

**EFFECT OF FINANCIAL CRISIS ON DIVIDEND PAYOUT POLICY  
OF COMMERCIAL AND SERVICES FIRMS LISTED AT THE  
NAIROBI SECURITIES EXCHANGE**

**BY**

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## DECLARATION

I hereby declare that this research project is my original work and has not been presented in any other institution.

Signature.....Date.....

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This research project has been submitted for presentation with my approval as the University supervisor.

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## **DEDICATION**

This research work is dedicated to my family for their encouragement and endless support during the study.

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## **LIST OF ABBREVIATIONS**

DSE	Dhaka Stock Exchange
EMH	Efficient Market Hypothesis
MSME	Micro, Small and Medium Enterprises
NSE	Nairobi Securities Exchange
NYSE	New York Stock Exchange
OPEC	Organization of the Petroleum Exporting Countries
SPSS	Statistical Package for Social Sciences
UK	United Kingdom
US	United States

## ABSTRACT

The study sought to establish the effect of a financial crisis on the dividend payout policy of commercial and service firms listed at Nairobi Securities Exchange. The independent variables for the study were real GDP, inflation, profitability, liquidity and leverage. The study employed descriptive research design. Research data was obtained from Nairobi Securities Exchange (NSE) annual reports of commercial and service firms' financial statements and Kenya National Bureau of Statistics. The results were analyzed using Stata software. The study used annual data financial reports for 8 commercial and service firms listed at Nairobi Securities Exchange since the years 2007-2015. From the results of correlation analysis, there is a positive and statistically significant correlation between real GDP and dividend payout ratio. The study also found out that there is a negative and significant correlation between inflation and dividend payout ratio. Profitability was also found to have a positive and significant association with dividend payout ratio of commercial and service firms listed at Nairobi Securities Exchange. Liquidity was found to have a strong positive and significant association with dividend payout ratio. Finally, leverage had a negative and significant association with dividend payout ratio. The model summary revealed that the independent variables: real GDP, inflation, profitability, liquidity and leverage explains 91.4% of changes in the dependent variable which is dividend payout ratio. Regression results showed that real GDP had a positive and statistically significant relationship with dividend payout policy of commercial and service firms listed at Nairobi Securities Exchange, inflation has negative and statistically significant relationship with dividend payout policy of commercial and service firms while profitability has a positive and statistically significant relationship with dividend payout policy of commercial and service firms listed at Nairobi Securities Exchange. Further, regression results showed that liquidity has positive and statistically significant relationship with dividend payout policy of commercial and service firms. Finally, regression results showed that leverage has a negative and statistically significant relationship with dividend payout policy of commercial and service firms listed at Nairobi Securities Exchange. From the study findings, the study conclude that dividend payout policy of Commercial and Service firms is significantly affected by level of real GDP, inflation rate, profitability, liquidity and leverage. This study recommends growth of real GDP for favorable business environment. This study further recommends formulation of macroeconomic policies to curb inflation and maintained it at the recommended and favorable level. It is also recommended that proactive fiscal policy and prudent monetary policy should be enacted to reduce firms' leverage through such measures as promoting mergers and acquisitions, revitalizing stock assets, optimizing debt structure, carrying out debt-for-equity swap programs and developing equity financing.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the study

A dividend is a distribution from a firm to its investors (Welch, 2009). Financial managers must decide how much of a firm's profit should be paid off as dividends and must determine the size of dividends per share. This is called the dividend policy (Silbiger, 1999). Dividend policy affects firm's value and as a result, shareholders wealth (Baker et al., 2001). A defined prospect dividend program is amongst the requirements needed for firms that are desirous to be listed at Nairobi Securities Exchange (Kenya Gazette Legal Notice No 60 May, 2002). Serious attention therefore should be accorded to puzzle of dividend policy. Nonetheless, firms are under no obligation to pay dividends, but most companies will offer shareholders a return on their investments as long as the company is not experiencing financial problems.

The credit crisis struck in 2008 resulted into serious financial crisis endangering so many companies. Financial institutions and banks experienced difficulties and were later on trailed by other firms. Most of the developed economies got into recession as a result of financial crisis that originated from careless lending practices that involved origination and distribution of mortgage debt in the United States. The situation was even worsened by the sharp surge in oil and food prices. The steep escalation in asset prices coupled with the boom in economic demand has been seen as product of prolonged era of easily available credit, insufficient regulation and associated boom in economic demand is considered a result of the prolonged period of easily available credit, inadequate regulation and oversight or accumulative inequality. The 2007 much disputed general election made the situation worse for Kenya.

In the wake of this, many studies were done to find out what had gone wrong and what ought to have been done to avert or curtail the results of the financial crisis. Campello, Graham & Harvey (2009), found out that financial crisis has impacts on a company's financial policy in the upcoming years more so on dividend and investment policy. More

studies have also been carried on reasons that make firms to pay dividends as well as the determinants. The conclusions of these studies advocate that the significance of dividends to a firm vary cross-sectional hence the likelihood that the effect of the crisis on dividend policy will likewise vary across firm characteristics.

### **1.1.1 Financial Crisis**

Financial crisis is the distraction of financial markets where adversarial choice and problems resultant from moral dangers deteriorate making financial markets powerless of capably directing funds to those who possess the most productive investment prospects. This causes panic in the banking segment and overall business world. In most economies the central banks try to avoid injurious financial instabilities by ensuring financial system remains liquid. Five factors primarily may contribute to a significant deteriorating of adverse selection and moral hazard in the financial markets, which result into financial crisis. Interest rate increments, bank panics, and declines in stock market, increased uncertainty and unforeseen decline in the aggregate price levels are among the factors. Dividends are vital since they undoubtedly demonstrate the cash generating capability for a company (Silbiger, 1999). The earnings of the firm and its dividend payout relationship for companies quoted in the stock exchange are often anticipated to exhibit the Joint Hypothesis Problem or efficient-market hypothesis (EMH) that states that financial markets are information efficient (Fama, 1991).

From the investors perspective dividends whether paid or accumulated and offset at a future date are not only a regular income but also a very important valuation tool for a company. The implication is that it may have undesirable concerns too for investors as the costs of raising finances is not trivial and could lead to lower payout especially where positive net present value projects are available to be undertaken. Information asymmetry that is experienced between external investors and internal management usually have some repercussions on dividend policy in addition to floatation costs. Moreover apart from the floatation costs and information asymmetry the investment decisions made by managers are subject to the pecking order of options of financing. Reduction of

expropriation of outside shareholders by agents is by high payouts that usually result in reduction of free cash flow available to managers. Information asymmetry could also reflect the desire for managers to signal their skills to generate more earnings in the future as a result of the assistance of high payouts. Establishing how financial crisis affects dividend payout policies in an economy as Kenya would be vital since the study seeks to establish how this variable will impact on the firms that generally pay dividends.

### **1.1.2 Dividend Payout Policies**

Maximization of shareholders' wealth and profit making are the key reasons for the existence of a firm. This wealth is predominantly influenced by increased sales as well as capital structure decisions and investment decisions. In this case a firm's performance is viewed as how well a firm enhances its shareholders' wealth and its capability to generate earnings from the capital invested by shareholders. The shareholders wealth are affected by dividend policies which in turn affect the value of the firm as it has implications for share prices and returns to investors. Dividend riddle though considered a share value-enhancing and as a policy remains most challenging topics of contemporary financial economics. Companies should pay dividends should they fail and cannot identify an investment vehicle that are capable of ensuring regular and high returns as compared to those expected by the shareholders.

Ratios on payout are presented as a function of three major factors that include flotation costs of external funds, agency cost of outside ownership and financing constraints resulting out of higher operating and financial leverage. Dividend payout determinants will be measured by firm's profitability, its liquidity as well as the financial leverage level.

### **1.1.3 Financial Crisis and Dividend Payout Policies**

Financial crisis affects the economy when it strikes and there may be far reaching consequences in the later years. One of the areas of importance is the dividend payments

as shareholders major focus when they invest their funds in any venture is what would be the return arising from the opportunity cost they have chosen to forego in order to invest their money. The crisis therefore would majorly impact on the company's ability to generate income hence its profitability, its ability to service its obligations and finally how much of income remains after meeting its entire obligation as this form the basis of dividends. The global financial crisis showed that undercapitalized banks are a huge threat to financial stability and the economy in general. Kirkulak and Kurt (2010) observed that the Istanbul market financial crisis resulted into a mountable drop in number of the firms paying dividends. On the contrary, Mollah (2011) there was lack of any substantial difference reported at the DSE in the payout behaviour of firms during or before the crisis and after financial crisis experienced in 1997 and 1998 in Asia.

The impacts of financial crisis has not only affected the financial sector but has had far reaching consequences on the Commercial and Service Sector firms listed at NSE. These have been felt ranging from logistics, publishing, marketing and advertising, hotels and resorts, supermarkets as well as furniture in which these firms deal. Kenya Airways, the national courier has been recording huge losses and even requested for bail out from the hugest shareholder which is the government. It is therefore essential to establish the effect that the crisis has had on the dividend policy of these firms.

#### **1.1.4 Commercial banks in Kenya**

In Kenya, like in most other countries, the public has always resented banks for raking in hugely obscene profits. Those pushing the lending cap laws which have now been signed into law, knew this and ultimately took full advantage of it. What many did not realize, however, is that not all bank profits end up in shareholders pockets at the end of the day. And that these banks in fact, need to make adequate profits if the system is to remain financially stable and to lend to the real economy. Whereas the proponents of lending caps remained fixated with the big bank profits, they put little or no thought for the other constituents in the banking system and the complexity of the decisions banks make as

they try to satisfy the desires of all their customers and capital providers while at same time, complying with ever increasing regulatory requirements. Latest Central Bank of Kenya data shows bank advancing loans to micro, small and medium size enterprises MSMEs cut down by 5.7% between January and April 2017 even as providing loans to vast business and persons started rising. Aggregate bank lending to MSMEs was Ksh.233billion implying the crisis saw it fall by an equivalent of Ksh.13billion to Ksh.220billion, (Business Daily, May 31<sup>st</sup> 2017).

## **1.2 Research Problem**

To the investors, a dividend cut is viewed undesirable since it could convey negative signals. However, Reddemann, (2010) contended that a move is a suitable act to ensure financial firmness during distress. He found out that in 2008 and 2009 financial crisis in Europe firms in the insurance industry did adjust their policies on dividends through cuts in order to toughen liquidity as well as create a capital reserve. In the same vein, French firms managers applied dividend cuts to conserve financial flexibility during the global financial crisis. Other findings on NYSE firms during the financial distress in the early eighties showed that managers reduced dividends considerably to respond to the crisis, attributable to meager financial performance occasioned by the crisis.

Hauser (2013) similarly noted that the propensity for dividends cuts amplified among US firms between 2008 and 2009 as a result of low cash ratios due the crisis. Bistrova and Lace (2012) found out that twenty three percent of the total number of dividend paymasters stopped payments in the Central and Eastern European (C&EE) the same period. Earlier in the Asian markets financial crisis resulted into an upsurge in the number of non-payers of dividends as well as on the Stock Exchange of Thailand being a consequence of the financial distress experienced by the firms. Kirkulak and Kurt (2010) in the same manner observed that the Istanbul market financial crisis resulted into a mountable drop in number of the firms paying dividends.



Other evidences that are on the contrary show that payments of dividends payments did increase as firms are financial crisis. For the United Kingdom, Philip, Zhang and Kuo (2013) discovered that dividend payments during these periods were positive since a sizable upward tendency was manifested in the period. The desire of firms to try and signal superficial state of the economic hand financial health manifested itself as the firms tried to boost the confidence of financiers. Regardless of the enormous lack of profit making by banks in Europe UK and US, Acharya, Gujral, and Shin (2009) observed that some sampled banks managed dividends payments all through the crisis.

On the other hand, some studies established that there was lack of evidence implying firms had to change policies regarding dividends as crisis waned. According to Mollah (2011) there was lack of any substantial difference reported at the DSE in the payout behaviour of firms during or before the crisis and after financial crisis experienced in 1997 and 1998 in Asia. Finally in the crisis that was witnessed between 1991 and 2008, Sierpińska and Mlodkowski (2010) found out that those firms in Japanese did not decrease dividend payments. It is therefore apparent that the empirical evidence on dividend payment during crisis is inconclusive hence compelling further research in this area. This study endeavored to answer the question, When faced with a financial crisis does a firm have to change its dividend? From the foregoing a lot of literature mentioned relates to research done on companies based in advanced Western nations. It is evident that there is a conspicuous lack of literature relating to the Kenyan situation.

### **1.3 Research Objective**

The general objective of the research was to establish the effect of a financial crisis on the dividend payout policy of Commercial and Service firms listed at Nairobi Securities Exchange.

### **1.4 Value of the Study**

Under ordinary economic settings some studies have been done establishing relationships between dividend payout policies and firm value but how firms behave in relation to

dividend policy during financial crisis is somewhat unexamined. The crisis do affect firms in many ways ranging from decreased sales, unutilized and overvalued assets, decreased earnings just to mention but a few. It is envisioned that the subject of this study will supplement to the understanding on behavior of firms during crisis with regards to dividend payout policy. Practically the exploring of this subject adds knowledge to what shareholders would expect when a financial crisis strikes. The many unexplained questions regarding the effects of a crisis exhibited in stock prices decline as well as the dividend would be clearly understood.

The study would be of importance to various parties and stakeholders in the Nairobi Securities Exchange. The discoveries of this study would be of interest to those vested with managerial responsibilities of listed companies who will be able to gauge the effect of financial crisis on dividend policies so that they can make judicious dividend pronouncements.

The Kenyan government too will be enlightened in a bid to come up with policies relating to dividends to avoid major economic national shocks. Knowledge of the effect of dividend policies will inform the key policy holders to ensure adequate measures are undertaken to ensure continuous and sustainable sound economic growth.

The findings of the study would also assist consultants in the financial and related fields to offer proper services to their day to day clients. Surprisingly this would enhance maximization of shareholders wealth. Finally investors would be able to obtain clear indication between dividends policies and dividends payout to identify the best firm to invest their funds in so as to be assured of return on their capital invested.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents the literature relating to financial crisis and determinants of dividend payout policies. Several theories are discussed followed by a discussion on determinants of dividend payout policies. Related studies on financial crisis and dividends policies are reviewed at the end of the chapter.

#### **2.2 Theories of Financial Crisis**

Several theories advanced for explaining the financial crisis phenomena and how it results into market disruptions are Marxist theory, Minsky's theory and Herding models and learning models theory.

##### **2.2.1 Marxist Theory**

Coming up with a theory on economic crisis emerged to be a fundamental and recurring notion in the whole of Karl Marx's work. In his view businesses that were operated successfully in a capitalist system had less return of money to workers in form of wages compared to the value of goods produced by the very workers when majorly the amount the products got sold for. In the short run the profits were viewed to cover the business initial investment. However in the long run, a lesser amount of money in form of wages of the combined economic operations of businesses gets returned to the mass population which helped generate which would have enabled them purchase all of the goods produced by them. The propensity of profits to fall is further exhibited by the businesses expansion in the wake of competing for the markets.

Karl Marx maintains that capitalist system would always experience its own crisis from time to time unless is faced with external shocks for instance the World War or instances witnessed in 1973 when OPEC made a decision to raise steeply prices of oil. The system is therefore aimed at creating too much wealth and many goods which ultimately surpass what the demand. It is at this juncture that the economic downturn sets in since there is need for self-balance of the system. The result is economic disarray characterized by

increased unemployment, general rise in prices, low public investment and degraded standard of living of the people. In summary Marx views all these two terms; that is overproduction and over evaluation.

The practicability of the theory lies upon two main elements which are the extent to which government taxes the profits which are channeled to the people in the form of welfare, health and benefits to the family that entails the level of spending. He asserts that some lines of business for instance airlines and military require huge amount of capital in order for one to venture hence these are left in the hands of fewer people with the financial muscles. Marxist theory therefore discusses the disruptions occasioned by the overproduction and over evaluation that causes an imbalance in the economy.

### **2.2.2 Minsky's Theory**

A post-Keynesian justification has been posed by Hyman Minsky which is most suitable for closed economies. According to him the fragility in finance is a typical characteristic that is found in any capitalistic economy. In advancing his exploration he put forth three approaches companies may use to finance themselves depending on their degree to tolerate risks. These included hedge financing where income flows meet financial obligations for every instance thereby covering both the interest and the principal. Secondly, in speculative finance firms have no option but to debts rolled over since inflows only cover interest cost. The last approach is Ponzi finance where inflows not only fail to cover interest but also principal hence a firm is forced to sell its assets in order to service its debt. The expectation advanced is that either the market value of assets or income will have raised enough to pay off interest and principal.

If markets are seen to achieve stability or become confident then that is when they become even riskier with the deceitful hope of investors trying to extrapolate stability to be witnessed in the future. The business cycle move hand in hand with the financial fragility since after recession many firms do loose much of their finance and resorts to hedging. For more investments to be carried more loans are supplied with the lenders

tending to think that they will receive back all the finances they lent. This makes them to lend even without putting much considerations to have the loans guaranteed. The resultant is a financial crisis since firms not only have cash to pay dividends but also lack the ability to meet its financial obligations.

### **2.2.3 Herding Models and Learning Models Theory**

Several types of models have been established where asset values can spring unusually as investors stare trying to learn from one another. Few purchasers of assets entice others to purchase as well notwithstanding the true value of the purchased assets will increase but because these investors tend to believe that the true value is higher. For these models an assumption is made that the investors are fully rational save for the fact that they have incomplete information of the state of economy. The fact that a proportion of the investors purchase assets confirms that they possess to some little extent positive information concerning that asset in question. Though considered rational decision it has occasionally been mistaken to mean asset values would increase but would eventually results into a crash as the initial investors may have mistaken the move. The models on herding are often based on based science of complexity that basically asserts that it is the internal structures and not the external ones that are responsible for the crashes.

The adaptive learning models assume that investors are not perfectly rational since they base their reasoning on current experience. They believe that if prices of selected assets are seen to be increasing for some time then the same would always rise in the near future and this would increase the tendency to purchase and hence upsurge in prices. On the same vein if there is few decline in prices, there is observed tendency for downward price spiral hence a large fluctuation of prices is witnessed.

Herding models and learning models theory therefore explores the possibility of price fluctuations that would generally result in a financial crisis making payment of dividends an impossibility.

## **2.3 Determinants of Dividend Payout Policies**

Company's profitability, liquidity, financial leverage levels are among key determinants of dividend payout policies.

### **2.3.1 Company's Profitability**

Dividends get paid from the profits making it unmanageable for a loss-making firm to continually pay dividends arising from profits that had been retained earlier on in the past years. In his view Lintner (1956) maintains that a firm's net income is a central aspect that influences payments of dividends. The theory of pecking order denotes that in the scenario the debt cost and equity are factored in, firms that make low profits would not be considering paying dividends. On the contrary, firms that have higher profits will possess have superior capability to pay dividends.

### **2.3.2 Liquidity**

In order for any firm to pronounce any cash dividends the same must be having sufficient cash at hand. Companies having lower cash at their disposal will not be able to embrace a generous plan of paying dividends in cash. Payments of dividend are more influenced by inflows in cash. Brealey-Myers (2002), observed that top management cannot raise dividends unless they are hopeful of adequate cash inflows. For companies with low levels of working capital dividends would take other forms like bonus shares instead of cash.

### **2.3.3 Financial Leverage**

In the scenario where a company gets debt financing it has an outstanding responsibility to pay both the interest and the capital it has borrowed as the inability to service the same can result into the company becoming bankrupt and insolvency could be a consequence as well. Companies with higher debt level have a high risk to pay little or no dividends since these obligations must be met first as lenders have higher preference to

shareholders. These firms must therefore sustain their internal cash inflows to honor such obligations.

## **2.4 Empirical Literature Review**

Studies carried out in United States showed that the propensity for dividends cuts amplified among United States firms between 2008 and 2009 as a result of low cash ratios due the crisis. In other studies, it was observed that twenty three percent of those paying dividends in the Central and Eastern European (CE&E) stopped dividend outlays during financial crisis of 2008 and 2009.

Moreover other evidences that are on the contrary show that payments of dividends payments did increase as firms are financial crisis. For the United Kingdom, Philip, Zhang and Kuo (2013) discovered that dividend payments during these periods were positive since a sizable upward tendency was manifested in the period. The desire of firms to try and signal superficial state of the economic hand financial health manifested itself as the firms tried to boost the confidence of financiers. Regardless of the enormous lack of profit making by banks in Europe UK and US, Acharya, Gujral, and Shin (2009) observed that some sampled banks managed dividends payments all through the crisis.

Locally a number of studies have been carried out been done. A study by Calictus (2013) on what determines dividend payout by agricultural firms listed at the NSE showed a positive correlation between dividend payout profitability and liquidity He found a negative relationship on firm's growth, size and leverage.

A study about the effect of dividend policy on the value of the firm conducted on of all the firms quoted at the NSE found on average that there was a significant correlation between the dividend payout ratio and the value of the firm. Other studies have shown that there is no correlation between dividend payout policies and financial crisis as the crisis could be on a short period hence could mislead investors.

Felistas Wanjiru (2015) in her study about the effect of dividend payout ratio on firms performance on its financials at Nairobi Securities Exchange established existence of relationship on dividend payout and a firm's financial performance of the 33 listed companies she studied.

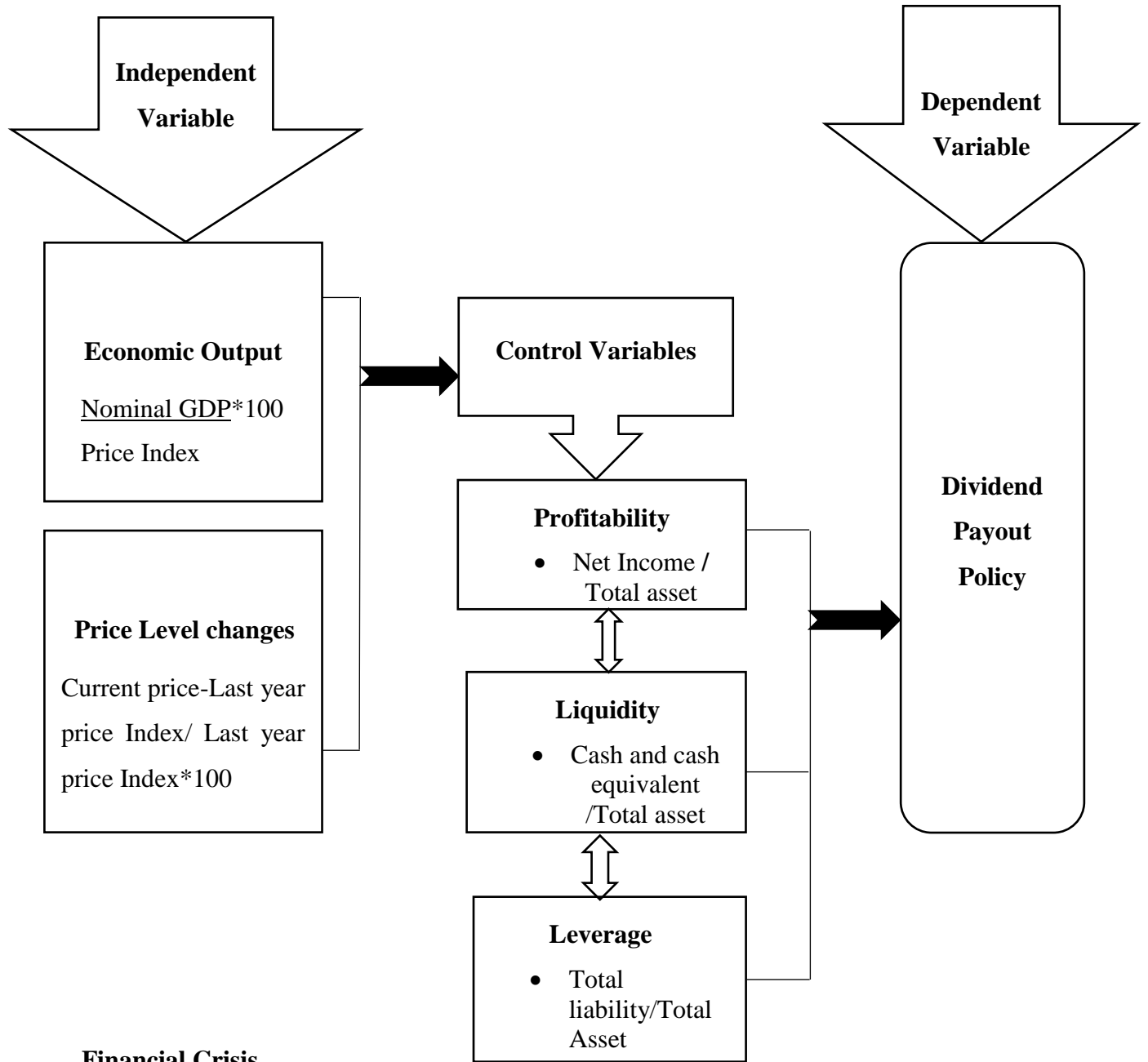
Thiga (2011) conducted a research on the relationship exhibited on changes of dividend and succeeding period changes in earning for Saccos in Kenya. In applying descriptive survey to carry out the research she established that there is a positive relationship. From the foregoing it is evident that there lies a research gap on studies in Kenya relating to effects of financial crisis on dividend payout policies that this proposal seeks to address.

It is apparent that the studies affirming that financial crisis affect dividend payout policies have not conclusively established if this affects the whole industries in an economy. Likewise the studies put forth that financial crisis do not result in dividend cuts have been critiqued by scholars who maintain that financial crisis have no impact on dividend payout policies. This study seeks to establish what the situation was for the Kenyan companies as the earlier studies seem not to have a common ground.

## **2.5 Conceptual Framework**

The aim of carrying out the study is to establish if there exist a correlation between the variables of two types; namely dependent and independent variables.





**Financial Crisis**

**Figure 2.1: Conceptual Framework**

Source: Authors Construct (2017)

## **2.6 Summary of Literature Review**

In establishing the whether there exist a relationship between a crisis and the dividend policy of firms, Campello, Graham & Harvey (2009) came up with a survey paper detailing expenditures by corporates while dealing with financial constraints that occurred in 2008.the conclusion of their study showed that firms that were constrained during the period of crisis averagely made a plan to radically lower employment by eleven percent. Spending on technology by twenty two percent, investments on capital by a mere nine percent, expenditures on marketing by 33 percent and dividend payments by a whopping fourteen percent thereby showing the impact of financial crisis.

Likewise firms that were not constrained planned the cuts and were on average, considerably lower. The Europe as well as Asian economies exhibited similar pattern since firms decided to build on cash reserves as a similar patterns are found. Evidence is found on the view that financially constrained firms build cash reserves as a cushion to credit tremors. It also witnessed the development of attractive opportunities for investment opportunities as a result of the much effort in required in getting external financing.

Some firms as a result of tight credit in the market were forced to sell off assets in order to get cash. Larger firms had huge cuts on expenditures relating to technology whereas smaller companies cut spending on capital investments and marketing expenditures albeit to preserve some cash. Speculative firms actually made a plan to cut expenditures in all divisions whereas investment oriented companies had a similar trend but only to a very insignificant proportion. On the basis of paying dividends financially constrained companies paid very meagre dividends while those not constrained almost paid the same dividends like in period before crisis. The study differs from initial ones conducted since it will apply hard financial data to back or reject the hypothesis.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Outlined is the method to be applied in carrying out the study. This chapter presents the all-inclusive methodological approach that was employed in so as to meet the objectives of the study as outlined in the introduction of the study. The chapter is divided into research design, population, sample design, collection of data and analysis of data.

#### **3.2 Research Design**

Descriptive design was employed to conduct a study on the effect of financial crisis on the dividend payout policies of commercial and services companies listed at NSE. The design has been necessitated as the study sought to establish the relationship between two variables. Secondary data was relied upon since the research is quantitative in nature and this data will be gotten from NSE and firms' financial reports (Mugenda & Mugenda, 2003).

#### **3.3 Population**

All the listed firms that fall under commercial and services quoted in the Nairobi Securities Exchange (Appendix I) would be studied as the desired population. The shares of quoted firms in this situation can be transferred freely from an individual to another as they have floated a portion to the public of the share capital and is available for sale at the NSE.

#### **3.4 Data Collection**

The study used data from secondary sources. The data were majorly obtained from the Security exchange handbooks as well as the published data of financial statements from the time the firms were listed. For the purpose of the study the data was in the form of income statement, statement of financial position and cash flow statements.

The data covered nine years covering the years 2007-2015 for listed firms under the category under study.

### **3.5 Data Analysis**

To determine the relationship between financial crisis and dividend payout policies multiple regression analysis was employed. The gathered information from secondary sources undergone sorting, coding and then was fed into the Stata software for production of descriptive statistics and inferential statistics. Generalizations as well as inferences of the study were made based on the generated information from the software.

#### **3.5.1 Analytical Model**

The multiple regression model took the form herein and to be incorporated in the study a control variable which though not captured in the dividend payout policy affects the dividend policy.

The major regression formula that was employed in this study is:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \varepsilon$$

Where:

Y= Dividend Payout Policy measured by Dividend Payout Ratio= Cash Dividend/ Net profit

X1 = Economic output (Real GDP) –  $\frac{\text{Nominal GDP}}{\text{Price Index}} * 100$

X2 = Inflation –  $\frac{\text{Current price} - \text{Last year price Index}}{\text{Last year price Index}} * 100$

X3 = Profitability – Net Income / Total asset.

X4 = Liquidity – Cash and cash equivalent / Total asset

X5 = Leverage – Total liability/Total Asset

$\alpha$  = the constant term

$\varepsilon$  = the error term for unexplained variations with zero mean, constant variance and distributed normally

$\beta$  = coefficient to measure how sensitive a unit change of the dependent variable is to predictor variable.

## CHAPTER FOUR

### PRESENTATION AND DISCUSSION OF RESULTS

#### 4.1 Introduction

This chapter provided the presentation of the findings and discussions. The findings are presented in conformity with the objectives of the study. Descriptive statistics, inferential statistics and trend analysis was conducted upon which the results were presented in form of tables, figures and line graphs.

#### 4.2 Diagnostic Tests

##### 4.2.1 Multicollinearity

Multicollinearity, according to William *et al.* (2013), refers to the existence of correlations between the predictor variables. Multicollinearity tends to inflate the standard errors and confidence intervals resulting in unstable estimates for the coefficients of individual predictors. Multicollinearity was assessed in this study using the variance inflation factors (VIF).

**Table 4.1 Multicollinearity results using VIF**

Variable	VIF	1/VIF
Real GDP	2.26	0.442598
Inflation	2.06	0.485644
Profitability	2.01	0.498040
Liquidity	1.87	0.533539
Leverage	2.05	0.453637
Dividend Payout Ratio	1.93	0.395968
Average	2.03	

The result in the Table above show variance inflation factors results and was established to be 2.03 that is less than 10 and hence according to Field (2009) this shows there is no Multicollinearity. Field (2009) maintains that VIF values that are excess of 10 is an indicator that there is Multicollinearity presence.

#### 4.3 Descriptive Analysis

Descriptive statistics gives a presentation of the mean, maximum and minimum values of variables applied together with their standard deviations in this study. The Table 4.2

shows the variables descriptive statistics applied in the study. Descriptive analysis for all the variables was obtained using SPSS software for the period 2016. Dividend Payout Policy measured by Dividend Payout Ratio had mean of 34.01667 and standard deviation of 28.54467. Real GDP had a mean of ksh 4.63E+10 with a standard deviation of 1.1E+10. Inflation had a mean of 10.2 with a standard deviation of 6.322595 whereas profitability had a mean of -1.86616 and a standard deviation of 16.03028. Further, liquidity had a mean of 1.378865 with a standard deviation of 0.720477. Finally, leverage had a mean of 0.338338 and a standard deviation of 0.122683.

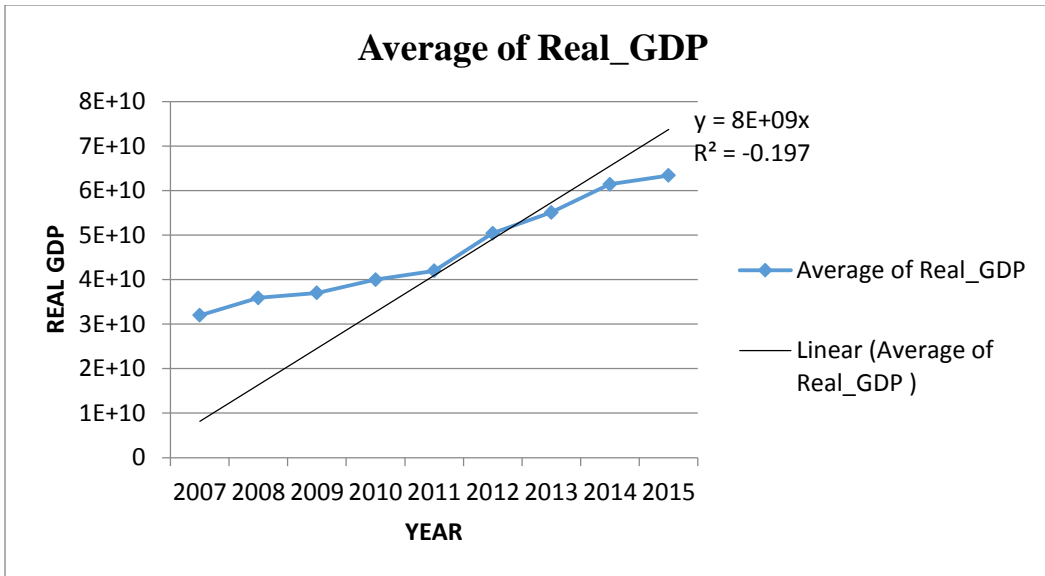
**Table 4.2: Descriptive Statistics**

<b>Variable</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Real GDP	72	3.2E+10	6.34E+10	4.63E+10	1.1E+10
Inflation	72	4.0	26.2	10.2	6.322595
Profitability	72	-135.978	0.235104	-1.86616	16.03028
Liquidity	72	0.31	3.6	1.378865	0.720477
Leverage	72	0.123006	0.821921	0.338338	0.122683
Dividend Payout Ratio	72	-11.31	167.95	34.01667	28.54467

#### **4.4 Trend Analysis**

##### **4.4.1 Real GDP**

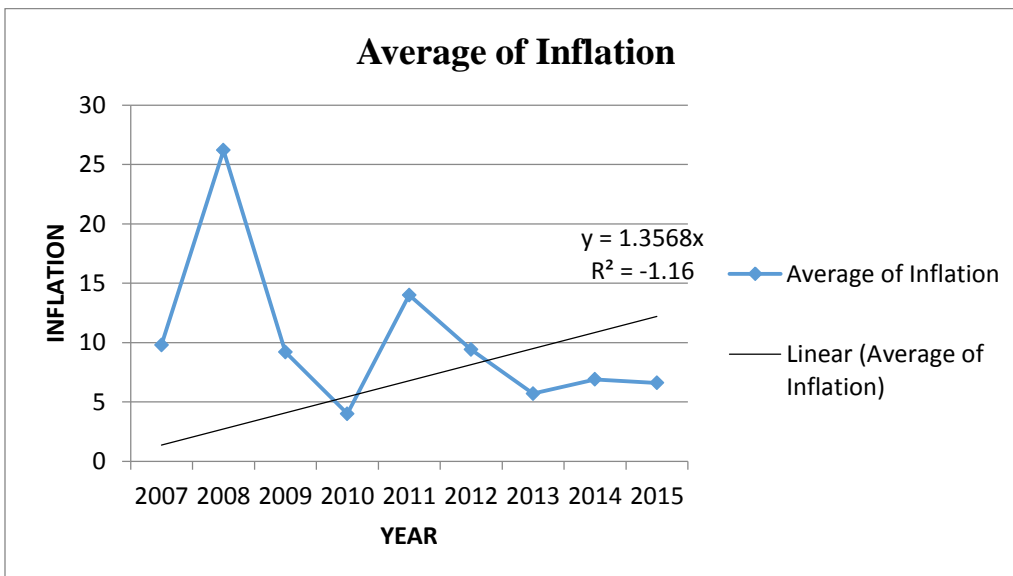
Figure 4.1 indicates the general trend of real GDP for the years 2007 to 2015. The trend line shows that real GDP has been increasing steadily from the year 2007 to 2015. The trend line exhibits that the real GDP has been growing over the years.



**Figure 4.1: Real GDP**

#### 4.4.2 Inflation

Figure 4.2 indicates the general trend of inflation for the years 2007 to 2015. The trend line shows that inflation has been rising and falling steadily from the year 2007 to 2015. Rate of inflation reached highest peak in 2007/2008. The trend line shows that inflation has been varying across the years.



**Figure 4.2: Inflation**

### 4.4.3 Profitability

Profitability was measured as ratio of revenue after tax to total assets. Figure 4.2 indicates the general trend of profitability of commercial and service firms listed at Nairobi Securities Exchange for the years 2007 to 2015. The trend line shows that profitability for some of the commercial and service firms listed at Nairobi Securities Exchange has been fluctuating. Average profitability was lowest in the year 2014.

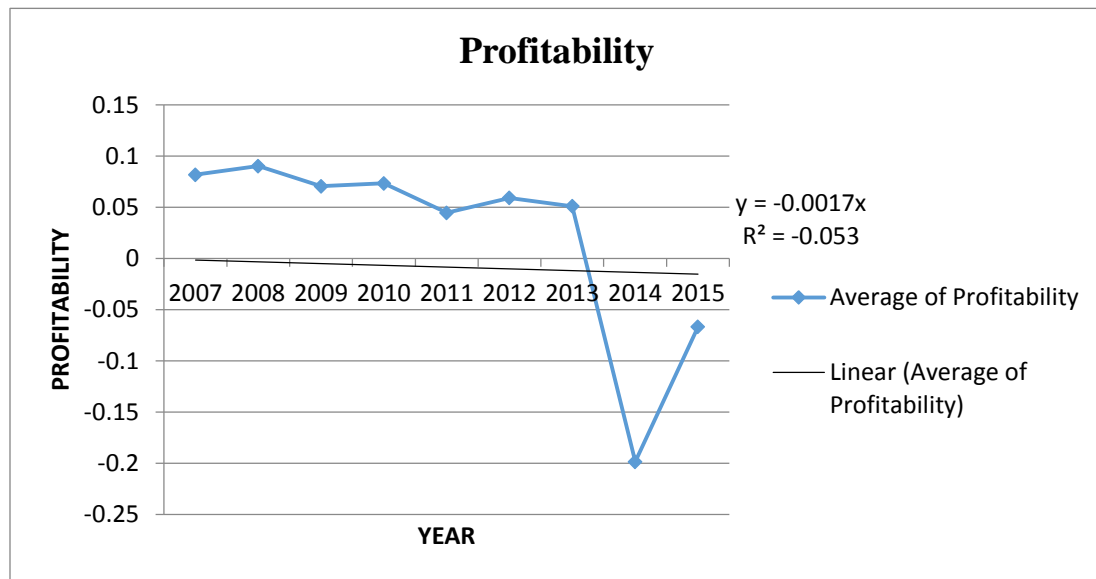
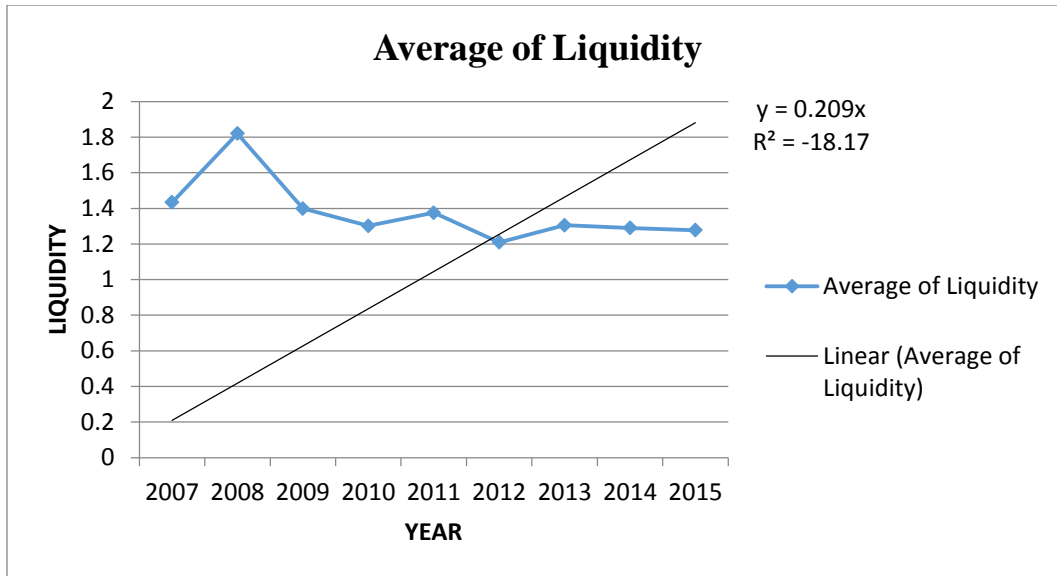


Figure 4.3: Profitability

### 4.4.4 Liquidity

Liquidity was measured as a ratio of current liabilities to current assets. Figure 4.4 indicates the general trend of liquidity of commercial and service firms listed at Nairobi Securities Exchange for the years 2007 to 2015. The trend line shows that average liquidity for the commercial and service firms listed at Nairobi Securities Exchange has been fluctuating. Average liquidity was highest in the year 2008 and lowest in 2012.

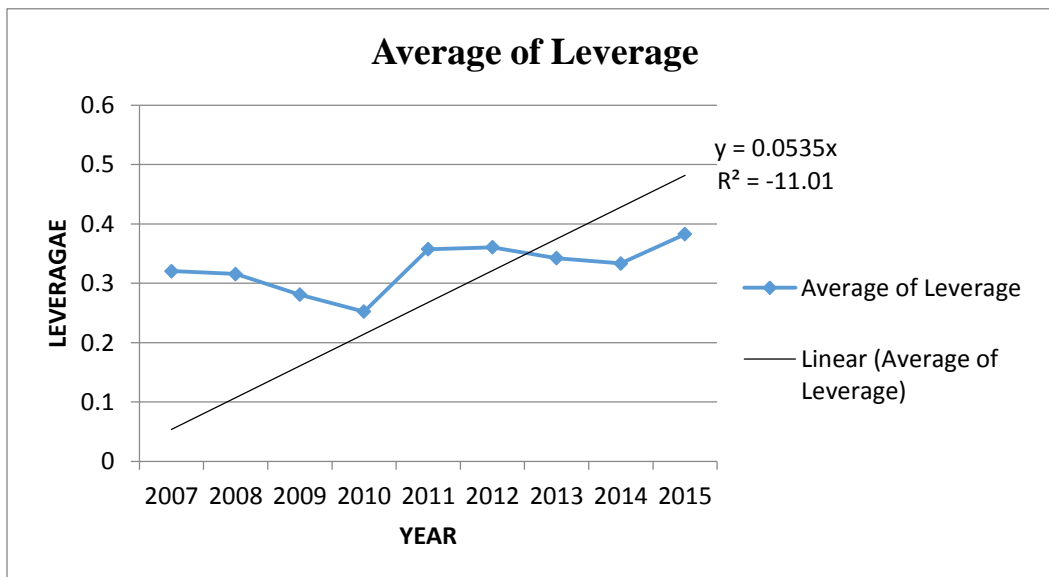




**Figure 4.4: Liquidity**

#### 4.4.5 Leverage

Firms leverage was measured as a ratio of the total liabilities to total assets. Figure 4.5 indicates the general trend of leverage of commercial and service firms listed at Nairobi Securities Exchange for the years 2007 to 2015. The trend line shows that average leverage has been fluctuating.



**Figure 4.5: Leverage**

#### 4.4.6 Dividend Payout Ratio

Dividend pay-out ratio was measured as a ratio of the dividend per share to earnings per share. Figure 4.6 indicates the general trend of liquidity of commercial and service firms listed at Nairobi Securities Exchange for the years 2007 to 2015. The trend line shows that average payout ratio for the commercial and service firms listed at Nairobi Securities Exchange has been fluctuating. Average dividend payout was highest in the year 2014.

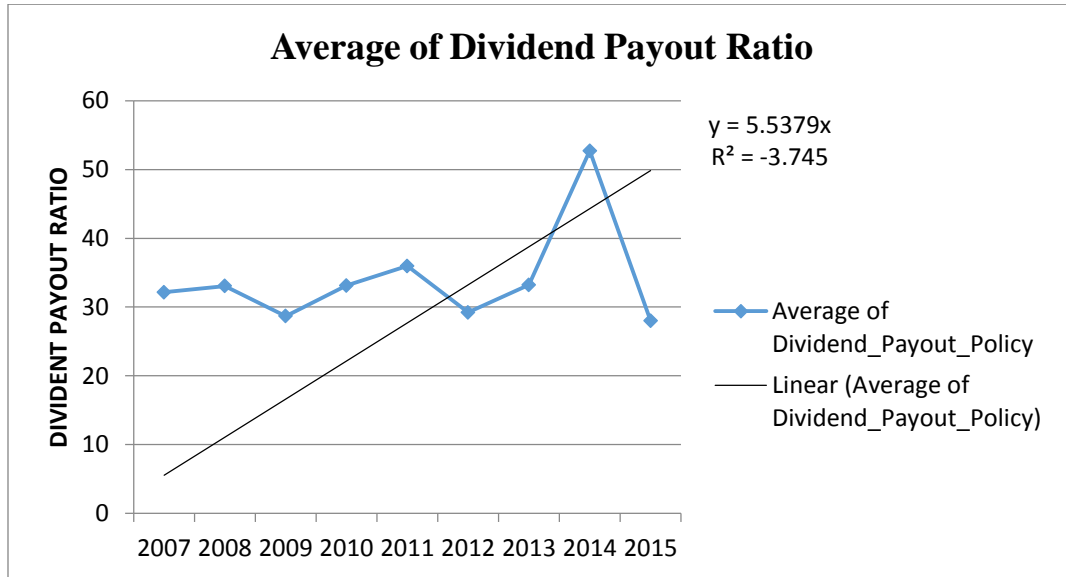


Figure 4.6: Dividend payout ratio

#### 4.5 Correlation Analysis

Analysis of correlation is used to establish whether there exists a relationship between two variables that lies between (-) strong negative correlation and (+) perfect positive correlation. Pearson correlation was employed to determine the level of association between the financial crisis and dividend payout policy of commercial and service firms listed at NSE.

The study found out that there was a positive and statistically significant correlation ( $r=.792$ ,  $p = .000$ ) between real GDP and dividend payout ratio. The study also found out existence of negative and significant correlation between inflation and dividend payout ratio as evidenced by ( $r = -.617$ ,  $p = .000$ ). Profitability was found to have a positive and

significant association with dividend payout ratio of commercial and service firms listed at Nairobi Securities Exchange as evidenced by ( $r = .432, p = .000$ ). Liquidity was found to have a strong positive and significant association with dividend payout ratio as evidenced by ( $r=.901, p = .000$ ). Finally, leverage was found to have a negative and significant association with dividend payout ratio as evidenced by ( $r = -.817, p = .000$ ). Analysis of correlation among the independent variables also revealed that some of the independent variables had a strong association which can cause Multicollinearity. The rule of thumb is that anytime the correlation coefficient exceeds 0.7, then Multicollinearity is said to occur.

**Table 4.4: Correlation Analysis**

Variable		Real GDP	Inflation	Profitability	Liquidity	Leverage	Dividend Payout Ratio
Real GDP	Pearson Correlation	1	-.811**	.293*	.963**	-.902**	.792**
	Sig. (2-tailed)		0.000	0.012	0.000	0.000	0.000
Inflation	Pearson Correlation	-.811**	1	-.377**	.799**	.845**	-.617**
	Sig. (2-tailed)	0.000		0.001	0.000	0.000	0.000
Profitability	Pearson Correlation	.293*	-.377**	1	.344**	-.591**	.432**
	Sig. (2-tailed)	0.012	0.001		0.003	0.000	0.000
Liquidity	Pearson Correlation	.963**	-.799**	.344**	1	-.916**	.901**
	Sig. (2-tailed)	0.000	0.000	0.003		0.000	0.000
Leverage	Pearson Correlation	-.902**	.845**	-.591**	.916**	1	-.817**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000		0.000
Dividend Payout Ratio	Pearson Correlation	.792**	-.617**	.432**	.901**	-.817**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	

**Source: Research Findings (2017).**

#### 4.6 Regression Analysis

Dividend payout policy of Commercial and Service firms listed at Nairobi Securities Exchange was regressed against real GDP, inflation, profitability, liquidity and leverage. The regression analysis was conducted at 5% significance level. The study obtained the model summary statistics as shown in table 4.5.

**Table 4.5: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.956a	0.914	0.907	8.688924

**Source: Research Findings (2017)**

In table 4.5, R squared, is the coefficient of determination indicates the deviations in the response variable that is as a result of changes in the predictor variables. From the outcome in table 4.5, the value of R square was 0.914, indicating that 91.4 percent of the deviations of dividend payout policy of commercial and service firms listed at Nairobi Securities Exchange are caused by changes real GDP, inflation, profitability, liquidity and leverage. Other variables not included in the model justify for 8.6 percent of the variations in dividend payout policy. Also, the results revealed that there exists a strong relationship among the selected independent variables and dividend payout policy as shown by the correlation coefficient (R) equal to 0.914. Figure 4.6 shows the ANOVA results of the study.

**Table 4.6: Analysis of Variance**

Model	Indicator	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	52867.82	5	10573.57	140.052	.000b
	Residual	4982.829	66	75.497		
	Total	57850.65	71			

**Source: Research findings (2017)**

The significance value is 0.000 which is less than  $p=0.05$ . This implies that the model was statistically significant in predicting how real GDP, inflation, profitability, liquidity and leverage affects dividend payout policy of commercial and service firms listed at

Nairobi Securities Exchange. The F value derived indicates that the data used was linear and therefore can be used for regression analysis.

The researcher used t-test to determine the significance of each individual variable used in this study as a predictor of dividend payout policy of commercial and service firms listed at Nairobi Securities Exchange. The p-value under sig. column was used as an indicator of the relationship significance between the dependent and the independent variables. At 95% confidence level, a p-value that is less than 0.05 was interpreted as a measure of statistical significance. As such, a p-value above 0.05 shows a statistically insignificant relationship between the dependent and the independent variables. The table 4.7 shows the regression results of the model.

**Table 4.7: Model Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2420.495	451.353		5.363	.000
Log of Real GDP	234.789	42.376	.842	5.541	.000
Inflation	-.957	.321	.212	2.986	.004
Profitability	.236	.108	.141	2.193	.002
Liquidity	74.071	5.938	1.870	12.474	.000
Leverage	-9.443	38.291	-.041	-.247	.006

**Source: Research Findings (2017)**

From the above results, it is clear that real GDP exhibits positive and statistically significant relationship with dividend payout policy of commercial and service firms listed at Nairobi Securities Exchange ( $r = 234.789$ ,  $p = .000$ ), inflation shows a negative and statistically significant relationship with dividend payout policy of commercial and service firms ( $r = -.957$ ,  $p = .004$ ) while profitability has positive and statistically significant relationship with dividend payout policy of commercial and service firms listed at Nairobi Securities Exchange ( $r = .236$ ,  $p = .002$ ). Further, regression results showed that liquidity has positive and statistically significant relationship with dividend

payout policy of commercial and service firms ( $r = 74.071$ ,  $p = .000$ ). Finally, regression results showed that leverage exhibits a negative and statistically significant relationship with dividend payout policy of commercial and service firms listed at Nairobi Securities Exchange ( $r = -9.443$ ,  $p = .006$ ).

The following regression equation was estimated:

$$Y = 2420.495 + 234.789X_1 - .957X_2 + .2368X_3 + 74.071X_4 - 9.443X_5$$

Where,

Y = Dividend payout policy of commercial and service firms listed at NSE

X<sub>1</sub> = Real GDP

X<sub>2</sub> = Inflation

X<sub>3</sub> = Profitability

X<sub>4</sub> = Liquidity

X<sub>5</sub> = Leverage

On the estimated regression model above, the constant = 2420.495 shows that if selected dependent variables (real GDP, inflation, profitability, liquidity and leverage) are rated zero, dividend payout policy of commercial and service firms would be 2420.495. Therefore, a unit increase in real GDP would lead to an increase in dividend payout policy of commercial and service firms by 234.789 units. Moreover a unit increase in inflation would lead to a decline in dividend payout policy of commercial and service firms by -.957 units, a unit increase in profitability would lead to an increase in dividend payout policy of commercial and service firms by .2368 units. Further, a unit increase in liquidity would lead to an increase in dividend payout policy of commercial and service by 74.071 units. Finally, a unit increase in leverage would result to a decline in dividend payout policy of commercial and service firms by - 9.443 units.

#### **4.7 Discussion of Research Findings**

The study sought to establish the effect of a financial crisis on the dividend payout policy of Commercial and Service firms listed at Nairobi Securities Exchange. Independent variables for this study were real GDP, inflation, profitability, liquidity and leverage. The effect of each of the independent variable on the dependent variable was analyzed in terms of direction and strength.

The Pearson correlation coefficients between the variables revealed that a positive and statistically significant correlation exists between real GDP and dividend payout policy of Commercial and Service firms that are listed at Nairobi Securities Exchange. The study also showed that there exist a negative relationship between inflation and dividend payout policy of Commercial and Service firms while the relationship of profitability and dividend payout policy of Commercial and Service firms was found to have a positive and significant relationship. Further, results showed that that there exist positive relationship between liquidity and dividend payout policy of Commercial and Service firms while the relationship of leverage and dividend payout policy of Commercial and Service firms was found to have a negative and significant relationship.

The model summary revealed that the independent variables: real GDP, inflation, profitability, liquidity and leverage explains 91.4% of changes in the dependent variable as indicated by the value of  $R^2$  which implies that there are other factors not included in this model that account for 8.6% of changes in dividend payout policy of Commercial and Service firms. The model is fit at 95% level of confidence since the F-value is 140.052. This therefore confirms generally that the multiple regression model is statistically significant, as it is a suitable prediction model for explaining how the selected independent variables affects dividend payout policy of Commercial and Service firms listed at Nairobi Securities Exchange.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter summarizes the findings of the previous chapter, the conclusion and the limitations encountered during the study. This chapter also highlights the policy recommendations that policy makers can implement to achieve the expected dividend payout policies. Lastly the chapter presents suggestions for further research which can be useful by future researchers.

#### **5.2 Summary of the Findings**

The study sought to establish the effect of financial crisis on the dividend payout policy of commercial and service firms listed at Nairobi Securities Exchange. The independent variables for the study were real GDP, inflation, profitability, liquidity and leverage. The study employed descriptive research design. Research data were obtained from majorly from Nairobi Securities Exchange (NSE) annual reports for commercial and service firms' financial statements. The results were analyzed using Stata software. The study used annual financial reports data for 8 commercial and service firms listed at Nairobi Securities Exchange since the years 2007-2015.

From the results of correlation analysis, there exist a positive and statistically significant correlation between real GDP and dividend payout ratio. The study also found out that there exists negative and significant correlation between inflation and dividend payout ratio. Profitability was also found to exhibit a positive and significant association with dividend payout ratio of commercial and service firms listed at Nairobi Securities Exchange. Liquidity was found to have a strong positive and significant association with dividend payout ratio as evidenced by. Finally, leverage had a negative and significant association with dividend payout ratio.

The model summary revealed that the independent variables: real GDP, inflation, profitability, liquidity and leverage explains 91.4% of changes in the dependent variable as indicated by the value of  $R^2$  which implies that there are other factors not included in



this model that account for 8.6% of changes in dividend payout policy of Commercial and Service firms. The model is fit at 95% level of confidence since the F-value is 140.052. As a result this confirms that generally the multiple regression model is statistically significant, in that it is a suitable prediction model for explaining how the selected independent variables affects dividend payout policy of Commercial and Service firms listed at NSE.

Regression results presented that real GDP had a positive and statistically significant relationship with dividend payout policy of commercial and service firms listed at Nairobi Securities Exchange, inflation has negative, statistically significant relationship with dividend payout policy of commercial and service firms while profitability shows a positive and statistically significant relationship with dividend payout policy of commercial and service firms listed at Nairobi Securities Exchange. Further, regression results showed that liquidity has positive and statistically significant relationship with dividend payout policy of commercial and service firms. Finally, regression results showed that leverage portrays a negative and statistically significant relationship with dividend payout policy of commercial and service firms listed at Nairobi Securities Exchange.

### **5.3 Conclusion**

Based on the study findings, the study conclude that dividend payout policy of Commercial and Service firms is significantly affected by level of real GDP, inflation rate, profitability, liquidity and leverage. The study found that real GDP exhibited a positive and statistically significant relationship with dividend payout ratio of commercial and service firms listed at Nairobi Securities Exchange. Therefore, the study concludes that an increase in a unit growth of real GDP would lead to an increase in dividend payout ratio.

The study found that inflation had negative and statistically significant relationship with dividend payout ratio of commercial and service firms and therefore it is concluded that in an increase in inflation rate leads to a decline of dividend payout ratio. Profitability was found to have positive and statistically significant relationship with dividend payout

ratio and this means that an increase in the unit in profitability leads to an increase in dividend payout ratio of commercial and service firms listed at Nairobi Securities Exchange.

It was also concluded that liquidity had a positive and statistically significant relationship with dividend payout ratio of implying that a unit increase in liquidity would lead to an increase in dividend payout ratio of commercial and service firms listed at Nairobi Securities Exchange.

It was also concluded, leverage has a negative and statistically significant relationship with dividend payout ratio of commercial and service. A unit increase in leverage leads to a decline of dividend payout ratio of commercial and service firms listed at Nairobi Securities Exchange.

This study concludes that independent variables selected for this study real GDP, inflation, profitability, liquidity and leverage influence to a large extent the dividend payout ratio of commercial and service firms listed at Nairobi Securities Exchange. It is therefore sufficient to conclude that these variables significantly influence dividend payout ratio of commercial and service as shown by the p value in ANOVA summary. The predictor variables explain 91.4% of changes in dividend payout ratio of commercial and service listed at Nairobi Securities Exchange.

#### **5.4 Recommendations**

The study established that real GDP has a positive and statistically significant relationship with dividend payout ratio of commercial and service firms listed at Nairobi Securities Exchange. This study recommends growth of real GDP for favorable business environment.

The study found out existence of a negative and statistically significant relationship between inflation and dividend payout ratio of commercial and service firms listed at Nairobi Securities Exchange. This study recommends formulation of macroeconomic policies to curb inflation and maintained it at the recommended and favorable level.

Profitability also exhibited a positive and significant relationship with dividend payout ratio. This study recommends that commercial and service firms listed at Nairobi Securities Exchange should review their model of running their business in order to increase their level of profitability.

Liquidity was also found to have positive and statistically significant relationship with dividend payout ratio. It is recommended that commercial and service firms listed at Nairobi Securities Exchange should ensure that they do not suffer from liquidity problems by practicing recommended financial resource management practices.

Finally, it was found that leverage shows a negative and statistically significant relationship with dividend payout ratio of commercial and service firms listed at Nairobi Securities Exchange. It is recommended that prudent monetary policy and proactive fiscal policy be enacted to reduce firms' leverage through such measures as revitalization of stock assets, promotion of mergers and acquisitions, optimization of debt structure, carrying out debt-for-equity swap programs and development of equity financing.

### **5.5 Limitations of the Study**

Among limitations of the study is the quality of the data. It is difficult to conclude from this research whether the findings present the true facts about the situation. Some of the figures in the NSE annual reports differed significantly. The measures used may keep on varying from one year to another subject to prevailing economic and political condition in the country. In the study secondary data was utilized, which had already been obtained and was in the NSE reports, contrasting to the primary data which is first-hand information.

The researcher relied much on multiple linear regression model. Due to the shortcomings involved when using regression models such as erroneous and misleading results when the variable values change, the researcher cannot be able to generalize the findings with certainty. If more and more data is added to the functional regression model, the hypothesized relationship between two or more variables may not hold.

There are other factors affecting dividend payout policy that have not been included in the study.

### **5.6 Suggestions for Further Research**

This study established the effect of a financial crisis on the dividend payout policy of commercial and service firms listed at Nairobi Securities Exchange. Future research should involve studying effect of financial crisis on the dividend payout policy of other sectors listed at Nairobi Securities Exchange. The sectors include agriculture, banking, investment firms and automobiles.

The study was not exhaustive since there are other factors for instance market information affecting dividend payout policy of commercial and service firms listed at Nairobi Securities Exchange and this study recommends that further studies be conducted to incorporate market information as a variable.

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## APPENDICES

### Appendix I: Commercial and Services Firms Listed at NSE

1	Express Kenya Limited
2	Kenya Airways Limited
3	Longhorn Kenya Limited
4	Nation Media Group Limited
5	Scangroup Limited
6	Standard Group Limited
7	TPS Eastern Africa Limited (Serena Hotels)
8	Uchumi Supermarket Limited



## Appendix II: Data Collection

item	Year	Firm		Real GDP	Inflation	Profitability	Liquidity	Lev	DPR
1	2007	Express Limited	Kenya	31958195182	9.8	0.03628685	0.34	0.44536	11.6
2	2008	Express Limited	Kenya	35895153328	26.2	-	0.36	0.38583	17.8
3	2009	Express Limited	Kenya	37021512049	9.2	0.01155572	0.31	0.38474	23.6
4	2010	Express Limited	Kenya	39999659234	4	-	0.32	0.41734	9.45
5	2011	Express Limited	Kenya	41953433591	14	0.29875926	0.32	0.53401	23.2
6	2012	Express Limited	Kenya	50410164014	9.4	0.02628685	0.4	0.32584	6.9
7	2013	Express Limited	Kenya	55100780396	5.7	0.00047656	0.64	0.33544	15.7
8	2014	Express Limited	Kenya	61395415492	6.9	-	0.59	0.26488	11.5
9	2015	Express Limited	Kenya	63398041540	6.6	135.978266	1.13	0.21855	19.8
10	2007	Kenya Airways Limited	Airways	31958195182	9.8	0.03635381	1.215	0.25818	23.9
11	2008	Kenya Airways Limited	Airways	35895153328	26.2	0.05039073	1.52	0.18381	20.88
12	2009	Kenya Airways Limited	Airways	37021512049	9.2	-	0.91	0.28589	-11.31
13	2010	Kenya Airways Limited	Airways	39999659234	4	0.02777664	0.87	0.28091	22.68
14	2011	Kenya Airways Limited	Airways	41953433591	14	0.04493098	1.06	0.28211	19.57
15	2012	Kenya Airways Limited	Airways	50410164014	9.4	0.02143817	0.92	0.3068	22.52
16	2013	Kenya Airways Limited	Airways	55100780396	5.7	-	0.56	0.41437	21.59
17	2014	Kenya Airways Limited	Airways	61395415492	6.9	0.15467831	0.46	0.42888	24.6
18	2015	Kenya Airways Limited	Airways	63398041540	6.6	-	0.4	0.44292	19.9
19	2007	Longhorn Limited	Kenya	31958195182	9.8	0.11649017	2.27498	0.35888	39
20	2008	Longhorn Limited	Kenya	35895153328	26.2	0.18627657	2.51112	0.29049	45
21	2009	Longhorn Limited	Kenya	37021512049	9.2	0.04670377	2.03883	0.34166	58
22	2010	Longhorn Limited	Kenya	39999659234	4	0.04134034	1.9	0.3831	54
23	2011	Longhorn Limited	Kenya	41953433591	14	0.18001192	1.77	0.42027	69
24	2012	Longhorn Limited	Kenya	50410164014	9.4	-	1.12	0.60013	47
25	2013	Longhorn Limited	Kenya	55100780396	5.7	0.03395171	1.62	0.43671	49.83
26	2014	Longhorn Limited	Kenya	61395415492	6.9	0.13710277	1.75	0.41899	129.0

		Limited							3
27	2015	Longhorn Limited	Kenya	63398041540	6.6	0.10404021	1.5	0.44818	21.43
28	2007	Nation Media Group Limited		31958195182	9.8	0.1830408	1.99	0.30118	56
29	2008	Nation Media Group Limited		35895153328	26.2	0.19579374	1.85	0.3283	30.26
30	2009	Nation Media Group Limited		37021512049	9.2	0.17028787	2.13	0.26922	70.08
31	2010	Nation Media Group Limited		39999659234	4	0.19289798	1.99	0.32013	81.7
32	2011	Nation Media Group Limited		41953433591	14	0.13648583	2.31	0.28707	104.46
33	2012	Nation Media Group Limited		50410164014	9.4	0.23510405	2.25	0.30126	62.59
34	2013	Nation Media Group Limited		55100780396	5.7	0.2213523	2.43	0.27231	62.02
35	2014	Nation Media Group Limited		61395415492	6.9	0.20599784	2.37	0.26107	19.15
36	2015	Nation Media Group Limited		63398041540	6.6	0.17506124	2.1	0.28284	84.83
37	2007	Scangroup Limited		31958195182	9.8	0.09283371	05	0.47958	35
38	2008	Scangroup Limited		35895153328	26.2	0.08367583	98	0.449	39
39	2009	Scangroup Limited		37021512049	9.2	0.10199159	12	0.39839	28
40	2010	Scangroup Limited		39999659234	4	0.07997884	1.68	0.5533	25.63
41	2011	Scangroup Limited		41953433591	14	0.10731716	2.05	0.48705	21.88
42	2012	Scangroup Limited		50410164014	9.4	0.08696801	2.25	0.43337	26.62
43	2013	Scangroup Limited		55100780396	5.7	0.06522983	2.46	0.33424	18.23
44	2014	Scangroup Limited		61395415492	6.9	0.09026412	2.46	0.33423	30.29
45	2015	Scangroup Limited		63398041540	6.6	0.10200683	2.76	0.29502	14.89
46	2007	Standard Group Limited		31958195182	9.8	0.09710991	39	0.30373	29.6
47	2008	Standard Group Limited		35895153328	26.2	0.10654107	53	0.31465	28.16
48	2009	Standard Group Limited		37021512049	9.2	0.08767876	26	0.28328	13.91
49	2010	Standard Group Limited		39999659234	4	0.08462916	1.32	0.31327	13.24
50	2011	Standard Group Limited		41953433591	14	0.04195166	1.08	0.3401	0.000
51	2012	Standard Group Limited		50410164014	9.4	0.05235027	1.12	0.31949	0.000
52	2013	Standard Group Limited		55100780396	5.7	0.04580708	1.16	0.34366	21.57
53	2014	Standard Group Limited		61395415492	6.9	0.05376097	1.22	0.29815	18.53
54	2015	Standard Group Limited		63398041540	6.6	-	0.95	0.41033	17.7
55	2007	TPS Eastern Africa Limited	(Serena)	31958195182	9.8	0.04431951	1.385	0.13875	45.56

		Hotels)							
56	2008	TPS Eastern Africa Limited (Serena Hotels)	35895153328	26.2	0.03422731	1.23	0.15635	59.42	
57	2009	TPS Eastern Africa Limited (Serena Hotels)	37021512049	9.2	0.05441171	1.54	0.14122	34.76	
58	2010	TPS Eastern Africa Limited (Serena Hotels)	39999659234	4	0.04330941	1.41	0.13905	35.88	
59	2011	TPS Eastern Africa Limited (Serena Hotels)	41953433591	14	0.04690059	1.5	0.12301	31.28	
60	2012	TPS Eastern Africa Limited (Serena Hotels)	50410164014	9.4	0.03660525	0.89	0.15173	39.04	
61	2013	TPS Eastern Africa Limited (Serena Hotels)	55100780396	5.7	0.02795044	0.87	0.16225	54.53	
62	2014	TPS Eastern Africa Limited (Serena Hotels)	61395415492	6.9	0.01040098	0.8	0.17383	167.95	
63	2015	TPS Eastern Africa Limited (Serena Hotels)	63398041540	6.6	-	0.00893657	1.04	0.14127	24.03
64	2007	Uchumi Supermarket Limited	31958195182	9.8	0.04690059	0.85	0.27837	16.6	
65	2008	Uchumi Supermarket Limited	35895153328	26.2	0.09749121	3.6	0.41551	23.9	
66	2009	Uchumi Supermarket Limited	37021512049	9.2	0.1443918	0.92	0.14122	12.51	
67	2010	Uchumi Supermarket Limited	39999659234	4	0.13716442	0.92	0.41048	22.4	
68	2011	Uchumi Supermarket Limited	41953433591	14	0.09749121	0.91	0.38509	18.3	
69	2012	Uchumi Supermarket Limited	50410164014	9.4	0.04690059	0.72	0.44594	29.06	
70	2013	Uchumi Supermarket Limited	55100780396	5.7	0.06405452	0.7	0.43924	22.3	
71	2014	Uchumi Supermarket Limited	61395415492	6.9	0.05581644	0.67	0.4866	20.72	
72	2015	Uchumi Supermarket Limited	63398041540	6.6	-	0.54287948	0.34	0.82192	21.45