMINUS	-7.359	4.3768	-1.681307	0.0942
BVKPS*RMINUS	-0.342	0.1786	-1.916429	0.0567
EPERS*RMINUS	3.7968	0.7861	4.829955	0
CASPS*RMINUS	0.5651	0.2679	2.109435	0.0361
FSIZE	4.4453	2.4456	1.817645	0.0705
R-squared	0.1516	Mean dependent var		8.1313
Adjusted R-squared	0.1314	S.D. dependent var		31.288
S.E. of regression	29.159	Akaike info criterion		9.6108
Sum squared resid	178551	Schwarz criterion		9.7045
Log likelihood	-1032	Hannan-Quinn criter.		9.6487
F-statistic	7.5074	Durbin-Watson stat		0.69
Prob(F-statistic)	2E-06			

Variance Inflation Factors
Date: 06/21/16 Time: 01:41
Sample: 717 952
Included observations: 216

Variable	Coefficient Variance	Centered VIF
C	103.66	NA
RMINUS	19.156	1.1829
BVKPS*RMINUS	0.0319	2.3661
EPERS*RMINUS	0.6179	1.2674
CASPS*RMINUS	0.0718	1.9346
FSIZE	5.9812	1.1397
Mean VIF		1.5781

Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	2.3675	Prob. F(5,210)	0.0407
Obs*R-squared	11.526	Prob. Chi-Square(5)	0.0419
Scaled explained SS	169.41	Prob. Chi-Square(5)	0

Dependent Variable: DECCP

Method: Least Squares
Date: 06/21/16 Time: 01:43
Sample: 717 952
Included observations: 216
White Heteroscedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.407	8.6537	-0.855922	0.393
RMINUS	-7.359	4.0565	-1.814052	0.0711
BVKPS*RMINUS	-0.342	0.2278	-1.502778	0.1344
EPERS*RMINUS	3.7968	1.7977	2.112082	0.0359
CASPS*RMINUS	0.5651	0.4784	1.181286	0.2388

FSIZE	4.4453	2.7199	1.634385	0.1037

R-squared	0.1516	Mean dependent var	8.1313
Adjusted R-squared	0.1314	S.D. dependent var	31.288
S.E. of regression	29.159	Akaike info criterion	9.6108
Sum squared resid	178551	Schwarz criterion	9.7045
Log likelihood	-1032	Hannan-Quinn criter.	9.6487
F-statistic	7.5074	Durbin-Watson stat	0.69
Prob(F-statistic)	2E-06	Wald F-statistic	2.1637
Prob(Wald F-statistic)	0.0594		

Data Decription	
Deccp	Share Prices
Returns	Share Price Returns
Rplus	Positive Share Price Return Dummy(Momentum effect), value of 1 for positive returns and 0 otherwise
Rminus	Negative Share Price Return Dummy(Disposition effect), value of 1 for negative returns and 0 otherwise
Epers	Accounting Earnings per Share, Proxy for Income Statement
Bvkps	Accounting Book value per Share, Proxy for Balance Sheet
Casps	Accounting Cash flow per Share, Proxy for Cash flow Statement
Fsize	Firm Size, Measured as log of Total Asset

FYEAR	OBS	COMPANIES	Group	SECTO	Deccp	Returns	Rplus	Rminus	Epers	Bvkps	Casps	Fsize
2008	1	Abbey Building Society	1.00	Financial	3.40	1.88	1.00	0.00	0.07	2.04	-0.46	4.01
2009	2	Abbey Building Society	1.00	Financial	1.61	-0.53	0.00	1.00	0.06	1.29	-0.18	4.03
2010	3	Abbey Building Society	1.00	Financial	1.33	-0.17	0.00	1.00	0.07	1.31	-0.42	4.06
2011	4	Abbey Building Society	1.00	Financial	1.44	0.08	1.00	0.00	0.06	1.67	-0.09	4.15
2012	5	Abbey Building Society	1.00	Financial	1.37	-0.05	0.00	1.00	0.05	1.72	0.18	4.16
2013	6	Abbey Building Society	1.00	Financial	1.49	0.09	1.00	0.00	-0.12	1.60	-0.03	4.13
2014	7	Abbey Building Society	1.00	Financial	1.30	-0.13	0.00	1.00	-0.04	1.56	0.19	4.12
2008	8	Access Bank	1.00	Financial	7.07	0.18	1.00	0.00	1.71	18.54	39.39	6.02
2009	9	Access Bank	1.00	Financial	7.60	0.07	1.00	0.00	-0.26	9.94	1.33	5.84
2010	10	Access Bank	1.00	Financial	9.34	0.23	1.00	0.00	0.63	9.98	3.86	5.91
2011	11	Access Bank	1.00	Financial	4.72	-0.49	0.00	1.00	0.95	11.86	7.45	6.21
2012	12	Access Bank	1.00	Financial	8.89	0.88	1.00	0.00	1.72	9.23	-4.99	6.24
2013	13	Access Bank	1.00	Financial	9.60	0.08	1.00	0.00	1.59	10.29	-4.97	6.26
2014	14	Access Bank	1.00	Financial	6.60	-0.31	0.00	1.00	1.88	12.17	-12.26	6.32
2014	15	Africa Prudential Registrar	1.00	Financial	3.04	5.08	1.00	0.00	0.61	2.26	1.85	4.28
2009	16	African Alliance Insurance	1.00	Financial	0.87	-0.68	0.00	1.00	-0.25	0.51	-0.05	4.20
2010	17	African Alliance Insurance	1.00	Financial	0.50	-0.43	0.00	1.00	-0.15	0.38	-0.01	4.12
2011	18	African Alliance Insurance	1.00	Financial	0.50	0.00	0.00	0.00	-0.44	3.21	0.16	4.12
2012	19	African Alliance Insurance	1.00	Financial	0.50	0.00	0.00	0.00	-0.15	3.06	0.26	4.15
2013	20	African Alliance Insurance	1.00	Financial	0.50	0.00	0.00	0.00	0.07	0.33	0.19	4.29
2008	21	Aiico	1.00	Financial	1.79	0.79	1.00	0.00	0.23	4.21	0.41	4.32
2009	22	Aiico	1.00	Financial	0.79	-0.56	0.00	1.00	0.14	1.82	0.21	4.40
2010	23	Aiico	1.00	Financial	0.90	0.14	1.00	0.00	0.13	1.59	0.14	4.47
2011	24	Aiico	1.00	Financial	0.50	-0.44	0.00	1.00	-0.00	1.05	0.12	4.45
2012	25	Aiico	1.00	Financial	0.62	0.24	1.00	0.00	0.19	1.62	0.52	4.54
2013	26	Aiico	1.00	Financial	0.84	0.35	1.00	0.00	-0.12	1.65	0.16	4.62
2014	27	Aiico	1.00	Financial	0.81	-0.04	0.00	1.00	0.31	1.61	2.20	4.77
2008	28	Aso Savings & Loans	1.00	Financial	1.69	2.07	1.00	0.00	0.34	1.61	5.10	4.83
2009	29	Aso Savings & Loans	1.00	Financial	0.56	-0.67	0.00	1.00	0.10	0.63	-0.95	4.80
2010	30	Aso Savings & Loans	1.00	Financial	0.50	-0.11	0.00	1.00	-0.37	0.20	-0.21	4.80
2012	31	Aso Savings & Loans	1.00	Financial	0.50	0.00	0.00	0.00	-0.01	0.18	-1.33	4.90
2013	32	Aso Savings & Loans	1.00	Financial	0.50	0.00	0.00	0.00	0.01	0.36	0.32	4.94
2008	33	Consolidated Hallmark	1.00	Financial	0.01	0.05	1.00	0.00	0.06	0.68	0.04	3.71

2009	34	Consolidated Hallmark	1.00	Financial	0.01	-0.53	0.00	1.00	0.04	0.66	0.05	3.70
2010	35	Consolidated Hallmark	1.00	Financial	0.01	0.00	0.00	0.00	0.07	1.38	0.13	3.74
2011	36	Consolidated Hallmark	1.00	Financial	0.01	0.00	0.00	0.00	0.03	0.65	0.09	3.78
2012	37	Consolidated Hallmark	1.00	Financial	0.01	0.00	0.00	0.00	0.07	0.70	0.04	3.82
2013	38	Consolidated Hallmark	1.00	Financial	0.01	0.00	0.00	0.00	-0.03	0.54	0.07	3.79
2014	39	Consolidated Hallmark	1.00	Financial	0.01	0.00	0.00	0.00	0.03	0.64	-0.01	3.79
2008	40	Contiental Reinsurance	1.00	Financial	0.02	-0.53	0.00	1.00	0.05	1.18	0.13	4.16
2009	41	Contiental Reinsurance	1.00	Financial	0.01	-0.36	0.00	1.00	0.09	1.11	0.15	4.19
2010	42	Contiental Reinsurance	1.00	Financial	0.01	-0.13	0.00	1.00	0.12	1.13	0.23	4.27
2011	43	Contiental Reinsurance	1.00	Financial	0.01	-0.16	0.00	1.00	0.14	1.20	0.16	4.33
2012	44	Contiental Reinsurance	1.00	Financial	0.01	-0.10	0.00	1.00	0.16	1.30	-0.02	4.38
2013	45	Contiental Reinsurance	1.00	Financial	0.01	0.62	1.00	0.00	0.17	1.39	0.05	4.42
2014	46	Contiental Reinsurance	1.00	Financial	0.01	-0.17	0.00	1.00	0.08	1.42	-0.02	4.45
2008	47	Cornerstone Insurance	1.00	Financial	0.02	-0.20	0.00	1.00	-0.05	0.68	0.00	3.95
2009	48	Cornerstone Insurance	1.00	Financial	0.01	-0.68	0.00	1.00	-0.05	0.63	0.00	3.97
2010	49	Cornerstone Insurance	1.00	Financial	0.01	-0.04	0.00	1.00	0.05	0.75	0.01	4.02
2011	50	Cornerstone Insurance	1.00	Financial	0.01	0.00	0.00	0.00	-	-	-	4.04
2012	51	Cornerstone Insurance	1.00	Financial	0.01	0.00	0.00	0.00	0.06	0.69	0.03	4.09
2013	52	Cornerstone Insurance	1.00	Financial	0.01	0.12	1.00	0.00	0.10	0.79	0.11	4.15
2014	53	Cornerstone Insurance	1.00	Financial	0.01	-0.11	0.00	1.00	0.10	0.89	-0.09	4.16
2008	54	Custodian & Allied Insurance	1.00	Financial	0.03	0.03	1.00	0.00	0.33	2.14	0.16	4.08
2009	55	Custodian & Allied Insurance	1.00	Financial	0.03	-0.07	0.00	1.00	0.37	2.17	0.14	4.15
2010	56	Custodian & Allied Insurance	1.00	Financial	0.03	0.10	1.00	0.00	0.40	2.31	0.11	4.20
2011	57	Custodian & Allied Insurance	1.00	Financial	0.02	-0.28	0.00	1.00	0.21	2.30	0.24	4.31
2012	58	Custodian & Allied Insurance	1.00	Financial	0.01	-0.43	0.00	1.00	0.18	1.21	0.22	4.32
2013	59	Custodian & Allied Insurance	1.00	Financial	0.02	0.60	1.00	0.00	0.60	3.25	1.15	4.66
2014	60	Custodian & Allied Insurance	1.00	Financial	0.04	0.74	1.00	0.00	0.70	3.94	0.40	4.69
2008	61	Diamond Bank	1.00	Financial	0.07	-0.63	0.00	1.00	1.18	10.74	5.63	5.80
2009	62	Diamond Bank	1.00	Financial	0.07	0.10	1.00	0.00	-0.56	7.27	-0.91	5.81
2010	63	Diamond Bank	1.00	Financial	0.07	-0.02	0.00	1.00	0.09	7.22	-1.59	5.77
2011	64	Diamond Bank	1.00	Financial	0.02	-0.72	0.00	1.00	-0.91	5.48	4.93	5.85
2012	65	Diamond Bank	1.00	Financial	0.05	1.26	1.00	0.00	1.59	7.83	2.13	6.07
2013	66	Diamond Bank	1.00	Financial	0.07	0.59	1.00	0.00	1.97	9.57	14.71	6.18
2014	67	Diamond Bank	1.00	Financial	0.06	-0.24	0.00	1.00	1.66	13.65	8.62	6.29
2009	68	Equity Assurance	1.00	Financial	0.01	-0.90	0.00	1.00	-0.10	0.62	0.06	3.93
2010	69	Equity Assurance	1.00	Financial	0.01	0.00	0.00	0.00	0.00	0.53	-0.04	3.91
2011	70	Equity Assurance	1.00	Financial	0.01	0.00	0.00	0.00	-0.08	0.43	-0.03	3.88
2012	71	Equity Assurance	1.00	Financial	0.01	0.00	0.00	0.00	0.02	0.46	0.03	3.95
2013	72	Equity Assurance	1.00	Financial	0.01	0.00	0.00	0.00	-5.70	50.15	7.78	3.99
2014	73	Equity Assurance	1.00	Financial	0.01	0.00	0.00	0.00	0.02	0.45	0.05	3.98
2009	74	Fidelity Bank	1.00	Financial	0.02	-0.49	0.00	1.00	0.05	4.52	-0.30	5.70
2010	75	Fidelity Bank	1.00	Financial	0.03	0.12	1.00	0.00	0.21	4.68	0.85	5.68
2011	76	Fidelity Bank	1.00	Financial	0.01	-0.46	0.00	1.00	0.09	5.09	0.56	5.87
2012	77	Fidelity Bank	1.00	Financial	0.02	0.57	1.00	0.00	0.63	5.59	1.48	5.96
2013	78	Fidelity Bank	1.00	Financial	0.02	0.09	1.00	0.00	0.27	5.72	0.53	6.03
2014	79	Fidelity Bank	1.00	Financial	0.02	-0.35	0.00	1.00	0.48	5.98	1.51	6.07
2009	80	First Bank Holding	1.00	Financial	0.14	-0.33	0.00	1.00	0.17	10.80	-15.77	6.34
2010	81	First Bank Holding	1.00	Financial	0.14	-0.02	0.00	1.00	1.02	10.40	-0.26	6.36

2011	82	First Bank Holding	1.00	Financial	0.09	-0.35	0.00	1.00	0.60	11.87	3.33	6.46
2012	83	First Bank Holding	1.00	Financial	0.16	0.77	1.00	0.00	2.33	13.51	0.68	6.50
2013	84	First Bank Holding	1.00	Financial	0.16	0.03	1.00	0.00	2.16	14.43	4.28	6.59
2014	85	First Bank Holding	1.00	Financial	0.09	-0.46	0.00	1.00	2.55	14.57	-13.62	6.64
2009	86	First City Monumental Bank	1.00	Financial	0.07	0.19	1.00	0.00	0.05	11.48	-4.16	5.67
2010	87	First City Monumental Bank	1.00	Financial	0.08	0.05	1.00	0.00	0.49	8.32	-0.60	5.73
2011	88	First City Monumental Bank	1.00	Financial	0.04	-0.44	0.00	1.00	-0.57	7.24	4.79	5.78
2012	89	First City Monumental Bank	1.00	Financial	0.04	-0.10	0.00	1.00	0.80	6.98	11.22	5.96
2013	90	First City Monumental Bank	1.00	Financial	0.03	-0.16	0.00	1.00	0.81	7.27	-1.44	6.00
2014	91	First City Monumental Bank	1.00	Financial	0.02	-0.21	0.00	1.00	1.12	8.10	-5.86	6.07
2013	92	Fortis Microfinance Bank	1.00	Financial	0.06	11.54	1.00	0.00	0.23	0.85	0.87	4.10
2014	93	Fortis Microfinance Bank	1.00	Financial	0.05	-0.14	0.00	1.00	0.41	1.29	-0.49	4.22
2010	94	Great Nig Insurance	1.00	Financial	0.01	-0.96	0.00	1.00	-0.14	-	-	3.84
2011	95	Great Nig Insurance	1.00	Financial	0.01	0.00	0.00	0.00	0.11	1.15	0.08	3.86
2012	96	Great Nig Insurance	1.00	Financial	0.01	0.00	0.00	0.00	0.24	1.40	0.00	3.93
2013	97	Great Nig Insurance	1.00	Financial	0.01	0.00	0.00	0.00	(0.003)	-	-	4.00
2014	98	Great Nig Insurance	1.00	Financial	0.01	0.00	0.00	0.00	-0.03	-	-	4.01
2008	99	Guaranty Trust Bank	1.00	Financial	0.09	-0.73	0.00	1.00	1.85	11.89	12.70	5.98
2009	100	Guaranty Trust Bank	1.00	Financial	0.16	0.64	1.00	0.00	1.27	10.31	-0.49	6.03
2010	101	Guaranty Trust Bank	1.00	Financial	0.18	0.15	1.00	0.00	1.63	8.96	8.33	6.06
2011	102	Guaranty Trust Bank	1.00	Financial	0.14	-0.20	0.00	1.00	1.69	8.09	4.30	6.21
2012	103	Guaranty Trust Bank	1.00	Financial	0.23	0.61	1.00	0.00	3.06	9.90	3.26	6.24
2013	104	Guaranty Trust Bank	1.00	Financial	0.27	0.16	1.00	0.00	3.17	11.52	11.45	6.32
2014	105	Guaranty Trust Bank	1.00	Financial	0.25	-0.06	0.00	1.00	3.47	13.16	-1.64	6.33
2008	106	Guinea Insurance	1.00	Financial	0.01	-0.71	0.00	1.00	0.01	0.44	-0.06	3.61
2009	107	Guinea Insurance	1.00	Financial	0.01	-0.50	0.00	1.00	-0.00	0.64	0.01	3.63
2010	108	Guinea Insurance	1.00	Financial	0.01	0.00	0.00	0.00	-0.02	0.62	0.06	3.61
2011	109	Guinea Insurance	1.00	Financial	0.01	0.00	0.00	0.00	-0.08	0.46	0.02	3.57
2012	110	Guinea Insurance	1.00	Financial	0.01	0.00	0.00	0.00	0.01	0.51	0.10	3.60
2013	111	Guinea Insurance	1.00	Financial	0.01	0.00	0.00	0.00	0.01	0.52	0.19	3.62
2013	112	Infinity Trust Mortgage Bank	1.00	Financial	0.02	-0.66	0.00	1.00	0.09	1.34	0.13	3.87
2014	113	Infinity Trust Mortgage Bank	1.00	Financial	0.01	-0.03	0.00	1.00	0.05	1.33	-0.04	3.85
2008	114	International Energy Insurance	1.00	Financial	0.02	-0.64	0.00	1.00	0.09	3.37	-0.21	4.25
2009	115	International Energy Insurance	1.00	Financial	0.01	-0.69	0.00	1.00	-0.06	1.33	-0.17	4.20
2010	116	International Energy Insurance	1.00	Financial	0.01	-0.21	0.00	1.00	-0.04	1.69	0.21	4.21
2011	117	International Energy Insurance	1.00	Financial	0.01	0.00	0.00	0.00	0.01	0.06	0.20	3.95
2012	118	International Energy Insurance	1.00	Financial	0.01	0.00	0.00	0.00	-0.06	0.06	0.01	4.05
2013	119	International Energy Insurance	1.00	Financial	0.01	0.08	1.00	0.00	0.05	0.27	0.61	4.01
2008	120	Lasasco Assurance	1.00	Financial	0.02	-0.60	0.00	1.00	0.06	0.79	-0.01	3.88
2009	121	Lasasco Assurance	1.00	Financial	0.01	-0.67	0.00	1.00	0.07	0.79	0.07	3.92
2010	122	Lasasco Assurance	1.00	Financial	0.01	-0.15	0.00	1.00	0.03	0.76	0.09	3.95
2011	123	Lasasco Assurance	1.00	Financial	0.01	0.00	0.00	0.00	0.03	0.72	0.03	3.99
2012	124	Lasasco Assurance	1.00	Financial	0.01	0.00	0.00	0.00	-0.03	0.66	-0.10	4.07
2013	125	Lasasco Assurance	1.00	Financial	0.01	0.00	0.00	0.00	0.04	0.85	0.07	4.13
2014	126	Lasasco Assurance	1.00	Financial	0.01	0.00	0.00	0.00	0.06	0.80	0.06	4.13
2008	127	Lawunion & Rock	1.00	Financial	0.03	-0.33	0.00	1.00	-0.03	1.06	0.05	3.76
2009	128	Lawunion & Rock	1.00	Financial	0.01	-0.83	0.00	1.00	0.09	1.32	-0.01	3.81

2010	129	Lawunion & Rock	1.00	Financial	0.01	0.08	1.00	0.00	0.11	1.39	0.15	3.87
2011	130	Lawunion & Rock	1.00	Financial	0.01	-0.09	0.00	1.00	0.07	1.39	0.01	3.88
2012	131	Lawunion & Rock	1.00	Financial	0.01	0.00	0.00	0.00	0.39	1.02	-0.01	3.82
2013	132	Lawunion & Rock	1.00	Financial	0.01	0.00	0.00	0.00	0.14	1.21	0.07	3.84
2014	133	Lawunion & Rock	1.00	Financial	0.01	0.00	0.00	0.00	0.04	1.22	0.21	3.86
2008	134	Linkage Assurance	1.00	Financial	0.01	-0.82	0.00	1.00	-0.31	6.44	0.54	3.72
2009	135	Linkage Assurance	1.00	Financial	0.01	-0.26	0.00	1.00	-0.51	6.05	0.01	3.70
2010	136	Linkage Assurance	1.00	Financial	0.01	0.00	0.00	0.00	-0.30	5.99	-0.86	3.68
2011	137	Linkage Assurance	1.00	Financial	0.01	0.00	0.00	0.00	0.43	15.95	-0.40	4.02
2012	138	Linkage Assurance	1.00	Financial	0.01	0.00	0.00	0.00	0.34	28.57	-1.02	4.23
2013	139	Linkage Assurance	1.00	Financial	0.01	0.00	0.00	0.00	0.52	19.29	-0.84	4.25
2014	140	Linkage Assurance	1.00	Financial	0.01	0.00	0.00	0.00	0.41	19.66	0.69	4.25
2008	141	Nem Insurance	1.00	Financial	0.01	-0.63	0.00	1.00	0.09	0.79	-0.08	3.70
2009	142	Nem Insurance	1.00	Financial	0.01	-0.64	0.00	1.00	0.17	0.94	0.26	3.75
2010	143	Nem Insurance	1.00	Financial	0.01	0.10	1.00	0.00	0.16	1.08	0.18	3.85
2011	144	Nem Insurance	1.00	Financial	0.01	-0.05	0.00	1.00	0.05	0.82	0.31	3.80
2012	145	Nem Insurance	1.00	Financial	0.01	0.02	1.00	0.00	0.09	0.85	0.17	3.89
2013	146	Nem Insurance	1.00	Financial	0.01	0.36	1.00	0.00	0.07	0.83	0.17	4.00
2014	147	Nem Insurance	1.00	Financial	0.01	-0.13	0.00	1.00	0.29	1.11	0.16	4.05
2008	148	Niger Insurance	1.00	Financial	0.03	-0.51	0.00	1.00	-0.02	1.09	0.26	4.27
2009	149	Niger Insurance	1.00	Financial	0.01	-0.70	0.00	1.00	-0.44	0.85	0.31	4.31
2010	150	Niger Insurance	1.00	Financial	0.01	-0.38	0.00	1.00	-0.02	0.82	0.33	4.33
2011	151	Niger Insurance	1.00	Financial	0.01	-0.17	0.00	1.00	-	-	-	4.33
2012	152	Niger Insurance	1.00	Financial	0.01	0.00	0.00	0.00	-	-	-	4.35
2013	153	Niger Insurance	1.00	Financial	0.01	0.00	0.00	0.00	0.08	-	-	4.39
2014	154	Niger Insurance	1.00	Financial	0.01	0.00	0.00	0.00	0.09	1.08	-0.16	4.36
2012	155	Npf Microfinance	1.00	Financial	0.01	-0.93	0.00	1.00	0.16	1.61	-	3.89
2013	156	Npf Microfinance	1.00	Financial	0.01	-0.32	0.00	1.00	0.17	1.71	0.23	3.94
2014	157	Npf Microfinance	1.00	Financial	0.01	0.00	0.00	0.00	0.21	1.78	0.09	4.04
2008	158	Oasis Insuraance	1.00	Financial	0.05	1.30	1.00	0.00	-0.17	0.62	0.01	3.55
2009	159	Oasis Insuraance	1.00	Financial	0.01	-0.73	0.00	1.00	-0.02	0.63	0.04	3.53
2010	160	Oasis Insuraance	1.00	Financial	0.01	-0.66	0.00	1.00	0.01	0.57	0.02	3.59
2011	161	Oasis Insuraance	1.00	Financial	0.01	0.00	0.00	0.00	0.07	0.47	0.03	3.59
2012	162	Oasis Insuraance	1.00	Financial	0.01	0.00	0.00	0.00	0.04	0.57	0.02	3.61
2013	163	Oasis Insuraance	1.00	Financial	0.01	0.00	0.00	0.00	-	-	-	3.60
2008	164	Prestige Assurance	1.00	Financial	0.06	-0.30	0.00	1.00	0.33	2.03	-0.00	3.77
2009	165	Prestige Assurance	1.00	Financial	0.04	-0.36	0.00	1.00	0.28	2.02	0.24	3.84
2010	166	Prestige Assurance	1.00	Financial	0.02	-0.48	0.00	1.00	0.23	2.21	0.05	3.88
2011	167	Prestige Assurance	1.00	Financial	0.01	-0.55	0.00	1.00	-0.01	1.10	-0.25	3.79
2012	168	Prestige Assurance	1.00	Financial	0.01	-0.46	0.00	1.00	0.24	1.54	-0.09	3.99
2013	169	Prestige Assurance	1.00	Financial	0.01	0.18	1.00	0.00	-0.04	1.76	-0.02	4.01
2014	170	Prestige Assurance	1.00	Financial	0.01	-0.17	0.00	1.00	0.57	1.82	-0.21	4.08
2008	171	Regency Aliance Ins	1.00	Financial	0.01	0.46	1.00	0.00	0.05	0.73	0.04	3.68
2009	172	Regency Aliance Ins	1.00	Financial	0.01	-0.32	0.00	1.00	-0.01	0.64	-0.03	3.67
2010	173	Regency Aliance Ins	1.00	Financial	0.01	0.00	0.00	0.00	0.03	0.68	0.02	3.73
2011	174	Regency Aliance Ins	1.00	Financial	0.01	0.00	0.00	0.00	-0.00	0.49	0.03	3.67
2012	175	Regency Aliance Ins	1.00	Financial	0.01	0.00	0.00	0.00	0.07	0.53	0.03	3.73
2014	176	Regency Aliance Ins	1.00	Financial	0.01	0.00	0.00	0.00	0.66	1.01	0.10	3.83

2013	177	Resort Savings & Loans	1.00	Financial	0.01	-0.92	0.00	1.00	-13.82	32.22	9.42	3.93
2008	178	Royal Exchange	1.00	Financial	0.03	-0.36	0.00	1.00	-0.66	-2.35	-0.38	4.09
2009	179	Royal Exchange	1.00	Financial	0.01	-0.80	0.00	1.00	0.04	-1.59	-0.39	4.16
2010	180	Royal Exchange	1.00	Financial	0.01	-0.24	0.00	1.00	0.06	-0.97	0.03	4.12
2011	181	Royal Exchange	1.00	Financial	0.01	0.00	0.00	0.00	-0.01	1.59	0.01	4.19
2012	182	Royal Exchange	1.00	Financial	0.01	0.00	0.00	0.00	0.12	1.56	-0.00	4.21
2013	183	Royal Exchange	1.00	Financial	0.01	0.06	1.00	0.00	0.02	1.61	0.10	4.31
2014	184	Royal Exchange	1.00	Financial	0.01	-0.06	0.00	1.00	0.06	3.57	0.19	4.42
2008	185	Skye Bank	1.00	Financial	0.09	-0.50	0.00	1.00	1.81	10.81	15.18	5.90
2009	186	Skye Bank	1.00	Financial	0.05	-0.36	0.00	1.00	0.07	51.46	-59.66	5.80
2010	187	Skye Bank	1.00	Financial	0.09	0.60	1.00	0.00	0.78	8.31	-0.61	5.85
2011	188	Skye Bank	1.00	Financial	0.04	-0.56	0.00	1.00	0.20	7.59	-3.47	5.96
2012	189	Skye Bank	1.00	Financial	0.04	0.12	1.00	0.00	0.95	8.03	3.14	6.03
2013	190	Skye Bank	1.00	Financial	0.04	-0.07	0.00	1.00	1.21	9.09	6.99	6.05
2014	191	Skye Bank	1.00	Financial	0.03	-0.34	0.00	1.00	0.75	10.18	-5.93	6.15
2013	192	Smart Product	1.00	Financial	0.01	1.96	1.00	0.00	0.27	1.34	-0.13	2.03
2014	193	Smart Product	1.00	Financial	0.01	-0.25	0.00	1.00	0.28	1.45	0.43	2.08
2008	194	Sovereign Trust	1.00	Financial	0.01	-0.72	0.00	1.00	0.07	0.70	0.07	3.73
2009	195	Sovereign Trust	1.00	Financial	0.01	-0.57	0.00	1.00	0.00	0.66	0.13	3.72
2010	196	Sovereign Trust	1.00	Financial	0.01	0.00	0.00	0.00	0.06	0.72	-0.02	3.75
2011	197	Sovereign Trust	1.00	Financial	0.01	0.00	0.00	0.00	-0.09	0.33	0.06	3.79
2012	198	Sovereign Trust	1.00	Financial	0.01	0.00	0.00	0.00	0.23	0.49	0.05	3.85
2013	199	Sovereign Trust	1.00	Financial	0.01	0.00	0.00	0.00	0.04	0.40	0.11	3.94
2008	200	Staco Insurance	1.00	Financial	0.07	0.74	1.00	0.00	0.11	0.88	0.14	3.86
2009	201	Staco Insurance	1.00	Financial	0.01	-0.81	0.00	1.00	0.08	0.86	0.03	3.89
2010	202	Staco Insurance	1.00	Financial	0.01	-0.60	0.00	1.00	0.01	1.10	0.15	3.94
2011	203	Staco Insurance	1.00	Financial	0.01	0.00	0.00	0.00	-0.35	0.40	-0.24	3.86
2012	204	Staco Insurance	1.00	Financial	0.01	0.00	0.00	0.00	0.05	0.44	0.19	3.90
2013	205	Staco Insurance	1.00	Financial	0.01	0.00	0.00	0.00	0.08	0.53	0.19	3.93
2014	206	Staco Insurance	1.00	Financial	0.01	0.00	0.00	0.00	0.03	0.55	-0.01	4.01
2008	207	Stanbic Ibtc Holding	1.00	Financial	0.11	-0.45	0.00	1.00	0.64	4.30	1.91	5.43
2009	208	Stanbic Ibtc Holding	1.00	Financial	0.07	-0.31	0.00	1.00	0.43	4.25	-1.49	5.41
2010	209	Stanbic Ibtc Holding	1.00	Financial	0.09	0.23	1.00	0.00	0.50	4.43	-0.06	5.58
2011	210	Stanbic Ibtc Holding	1.00	Financial	0.08	-0.10	0.00	1.00	0.57	7.98	6.57	5.74
2012	211	Stanbic Ibtc Holding	1.00	Financial	0.11	0.33	1.00	0.00	0.50	8.33	2.89	5.83
2013	212	Stanbic Ibtc Holding	1.00	Financial	0.20	0.82	1.00	0.00	1.86	4.72	4.58	5.82
2014	213	Stanbic Ibtc Holding	1.00	Financial	0.27	0.35	1.00	0.00	2.93	5.50	1.42	5.98
2008	214	Standard Alliance Insurance	1.00	Financial	0.01	-0.65	0.00	1.00	0.12	3.18	-0.16	4.36
2009	215	Standard Alliance Insurance	1.00	Financial	0.01	-0.63	0.00	1.00	-0.67	1.90	-0.11	4.27
2010	216	Standard Alliance Insurance	1.00	Financial	0.01	-0.09	0.00	1.00	-0.99	0.91	0.14	4.03
2011	217	Standard Alliance Insurance	1.00	Financial	0.01	0.00	0.00	0.00	0.00	0.53	0.01	3.98
2012	218	Standard Alliance Insurance	1.00	Financial	0.01	0.00	0.00	0.00	-0.17	0.41	0.04	3.95
2013	219	Standard Alliance Insurance	1.00	Financial	0.01	0.00	0.00	0.00	-0.07	0.40	0.01	3.94
2014	220	Standard Alliance Insurance	1.00	Financial	0.01	0.00	0.00	0.00	-0.17	0.28	0.03	3.89
2008	221	Sterling Bank	1.00	Financial	0.02	-0.67	0.00	1.00	0.52	2.48	3.70	5.34
2009	222	Sterling Bank	1.00	Financial	0.01	-0.49	0.00	1.00	-0.72	1.77	-2.73	5.26
2010	223	Sterling Bank	1.00	Financial	0.02	0.88	1.00	0.00	0.40	2.09	1.97	5.37
2011	224	Sterling Bank	1.00	Financial	0.01	-0.56	0.00	1.00	0.53	3.27	-0.90	5.67

2012	225	Sterling Bank	1.00	Financial	0.02	0.71	1.00	0.00	0.44	3.71	-1.18	5.73
2013	226	Sterling Bank	1.00	Financial	0.02	0.32	1.00	0.00	0.52	2.94	-2.04	5.81
2014	227	Sterling Bank	1.00	Financial	0.03	0.11	1.00	0.00	0.42	3.92	-0.03	5.92
2008	228	Unic Insurance	1.00	Financial	1.20	-0.72	0.00	1.00	0.05	0.97	0.21	3.91
2009	229	Unic Insurance	1.00	Financial	1.10	-0.08	0.00	1.00	-0.22	4.20	0.94	3.88
2010	230	Unic Insurance	1.00	Financial	0.50	-0.55	0.00	1.00	-0.40	1.09	-0.24	3.84
2011	231	Unic Insurance	1.00	Financial	0.50	0.00	0.00	0.00	-0.06	1.22	-0.11	3.78
2012	232	Unic Insurance	1.00	Financial	0.50	0.00	0.00	0.00	-0.14	1.08	-0.09	3.78
2013	233	Unic Insurance	1.00	Financial	0.50	0.00	0.00	0.00	-0.46	0.62	-0.09	3.71
2014	234	Unic Insurance	1.00	Financial	0.50	0.00	0.00	0.00	-0.26	0.36	-	3.65
2008	235	Union Bank Of Nig	1.00	Financial	15.20	-0.65	0.00	1.00	2.22	10.36	2.91	6.00
2009	236	Union Bank Of Nig	1.00	Financial	6.00	-0.61	0.00	1.00	-2.08	-1.69	0.35	6.14
2010	237	Union Bank Of Nig	1.00	Financial	4.20	-0.30	0.00	1.00	8.30	-9.03	3.57	6.05
2011	238	Union Bank Of Nig	1.00	Financial	10.60	1.52	1.00	0.00	-12.66	30.58	-36.46	6.02
2012	239	Union Bank Of Nig	1.00	Financial	7.35	-0.31	0.00	1.00	0.61	16.08	1.98	6.01
2013	240	Union Bank Of Nig	1.00	Financial	10.00	0.36	1.00	0.00	0.37	12.14	-4.31	6.00
2014	241	Union Bank Of Nig	1.00	Financial	8.50	-0.15	0.00	1.00	1.57	13.12	-7.27	6.00
2008	242	Union Homes Savings & Loans	1.00	Financial	3.41	-0.53	0.00	1.00	-0.32	1.38	0.70	4.89
2009	243	Union Homes Savings & Loans	1.00	Financial	0.85	-0.75	0.00	1.00	-0.21	-5.39	0.07	4.68
2011	244	Union Homes Savings & Loans	1.00	Financial	0.50	-0.41	0.00	1.00	-0.69	-0.68	-1.16	4.59
2012	245	Union Homes Savings & Loans	1.00	Financial	0.50	0.00	0.00	0.00	-0.77	-1.36	0.42	4.59
2013	246	Union Homes Savings & Loans	1.00	Financial	0.50	0.00	0.00	0.00	-0.42	-1.70	-1.29	4.37
2008	247	United Bank For Africa	1.00	Financial	13.15	-0.65	0.00	1.00	3.14	14.88	16.15	6.17
2009	248	United Bank For Africa	1.00	Financial	10.80	-0.18	0.00	1.00	0.10	7.87	-11.40	6.13
2010	249	United Bank For Africa	1.00	Financial	9.15	-0.15	0.00	1.00	0.03	9.00	2.39	6.16
2011	250	United Bank For Africa	1.00	Financial	2.59	-0.72	0.00	1.00	-0.29	5.05	-0.79	6.25
2012	251	United Bank For Africa	1.00	Financial	4.56	0.76	1.00	0.00	1.66	6.21	7.59	6.32
2013	252	United Bank For Africa	1.00	Financial	7.70	0.69	1.00	0.00	1.52	7.67	-2.09	6.42
2014	253	United Bank For Africa	1.00	Financial	4.30	-0.44	0.00	1.00	1.56	8.64	-3.50	6.44
2008	254	Unity Bank	1.00	Financial	2.86	-0.68	0.00	1.00	0.80	1.20	8.00	5.54
2009	255	Unity Bank	1.00	Financial	0.84	-0.71	0.00	1.00	1.01	0.43	-8.12	5.40
2010	256	Unity Bank	1.00	Financial	1.20	0.43	1.00	0.00	0.38	1.32	-0.09	5.42
2011	257	Unity Bank	1.00	Financial	0.55	-0.54	0.00	1.00	0.08	1.25	0.69	5.42
2012	258	Unity Bank	1.00	Financial	0.50	-0.09	0.00	1.00	0.18	1.47	-0.83	5.54
2013	259	Unity Bank	1.00	Financial	0.53	0.06	1.00	0.00	0.59	0.73	0.61	5.61
2014	260	Unity Bank	1.00	Financial	0.50	-0.06	0.00	1.00	0.17	1.24	-0.53	5.62
2009	261	Unitykapital Assurance	1.00	Financial	2.38	3.76	1.00	0.00	-0.01	0.67	-0.07	3.95
2010	262	Unitykapital Assurance	1.00	Financial	0.50	-0.79	0.00	1.00	-0.01	0.61	0.00	3.95
2011	263	Unitykapital Assurance	1.00	Financial	0.50	0.00	0.00	0.00	0.01	0.71	-0.02	4.00
2012	264	Unitykapital Assurance	1.00	Financial	0.50	0.00	0.00	0.00	0.03	0.78	-0.06	4.04
2013	265	Unitykapital Assurance	1.00	Financial	0.50	0.00	0.00	0.00	-	0.74	0.04	4.02
2014	266	Unitykapital Assurance	1.00	Financial	0.50	0.00	0.00	0.00	0.02	1.38	0.02	4.02
2008	267	Universal Insurance	1.00	Financial	0.69	-0.84	0.00	1.00	0.01	0.61	-0.02	4.02
2009	268	Universal Insurance	1.00	Financial	0.50	-0.28	0.00	1.00	-0.14	0.53	-0.03	3.97
2010	269	Universal Insurance	1.00	Financial	0.50	0.00	0.00	0.00	-0.68	52.35	-0.28	3.95
2008	270	Wapic Insurance	1.00	Financial	3.79	-0.59	0.00	1.00	0.04	1.91	0.37	4.11
2009	271	Wapic Insurance	1.00	Financial	1.10	-0.71	0.00	1.00	-0.08	1.66	-0.26	4.09
2010	272	Wapic Insurance	1.00	Financial	0.52	-0.53	0.00	1.00	-0.12	1.53	0.15	4.06

2011	273	Wapic Insurance	1.00	Financial	0.52	0.00	0.00	0.00	0.07	1.47	0.17	4.08
2012	274	Wapic Insurance	1.00	Financial	0.58	0.12	1.00	0.00	0.08	1.59	0.16	4.10
2013	275	Wapic Insurance	1.00	Financial	1.08	0.86	1.00	0.00	-2.19	149.20	-2.64	4.35
2014	276	Wapic Insurance	1.00	Financial	0.64	-0.41	0.00	1.00	1.77	1.06	-0.16	4.34
2008	277	Wema Bank	1.00	Financial	14.29	-0.05	0.00	1.00	-4.55	-	-	5.19
2009	278	Wema Bank	1.00	Financial	0.93	-0.93	0.00	1.00	-0.66	-4.02	0.24	5.29
2010	279	Wema Bank	1.00	Financial	1.29	0.39	1.00	0.00	1.63	1.47	2.72	5.30
2011	280	Wema Bank	1.00	Financial	0.57	-0.56	0.00	1.00	-0.36	0.53	-1.84	5.33
2012	281	Wema Bank	1.00	Financial	0.52	-0.09	0.00	1.00	-0.42	0.11	1.18	5.39
2013	282	Wema Bank	1.00	Financial	1.10	1.12	1.00	0.00	0.08	2.07	0.70	5.46
2014	283	Wema Bank	1.00	Financial	0.96	-0.13	0.00	1.00	0.06	1.13	-1.10	5.58
2008	284	Zenith Bank	1.00	Financial	22.00	-0.52	0.00	1.00	3.83	25.53	33.43	6.16
2009	285	Zenith Bank	1.00	Financial	13.60	-0.38	0.00	1.00	0.82	13.44	-11.82	6.12
2010	286	Zenith Bank	1.00	Financial	15.01	0.10	1.00	0.00	1.19	11.51	4.62	6.19
2011	287	Zenith Bank	1.00	Financial	12.18	-0.19	0.00	1.00	1.54	12.47	-1.54	6.29
2012	288	Zenith Bank	1.00	Financial	19.49	0.60	1.00	0.00	3.19	14.64	3.30	6.33
2013	289	Zenith Bank	1.00	Financial	21.55	0.11	1.00	0.00	2.91	16.09	8.46	6.42
2014	290	Zenith Bank	1.00	Financial	18.41	-0.15	0.00	1.00	3.16	17.60	-0.64	6.57
2008	291	Academy	2.00	Services	5.52	0.02	1.00	0.00	0.27	1.97	1.19	3.12
2009	292	Academy	2.00	Services	5.40	-0.02	0.00	1.00	0.25	1.24	0.60	3.17
2010	293	Academy	2.00	Services	3.68	-0.32	0.00	1.00	0.42	1.49	0.86	3.31
2011	294	Academy	2.00	Services	2.20	-0.40	0.00	1.00	0.23	1.65	0.81	3.37
2012	295	Academy	2.00	Services	1.62	-0.26	0.00	1.00	0.18	1.36	0.69	3.45
2013	296	Academy	2.00	Services	2.55	0.57	1.00	0.00	0.13	1.49	1.22	3.55
2014	297	Academy	2.00	Services	1.18	-0.54	0.00	1.00	0.20	1.59	1.36	3.58
2009	298	Afromedia	2.00	Services	0.80	-0.01	0.00	1.00	0.08	1.22	-0.07	3.86
2010	299	Afromedia	2.00	Services	0.56	-0.30	0.00	1.00	0.11	1.28	-0.09	3.96
2011	300	Afromedia	2.00	Services	0.50	-0.11	0.00	1.00	-0.07	1.21	-0.06	3.94
2012	301	Afromedia	2.00	Services	0.50	0.00	0.00	0.00	-0.99	0.10	0.07	3.64
2013	302	Afromedia	2.00	Services	0.50	0.00	0.00	0.00	-0.19	-0.02	-0.03	3.62
2014	303	Afromedia	2.00	Services	0.50	0.00	0.00	0.00	-0.32	-0.34	-0.06	3.56
2008	304	Air& Logistic Services	2.00	Transport	13.72	-0.17	0.00	1.00	0.17	2.03	0.33	3.52
2009	305	Air& Logistic Services	2.00	Transport	2.65	-0.81	0.00	1.00	0.29	2.29	2.14	3.41
2010	306	Air& Logistic Services	2.00	Transport	1.72	-0.35	0.00	1.00	0.38	2.48	1.56	3.35
2011	307	Air& Logistic Services	2.00	Transport	2.17	0.26	1.00	0.00	0.39	2.90	0.36	3.41
2012	308	Air& Logistic Services	2.00	Transport	4.18	0.93	1.00	0.00	0.78	3.46	1.19	3.48
2013	309	Air& Logistic Services	2.00	Transport	3.20	-0.23	0.00	1.00	0.23	5.50	1.07	3.54
2014	310	Air& Logistic Services	2.00	Transport	1.70	-0.47	0.00	1.00	0.28	3.68	0.82	3.63
2009	311	Associated Bus Company	2.00	Transport	0.73	-0.74	0.00	1.00	0.06	1.23	0.55	3.61
2010	312	Associated Bus Company	2.00	Transport	0.55	-0.25	0.00	1.00	0.04	1.23	1.01	3.57
2011	313	Associated Bus Company	2.00	Transport	0.50	-0.09	0.00	1.00	0.05	1.34	1.05	3.71
2012	314	Associated Bus Company	2.00	Transport	0.50	0.00	0.00	0.00	0.22	1.49	1.27	3.70
2013	315	Associated Bus Company	2.00	Transport	0.82	0.64	1.00	0.00	0.20	1.49	0.52	3.75
2014	316	Associated Bus Company	2.00	Transport	0.55	-0.33	0.00	1.00	-0.25	1.24	0.98	3.81
2010	317	Capital Hotel	2.00	Services	0.03	1.39	1.00	0.00	0.39	0.23	0.02	3.75
2011	318	Capital Hotel	2.00	Services	0.07	1.05	1.00	0.00	0.28	1.83	0.67	3.83
2012	319	Capital Hotel	2.00	Services	0.06	-0.08	0.00	1.00	0.23	1.75	0.05	3.81
2013	320	Capital Hotel	2.00	Services	0.05	-0.27	0.00	1.00	0.11	2.08	0.49	3.81

2014	321	Capital Hotel	2.00	Services	0.04	-0.06	0.00	1.00	0.16	2.24	0.52	3.85
2008	322	Chams	2.00	Services	0.03	-0.35	0.00	1.00	0.08	3.77	-0.70	4.05
2009	323	Chams	2.00	Services	0.01	-0.78	0.00	1.00	-1.22	3.27	-1.10	3.98
2010	324	Chams	2.00	Services	0.01	-0.12	0.00	1.00	-0.29	1.08	-0.13	3.93
2011	325	Chams	2.00	Services	0.01	0.00	0.00	0.00	-0.26	0.84	0.03	3.89
2012	326	Chams	2.00	Services	0.01	0.00	0.00	0.00	0.03	1.54	-0.08	3.94
2013	327	Chams	2.00	Services	0.01	0.00	0.00	0.00	0.07	1.74	0.16	4.03
2014	328	Chams	2.00	Services	0.01	0.00	0.00	0.00	0.07	1.48	0.20	4.08
2008	329	Ci Leasing	2.00	Services	0.11	0.37	1.00	0.00	0.26	1.26	0.77	3.83
2009	330	Ci Leasing	2.00	Services	0.03	-0.77	0.00	1.00	0.19	1.34	0.23	4.02
2010	331	Ci Leasing	2.00	Services	0.02	-0.41	0.00	1.00	0.09	1.77	2.25	4.11
2011	332	Ci Leasing	2.00	Services	0.01	-0.59	0.00	1.00	-0.19	1.93	0.36	4.10
2012	333	Ci Leasing	2.00	Services	0.01	-0.21	0.00	1.00	0.07	0.97	2.87	4.30
2013	334	Ci Leasing	2.00	Services	0.01	0.00	0.00	0.00	0.11	3.48	3.35	4.34
2014	335	Ci Leasing	2.00	Services	0.01	0.00	0.00	0.00	0.19	3.59	3.20	4.37
2013	336	Computer Warehouse Group	2.00	Services	0.06	-0.85	0.00	1.00	0.24	1.97	0.54	4.13
2014	337	Computer Warehouse Group	2.00	Services	0.04	-0.29	0.00	1.00	0.02	1.85	0.14	4.14
2009	338	Courtville Investment	2.00	Services	0.01	-0.86	0.00	1.00	0.61	8.27	0.15	3.44
2010	339	Courtville Investment	2.00	Services	0.01	0.00	0.00	0.00	0.06	0.89	0.11	3.46
2011	340	Courtville Investment	2.00	Services	0.01	0.00	0.00	0.00	0.08	0.90	0.14	3.49
2012	341	Courtville Investment	2.00	Services	0.01	0.00	0.00	0.00	0.08	0.76	0.09	3.62
2013	342	Courtville Investment	2.00	Services	0.01	0.34	1.00	0.00	0.09	0.84	0.11	3.64
2014	343	Courtville Investment	2.00	Services	0.01	-0.25	0.00	1.00	0.09	-	-	3.67
2009	344	Daar Commuunictions	2.00	Services	0.01	-1.00	0.00	1.00	-0.33	1.87	-0.07	4.22
2010	345	Daar Commuunictions	2.00	Services	0.01	-0.11	0.00	1.00	-0.20	1.70	0.12	4.20
2011	346	Daar Commuunictions	2.00	Services	0.01	0.00	0.00	0.00	0.34	2.23	0.12	4.51
2010	347	Dn Tyre & Rubber (Dunlop)	2.00	Services	0.01	0.00	0.00	0.00	-0.09	-0.75	0.08	3.75
2012	348	Dn Tyre & Rubber (Dunlop)	2.00	Services	0.01	0.00	0.00	0.00	-0.10	-1.16	0.18	3.45
2013	349	Dn Tyre & Rubber (Dunlop)	2.00	Services	0.01	0.00	0.00	0.00	-0.09	-1.20	0.07	3.41
2012	350	Ekocorp	2.00	Healthcare	0.05	0.00	0.00	0.00	0.52	8.16	0.70	3.49
2013	351	Ekocorp	2.00	Healthcare	0.04	-0.23	0.00	1.00	0.61	8.77	0.20	3.52
2009	352	Etranzact Interntional	2.00	Services	0.06	6.36	1.00	0.00	-	-	-	3.44
2010	353	Etranzact Interntional	2.00	Services	0.05	-0.22	0.00	1.00	-0.03	0.58	0.00	3.41
2011	354	Etranzact Interntional	2.00	Services	0.05	-0.01	0.00	1.00	0.02	0.60	-0.01	3.43
2012	355	Etranzact Interntional	2.00	Services	0.04	-0.22	0.00	1.00	0.03	0.63	0.08	3.49
2013	356	Etranzact Interntional	2.00	Services	0.03	-0.33	0.00	1.00	0.05	0.67	0.09	3.56
2014	357	Etranzact Interntional	2.00	Services	0.03	0.32	1.00	0.00	0.10	0.71	0.24	3.67
2009	358	Evans Medical	2.00	Healthcare	0.01	-0.67	0.00	1.00	-1.83	-0.14	0.93	3.60
2010	359	Evans Medical	2.00	Healthcare	0.01	0.03	1.00	0.00	0.02	-0.13	1.18	3.61
2011	360	Evans Medical	2.00	Healthcare	0.01	-0.39	0.00	1.00	0.21	0.05	0.59	3.84
2012	361	Evans Medical	2.00	Healthcare	0.01	0.30	1.00	0.00	0.41	4.08	0.90	3.86
2008	362	Fidson Healthcare	2.00	Healthcare	0.04	6.20	1.00	0.00	0.13	3.31	-0.59	3.84
2009	363	Fidson Healthcare	2.00	Healthcare	0.02	-0.51	0.00	1.00	0.29	3.40	0.80	3.86
2010	364	Fidson Healthcare	2.00	Healthcare	0.03	0.72	1.00	0.00	0.31	3.49	0.78	3.90
2011	365	Fidson Healthcare	2.00	Healthcare	0.01	-0.74	0.00	1.00	0.04	3.46	-0.13	3.97
2012	366	Fidson Healthcare	2.00	Healthcare	0.01	0.34	1.00	0.00	0.14	3.49	0.59	4.03
2013	367	Fidson Healthcare	2.00	Healthcare	0.03	1.63	1.00	0.00	0.10	3.50	1.18	4.09
2014	368	Fidson Healthcare	2.00	Healthcare	0.04	0.40	1.00	0.00	0.42	3.84	2.00	4.20

2008	369	Glaxosmithkline Nig	2.00	Healthcare	0.15	-0.38	0.00	1.00	1.34	5.72	2.14	3.98
2009	370	Glaxosmithkline Nig	2.00	Healthcare	0.22	0.53	1.00	0.00	1.78	-	-	4.08
2010	371	Glaxosmithkline Nig	2.00	Healthcare	0.26	0.16	1.00	0.00	2.07	8.21	2.40	4.17
2011	372	Glaxosmithkline Nig	2.00	Healthcare	0.23	-0.12	0.00	1.00	2.40	9.36	3.88	4.25
2012	373	Glaxosmithkline Nig	2.00	Healthcare	0.45	0.96	1.00	0.00	2.95	11.14	5.31	4.34
2013	374	Glaxosmithkline Nig	2.00	Healthcare	0.68	0.51	1.00	0.00	3.05	12.90	5.06	4.42
2014	375	Glaxosmithkline Nig	2.00	Healthcare	0.50	-0.26	0.00	1.00	1.93	13.52	1.41	4.45
2009	376	Ihs Nig	2.00	Services	0.04	4.44	1.00	0.00	0.28	2.54	-1.85	4.37
2010	377	Ihs Nig	2.00	Services	0.03	-0.36	0.00	1.00	0.13	1.13	0.59	4.42
2011	378	Ihs Nig	2.00	Services	0.03	-0.05	0.00	1.00	-0.38	1.94	1.39	4.41
2012	379	Ihs Nig	2.00	Services	0.02	-0.17	0.00	1.00	-0.46	5.69	0.10	4.68
2013	380	Ihs Nig	2.00	Services	0.03	0.26	1.00	0.00	-1.50	0.13	3.40	4.74
2008	381	Ikeja Hotel	2.00	Services	0.07	0.10	1.00	0.00	0.50	3.15	0.99	4.19
2009	382	Ikeja Hotel	2.00	Services	0.01	-0.88	0.00	1.00	0.56	3.21	1.11	4.25
2010	383	Ikeja Hotel	2.00	Services	0.02	1.07	1.00	0.00	1.07	4.18	1.84	4.29
2011	384	Ikeja Hotel	2.00	Services	0.02	-0.06	0.00	1.00	0.70	2.45	0.84	4.16
2012	385	Ikeja Hotel	2.00	Services	0.01	-0.53	0.00	1.00	0.83	3.10	1.11	4.20
2013	386	Ikeja Hotel	2.00	Services	0.01	-0.03	0.00	1.00	0.48	2.77	1.24	4.24
2009	387	Interlinked Technologies	2.00	Services	0.05	-0.78	0.00	1.00	0.02	-0.54	-2.64	2.52
2010	388	Interlinked Technologies	2.00	Services	0.05	0.00	0.00	0.00	0.08	1.89	-0.16	2.73
2011	389	Interlinked Technologies	2.00	Services	0.05	-0.05	0.00	1.00	0.01	1.18	1.10	2.68
2012	390	Interlinked Technologies	2.00	Services	0.05	0.00	0.00	0.00	-0.06	1.12	-0.45	2.64
2013	391	Interlinked Technologies	2.00	Services	0.05	0.00	0.00	0.00	0.02	1.13	-0.02	2.65
2014	392	Interlinked Technologies	2.00	Services	0.04	-0.10	0.00	1.00	0.03	1.16	0.16	2.68
2008	393	May & Baker Nig	2.00	Healthcare	0.06	-0.56	0.00	1.00	0.60	3.95	0.35	3.76
2009	394	May & Baker Nig	2.00	Healthcare	0.04	-0.34	0.00	1.00	0.33	3.85	1.14	3.79
2010	395	May & Baker Nig	2.00	Healthcare	0.04	0.09	1.00	0.00	0.20	2.99	0.60	3.83
2011	396	May & Baker Nig	2.00	Healthcare	0.02	-0.53	0.00	1.00	0.23	2.84	0.91	3.85
2012	397	May & Baker Nig	2.00	Healthcare	0.02	-0.22	0.00	1.00	0.08	3.30	-0.31	3.91
2013	398	May & Baker Nig	2.00	Healthcare	0.02	0.58	1.00	0.00	-0.11	3.23	1.39	3.91
2014	399	May & Baker Nig	2.00	Healthcare	0.02	-0.36	0.00	1.00	0.06	3.16	0.78	3.91
2011	400	Mcnichols Consolidated	2.00	Healthcare	0.01	-0.99	0.00	1.00	0.02	0.50	0.05	2.35
2012	401	Mcnichols Consolidated	2.00	Healthcare	0.01	-0.21	0.00	1.00	0.03	0.64	0.34	2.42
2013	402	Mcnichols Consolidated	2.00	Healthcare	0.02	1.54	1.00	0.00	8.67	0.70	0.36	2.51
2014	403	Mcnichols Consolidated	2.00	Healthcare	0.01	-0.28	0.00	1.00	0.15	0.75	0.37	2.58
2008	404	Morison Industries	2.00	Healthcare	0.15	4.59	1.00	0.00	0.09	2.08	0.09	2.76
2009	405	Morison Industries	2.00	Healthcare	0.12	-0.19	0.00	1.00	-0.14	2.99	0.18	2.76
2010	406	Morison Industries	2.00	Healthcare	0.11	-0.14	0.00	1.00	-0.22	2.63	0.03	2.74
2011	407	Morison Industries	2.00	Healthcare	0.09	-0.14	0.00	1.00	-0.17	2.59	0.02	2.76
2012	408	Morison Industries	2.00	Healthcare	0.03	-0.62	0.00	1.00	0.01	2.85	0.08	2.77
2013	409	Morison Industries	2.00	Healthcare	0.02	-0.45	0.00	1.00	-0.15	2.71	-0.24	2.72
2014	410	Morison Industries	2.00	Healthcare	0.02	-0.05	0.00	1.00	-0.54	2.17	0.00	2.65
2008	411	National Aviation Handling	2.00	Transport	0.12	-0.58	0.00	1.00	0.82	4.31	-0.24	3.21
2009	412	National Aviation Handling	2.00	Transport	0.07	-0.38	0.00	1.00	1.01	3.79	1.98	3.29
2010	413	National Aviation Handling	2.00	Transport	0.10	0.42	1.00	0.00	0.96	4.07	0.90	3.15
2011	414	National Aviation Handling	2.00	Transport	0.05	-0.50	0.00	1.00	0.68	4.63	0.41	4.00
2012	415	National Aviation Handling	2.00	Transport	0.05	0.05	1.00	0.00	0.41	3.76	2.84	4.04
2013	416	National Aviation Handling	2.00	Transport	0.06	0.15	1.00	0.00	0.56	4.30	1.34	4.13

2014	417	National Aviation Handling	2.00	Transport	0.05	-0.20	0.00	1.00	0.39	4.02	1.17	4.16
2008	418	Ncr Nigeria	2.00	Services	0.10	1.83	1.00	0.00	0.74	-4.66	-1.91	3.42
2009	419	Ncr Nigeria	2.00	Services	0.09	-0.14	0.00	1.00	8.70	4.05	-0.52	3.42
2010	420	Ncr Nigeria	2.00	Services	0.07	-0.18	0.00	1.00	6.70	10.78	5.66	3.36
2011	421	Ncr Nigeria	2.00	Services	0.09	0.34	1.00	0.00	2.12	14.18	7.30	3.58
2012	422	Ncr Nigeria	2.00	Services	0.15	0.62	1.00	0.00	-9.86	1.31	10.87	3.73
2013	423	Ncr Nigeria	2.00	Services	0.17	0.12	1.00	0.00	-0.18	1.28	-7.39	3.74
2014	424	Ncr Nigeria	2.00	Services	0.13	-0.24	0.00	1.00	1.46	2.41	3.84	3.83
2008	425	Neimeth Int Pharm	2.00	Healthcare	0.03	-0.37	0.00	1.00	0.15	2.49	-0.41	3.52
2009	426	Neimeth Int Pharm	2.00	Healthcare	0.02	-0.54	0.00	1.00	-0.55	1.30	0.20	3.46
2010	427	Neimeth Int Pharm	2.00	Healthcare	0.01	-0.29	0.00	1.00	-0.15	1.13	0.48	3.61
2011	428	Neimeth Int Pharm	2.00	Healthcare	0.01	0.02	1.00	0.00	0.14	1.25	0.21	3.49
2012	429	Neimeth Int Pharm	2.00	Healthcare	0.01	-0.09	0.00	1.00	-0.05	1.00	0.10	3.46
2013	430	Neimeth Int Pharm	2.00	Healthcare	0.01	0.29	1.00	0.00	0.10	1.13	0.06	3.46
2014	431	Neimeth Int Pharm	2.00	Healthcare	0.01	-0.38	0.00	1.00	0.15	1.04	0.06	3.44
2008	432	Nigerian-German Ch	2.00	Healthcare	0.19	-0.25	0.00	1.00	0.12	8.46	2.19	3.69
2010	433	Nigerian-German Ch	2.00	Healthcare	0.13	-0.34	0.00	1.00	-3.05	16.10	13.24	3.87
2011	434	Nigerian-German Ch	2.00	Healthcare	0.09	-0.33	0.00	1.00	-1.05	17.44	5.64	3.93
2012	435	Nigerian-German Ch	2.00	Healthcare	0.08	-0.05	0.00	1.00	-2.40	15.05	6.02	3.95
2013	436	Nigerian-German Ch	2.00	Healthcare	0.07	-0.10	0.00	1.00	1.47	26.82	4.43	4.05
2014	437	Nigerian-German Ch	2.00	Healthcare	0.06	-0.14	0.00	1.00	-	-	-	4.02
2008	438	Pharma-Deko	2.00	Healthcare	0.11	1.15	1.00	0.00	-2.08	-1.94	0.82	3.17
2009	439	Pharma-Deko	2.00	Healthcare	0.05	-0.53	0.00	1.00	-4.64	-6.50	-1.76	3.10
2010	440	Pharma-Deko	2.00	Healthcare	0.04	-0.14	0.00	1.00	-4.66	-11.15	0.17	3.21
2011	441	Pharma-Deko	2.00	Healthcare	0.04	-0.18	0.00	1.00	0.76	-30.71	6.74	3.41
2012	442	Pharma-Deko	2.00	Healthcare	0.03	-0.26	0.00	1.00	0.07	0.09	0.07	3.44
2013	443	Pharma-Deko	2.00	Healthcare	0.02	-0.29	0.00	1.00	-1.21	8.29	1.34	3.40
2014	444	Pharma-Deko	2.00	Healthcare	0.02	0.16	1.00	0.00	1.01	9.31	4.43	3.45
2008	445	R.T Briscoe Nig	2.00	Services	0.17	-0.44	0.00	1.00	1.11	5.69	0.74	3.99
2009	446	R.T Briscoe Nig	2.00	Services	0.06	-0.64	0.00	1.00	0.42	3.19	1.57	3.88
2010	447	R.T Briscoe Nig	2.00	Services	0.03	-0.53	0.00	1.00	0.19	4.31	-0.61	3.97
2011	448	R.T Briscoe Nig	2.00	Services	0.01	-0.58	0.00	1.00	0.15	3.52	-4.03	4.18
2012	449	R.T Briscoe Nig	2.00	Services	0.02	0.25	1.00	0.00	-0.24	2.68	1.10	4.15
2013	450	R.T Briscoe Nig	2.00	Services	0.01	-0.03	0.00	1.00	-0.08	2.65	-0.63	4.19
2014	451	R.T Briscoe Nig	2.00	Services	0.01	-0.48	0.00	1.00	-1.55	2.77	-0.45	4.28
2008	452	Redstar Express	2.00	Transport	0.04	6.76	1.00	0.00	0.33	1.36	0.58	3.15
2009	453	Redstar Express	2.00	Transport	0.02	-0.45	0.00	1.00	0.42	2.17	0.52	3.37
2010	454	Redstar Express	2.00	Transport	0.03	0.34	1.00	0.00	0.31	2.20	-	3.40
2011	455	Redstar Express	2.00	Transport	0.02	-0.17	0.00	1.00	0.57	2.67	-	3.44
2012	456	Redstar Express	2.00	Transport	0.03	0.26	1.00	0.00	0.52	2.70	0.89	3.46
2013	457	Redstar Express	2.00	Transport	0.04	0.47	1.00	0.00	0.52	2.92	0.57	3.48
2014	458	Redstar Express	2.00	Transport	0.04	-0.11	0.00	1.00	0.68	3.23	1.20	3.54
2012	459	Secure Electronic Technology	2.00	Services	0.01	-0.63	0.00	1.00	-0.25	0.86	-0.02	4.00
2013	460	Secure Electronic Technology	2.00	Services	0.01	-0.04	0.00	1.00	0.03	0.86	0.25	3.96
2014	461	Secure Electronic Technology	2.00	Services	0.01	-0.24	0.00	1.00	0.01	0.99	0.55	3.80
2008	462	Starcoms	2.00	Services	0.04	0.59	1.00	0.00	-1.44	7.02	-1.28	4.91
2009	463	Starcoms	2.00	Services	0.02	-0.57	0.00	1.00	-1.13	4.53	1.13	4.87
2008	464	Tantalizer	2.00	Services	0.02	-0.98	0.00	1.00	0.10	1.28	0.13	3.71

2009	465	Tantalizer	2.00	Services	0.01	-0.56	0.00	1.00	0.02	1.29	0.30	3.76
2010	466	Tantalizer	2.00	Services	0.01	-0.32	0.00	1.00	0.02	1.28	0.21	3.77
2011	467	Tantalizer	2.00	Services	0.01	-0.04	0.00	1.00	0.03	1.11	-0.05	3.82
2012	468	Tantalizer	2.00	Services	0.01	0.00	0.00	0.00	0.09	0.99	0.10	3.78
2013	469	Tantalizer	2.00	Services	0.01	0.00	0.00	0.00	-0.18	0.85	0.15	3.76
2014	470	Tantalizer	2.00	Services	0.01	0.00	0.00	0.00	-0.24	0.56	0.10	3.70
2008	471	Thomas Wyatt	2.00	Services	3.00	-0.17	0.00	1.00	0.01	1.05	-0.28	2.78
2009	472	Thomas Wyatt	2.00	Services	1.84	-0.39	0.00	1.00	0.01	1.96	-0.71	2.77
2010	473	Thomas Wyatt	2.00	Services	1.38	-0.25	0.00	1.00	-0.03	1.01	-0.13	2.80
2011	474	Thomas Wyatt	2.00	Services	1.38	0.00	0.00	0.00	-0.14	0.70	0.04	2.81
2012	475	Thomas Wyatt	2.00	Services	1.32	-0.04	0.00	1.00	-0.13	0.60	0.01	2.83
2013	476	Thomas Wyatt	2.00	Services	0.87	-0.34	0.00	1.00	-0.03	-0.17	0.23	2.81
2008	477	Tourist Company Of Nigeria	2.00	Services	5.56	0.77	1.00	0.00	-0.60	0.11	0.03	3.96
2009	478	Tourist Company Of Nigeria	2.00	Services	5.28	-0.05	0.00	1.00	-0.60	-0.49	-1.26	4.12
2011	479	Tourist Company Of Nigeria	2.00	Services	4.32	-0.18	0.00	1.00	-0.67	1.09	0.57	4.06
2012	480	Tourist Company Of Nigeria	2.00	Services	4.53	0.05	1.00	0.00	-0.23	0.77	0.04	4.05
2013	481	Tourist Company Of Nigeria	2.00	Services	4.08	-0.10	0.00	1.00	0.06	0.87	0.24	4.04
2014	482	Tourist Company Of Nigeria	2.00	Services	3.51	-0.14	0.00	1.00	-0.27	0.54	0.12	4.03
2014	483	Transcorp Hotels	2.00	Services	10.00	2.08	1.00	0.00	0.59	9.54	-1.41	4.84
2008	484	Trans-Nationwide Express	2.00	Transport	8.04	1.50	1.00	0.00	0.36	1.17	0.65	2.43
2009	485	Trans-Nationwide Express	2.00	Transport	6.45	-0.20	0.00	1.00	0.42	2.88	0.07	2.71
2010	486	Trans-Nationwide Express	2.00	Transport	6.40	-0.01	0.00	1.00	0.38	3.16	0.30	2.71
2011	487	Trans-Nationwide Express	2.00	Transport	3.45	-0.46	0.00	1.00	0.24	2.26	0.14	2.76
2012	488	Trans-Nationwide Express	2.00	Transport	2.78	-0.19	0.00	1.00	-0.17	1.55	0.13	2.78
2013	489	Trans-Nationwide Express	2.00	Transport	1.17	-0.58	0.00	1.00	0.39	1.92	0.32	2.82
2014	490	Trans-Nationwide Express	2.00	Transport	1.23	0.05	1.00	0.00	0.34	2.02	0.15	2.80
2008	491	Tripple Gee & Company	2.00	Services	8.17	0.56	1.00	0.00	0.31	2.36	0.30	3.17
2009	492	Tripple Gee & Company	2.00	Services	4.84	-0.41	0.00	1.00	0.29	1.74	0.27	3.23
2010	493	Tripple Gee & Company	2.00	Services	3.59	-0.26	0.00	1.00	-0.10	1.38	0.12	3.15
2011	494	Tripple Gee & Company	2.00	Services	2.94	-0.18	0.00	1.00	-0.10	1.28	0.22	3.16
2012	495	Tripple Gee & Company	2.00	Services	2.29	-0.22	0.00	1.00	0.01	1.30	0.17	3.23
2013	496	Tripple Gee & Company	2.00	Services	2.07	-0.10	0.00	1.00	0.04	2.18	0.28	3.22
2014	497	Tripple Gee & Company	2.00	Services	1.86	-0.10	0.00	1.00	0.03	2.26	0.31	3.24
2008	498	Uac-Propety	2.00	Real Estate	26.84	0.15	1.00	0.00	3.35	28.11	13.83	4.81
2009	499	Uac-Propety	2.00	Real Estate	19.86	-0.26	0.00	1.00	2.21	27.64	7.38	4.79
2010	500	Uac-Propety	2.00	Real Estate	16.51	-0.17	0.00	1.00	1.69	22.17	1.09	4.84
2011	501	Uac-Propety	2.00	Real Estate	12.00	-0.27	0.00	1.00	1.24	22.25	-1.58	4.84
2012	502	Uac-Propety	2.00	Real Estate	11.80	-0.02	0.00	1.00	1.61	23.07	-0.50	4.85
2013	503	Uac-Propety	2.00	Real Estate	19.00	0.61	1.00	0.00	2.32	24.66	2.24	4.82
2014	504	Uac-Propety	2.00	Real Estate	9.50	-0.50	0.00	1.00	2.10	21.05	0.14	4.83
2009	505	Union Diagnostic & Clinical Sev	2.00	Healthcare	0.61	-0.86	0.00	1.00	0.03	1.34	-	3.75
2010	506	Union Diagnostic & Clinical Sev	2.00	Healthcare	0.50	-0.18	0.00	1.00	0.04	1.20	-	3.72
2011	507	Union Diagnostic & Clinical Sev	2.00	Healthcare	0.50	0.00	0.00	0.00	-	-	-	3.71
2012	508	Union Diagnostic & Clinical Sev	2.00	Healthcare	0.50	0.00	0.00	0.00	-0.01	8.02	5.12	3.70
2013	509	Union Diagnostic & Clinical Sev	2.00	Healthcare	0.50	0.00	0.00	0.00	-0.28	0.97	-0.08	3.58
2014	510	Union Diagnostic & Clinical Sev	2.00	Healthcare	0.50	0.00	0.00	0.00	0.03	1.00	0.05	3.57

2008	511	University Press	2.00	Services	5.81	-0.31	0.00	1.00	0.64	3.78	1.13	3.15
2009	512	University Press	2.00	Services	4.97	-0.14	0.00	1.00	0.81	3.67	0.16	3.24
2010	513	University Press	2.00	Services	6.80	0.37	1.00	0.00	0.77	3.50	-	3.31
2011	514	University Press	2.00	Services	3.40	-0.50	0.00	1.00	0.49	4.11	0.81	3.38
2012	515	University Press	2.00	Services	4.47	0.31	1.00	0.00	0.53	4.29	0.76	3.43
2013	516	University Press	2.00	Services	4.18	-0.06	0.00	1.00	0.60	5.02	0.39	3.45
2014	517	University Press	2.00	Services	4.22	0.01	1.00	0.00	0.54	5.20	0.22	3.47
2008	518	7Up Nigeria	3.00	Consumer	38.61	0.29	1.00	0.00	3.14	14.10	8.99	4.38
2009	519	7Up Nigeria	3.00	Consumer	29.40	-0.24	0.00	1.00	2.98	15.55	9.18	4.50
2010	520	7Up Nigeria	3.00	Consumer	39.00	0.33	1.00	0.00	3.69	17.50	14.24	4.52
2011	521	7Up Nigeria	3.00	Consumer	46.47	0.19	1.00	0.00	3.99	15.03	12.26	4.60
2012	522	7Up Nigeria	3.00	Consumer	42.00	-0.10	0.00	1.00	3.23	15.94	12.55	4.65
2013	523	7Up Nigeria	3.00	Consumer	71.40	0.70	1.00	0.00	4.46	19.63	21.60	4.71
2014	524	7Up Nigeria	3.00	Consumer	165.40	1.32	1.00	0.00	10.04	27.05	30.01	4.75
2008	525	A.G.Leventis Nig	3.00	Conglomerate	7.90	0.55	1.00	0.00	0.36	2.77	0.24	4.14
2009	526	A.G.Leventis Nig	3.00	Conglomerate	2.47	-0.69	0.00	1.00	0.40	3.34	-0.02	4.22
2010	527	A.G.Leventis Nig	3.00	Conglomerate	2.54	0.03	1.00	0.00	0.29	4.19	0.15	4.29
2011	528	A.G.Leventis Nig	3.00	Conglomerate	1.38	-0.46	0.00	1.00	0.21	6.57	0.49	4.32
2012	529	A.G.Leventis Nig	3.00	Conglomerate	1.35	-0.02	0.00	1.00	0.28	10.08	0.63	4.36
2013	530	A.G.Leventis Nig	3.00	Conglomerate	1.70	0.26	1.00	0.00	0.31	4.41	0.60	4.31
2014	531	A.G.Leventis Nig	3.00	Conglomerate	1.31	-0.23	0.00	1.00	0.15	3.88	0.18	4.38
2008	532	Cadbury Nig	3.00	Consumer	0.24	-0.35	0.00	1.00	-2.44	-2.86	1.69	4.38
2009	533	Cadbury Nig	3.00	Consumer	0.10	-0.56	0.00	1.00	-0.84	8.61	2.96	4.40
2010	534	Cadbury Nig	3.00	Consumer	0.26	1.44	1.00	0.00	0.38	4.21	1.46	4.45
2011	535	Cadbury Nig	3.00	Consumer	0.11	-0.56	0.00	1.00	1.17	5.29	1.79	4.53
2012	536	Cadbury Nig	3.00	Consumer	0.29	1.54	1.00	0.00	1.10	6.38	2.29	4.60
2013	537	Cadbury Nig	3.00	Consumer	0.59	1.03	1.00	0.00	1.92	7.65	2.08	4.64
2014	538	Cadbury Nig	3.00	Consumer	0.40	-0.32	0.00	1.00	0.75	5.70	0.70	4.46
2010	539	Champion Breweries	3.00	Consumer	0.02	3.46	1.00	0.00	-1.37	-3.85	0.77	3.45
2011	540	Champion Breweries	3.00	Consumer	0.04	0.81	1.00	0.00	-1.33	-2.33	0.20	3.84
2012	541	Champion Breweries	3.00	Consumer	0.04	0.03	1.00	0.00	-1.49	-3.82	0.18	3.83
2013	542	Champion Breweries	3.00	Consumer	0.17	3.07	1.00	0.00	-1.31	-5.12	1.18	3.96
2014	543	Champion Breweries	3.00	Consumer	0.07	-0.59	0.00	1.00	-0.24	1.88	0.32	3.98
2008	544	Chellarams	3.00	Conglomerate	0.22	0.81	1.00	0.00	0.68	7.04	0.68	3.87
2009	545	Chellarams	3.00	Conglomerate	0.14	-0.37	0.00	1.00	-0.73	4.29	-1.80	3.95
2010	546	Chellarams	3.00	Conglomerate	0.08	-0.46	0.00	1.00	0.61	3.88	2.39	3.97
2011	547	Chellarams	3.00	Conglomerate	0.06	-0.15	0.00	1.00	0.30	1.43	0.53	3.56
2012	548	Chellarams	3.00	Conglomerate	0.06	-0.11	0.00	1.00	0.35	4.26	-3.65	4.17
2013	549	Chellarams	3.00	Conglomerate	0.04	-0.27	0.00	1.00	0.16	7.90	7.26	4.19
2014	550	Chellarams	3.00	Conglomerate	0.04	-0.05	0.00	1.00	-0.10	6.00	-0.53	4.22
2009	551	Dangote Sugar	3.00	Consumer	0.15	-0.03	0.00	1.00	1.10	3.47	0.68	4.89
2010	552	Dangote Sugar	3.00	Consumer	0.16	0.06	1.00	0.00	0.94	3.41	-0.46	4.79
2011	553	Dangote Sugar	3.00	Consumer	0.05	-0.71	0.00	1.00	0.62	3.31	1.19	4.86
2012	554	Dangote Sugar	3.00	Consumer	0.06	0.28	1.00	0.00	0.90	3.86	2.09	4.92
2013	555	Dangote Sugar	3.00	Consumer	0.12	0.95	1.00	0.00	0.90	3.90	-1.02	4.92
2014	556	Dangote Sugar	3.00	Consumer	0.06	-0.46	0.00	1.00	0.97	4.28	1.29	4.97
2012	557	Ellah Lakes	3.00	Agriculture	0.04	7.52	1.00	0.00	-	-	-	3.05
2013	558	Ellah Lakes	3.00	Agriculture	0.04	0.00	0.00	0.00	-0.41	9.76	-0.50	3.07

2014	559	Ellah Lakes	3.00	Agriculture	0.04	0.00	0.00	0.00	-0.23	9.54	-0.21	3.08
2008	560	Flour Mills Of Nigeria	3.00	Consumer	0.32	-0.61	0.00	1.00	4.08	36.75	4.56	5.04
2009	561	Flour Mills Of Nigeria	3.00	Consumer	0.36	0.13	1.00	0.00	2.23	19.28	3.66	5.14
2010	562	Flour Mills Of Nigeria	3.00	Consumer	0.69	0.92	1.00	0.00	9.67	132.35	73.93	5.16
2011	563	Flour Mills Of Nigeria	3.00	Consumer	0.65	-0.05	0.00	1.00	4.52	23.91	8.93	5.21
2012	564	Flour Mills Of Nigeria	3.00	Consumer	0.65	-0.01	0.00	1.00	3.08	32.06	1.47	5.37
2013	565	Flour Mills Of Nigeria	3.00	Consumer	0.87	0.34	1.00	0.00	2.91	31.97	7.11	5.45
2014	566	Flour Mills Of Nigeria	3.00	Consumer	0.39	-0.55	0.00	1.00	1.93	31.84	9.63	5.47
2008	567	Ftn Cocoa Processors	3.00	Agriculture	0.02	-0.97	0.00	1.00	0.09	1.13	-0.01	3.50
2009	568	Ftn Cocoa Processors	3.00	Agriculture	0.01	-0.65	0.00	1.00	0.11	1.02	-0.05	3.54
2010	569	Ftn Cocoa Processors	3.00	Agriculture	0.01	0.17	1.00	0.00	0.03	1.03	0.15	3.64
2011	570	Ftn Cocoa Processors	3.00	Agriculture	0.01	-0.18	0.00	1.00	-0.11	1.08	-0.01	3.66
2012	571	Ftn Cocoa Processors	3.00	Agriculture	0.01	0.00	0.00	0.00	-0.18	0.90	0.10	3.64
2013	572	Ftn Cocoa Processors	3.00	Agriculture	0.01	0.00	0.00	0.00	-0.13	0.77	-0.04	3.66
2014	573	Ftn Cocoa Processors	3.00	Agriculture	0.01	0.00	0.00	0.00	-0.26	0.54	-0.10	3.65
2008	574	Guinness Nig	3.00	Consumer	1.00	-0.23	0.00	1.00	8.04	24.99	9.89	4.86
2009	575	Guinness Nig	3.00	Consumer	1.28	0.28	1.00	0.00	9.18	21.37	7.65	4.87
2010	576	Guinness Nig	3.00	Consumer	1.91	0.49	1.00	0.00	9.31	23.18	19.43	4.89
2011	577	Guinness Nig	3.00	Consumer	2.50	0.31	1.00	0.00	12.16	27.31	13.24	4.96
2012	578	Guinness Nig	3.00	Consumer	2.75	0.10	1.00	0.00	9.64	26.18	15.96	5.03
2013	579	Guinness Nig	3.00	Consumer	2.36	-0.14	0.00	1.00	7.93	30.57	16.14	5.08
2014	580	Guinness Nig	3.00	Consumer	1.68	-0.29	0.00	1.00	6.36	29.92	12.72	5.12
2009	581	Honywell Flour Mill	3.00	Consumer	0.09	2.15	1.00	0.00	0.03	0.77	-0.16	4.37
2010	582	Honywell Flour Mill	3.00	Consumer	0.05	-0.40	0.00	1.00	0.15	1.70	0.27	4.48
2011	583	Honywell Flour Mill	3.00	Consumer	0.02	-0.55	0.00	1.00	0.31	1.91	0.33	4.46
2012	584	Honywell Flour Mill	3.00	Consumer	0.02	-0.10	0.00	1.00	0.34	2.12	0.33	4.65
2013	585	Honywell Flour Mill	3.00	Consumer	0.04	0.76	1.00	0.00	0.36	2.34	-0.23	4.74
2014	586	Honywell Flour Mill	3.00	Consumer	0.03	-0.06	0.00	1.00	0.42	2.60	0.81	4.81
2008	587	International Breweries	3.00	Consumer	0.05	8.09	1.00	0.00	0.03	0.00	-0.22	2.57
2009	588	International Breweries	3.00	Consumer	0.02	-0.54	0.00	1.00	-0.14	-0.14	1.05	2.51
2010	589	International Breweries	3.00	Consumer	0.06	1.83	1.00	0.00	0.09	-0.04	-	4.00
2011	590	International Breweries	3.00	Consumer	0.06	-0.11	0.00	1.00	-	-	-	4.16
2013	591	International Breweries	3.00	Consumer	0.29	4.04	1.00	0.00	0.71	2.84	-1.22	4.36
2014	592	International Breweries	3.00	Consumer	0.23	-0.19	0.00	1.00	0.71	3.41	1.90	4.39
2008	593	John Holt	3.00	Conglomerate	0.14	2.11	1.00	0.00	1.00	10.15	0.52	4.13
2009	594	John Holt	3.00	Conglomerate	0.09	-0.33	0.00	1.00	-5.51	7.57	1.41	4.17
2010	595	John Holt	3.00	Conglomerate	0.09	-0.05	0.00	1.00	-	-	-	4.16
2011	596	John Holt	3.00	Conglomerate	0.06	-0.33	0.00	1.00	-4.02	8.10	3.93	4.03
2012	597	John Holt	3.00	Conglomerate	0.03	-0.42	0.00	1.00	1.09	4.73	1.38	4.04
2013	598	John Holt	3.00	Conglomerate	0.01	-0.67	0.00	1.00	0.32	5.51	7.29	3.91
2014	599	John Holt	3.00	Conglomerate	0.01	-0.13	0.00	1.00	1.52	8.56	-0.37	4.01
2009	600	Livestock Feeds	3.00	Agriculture	0.01	-0.74	0.00	1.00	0.02	0.33	0.10	2.94
2010	601	Livestock Feeds	3.00	Agriculture	0.01	0.14	1.00	0.00	0.02	0.35	-0.04	3.03
2011	602	Livestock Feeds	3.00	Agriculture	0.01	0.11	1.00	0.00	0.08	0.41	0.02	3.19
2012	603	Livestock Feeds	3.00	Agriculture	0.01	1.00	1.00	0.00	0.12	0.53	-0.04	3.32
2013	604	Livestock Feeds	3.00	Agriculture	0.04	1.99	1.00	0.00	0.18	1.44	-0.15	3.56
2014	605	Livestock Feeds	3.00	Agriculture	0.02	-0.47	0.00	1.00	0.13	0.99	-0.41	3.76
2011	606	Multi- Trex Food	3.00	Consumer	0.01	1.42	1.00	0.00	0.02	1.84	-0.10	4.26

2012	607	Multi- Trex Food	3.00	Consumer	0.01	-0.21	0.00	1.00	-0.26	1.30	-0.15	4.27
2013	608	Multi- Trex Food	3.00	Consumer	0.01	-0.47	0.00	1.00	-0.62	0.66	0.36	4.26
2008	609	National Salt Company	3.00	Consumer	0.06	-0.65	0.00	1.00	0.49	1.45	0.62	3.87
2009	610	National Salt Company	3.00	Consumer	0.04	-0.27	0.00	1.00	0.70	1.76	0.57	3.91
2010	611	National Salt Company	3.00	Consumer	0.06	0.47	1.00	0.00	0.62	1.86	0.45	3.88
2011	612	National Salt Company	3.00	Consumer	0.04	-0.37	0.00	1.00	0.83	2.13	1.37	4.00
2012	613	National Salt Company	3.00	Consumer	0.08	1.00	1.00	0.00	1.04	2.47	1.22	4.03
2013	614	National Salt Company	3.00	Consumer	0.15	0.87	1.00	0.00	1.02	2.60	0.71	4.06
2014	615	National Salt Company	3.00	Consumer	0.06	-0.59	0.00	1.00	0.70	2.38	1.59	4.10
2008	616	Nestle Nig	3.00	Consumer	1.91	-0.31	0.00	1.00	12.61	13.67	8.44	4.46
2009	617	Nestle Nig	3.00	Consumer	2.40	0.25	1.00	0.00	14.81	15.96	18.04	4.65
2010	618	Nestle Nig	3.00	Consumer	3.69	0.54	1.00	0.00	19.08	22.51	23.24	4.78
2011	619	Nestle Nig	3.00	Consumer	4.46	0.21	1.00	0.00	20.81	29.28	25.23	4.89
2012	620	Nestle Nig	3.00	Consumer	7.00	0.57	1.00	0.00	26.67	43.13	38.16	4.95
2013	621	Nestle Nig	3.00	Consumer	12.00	0.71	1.00	0.00	-	-	-	5.03
2014	622	Nestle Nig	3.00	Consumer	10.12	-0.16	0.00	1.00	28.05	45.34	29.64	5.03
2008	623	Nigeria Breweries	3.00	Consumer	0.41	-0.17	0.00	1.00	3.40	4.26	5.28	5.02
2009	624	Nigeria Breweries	3.00	Consumer	0.53	0.30	1.00	0.00	3.69	6.16	4.89	5.03
2010	625	Nigeria Breweries	3.00	Consumer	0.77	0.45	1.00	0.00	4.01	6.63	5.18	5.06
2011	626	Nigeria Breweries	3.00	Consumer	0.94	0.22	1.00	0.00	5.03	10.28	7.18	5.37
2012	627	Nigeria Breweries	3.00	Consumer	1.47	0.56	1.00	0.00	5.03	12.36	7.39	5.40
2013	628	Nigeria Breweries	3.00	Consumer	1.68	0.14	1.00	0.00	5.70	14.87	12.59	5.40
2014	629	Nigeria Breweries	3.00	Consumer	1.65	-0.02	0.00	1.00	5.62	22.73	8.04	5.54
2008	630	Nigerian Northen Flour Mill	3.00	Consumer	0.14	-0.44	0.00	1.00	0.39	4.51	3.15	3.37
2009	631	Nigerian Northen Flour Mill	3.00	Consumer	0.22	0.54	1.00	0.00	1.59	5.82	2.60	3.44
2010	632	Nigerian Northen Flour Mill	3.00	Consumer	0.40	0.83	1.00	0.00	2.76	22.49	-8.38	3.41
2011	633	Nigerian Northen Flour Mill	3.00	Consumer	0.21	-0.46	0.00	1.00	2.56	8.73	7.35	3.62
2012	634	Nigerian Northen Flour Mill	3.00	Consumer	0.18	-0.14	0.00	1.00	0.03	8.10	-5.38	3.53
2013	635	Nigerian Northen Flour Mill	3.00	Consumer	0.23	0.26	1.00	0.00	1.42	10.13	7.10	3.56
2014	636	Nigerian Northen Flour Mill	3.00	Consumer	0.18	-0.22	0.00	1.00	1.31	9.95	-0.31	3.51
2009	637	Okomu Oil Palm	3.00	Agriculture	0.23	-0.31	0.00	1.00	1.15	9.11	2.27	3.90
2010	638	Okomu Oil Palm	3.00	Agriculture	0.15	-0.33	0.00	1.00	3.42	12.31	5.10	3.94
2011	639	Okomu Oil Palm	3.00	Agriculture	0.23	0.52	1.00	0.00	0.22	1.07	0.26	4.37
2012	640	Okomu Oil Palm	3.00	Agriculture	0.43	0.84	1.00	0.00	0.18	1.28	0.26	4.49
2013	641	Okomu Oil Palm	3.00	Agriculture	0.44	0.04	1.00	0.00	2.19	23.67	2.80	4.48
2014	642	Okomu Oil Palm	3.00	Agriculture	0.25	-0.42	0.00	1.00	1.63	24.38	3.38	4.49
2008	643	Presco	3.00	Agriculture	0.10	-0.31	0.00	1.00	0.67	2.54	0.12	3.75
2009	644	Presco	3.00	Agriculture	0.06	-0.45	0.00	1.00	0.24	2.63	0.82	3.88
2010	645	Presco	3.00	Agriculture	0.07	0.22	1.00	0.00	1.10	3.53	1.15	3.87
2011	646	Presco	3.00	Agriculture	0.09	0.27	1.00	0.00	1.78	4.65	3.65	4.40
2012	647	Presco	3.00	Agriculture	0.17	0.96	1.00	0.00	3.55	17.39	5.14	4.45
2013	648	Presco	3.00	Agriculture	0.39	1.26	1.00	0.00	1.29	16.77	1.92	4.51
2014	649	Presco	3.00	Agriculture	0.25	-0.36	0.00	1.00	2.68	19.96	6.78	4.54
2008	650	Pz Cussons	3.00	Consumer	0.11	-0.58	0.00	1.00	1.24	9.26	2.22	4.70
2009	651	Pz Cussons	3.00	Consumer	0.25	1.22	1.00	0.00	1.52	10.14	2.43	4.74
2010	652	Pz Cussons	3.00	Consumer	0.32	0.26	1.00	0.00	1.67	11.57	4.22	4.77
2011	653	Pz Cussons	3.00	Consumer	0.28	-0.11	0.00	1.00	1.64	11.86	-0.12	4.84
2012	654	Pz Cussons	3.00	Consumer	0.28	0.00	0.00	0.00	0.61	10.31	0.87	4.81

2013	655	Pz Cussons	3.00	Consumer	0.37	0.32	1.00	0.00	1.23	11.11	2.45	4.86
2014	656	Pz Cussons	3.00	Consumer	0.24	-0.36	0.00	1.00	1.16	10.22	1.88	4.85
2008	657	Scoa Nig	3.00	Conglomerate	0.13	1.89	1.00	0.00	0.36	2.54	0.09	3.62
2009	658	Scoa Nig	3.00	Conglomerate	0.09	-0.31	0.00	1.00	1.10	3.53	-0.22	3.67
2010	659	Scoa Nig	3.00	Conglomerate	0.08	-0.06	0.00	1.00	0.33	3.74	0.45	3.40
2011	660	Scoa Nig	3.00	Conglomerate	0.06	-0.33	0.00	1.00	0.16	4.10	-0.25	3.78
2012	661	Scoa Nig	3.00	Conglomerate	0.05	-0.02	0.00	1.00	0.11	4.89	-0.07	3.85
2013	662	Scoa Nig	3.00	Conglomerate	0.05	-0.02	0.00	1.00	0.22	5.85	1.43	3.91
2014	663	Scoa Nig	3.00	Conglomerate	0.05	-0.12	0.00	1.00	0.28	4.71	1.08	3.99
2008	664	Tiger Branded (Dangote Flour)	3.00	Consumer	12.75	-0.91	0.00	1.00	0.60	5.13	1.95	4.49
2009	665	Tiger Branded (Dangote Flour)	3.00	Consumer	9.93	-0.22	0.00	1.00	1.11	5.82	3.41	4.55
2010	666	Tiger Branded (Dangote Flour)	3.00	Consumer	16.80	0.69	1.00	0.00	0.54	5.38	2.54	4.62
2011	667	Tiger Branded (Dangote Flour)	3.00	Consumer	5.00	-0.70	0.00	1.00	0.12	5.38	1.05	4.94
2012	668	Tiger Branded (Dangote Flour)	3.00	Consumer	8.20	0.64	1.00	0.00	0.55	6.20	-0.99	4.89
2013	669	Tiger Branded (Dangote Flour)	3.00	Consumer	10.25	0.25	1.00	0.00	-1.59	3.62	0.23	4.82
2014	670	Tiger Branded (Dangote Flour)	3.00	Consumer	4.55	-0.56	0.00	1.00	-1.24	1.92	-0.79	4.74
2008	671	Transcorp Nig	3.00	Conglomerate	0.79	-0.75	0.00	1.00	0.23	1.14	0.26	5.00
2009	672	Transcorp Nig	3.00	Conglomerate	0.50	-0.37	0.00	1.00	0.05	0.94	0.28	4.54
2010	673	Transcorp Nig	3.00	Conglomerate	0.50	0.00	0.00	0.00	0.12	0.59	0.09	4.63
2011	674	Transcorp Nig	3.00	Conglomerate	0.57	0.14	1.00	0.00	7.74	54.08	2.56	4.79
2012	675	Transcorp Nig	3.00	Conglomerate	1.05	0.84	1.00	0.00	4.38	71.80	6.95	4.88
2013	676	Transcorp Nig	3.00	Conglomerate	4.35	3.14	1.00	0.00	0.12	1.52	-0.04	5.17
2014	677	Transcorp Nig	3.00	Conglomerate	3.25	-0.25	0.00	1.00	0.19	2.32	0.20	5.23
2008	678	Uac Of Nig	3.00	Conglomerate	34.60	-0.32	0.00	1.00	3.27	23.00	7.77	4.98
2009	679	Uac Of Nig	3.00	Conglomerate	36.75	0.06	1.00	0.00	3.14	22.86	6.48	4.97
2010	680	Uac Of Nig	3.00	Conglomerate	37.51	0.02	1.00	0.00	1.99	16.64	2.69	5.01
2011	681	Uac Of Nig	3.00	Conglomerate	31.18	-0.17	0.00	1.00	0.37	6.20	-0.59	5.08
2012	682	Uac Of Nig	3.00	Conglomerate	42.00	0.35	1.00	0.00	2.57	21.93	3.41	5.09
2013	683	Uac Of Nig	3.00	Conglomerate	67.00	0.60	1.00	0.00	2.96	21.32	2.21	5.09
2014	684	Uac Of Nig	3.00	Conglomerate	34.00	-0.49	0.00	1.00	3.40	38.76	1.22	5.12
2008	685	Unilever Nig	3.00	Consumer	10.38	-0.52	0.00	1.00	0.69	1.78	1.28	4.37
2009	686	Unilever Nig	3.00	Consumer	18.50	0.78	1.00	0.00	1.08	2.16	1.36	4.37
2010	687	Unilever Nig	3.00	Consumer	26.90	0.45	1.00	0.00	1.11	2.21	2.34	4.41
2011	688	Unilever Nig	3.00	Consumer	29.00	0.08	1.00	0.00	1.46	3.54	2.81	4.51
2012	689	Unilever Nig	3.00	Consumer	46.50	0.60	1.00	0.00	1.48	3.75	1.89	4.56
2013	690	Unilever Nig	3.00	Consumer	53.80	0.16	1.00	0.00	1.27	2.55	3.08	4.64
2014	691	Unilever Nig	3.00	Consumer	35.80	-0.33	0.00	1.00	0.64	1.98	-0.48	4.66
2008	692	Union Dicon Salt	3.00	Consumer	8.81	-0.32	0.00	1.00	-0.87	-3.62	-0.53	2.03
2009	693	Union Dicon Salt	3.00	Consumer	6.01	-0.32	0.00	1.00	-0.42	-4.04	-0.05	1.85
2010	694	Union Dicon Salt	3.00	Consumer	4.22	-0.30	0.00	1.00	-0.38	-4.42	0.01	1.84
2011	695	Union Dicon Salt	3.00	Consumer	4.22	0.00	0.00	0.00	-0.18	-4.58	-0.00	1.84
2012	696	Union Dicon Salt	3.00	Consumer	4.22	0.00	0.00	0.00	-	-	-	1.95
2008	697	Utc	3.00	Consumer	4.49	0.20	1.00	0.00	0.08	1.16	0.15	3.43
2009	698	Utc	3.00	Consumer	0.86	-0.81	0.00	1.00	0.06	1.14	0.12	3.44
2010	699	Utc	3.00	Consumer	0.68	-0.21	0.00	1.00	0.06	1.01	0.22	3.41
2011	700	Utc	3.00	Consumer	0.50	-0.26	0.00	1.00	0.25	1.24	0.03	3.46
2012	701	Utc	3.00	Consumer	0.75	0.50	1.00	0.00	-	-	-	3.42
2013	702	Utc	3.00	Consumer	0.70	-0.07	0.00	1.00	-	-	-	3.43

2008	703	Vitafoam Nig	3.00	Consumer	4.65	-0.53	0.00	1.00	0.85	2.31	0.94	3.66
2009	704	Vitafoam Nig	3.00	Consumer	5.65	0.22	1.00	0.00	0.63	2.66	0.89	3.73
2010	705	Vitafoam Nig	3.00	Consumer	6.66	0.18	1.00	0.00	0.63	3.02	0.77	3.77
2011	706	Vitafoam Nig	3.00	Consumer	5.06	-0.24	0.00	1.00	0.69	3.73	1.56	3.97
2012	707	Vitafoam Nig	3.00	Consumer	3.66	-0.28	0.00	1.00	0.68	3.14	1.15	4.02
2013	708	Vitafoam Nig	3.00	Consumer	4.90	0.34	1.00	0.00	0.50	3.16	1.56	4.00
2014	709	Vitafoam Nig	3.00	Consumer	4.03	-0.18	0.00	1.00	0.63	3.08	2.11	4.08
2008	710	Vono Products	3.00	Consumer	2.96	-0.33	0.00	1.00	-0.40	0.48	0.23	2.97
2009	711	Vono Products	3.00	Consumer	0.69	-0.77	0.00	1.00	-0.85	3.35	0.20	3.31
2010	712	Vono Products	3.00	Consumer	2.86	3.14	1.00	0.00	-1.32	2.03	-0.39	3.33
2011	713	Vono Products	3.00	Consumer	2.88	0.01	1.00	0.00	-0.29	1.74	0.08	3.29
2012	714	Vono Products	3.00	Consumer	2.88	0.00	0.00	0.00	-0.26	2.79	-0.13	3.28
2013	715	Vono Products	3.00	Consumer	1.73	-0.40	0.00	1.00	-0.87	2.77	0.06	3.27
2014	716	Vono Products	3.00	Consumer	1.12	-0.35	0.00	1.00	-0.92	1.47	-0.06	3.27
2008	717	African Paints Nig	4.00	Construction	3.49	0.00	0.00	0.00	0.48	0.33	0.03	2.58
2009	718	African Paints Nig	4.00	Construction	3.49	0.00	0.00	0.00	-	-	-	2.58
2010	719	African Paints Nig	4.00	Construction	3.32	-0.05	0.00	1.00	-	-	-	2.58
2012	720	African Paints Nig	4.00	Construction	2.86	-0.14	0.00	1.00	0.10	0.43	0.32	2.61
2013	721	African Paints Nig	4.00	Construction	2.72	-0.05	0.00	1.00	-0.03	0.89	-0.19	2.60
2008	722	Aluminium Extrusion Indus	4.00	Industrial	13.04	4.22	1.00	0.00	0.32	0.72	1.14	2.81
2009	723	Aluminium Extrusion Indus	4.00	Industrial	13.04	0.00	0.00	0.00	0.35	1.07	0.43	2.84
2010	724	Aluminium Extrusion Indus	4.00	Industrial	12.39	-0.05	0.00	1.00	0.27	1.35	0.44	2.93
2011	725	Aluminium Extrusion Indus	4.00	Industrial	11.15	-0.10	0.00	1.00	0.23	2.81	0.07	3.09
2012	726	Aluminium Extrusion Indus	4.00	Industrial	10.55	-0.05	0.00	1.00	0.21	4.31	0.26	3.21
2013	727	Aluminium Extrusion Indus	4.00	Industrial	10.50	-0.00	0.00	1.00	0.62	4.37	0.42	3.23
2014	728	Aluminium Extrusion Indus	4.00	Industrial	10.43	-0.01	0.00	1.00	0.77	5.07	0.75	3.24
2008	729	Arbico	4.00	Construction	29.44	9.22	1.00	0.00	-	-	-	3.09
2009	730	Arbico	4.00	Construction	29.44	0.00	0.00	0.00	-	-	-	3.13
2012	731	Arbico	4.00	Construction	6.91	-0.77	0.00	1.00	-0.01	-0.05	0.12	3.41
2013	732	Arbico	4.00	Construction	5.05	-0.27	0.00	1.00	0.02	0.01	0.05	3.17
2014	733	Arbico	4.00	Construction	5.30	0.05	1.00	0.00	-1.75	-1.38	5.08	3.65
2008	734	Ashaka Cement	4.00	Construction	17.01	0.06	1.00	0.00	1.21	7.48	3.45	4.40
2009	735	Ashaka Cement	4.00	Construction	11.55	-0.32	0.00	1.00	0.47	6.55	1.37	4.41
2010	736	Ashaka Cement	4.00	Construction	26.51	1.30	1.00	0.00	1.51	8.11	1.34	4.45
2011	737	Ashaka Cement	4.00	Construction	11.30	-0.57	0.00	1.00	1.29	20.89	3.90	4.81
2012	738	Ashaka Cement	4.00	Construction	17.95	0.59	1.00	0.00	1.40	22.18	1.49	4.83
2013	739	Ashaka Cement	4.00	Construction	20.99	0.17	1.00	0.00	1.26	21.04	0.91	4.83
2014	740	Ashaka Cement	4.00	Construction	21.90	0.04	1.00	0.00	2.04	22.89	0.09	4.85
2013	741	Austin Laz & Co	4.00	Industrial	2.00	0.26	1.00	0.00	-	-	-	3.38
2014	742	Austin Laz & Co	4.00	Industrial	2.09	0.04	1.00	0.00	-	-	-	3.31
2008	743	Avon Crowncaps & Containers	4.00	Industrial	9.51	0.76	1.00	0.00	0.41	2.80	-0.65	3.74
2009	744	Avon Crowncaps & Containers	4.00	Industrial	7.65	-0.20	0.00	1.00	0.35	2.76	0.77	3.85
2010	745	Avon Crowncaps & Containers	4.00	Industrial	6.91	-0.10	0.00	1.00	0.12	2.70	1.03	3.94
2013	746	Avon Crowncaps & Containers	4.00	Industrial	1.71	-0.75	0.00	1.00	-0.15	2.91	2.14	4.00
2014	747	Avon Crowncaps & Containers	4.00	Industrial	1.59	-0.07	0.00	1.00	0.19	3.05	2.97	3.96
2008	748	B.O.C Gases Nig	4.00	Industrial	17.36	0.83	1.00	0.00	0.56	1.93	0.91	3.28
2009	749	B.O.C Gases Nig	4.00	Industrial	13.48	-0.22	0.00	1.00	0.63	2.30	0.94	3.31

2010	750	B.O.C Gases Nig	4.00	Industrial	9.20	-0.32	0.00	1.00	0.88	2.90	1.07	3.33
2011	751	B.O.C Gases Nig	4.00	Industrial	6.85	-0.26	0.00	1.00	0.80	3.21	1.04	3.35
2012	752	B.O.C Gases Nig	4.00	Industrial	6.25	-0.09	0.00	1.00	0.73	3.94	1.23	3.42
2013	753	B.O.C Gases Nig	4.00	Industrial	6.66	0.07	1.00	0.00	0.63	4.37	1.29	3.46
2014	754	B.O.C Gases Nig	4.00	Industrial	5.48	-0.18	0.00	1.00	0.54	4.85	1.40	3.53
2009	755	Beco Petroleum Nig	4.00	Energy	2.53	-0.72	0.00	1.00	0.05	0.89	0.00	3.59
2010	756	Beco Petroleum Nig	4.00	Energy	0.60	-0.76	0.00	1.00	-0.09	0.79	0.00	3.57
2012	757	Beco Petroleum Nig	4.00	Energy	0.50	-0.17	0.00	1.00	-	-	-	3.36
2013	758	Beco Petroleum Nig	4.00	Energy	0.50	0.00	0.00	0.00	-	-	-	3.30
2014	759	Beco Petroleum Nig	4.00	Energy	0.50	0.00	0.00	0.00	-	-	-	3.23
2008	760	Berger Paints Nig	4.00	Construction	8.12	-0.20	0.00	1.00	0.95	7.78	2.23	3.31
2009	761	Berger Paints Nig	4.00	Construction	3.20	-0.61	0.00	1.00	0.89	6.18	1.67	3.36
2010	762	Berger Paints Nig	4.00	Construction	8.36	1.61	1.00	0.00	2.03	7.70	0.90	3.42
2011	763	Berger Paints Nig	4.00	Construction	8.47	0.01	1.00	0.00	1.05	7.97	1.37	3.43
2012	764	Berger Paints Nig	4.00	Construction	8.98	0.06	1.00	0.00	0.88	8.13	1.15	3.46
2013	765	Berger Paints Nig	4.00	Construction	8.00	-0.11	0.00	1.00	0.87	8.43	1.08	3.55
2014	766	Berger Paints Nig	4.00	Construction	9.00	0.13	1.00	0.00	0.51	8.49	-1.60	3.56
2008	767	Beta Glass Company	4.00	Industrial	21.78	0.02	1.00	0.00	2.39	14.61	4.40	4.14
2009	768	Beta Glass Company	4.00	Industrial	14.26	-0.35	0.00	1.00	2.77	17.05	5.90	4.12
2010	769	Beta Glass Company	4.00	Industrial	15.58	0.09	1.00	0.00	2.95	19.67	5.83	4.21
2011	770	Beta Glass Company	4.00	Industrial	12.71	-0.18	0.00	1.00	3.55	22.66	5.47	4.26
2012	771	Beta Glass Company	4.00	Industrial	10.50	-0.17	0.00	1.00	2.66	24.94	2.57	4.35
2013	772	Beta Glass Company	4.00	Industrial	14.43	0.37	1.00	0.00	2.93	27.46	5.84	4.43
2014	773	Beta Glass Company	4.00	Industrial	27.78	0.93	1.00	0.00	4.78	31.90	8.68	4.43
2011	774	Capital Oil	4.00	Energy	0.09	1.60	1.00	0.00	-0.02	0.69	0.01	3.35
2012	775	Capital Oil	4.00	Energy	0.09	0.00	0.00	0.00	0.01	0.88	-0.11	3.44
2014	776	Caverton Offshore	4.00	Energy	0.03	-0.66	0.00	1.00	0.29	3.56	2.63	4.56
2008	777	Cement Comy Of Northern Nig	4.00	Construction	0.05	-0.77	0.00	1.00	1.34	3.48	0.61	3.94
2009	778	Cement Comy Of Northern Nig	4.00	Construction	0.12	1.34	1.00	0.00	1.84	4.28	3.46	3.72
2010	779	Cement Comy Of Northern Nig	4.00	Construction	0.15	0.24	1.00	0.00	1.01	3.86	-	4.03
2011	780	Cement Comy Of Northern Nig	4.00	Construction	0.04	-0.72	0.00	1.00	1.83	5.56	-	4.10
2012	781	Cement Comy Of Northern Nig	4.00	Construction	0.05	0.22	1.00	0.00	0.95	6.07	-	4.15
2013	782	Cement Comy Of Northern Nig	4.00	Construction	0.12	1.22	1.00	0.00	1.13	7.20	1.65	4.18
2014	783	Cement Comy Of Northern Nig	4.00	Construction	0.10	-0.12	0.00	1.00	1.53	7.53	1.49	4.20
2008	784	Chemical & Allied Product	4.00	Construction	0.42	-0.34	0.00	1.00	3.50	3.27	2.98	3.35
2009	785	Chemical & Allied Product	4.00	Construction	0.28	-0.34	0.00	1.00	1.62	3.58	1.42	3.33
2010	786	Chemical & Allied Product	4.00	Construction	0.34	0.22	1.00	0.00	3.15	3.64	2.87	3.37
2011	787	Chemical & Allied Product	4.00	Construction	0.15	-0.57	0.00	1.00	1.87	2.60	1.66	3.49
2012	788	Chemical & Allied Product	4.00	Construction	0.28	0.93	1.00	0.00	1.99	2.00	1.63	3.46
2013	789	Chemical & Allied Product	4.00	Construction	0.48	0.73	1.00	0.00	2.02	1.81	2.07	3.48
2014	790	Chemical & Allied Product	4.00	Construction	0.38	-0.23	0.00	1.00	2.37	1.68	1.91	3.49
2008	791	Conoil	4.00	Energy	0.78	-0.07	0.00	1.00	2.62	17.02	-1.56	4.75
2009	792	Conoil	4.00	Energy	0.28	-0.65	0.00	1.00	3.33	19.46	37.26	4.60
2010	793	Conoil	4.00	Energy	0.36	0.32	1.00	0.00	4.02	21.99	9.12	4.62
2011	794	Conoil	4.00	Energy	0.32	-0.14	0.00	1.00	4.32	24.35	11.21	4.79
2012	795	Conoil	4.00	Energy	0.21	-0.35	0.00	1.00	1.03	22.56	-34.03	4.92
2013	796	Conoil	4.00	Energy	0.68	2.31	1.00	0.00	4.42	25.97	57.25	4.92

2014	797	Conoil	4.00	Energy	0.38	-0.44	0.00	1.00	1.20	23.15	-2.69	4.94
2008	798	Costain West Africa	4.00	Construction	0.12	-0.36	0.00	1.00	2.21	-5.83	-3.99	3.68
2009	799	Costain West Africa	4.00	Construction	0.04	-0.68	0.00	1.00	-0.57	8.05	-1.33	4.18
2010	800	Costain West Africa	4.00	Construction	0.06	0.71	1.00	0.00	0.03	7.05	0.35	4.15
2011	801	Costain West Africa	4.00	Construction	0.03	-0.59	0.00	1.00	-1.15	6.09	-0.17	4.14
2012	802	Costain West Africa	4.00	Construction	0.03	0.00	0.00	0.00	-1.71	4.15	-0.56	4.16
2008	803	Cutix	4.00	Industrial	0.09	-0.32	0.00	1.00	0.22	0.74	0.34	2.88
2009	804	Cutix	4.00	Industrial	0.03	-0.67	0.00	1.00	0.15	0.76	0.29	2.89
2010	805	Cutix	4.00	Industrial	0.02	-0.23	0.00	1.00	0.26	0.90	0.07	3.03
2011	806	Cutix	4.00	Industrial	0.02	-0.30	0.00	1.00	0.16	0.94	0.43	2.97
2012	807	Cutix	4.00	Industrial	0.02	-0.01	0.00	1.00	0.15	0.97	0.07	2.97
2013	808	Cutix	4.00	Industrial	0.02	0.16	1.00	0.00	0.17	0.68	0.22	3.03
2014	809	Cutix	4.00	Industrial	0.01	-0.27	0.00	1.00	0.24	0.81	0.15	3.24
2010	810	Dangote Cement	4.00	Construction	1.20	17.90	1.00	0.00	7.00	13.89	5.22	5.60
2011	811	Dangote Cement	4.00	Construction	1.11	-0.08	0.00	1.00	7.13	17.12	6.15	5.72
2012	812	Dangote Cement	4.00	Construction	1.28	0.16	1.00	0.00	8.92	25.04	9.09	5.83
2013	813	Dangote Cement	4.00	Construction	2.19	0.71	1.00	0.00	11.85	32.40	16.59	5.93
2014	814	Dangote Cement	4.00	Construction	2.00	-0.09	0.00	1.00	9.46	34.73	12.64	5.99
2008	815	Dn Meyer	4.00	Construction	0.12	0.38	1.00	0.00	-1.02	4.93	1.22	3.51
2009	816	Dn Meyer	4.00	Construction	0.05	-0.53	0.00	1.00	-1.93	2.54	0.15	3.42
2010	817	Dn Meyer	4.00	Construction	0.04	-0.35	0.00	1.00	-0.73	1.81	2.44	3.43
2011	818	Dn Meyer	4.00	Construction	0.01	-0.70	0.00	1.00	-0.17	1.83	0.98	3.44
2012	819	Dn Meyer	4.00	Construction	0.02	0.45	1.00	0.00	-0.08	2.00	-0.11	3.41
2013	820	Dn Meyer	4.00	Construction	0.01	-0.09	0.00	1.00	0.14	2.13	0.76	3.42
2014	821	Dn Meyer	4.00	Construction	0.01	-0.38	0.00	1.00	-0.12	2.23	0.48	3.39
2008	822	Eternaoil	4.00	Energy	0.31	0.94	1.00	0.00	-0.52	1.00	0.75	3.98
2009	823	Eternaoil	4.00	Energy	0.05	-0.84	0.00	1.00	-1.32	3.45	-0.44	4.01
2010	824	Eternaoil	4.00	Energy	0.05	0.01	1.00	0.00	0.55	3.52	1.95	3.97
2011	825	Eternaoil	4.00	Energy	0.03	-0.41	0.00	1.00	0.93	4.48	-1.71	4.17
2012	826	Eternaoil	4.00	Energy	0.03	-0.07	0.00	1.00	0.73	4.93	-0.20	4.52
2013	827	Eternaoil	4.00	Energy	0.03	0.00	0.00	0.00	0.54	5.46	3.64	4.26
2014	828	Eternaoil	4.00	Energy	0.03	0.00	0.00	0.00	0.75	6.22	1.83	4.11
2008	829	First Alumminium Nig	4.00	Industrial	0.05	0.98	1.00	0.00	-0.23	1.78	0.53	3.94
2009	830	First Alumminium Nig	4.00	Industrial	0.01	-0.89	0.00	1.00	0.02	3.15	0.69	4.01
2010	831	First Alumminium Nig	4.00	Industrial	0.01	0.46	1.00	0.00	-0.16	2.98	0.27	4.02
2011	832	First Alumminium Nig	4.00	Industrial	0.01	-0.32	0.00	1.00	-0.13	2.81	0.37	4.00
2012	833	First Alumminium Nig	4.00	Industrial	0.01	0.00	0.00	0.00	-0.02	0.09	0.01	3.95
2013	834	First Alumminium Nig	4.00	Industrial	0.01	0.00	0.00	0.00	0.05	2.37	0.45	3.93
2014	835	First Alumminium Nig	4.00	Industrial	0.01	0.00	0.00	0.00	0.01	2.20	0.36	3.93
2009	836	Forte Oil (Ap)	4.00	Energy	0.34	-0.89	0.00	1.00	-0.08	0.31	0.09	4.94
2010	837	Forte Oil (Ap)	4.00	Energy	0.22	-0.35	0.00	1.00	-0.03	0.23	0.12	4.84
2011	838	Forte Oil (Ap)	4.00	Energy	0.12	-0.47	0.00	1.00	-0.20	0.06	-0.03	4.66
2012	839	Forte Oil (Ap)	4.00	Energy	0.08	-0.33	0.00	1.00	0.93	7.00	1.78	4.63
2013	840	Forte Oil (Ap)	4.00	Energy	1.08	13.01	1.00	0.00	4.32	36.56	0.06	5.02
2014	841	Forte Oil (Ap)	4.00	Energy	2.28	1.10	1.00	0.00	2.20	21.89	1.07	5.14
2008	842	Greif Nig	4.00	Industrial	0.15	6.06	1.00	0.00	0.06	7.33	1.40	2.84
2009	843	Greif Nig	4.00	Industrial	0.15	0.00	0.00	0.00	-0.40	6.90	0.94	2.86
2010	844	Greif Nig	4.00	Industrial	0.15	0.00	0.00	0.00	1.02	7.98	1.33	2.83

2011	845	Greif Nig	4.00	Industrial	0.13	-0.12	0.00	1.00	0.90	8.60	2.18	2.79
2013	846	Greif Nig	4.00	Industrial	0.13	-0.05	0.00	1.00	0.72	7.50	1.21	2.83
2014	847	Greif Nig	4.00	Industrial	0.12	-0.05	0.00	1.00	1.02	7.91	1.07	2.82
2008	848	Ipwa	4.00	Construction	0.05	0.19	1.00	0.00	0.04	0.78	-0.02	2.81
2009	849	Ipwa	4.00	Construction	0.01	-0.69	0.00	1.00	-0.01	0.79	0.04	2.84
2010	850	Ipwa	4.00	Construction	0.01	-0.32	0.00	1.00	-0.12	0.65	0.02	2.80
2011	851	Ipwa	4.00	Construction	0.01	-0.08	0.00	1.00	-0.34	2.56	-0.05	3.22
2012	852	Ipwa	4.00	Construction	0.01	-0.45	0.00	1.00	-0.22	2.40	0.01	3.19
2013	853	Ipwa	4.00	Construction	0.01	0.46	1.00	0.00	-0.26	3.20	0.06	3.17
2008	854	Japaul Oil & Maritime Serv	4.00	Energy	0.04	-0.54	0.00	1.00	0.11	0.61	3.32	4.32
2009	855	Japaul Oil & Maritime Serv	4.00	Energy	0.01	-0.69	0.00	1.00	0.12	0.83	-0.00	4.33
2010	856	Japaul Oil & Maritime Serv	4.00	Energy	0.01	0.24	1.00	0.00	0.13	0.55	0.23	4.40
2011	857	Japaul Oil & Maritime Serv	4.00	Energy	0.01	-0.36	0.00	1.00	0.16	0.75	0.44	4.44
2012	858	Japaul Oil & Maritime Serv	4.00	Energy	0.01	-0.39	0.00	1.00	-1.08	2.40	0.92	4.51
2013	859	Japaul Oil & Maritime Serv	4.00	Energy	0.01	-0.02	0.00	1.00	0.04	2.54	0.19	4.59
2014	860	Japaul Oil & Maritime Serv	4.00	Energy	0.01	-0.07	0.00	1.00	-0.42	1.99	0.20	4.59
2008	861	Julius Berger	4.00	Construction	0.56	-0.34	0.00	1.00	2.08	5.51	18.03	5.14
2009	862	Julius Berger	4.00	Construction	0.26	-0.54	0.00	1.00	2.74	6.50	11.30	5.19
2010	863	Julius Berger	4.00	Construction	0.50	0.94	1.00	0.00	2,33	6.42	12.19	5.18
2011	864	Julius Berger	4.00	Construction	0.32	-0.37	0.00	1.00	3.68	8.13	16.58	5.24
2012	865	Julius Berger	4.00	Construction	0.35	0.10	1.00	0.00	6.83	12.91	26.89	5.25
2013	866	Julius Berger	4.00	Construction	0.72	1.09	1.00	0.00	6.72	18.00	13.62	5.36
2014	867	Julius Berger	4.00	Construction	0.61	-0.16	0.00	1.00	6.13	19.41	9.32	5.41
2008	868	Lafarge Cement Wapco Nig	4.00	Construction	0.26	-0.68	0.00	1.00	3.75	13.48	4.59	4.69
2009	869	Lafarge Cement Wapco Nig	4.00	Construction	0.30	0.18	1.00	0.00	1.68	14.53	3.14	4.90
2010	870	Lafarge Cement Wapco Nig	4.00	Construction	0.41	0.36	1.00	0.00	1.63	14.46	4.21	5.07
2011	871	Lafarge Cement Wapco Nig	4.00	Construction	0.43	0.06	1.00	0.00	2.88	18.70	10.45	5.18
2012	872	Lafarge Cement Wapco Nig	4.00	Construction	0.59	0.35	1.00	0.00	4.90	22.77	8.32	5.18
2013	873	Lafarge Cement Wapco Nig	4.00	Construction	1.15	0.96	1.00	0.00	9.42	30.98	12.31	5.21
2014	874	Lafarge Cement Wapco Nig	4.00	Construction	0.81	-0.30	0.00	1.00	7.38	36.29	10.38	5.49
2008	875	Mobil Nig	4.00	Energy	3.31	0.84	1.00	0.00	6.22	10.27	4.02	4.30
2009	876	Mobil Nig	4.00	Energy	0.99	-0.70	0.00	1.00	9.46	13.90	18.45	4.34
2011	877	Mobil Nig	4.00	Energy	1.34	0.36	1.00	0.00	12.14	14.97	23.00	4.43
2012	878	Mobil Nig	4.00	Energy	1.09	-0.18	0.00	1.00	8.56	21.93	16.54	4.53
2013	879	Mobil Nig	4.00	Energy	1.19	0.09	1.00	0.00	10.35	31.74	38.39	4.61
2014	880	Mobil Nig	4.00	Energy	1.58	0.33	1.00	0.00	17.73	45.09	18.62	4.69
2010	881	Mrs(Texaco Chevron)	4.00	Energy	0.67	-0.58	0.00	1.00	7.27	46.65	4.27	4.61
2011	882	Mrs(Texaco Chevron)	4.00	Energy	0.59	-0.11	0.00	1.00	2.42	32.52	6.27	4.86
2012	883	Mrs(Texaco Chevron)	4.00	Energy	0.24	-0.60	0.00	1.00	0.81	40.75	21.98	4.75
2013	884	Mrs(Texaco Chevron)	4.00	Energy	0.54	1.29	1.00	0.00	2.50	77.35	38.01	4.82
2014	885	Mrs(Texaco Chevron)	4.00	Energy	0.53	-0.02	0.00	1.00	2.94	79.60	12.02	4.76
2008	886	Multiverse	4.00	Materials	0.01	0.40	1.00	0.00	0.06	0.94	0.11	3.61
2009	887	Multiverse	4.00	Materials	0.01	-0.29	0.00	1.00	0.02	-0.03	0.01	3.63
2010	888	Multiverse	4.00	Materials	0.01	0.00	0.00	0.00	0.01	0.02	0.03	3.65
2011	889	Multiverse	4.00	Materials	0.01	0.00	0.00	0.00	0.60	0.87	-	3.70
2012	890	Multiverse	4.00	Materials	0.01	0.00	0.00	0.00	0.01	0.88	0.10	3.74
2013	891	Multiverse	4.00	Materials	0.01	0.00	0.00	0.00	-0.07	0.59	0.10	3.72

2014	892	Multiverse	4.00	Materials	0.01	0.00	0.00	0.00	-0.13	0.38	0.00	3.68
2008	893	Nigeria Ropes	4.00	Industrial	0.12	2.35	1.00	0.00	0.11	1.14	0.53	2.89
2009	894	Nigeria Ropes	4.00	Industrial	0.09	-0.23	0.00	1.00	-0.49	0.57	0.10	2.83
2010	895	Nigeria Ropes	4.00	Industrial	0.09	-0.05	0.00	1.00	-0.01	0.56	-0.19	2.80
2011	896	Nigeria Ropes	4.00	Industrial	0.08	-0.05	0.00	1.00	0.02	0.84	0.01	2.87
2012	897	Nigeria Ropes	4.00	Industrial	0.08	-0.05	0.00	1.00	-0.59	0.26	-0.09	2.79
2013	898	Nigeria Ropes	4.00	Industrial	0.07	-0.05	0.00	1.00	-0.85	-0.59	-0.62	2.87
2014	899	Nigeria Ropes	4.00	Industrial	0.07	0.00	0.00	0.00	-0.78	-1.37	0.53	2.85
2008	900	Nigerian Enamelware	4.00	Industrial	0.65	4.44	1.00	0.00	0.69	5.06	4.51	3.16
2009	901	Nigerian Enamelware	4.00	Industrial	0.56	-0.15	0.00	1.00	1.00	2.74	10.03	3.11
2010	902	Nigerian Enamelware	4.00	Industrial	0.43	-0.23	0.00	1.00	1.18	3.69	-5.24	3.09
2011	903	Nigerian Enamelware	4.00	Industrial	0.36	-0.15	0.00	1.00	1.39	4.69	7.45	3.01
2012	904	Nigerian Enamelware	4.00	Industrial	0.34	-0.06	0.00	1.00	1.39	5.66	2.59	3.34
2013	905	Nigerian Enamelware	4.00	Industrial	0.32	-0.05	0.00	1.00	1.01	18.69	-0.51	3.34
2014	906	Nigerian Enamelware	4.00	Industrial	0.32	-0.01	0.00	1.00	1.36	19.60	-11.36	3.49
2008	907	Oando	4.00	Energy	0.80	-0.35	0.00	1.00	9.22	49.59	-15.22	5.46
2009	908	Oando	4.00	Energy	0.94	0.18	1.00	0.00	11.32	59.78	65.21	5.50
2010	909	Oando	4.00	Energy	0.66	-0.30	0.00	1.00	8.29	54.90	6.12	5.51
2011	910	Oando	4.00	Energy	0.22	-0.67	0.00	1.00	1.62	39.42	-0.88	5.61
2012	911	Oando	4.00	Energy	0.12	-0.44	0.00	1.00	4.58	44.77	12.46	5.71
2013	912	Oando	4.00	Energy	0.24	0.96	1.00	0.00	-0.75	26.04	5.27	5.77
2014	913	Oando	4.00	Energy	0.16	-0.34	0.00	1.00	-20.23	5.13	-5.12	5.95
2010	914	Paints & Coatings Man	4.00	Construction	0.03	0.57	1.00	0.00	0.13	1.16	0.13	3.20
2011	915	Paints & Coatings Man	4.00	Construction	0.01	-0.85	0.00	1.00	0.16	-	-0.44	3.24
2012	916	Paints & Coatings Man	4.00	Construction	0.02	2.77	1.00	0.00	0.32	-	-0.01	3.30
2013	917	Paints & Coatings Man	4.00	Construction	0.02	-0.03	0.00	1.00	-	-	-	3.37
2014	918	Paints & Coatings Man	4.00	Construction	0.02	-0.19	0.00	1.00	0.26	2.12	0.13	3.52
2009	919	Portland Paint Nig	4.00	Construction	0.06	-0.48	0.00	1.00	0.46	-	0.20	3.22
2010	920	Portland Paint Nig	4.00	Construction	0.05	-0.07	0.00	1.00	0.33	-	0.49	3.19
2011	921	Portland Paint Nig	4.00	Construction	0.05	-0.03	0.00	1.00	0.48	3.08	0.96	3.36
2012	922	Portland Paint Nig	4.00	Construction	0.04	-0.15	0.00	1.00	-0.56	1.90	0.72	3.38
2013	923	Portland Paint Nig	4.00	Construction	0.06	0.26	1.00	0.00	0.27	2.22	0.09	3.34
2014	924	Portland Paint Nig	4.00	Construction	0.03	-0.38	0.00	1.00	0.37	2.31	0.44	3.36
2008	925	Premier Paints	4.00	Construction	0.01	0.00	0.00	0.00	-0.04	2.02	0.14	1.94
2009	926	Premier Paints	4.00	Construction	0.01	0.00	0.00	0.00	-0.24	0.97	-0.24	2.07
2010	927	Premier Paints	4.00	Construction	0.01	0.00	0.00	0.00	-1.16	-0.20	0.07	2.09
2011	928	Premier Paints	4.00	Construction	0.01	0.03	1.00	0.00	-0.82	-	-0.66	2.44
2012	929	Premier Paints	4.00	Construction	0.01	-0.11	0.00	1.00	-0.25	0.10	-0.18	2.34
2013	930	Premier Paints	4.00	Construction	0.01	-0.09	0.00	1.00	-0.17	-0.07	0.09	2.40
2014	931	Premier Paints	4.00	Construction	0.11	13.19	1.00	0.00	0.07	-0.01	0.10	2.46
2008	932	Roads Construction	4.00	Construction	0.04	1.13	1.00	0.00	2.07	5.44	25.57	3.37
2009	933	Roads Construction	4.00	Construction	0.03	-0.15	0.00	1.00	2.19	5.66	16.55	3.41
2010	934	Roads Construction	4.00	Construction	0.03	-0.09	0.00	1.00	4.01	11.29	17.17	3.51
2011	935	Roads Construction	4.00	Construction	0.09	1.89	1.00	0.00	3.66	14.45	-7.09	3.51
2012	936	Roads Construction	4.00	Construction	0.10	0.16	1.00	0.00	4.73	18.24	11.78	3.53
2013	937	Roads Construction	4.00	Construction	0.08	-0.16	0.00	1.00	1.69	19.37	-6.82	3.47
2014	938	Roads Construction	4.00	Construction	0.06	-0.26	0.00	1.00	6.85	25.90	0.26	3.56
2008	939	Studio Press Nig	4.00	Industrial	0.03	0.90	1.00	0.00	0.39	2.66	0.98	3.83

2009	940	Studio Press Nig	4.00	Industrial	0.03	-0.05	0.00	1.00	0.42	2.19	-0.43	3.91
2010	941	Studio Press Nig	4.00	Industrial	0.03	0.00	0.00	0.00	0.24	19.10	11.89	3.90
2011	942	Studio Press Nig	4.00	Industrial	0.03	-0.05	0.00	1.00	0.44	190.95	112.54	3.93
2012	943	Studio Press Nig	4.00	Industrial	0.03	-0.05	0.00	1.00	0.00	3.52	-0.76	3.87
2013	944	Studio Press Nig	4.00	Industrial	0.03	-0.05	0.00	1.00	-0.08	3.62	1.92	3.97
2014	945	Studio Press Nig	4.00	Industrial	0.02	-0.09	0.00	1.00	-0.59	3.02	2.26	4.01
2008	946	Total Nigeria	4.00	Energy	203.69	0.13	1.00	0.00	12.94	21.41	8.58	4.62
2009	947	Total Nigeria	4.00	Energy	149.00	-0.27	0.00	1.00	11.69	20.57	20.58	4.70
2010	948	Total Nigeria	4.00	Energy	234.00	0.57	1.00	0.00	16.01	35.99	24.64	4.74
2011	949	Total Nigeria	4.00	Energy	188.10	-0.20	0.00	1.00	11.23	29.53	37.14	4.77
2012	950	Total Nigeria	4.00	Energy	120.57	-0.36	0.00	1.00	13.76	33.29	-24.83	4.88
2013	951	Total Nigeria	4.00	Energy	170.00	0.41	1.00	0.00	15.71	39.00	40.23	4.90
2014	952	Total Nigeria	4.00	Energy	142.50	-0.16	0.00	1.00	13.03	41.03	45.96	4.98

Apendix 4 (Data Decription)