

**THE EFFECT OF CAPITAL STRUCTURE ON FINANCIAL
DISTRESS OF COMMERCIAL AND SERVICES COMPANIES
LISTED AT THE NAIROBI SECURITIES EXCHANGE KENYA**

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DECLARATION

This research project is my original work and has not been submitted for a degree in any other university.

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This research project has been presented for examinations with my approval as the university supervisor.

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DEDICATION

I dedicate this research project to my parents for the support and encouragement during this time.

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ABBREVIATIONS AND ACRONYMS

CS	Capital Structure
FP	Financial Performance
GDP	Gross Domestic Product
MMT	Modigliani-Miller Theory
NSE	Nairobi Securities Exchange
POT	Pecking- Order Theory
RE	Retained Earnings
ROA	return on asset
ROE	Return on Equity
ROI	Return on Investment
SPSS	Statistical Package for Social Sciences
TOT	Trade-Off Theory
USA	United States of America
NSE	Nairobi Stock Exchange
FD	Financial Distress
SD	Standard Deviation

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ABSTRACT

There is evidence of poor performance in the commercial and service establishments registered in the NSE leading to financial distress.. However, there are no deliberate moves by the stock markets to educate companies about the bearing that financial difficulty has on the results of firms in the stock market, causes or on ways of improving their profitability. Existing literature indicates that poor establishment of companies' capital structure is a likely cause of the observed financial distress as well as the subsequent poor performance in the stock market. However, there are few studies done to verify the specific association between capital structure and financial distress and the few that attempt to assess this have used the Altman Z score which does not consider the endogeneity of the variables which leads to biased results. Similarly, these studies present inconsistent findings. This research looked this gap using a different approach from the others as it narrows down specifically to financial distress and also uses the shumway hazard model as modified. The aim of the investigation was to confirm the effects of capital structure on the financial distress of commercial and services companies listed on the NSE. It applied a descriptive research design and used the eleven (11) firms listed under commercial and service category as its target population. Because the population data was readily available the study applied census, a non-probability method for sampling. Information and data was sourced from secondary sources and mainly from the Nairobi Stock Exchange reports. The research evaluated the data by use of quantitative approach to generate descriptive statistics and thereafter carried out inferential statistics. The conclusions made were that the variables had the following effects on financial distress of NSE listed commercial and services firm; business size has negative immaterial influence on probability of financial distress; profitability has positive unsubstantial influence on the possibility of financial distress, liquidity of a business had a negative significant effect on financial distress and positive effect to firm performance and if not monitored can lead to financial distress, and capital structure has a positive insignificant impact on probability of financial difficulty among these particular group of firms .

The study recommends that the managers of these firms should come up with policies that help to estimate the optimum levels of liquidity, debt, profitability and earnings growth to be sustained by the enterprise in order to ensure smooth running and long term sustainability of the company. The study also recommends for improvement of strategic decision making implemented by skilled and experienced professionals which will result to good returns due to sound and rational decision making for the firms; These firms should also match their debt amounts with their revenue volatility; and these firms should seek to employ more internal financing and less debt capital to fund their activities since employment of borrowed funds is a major recipe for corporate financial distress.

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CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Capital structure (CS) is generally defined as how a business institution funds its assets through its equity, its hybrid securities as well as its credit facilities (Wang et al., 2014). The idea simply implies an aggregate of all the loans and equity that function as sources of capital to a business enterprise. The development and the implementation of decisions surrounding CS are very crucial as they determine the company's vulnerability to financial distress (Villanueva, 2013). Financial distress is the condition in which a company cannot generate profits due to its inability to meet its obligatory bills and is at high risk of bankruptcy (Kollár, Král & Laco, 2016). It is therefore important for companies to pay particular attention when making capital structure decision; not only plan for the maximum utilization of the available resources but also to be flexible enough to easily adapt to the dynamic conditions.

The study was based on four theories: the Modigliani-Miller Theory (MMT), Trade-off Theory (TOT), the Pecking- order theory (POT) as well as Wreckers Theory of financial distress. According to Ahmeti and Prenaj (2015), Modigliani-Miller's theory put forward by Miller and Modigliani in 1958 justifies the existence, applicability, and relevance of the concept of CS. The TOT was similarly proposed by Modigliani and Miller in (1963) to assess the significance of bankruptcy costs (Ahmeti & Prenaj, 2015), (Serrasqueiro & Caetano, 2015). The theory provided a room for the existence of bankruptcy costs by asserting the benefits related to using debts in financing; such as the tax benefits and the bankruptcy costs. Serrasqueiro and Caetano (2015) describe the POT as originally proposed by Myers and Majluf in 1984 describes the order in which a firm uses its debts,

retained earnings, and equity in financing its operations. According to the theory, a firm first utilizes its retained income to fund its investments. However, when the retained income runs out, a firm further chooses to seek debts to finance its operations. If a company still realizes that it needs more sources of capital after pursuing debts, it issues equity as the last resort.

In Kenya, commercial and service establishments registered in the NSE have historically had their fair share of financial distress. A significant number of institutions such as Kenya Airways, Uchumi, Deacons and Nakumatt among many others have undergone financial distress within the past ten years. Maringa and Muturi (2016) observed several other companies to be struggling with their finances and are at the verge of closing down. The study sought to establish whether the distress could be avoided or detected before the actual collapse.

1.1.1 Capital Structure

Cole (2013) starts by defining structure as an assembly of various components. Therefore according to the work, CS refers to the assembling of various capitals from every possible kind of source to raise the long-term finances needed by the company. Panier, Pérez-González, and Villanueva (2013) simply put it as CS as the specific distribution of both equity and debts that constitutes the financial makeup of a business organization. Wang et al. (2014) describe it as how a business enterprise finances its growth and functioning using a various sources of money, such as debts and equity. As per the three meanings, it is apparent that CS is made up of the long-term sources of finances like

long-term credit facilities, debentures, as well as the preference share capital. Similarly, it includes the equity share capital which entails surpluses as well as reserves.

According to Wang et al. (2014), the CS of a given business organization is described by various aspects which comprise; the growth and expansion of the establishment, its size, kind of its operations, as well as, the trading and the leverage on equity. Similarly, other factors such as the firm's philosophy for retaining control, its investing needs, the flexibility of its CS, the flow of cash, floatation costs, legal needs, as well as its timing of matters and its legal needs also determine the capital structure of an organization. Villanueva (2013) maintains that those factors cannot be ranked because; not only are they important and influence capital structure at different levels, but also they are dynamic and are subject to change from time to time.

1.1.2 Financial Distress

Kostiuk, Afanasieva, and Lapina (2014) define FD (financial distress) as a state in which a business entity is not able to generate revenue due to its failure to meet its monetary obligation. ČÁMSKÁ (2013) regards it as a state in which a business organization is not able to either pay its lenders. The author further likens the condition to that which occurs when an establishment's leverage is high, and its revenue for each unit is too low and with a high breakeven point. The sales of such an enterprise are too susceptible to declines in the economy. Moreover, Kollár, Král, and Laco (2016) further explain that financial distress causes clients to discontinue placing orders, suppliers may not only impose interest fine on the unpaid loans but might also insist on payments to be made on

delivery. Similarly, lenders might refuse to extend more credit facilities, and competitors begin working to take the company's clients.

Kollár, Král, and Laco (2016) identifies poor profits, poor growth of sales, overdue debts, negative cash flow as well as employees turnovers, and client's back off as the major indicators of a company's financial distress. According to them, financially distressed companies struggle to pay its mandatory obligation within the agreed time. Similarly, it may be characterized by unmotivated and stressed employees, as they can perceive the possibility of bankruptcy that might make them lose their jobs. Similarly, Kostiuk, Afanasieva, and Lapina (2014) maintain that such companies might have debts that are higher than their timely income, and have negative cash flows. ČÁMSKÁ (2013) simply regards a firm's financial distress as its last stage to bankruptcy, and can only be salvaged either through cutting down costs or through the restructuring of credits.

1.1.3 Capital Structure and Financial Distress

Business organizations utilize equity and credits not only to attain their ideal capital structure but also to fund their functioning. Moreover, according to Villanueva (2013) firms that fund themselves with credit facility are viewed to be more valuable as they tend to reduce tax liabilities through the interest. However, Zeitun and Tian (2014) provide evidence to show that accumulating high levels of credit might not only heighten the risks to its shareholders but also increases the company's vulnerability to bankruptcy.

Zeitun and Tian's work suggest that bankruptcy results when a firm has exceedingly high credits than its equity. Kostiuk, Afanasieva, and Lapina (2014) describe bankruptcy as the formal word used to classify companies that need assistance in paying back their bills

and credits. According to the work, costs related to bankruptcy entails legal charges, which can water down the capital structure of an organization. The author further maintains that although bankruptcy is always the last option, it allows banks to have new beginnings whereas providing lenders and suppliers with some sort of repayment depending on the business concerns assets that can be liquidized.

1.1.4 Commercial and Services Companies Listed in Nairobi Securities Exchange

According to Kihooto, Omagwa, and Ronald (2016), the commercial and service sector accounts for more than half of the Kenyan GDP. The author further lists industries such as the real estate, retail, transport, and well as finance, education, public administration, liberal professions, information technologies and health. The sector stands out among the largest contributors of the GDP, and holding the highest number of employments among all the other sectors. The Nairobi Securities Exchange (NSE) has listed 11 companies that fall in the category of commercial and service sector (Appendix 1).

However, Maina and Sakwa (2017) observed the results of the sector in the Stock Securities Exchange market to have been poor in the recent past with a significant decrease each year. For instance the work records a 8.5 percent decrease in 2016, as well as a 7 percent decrease in 2017. Maina and Sakwa relates these declines to leaderships and managements that only focus of short term goals of attaining profits as opposed to the long-standing goals of maintaining the establishment's sustainability and wellbeing. Moreover, Maringa and Wachira (2016) observed the Kenyan stock market as inefficient in determining the financial distress-related causes of companies' performance declines in the financial market.

Most of the commercial and services companies in the NSE have funding structures that include both debt and equity. Some like uchumi, Nakumatt e.t.c have been seen to include a lot of debt in their CS i.e. short term and long term debts which has led to financial problems within the firms which shows that they are not aware of how critical CS decisions are to a firm and that these decisions can actually lead to FD and collapse of the enterprise.

1.2 Research Problem

Serfling (2016) identifies making decisions on the CS as the most difficult tasks in the firm's management process. The author regards capital structure-related decisions as to the most crucial, as they ultimately affect the financial performance of a business organization. Serfling further recommends taking necessary precautions in developing and implementing decisions on CS, to avoid occurrences of awkward situations.

The evidences of poor performance of the commercial and service establishments registered in the NSE are paramount. However, there are no deliberate moves by the stock markets to educate companies about the bearing of financial difficulty on FP in the stock market, causes or on ways of improving their profitability. Similarly, the implications of CS to an establishment's vulnerability to financial distress are vivid. Kihooto, Omagwa, and Ronald (2016) notes that managers of companies in the commercial and service sector tend to focus more on the short term profit-related goals over the long term needs for firms' wellbeing. Poor establishment of companies' capital structure is a likely cause of the observed financial distress as well as the subsequent poor performance in the stock market.

However, there are few studies done to verify the specific link between CS and FD and the few that attempt to assess this have used the Altman Z score which does not consider the endogeneity of the variables which leads to biased results.. The little studies that have been undertaken on this assess the bearing of CS on the FP of an organization. Similarly, these studies present inconsistent findings. Although others ascertained negative relationships between CS and FP, others found a positive relationship between the two variables. Muritala (2018) empirical assessment of CS on the performance of Nigerian business organizations found existence in the inconsistency on the bearing of CS on the financial functioning of an organization. Evidence presented by Chadha and Sharma (2015) on establishment performance and CS in India concluded total credit as having adverse negative consequences on the FP of a business organization. These results were supported by Vātavu (2015) on implications of CS to the FP of financial institutions registered in Rome which also found a negative correlation between high debts in the CS and establishment's FP. Despite these findings, studies such as Okiro, Aduda, and Omoro (2015) on the impacts of CS as well as corporate governance on FP of businesses within the East African region ascertained a positive link between high debts in companies' CS and their FP.

Similarly, few research studies done to assess the bearing of CS and FD on the commercial and service companies exist. The few studies concentrated on the bearing of CS on the FP of microfinance establishments and other allied sectors. Maina and Ishmail (2014) investigation on the CS and FP of financial institutions registered in the NSE ascertained a positive relation between capital structure and FP of microfinance institutions. Also, Mwangi, Makau, and Kosimbei (2014) investigation on effects of CS to

the performance of non-financial firms registered in the NSE limited their scope by exploring non-financial establishments. Kodongo, Mokoaleli-Mokoteli, and Maina(2015) on evidence on CS, firm value, as well as the profitability firms listed in Kenya found a positive link between CS and effectiveness. Though, this research is different from the others as it narrows down specifically to financial distress and also uses the Shumway(2001) hazard model as modified in Charalambakis,E., Espenlaub et al (2008) which factors in the endogeneity aspects of the variables. The investigation seeks to comprehensively examine the bearing of CS on financial difficulty. The study thus seeks to fill the gaps by answering the questions: the bearing of CS on financial distress among the commercial and services companies registered in NSE?

1.3 Research Objective

The aim of the investigation was to establish the effects of CS on the FD of commercial and services companies listed on the NSE.

1.4 Value of Study

This investigation hopes to bring to the attention of the administrators and owners the relevance of the concept of financial distress and its indicators. Similarly, the study provides research findings on the importance of decisions surrounding CS by enlightening them on ways through which an establishment's CS can surge its vulnerability to financial distress.

Secondly, the investigation sought to add to the already present knowledge, theory and practice on capital structures of business organization; by providing up-to-date empirical findings on this relationship. As a result, it contributes to other academic material that

might pioneers changes in the pedagogy, practices, and theory surrounding the formation of a company's capital structures. The study also provides a reference to future scholar and researchers who might be interested in this relationship.

To the relevant government agencies, the study provides up-to-date and useful research-based findings; that will inform their decision making, policy development, and management of commercial and Services Company.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This part presents a theoretical framework related to the concept of this investigation and also offers a review of works on CS and FD conducted by various authors previously. It embroils a theoretical review, determining factors of financial distress, empirical review, a conceptual framework, a summary of literature review and research gap.

2.2 Theoretical Foundation

This part presents a review of concepts pertinent to this research which gives an explanation of the link that exists between CS and FD. The three theories that guide this study include; Modigliani and Miller model, Trade-off theory, Pecking Order theory and wreckers theory.

2.2.1 Modigliani-Miller Theory

This paradigm was originally suggested by Modigliani and Miller (1958) and they postulated that a company's CS is immaterial to the worth accorded to that company, supposing faultless markets and nil firm deal charges (Ahmeti and Prenaj, 2015). In 1963, they demonstrated comprehensively the influence of enterprise revenues levies on the establishment's CS and also established the possibility of companies to escalate their debt usage patterns expecting to exploit the duty deductibility of interest. However, high amounts of debt financing commonly surges the likelihood of insolvency. It is also key to note that high levels of market symmetry may be experienced by the fact that the value of using debt financing is equal to high peril of bankruptcy owing to the great leverage of business entities. Staking and Babel (1995) supported this by presenting an argument

demonstrated their agreement with the hypothesis presented by Modigliani and Miller (Ahmeti & Prenaj, 2015).

In revision of the opinion they had presented earlier, Modigliani and Miller (1963) stated that duty welfares were the causes of the CS in companies. Tax- deductible outlay is the most important feature of tax. Establishment which pays taxes gets relatively offsetting interest duty- shield in terms of reduced taxes paid. Consequently, as Modigliani and Miller (1963) suggest businesses should spend equally considerable debt funding as possibly acceptable to attain leverage between the price and benefits of having debt.

2.2.2 The Trade-Off Theory

The pioneers of this paradigm were Modigliani and Miller (1963) even though it received extensive critics claiming that it was irrelevant in account of the market assumptions. The dominance of this theory on the literature of capital structure is quite clear and it states that the optimum financing mix of an establishment is ascertained by harmonizing the losses and gains of debt financing. They incorporated the impact of corporate taxes and relaxed the assumption on existence of arbitrage and suggested that making interests paid on debts tax deductible increases cash inflow for a levered company in form of interest tax savings which only means that the market worth of geared firms is substantial compared to firms that are not in situations such as permanent debt, constant cost of debt and static marginal tax rate (Ahmeti & Prenaj, 2015).

Jensen and Meckling (1976) further modified the concept by introducing the agency costs aspect where they stated that despite the fact that debts benefits a firm in some various ways, it also upsurges agency costs associated with it. The origin of agency costs is from

conflicts that exists between the principal and the agent, these may include; debt-holders, shareholders and the management team. The argument based on that is that conflicts may arise where managers of a firm may working to rather serve their interests instead of dedicating themselves to ensure the interests of the shareholders are represented and safeguarded to the maximum, such a situation may result into free cash flow wastage by perquisites and sub-optimal investments. Also, shareholders may also make wrong decisions by immersing their time and money on investment that are not worth it owing to their limited liability nature to the establishment which may result into losses and therefore conflicts. To ensure that losses and conflicts from such incidences are reduced, debt-holders consequently seek the services of professional analysts and make debts contracts, agreements and restrictions.

This paradigm is pertinent to this investigation as it gives a comprehensive insight of the importance debt financing in up surging the worth of the business entity by the tax deductibility aspect related to debts. Additionally, this theory introduces and gives an understanding of how agency costs works and the costs associated with them. This will help firms establish ways in which they can maximally mitigates agency costs and improve firm value. This theory also introduces financial distress costs and their effect on the concept of CS and points out how CS may adversely impinge on the establishment by surging the agency costs related to debt.

2.2.3 Pecking-Order Theory

This paradigm was first introduced by Myers and Majluf in 1984. It doesn't show any predefined optimum capital structure but instead it states that firms have varying

preference in utilizing retained earnings (REs) over external capital. In company leverage, this paradigm is among the most relevant literatures on CS and it is against the firm's ideology on having distinctive combination of internal as well as debt funding that minimizes the corporation costs of funds. It asserts that a company should set its priorities appropriately starting from the highest to the lowest and follow them in that order. This will help it to adequately mobilize its financing sources in order to decrease its costs related to information asymmetry, primarily it should choose REs followed by debt and then increasing equity as the last choice. This theory supports that retained earnings should be prioritized in financial company's projects that are long-term and when such funding's reach their exhaustion point or are no longer available, then the company can shift to debt and when its availability is no longer there the equity is issued (Myers, 1984).

The explanation of this paradigm stems from the existence of the information asymmetry where managers are assumed to understand their establishment risk, opportunities as well as project value than external stakeholders including capital markets. According to Myers and Majluf (1984), investors value less the stock of an establishment because of the inability of managers to convey information on the company prospects including the new investment opportunities identified. This in return makes executives who are thought to be fundamental with regards to establishment's information of funding their project with the REs that is readily obtainable. If the retained earnings are insufficient, executives will decide on debt capital instead of giving out equity stocks because they are underestimated in the capital markets. This asymmetric information effect hence favors use of debt over internal financing and shows management's confidence that the newly seen investment

prospect is gainful and the stock price is currently underestimated (Myers & Majluf, 1984).

2.2.4 Wreckers Theory of Financial Distress

This theory was established initially by Campbell, Hilscher and Szilagy (2005) they asserted that shares of distressed firms perform poorly than stocks of healthier firms. The theory tries to describe the gains that are lost due to FD by stakeholders (Kalckreuth, 2005).

As per Daniel, Hirshleifer, and Subrahmanyam, (1998); Fama, (1998) the authors explored the assumption that shares of financially distressed concerns continuously perform less than financially sound firms. This is because investors are known to pull out immediately they realize the firm is in financial problems an act referred to as wrecking. This occurs at a time when the firm is in dire need of funds.

This is similar to taking apart an old ship and salvaging the usable parts thus avoiding total loss in the future and the investors therefore only suffer the opportunity cost. (Kalckreuth, 2005).

2.3 Determinants of Financial Distress

FD could be determined through the following aspects; establishment profitability, leverage, establishment size as well as effectiveness as outlined below.

2.3.1 Firm Profitability

Alemu (2015) states that profitability is an establishment's capability to create profits and either maintain or increase its profitability rates through sales and investments on capital assets. Therefore, profits are referred to as excessive earnings in account of the expenses used by a company. Profitability ratios are a firm's measure for the gained profit attained and they involve; the portion of the gains of an establishment's apportioned to every common share (earning per share (EPS)), a measure of returned net gains as an amount of shareholders value (return on equity (ROE), return on investment (ROI), extent of efficiency the administration in revenues creation via the available assets (return on asset (ROA)).

According to Anwar (2014) appropriate corporate policies are a necessity for a distressed firm for it to be able to improve on its profitability rates and be able to uproot itself from the troubled situation. The negative impact of financial distress is quite significant in that it derails a firm's viability by linked costs (direct and indirect). Accrued debts contributes the greatest amount to indirect costs for firms in a troubled position whereas costs associated with legal actions, lost shares in the market and administrative costs contribute to direct costs in such firms. Aspects both within and outside the establishment impinges on the amount of profitability and whereas aspects within are particular to the firm, aspects outside generally impinges on every establishment. The commonly used metrics of profitability include ROA and ROE.

2.3.2 Firm Leverage

Kodongo, Mokoaleli-Mokoteli and Maina (2014) undertook a study that sought to find out the effect of financial leverage on firm value of firms listed in NSE, Kenya. The evaluation that covered the period 2002 – 2011 adopted debt equity ratio, aggregate debt to total assets ratio and long-term debt to equity ratio as proxies of leverage while Tobin's Q ratio was used to evaluate the business value. Upon controlling for the GDP growth, firm size, tangibility and growth in sales, the study found that financial leverage had zero impact on the Tobin's Q. This finding was in agreement with the pioneering CS irrelevance hypothesis postulated by Modigliani and Miller (1958).

Ogundipe, Idowu, Ogundipe (2012) whose study of firms listed in Nigerian Stocks Exchange revealed that employment of longer-maturity debt affords excess liquidity to the firms in terms of interest-tax savings which improves their corporate financial performance. Further, the finding attributed the positive relation between long-term debt funding and FD index among Italian and UK firms to the fact that firms normally employ long-term external funds to finance capital projects that are associated with long run profitability of the firm (Gupta, Srivastava, Sharma, 2014)

According to Cui, DeJong and Ponds (2011) leverage is defined as the amount amongst collective assets and the aggregate of the establishment which shows the extent to which the collective assets are financed using debt. When this proportion rises even with the slightest range, this only indicates that the firm involved is relying on the establishments on external financing owing financing and greater score being given to the establishment by finance initiators which has the effect of causing a financial difficulty to an

establishment. Aggregate liabilities to equity normally are employed in evaluation of leverage. Bliss and Gul (2012) reveals that some liabilities which may include financial debts as well as shares issued are as a result of funding, other obligations for instance operation levies, deferred returns, and annuity obligations as a result of transactions with suppliers, customers as well as workforce in undertaking activities.

Financing obligations are typically conducted in appropriate operating principal markets whereby issuers are the ones taking cost. In contrast, establishments will perhaps enhance the value in business as operations encompass managing raw materials as well as complete commodity markets that are not much higher compared to operations for capital. The typically employed metric of financial difficulty is gearing ratios which include (aggregate debt to assets as well as aggregate debt to equity ratios). Leverage affect financial distress negatively (Andrade and Kaplan, 2013).

Ariff, Hassan and Shamsheer (2008) postulate that traditional CS theory holding a reasonable amount of debt helps to lower the overall cost of capital hence increase firm worth. Once this optimal level of debt is surpassed cost of capital and financial risk associated with the firm increases and the financial worth of the firm decreases and the likelihood of FD becomes greater.

2.3.3 Firm size

The significance of the establishment's size in ascertaining whether a firm is distressed or not is quite crucial. This can be attributed to the capability of extensive firms to efficiently and effectively source their funds due to their capacity of impacting the interest rates which further increases their advantage.

Moreover, huge firms and companies have the capability to sustain their earnings even in harsh environment and hard times in comparison to smaller firms because of their high levels of retained earnings (Ooghe and Prijcker, 2013). More often, the size of the business is determined as an ordinary logarithm of the aggregate assets. Though, current works point out varied outcomes on the bearing of establishment size on financial distress. An investigation by Nyambura and Memba (2013) for instance encompassing the impact establishment aspects have on financial difficulty whereby establishment size was given consideration. The outcomes pointed out that establishment size was substantial in financial difficulty. In a conclusion by Yu (2016) he stated that establishment size did not substantially impinge on financial difficulty.

2.3.4 Firm Liquidity

Fahmi (2013) described liquidity as the ability of an organization or company to meet its short term obligations in time using its current assets and also ability to provide resources to meet the company's operations.

A company that is able to pay off its short term liabilities well will be able to reduce its probability of financial distress.

Liquidity can be estimated by use of current ratio, quick ratio and operating cash flow ratio. Quick ratio assesses a company's ability to satisfy its short term obligations with its current assets and does not include inventory in its current assets.

In this research current ratio was used to measure the firm's liquidity. Current ratio measures the enterprises' capability to meet its current liabilities using its current assets

(Brigham and Houston, 2001). If a firm has current assets that exceed its current liabilities it is considered to be in a liquid position.

2.4 Empirical Review

Pouraghajan and Malekian (2012) in their research sought to verify in what manner CS influences the profitability of establishments registered in the Tehran Stock Exchange. A sample of 400 listed establishments in the Tehran Stock Exchange was used in the study for 12 industrial groups from 2006-2010. FP of the registered establishments was evaluated by ROA and ROE. The findings from the study established existence of a positive link between asset tangibility, establishment size and growth opportunities as the determinants of FP. Establishment size had the most positive substantial relationship with ROE as well as ROA hence enhanced profitability of the firm. Asset tangibility also had a positive statistical relationship with an establishment's profitability when ROA as well as ROE are used as the measures. Additionally, growth opportunities bore a positive and substantial relation with an establishment's profitability when measured using ROA and ROE.

Chinaemerem and Anothy (2012) in their study sought to verify the bearing of CS on FP on 30 non-financial companies registered on the Nigerian Stock Exchange between the years 2004 and 2010. The independent variables were represented by asset tangibility whereas FP was evaluated using ROA and ROE. The findings indicated existence of a negative relation between a business entity's asset tangibility as well as ROA against hypothetical anticipations. The conclusion was that companies with the highest ratios of asset tangibility would experience derailed FP ratio in terms of ROA and ROE.

Alternatively, there existed a positive however substantial link between asset tangibility as well as ROE. The observed that the companies used for this research failed to effectively employ their tangible assets component in the aggregate asset prudently to enhance their FP.

Babalola (2013) conducted an investigation aimed at establishing how establishment size impinges on the FP of manufacturing establishments registered in the Nigerian Stock Exchange for the period of 2000-2009 where secondary data was analyzed for the firms between this periods. FP was evaluated by way of ROA whereas size of the firm was evaluated through total sales and total assets. The outcomes of this investigation suggested that size of an establishment was positively linked to FP with regard to ROA of Nigerian manufacturing establishments. This only indicates the sensitivity and importance of size in influencing the FP of Nigerian manufacturing establishments which depicts that huge firms have better financial performance than smaller firms.

Charalambakis,E., Espenlaub,S.,& Garret, I.(2008) did a study on the impact of FDon CS where they noted that previous research done on financial distress and leverage or capital structure had used methods like Altman Z score and ABI which did not factor the endogeneity between the variables in the regression equation and therefore they developed a modified formula of the shumway hazard model which was adopted while conducting this particular research.

Campbell, John, Hilscher and Jan (2013) in their study aimed at establishing monetary distress and cost effectiveness of firms in distress in USA. Using a corporate failure model they were able to predict the probability of future financial distress through

accounting and application of market-based measures. They used a computation of FD to determine the cost effectiveness of distressed shares between the years 1981-2008. The outcomes of this study point out that distressed shares had bigger variable proceeds and that such shares have a tendency to underperform secure shares by more now and then of greater market instability and risk avoidance. Despite the fact these shares are associated with significant risks, investors in distressed stocks were not awarded any particular rewards. Even after significantly adjusting for their high risk, distressed stocks relative to other market stocks had very low returns. The study presents contextual knowledge gap because USA is a developed economy which makes its condition incomparable and therefore cannot be generalized onto the Kenyan context.

Local studies include; Abdulahi (2017) conducted an investigation to verify the impact of corporate governance on FD of firms registered at the NSE. The study used a descriptive research design and a normal least square regression model was employed to collect data. Altman Z score tested the score of financial difficulty amongst the quoted establishments. The findings reveal that management concentration, net profit and non-executive board members negatively and statistically impacted financial distress while size of the board positively and significantly affected financial distress. Capital structure and board diversity had positive insignificant correlation with the quoted firms.

Kamau (2014) investigated how internal aspects impact the profitability of private hospitals in Kenya specifically on Karen Hospital using the case study research method. The finance staff and departmental head filled the questionnaires while primary data was

collected through stratified random sampling. The findings suggests existence of an affirmative link between asset tangibility, establishment size and capital volume on profitability of private hospitals. However, leverage revealed a negative correlation with profitability. All these aspects in either way affect the profitability of Kenyan private hospitals.

Atosh (2017) in his investigation aimed to verify the impact of corporate governance activities on FD on firms registered on NSE for the year ending December 2016. The study focused on number of non-executive members, board size, board diversity based on gender, management concentration, net profit and CS the used descriptive research method and Altman Z score model was applied to score the FD. The study employed normal least square regression model to find that there existed an adversarial link between net income and financial distress, ownership concentration was also negatively correlated with financial distress.

Kanyugi (2016) objectively tried to establish the bearing of FD on the value of 34 establishments registered on NSE between the years 2011 and 2015. Particularly, the study focused on FD as predicted by Altman's Z-score model and value of firm, proxy of which being; Market capitalization. The annual reports and accounts of the establishments employed in this investigation provided the secondary data. The findings of this study shows existence of a substantial positive link of about 74% between the log of market capitalization and the Altman's Z-score. Further, the study shown that there exists a positive beta value of 0.2054 between the two variables indicating that a unit increase in Altman's Z-score (an indicator of reduction in the level of FD would lead to 0.2054 increases in the log of market capitalization with other factors held constant.

2.5 Summary of Literature and Research Gap

This part highlights the empirical and theoretical reviews related to CS and financial difficulty and also presents the determining factors of financial distress for establishments registered at the NSE. The investigation further presents a well drafted conceptual framework to help understand the relation that exists between the independent variables which are profitability, leverage, establishment liquidity and establishment size and the dependent variable which is represented by financial distress. Existing literature such as; Abdulahi (2017), Kamau (2014), Babalola (2013), Chinaemerem and Anothy (2012), Kanyugi (2016) among others identifies a strong positive link between financial difficulty and ROE of the establishments. Abdulahi (2017) in his investigation to verify the impact of corporate governance on financial difficulty on establishments registered at NSE found that management concentration, net profit and non-executive board members negatively and statistically impacted FD while board size positively and substantially affected financial distress. Capital structure and board diversity had positive insignificant correlation with the quoted firms.

There is no unanimity amongst a number of scholars on the bearing of financial distress on FP of on establishments registered at NSE. However, some of the empirical studies do not lead to the same conclusion such as the study of Atosh (2017) established that net profit has an adversarial correlation bearing on financial difficulty; management concentration and FD are negatively related. The debate of whether Z-score model is applicable to detect FD and bankruptcy in Kenyan context is raised from previous empirical studies.

Additionally a number of investigations undertaken globally and in Kenya have considered financial difficulty on commercial banks and this breeds the knowledge gap upon which this research seeks to fill. The ones done in Kenya in regard to CS and FD also employ the Altman Z score model which ignores the endogeneity relationship between the variables. Driven by this gap, this investigation, hence, tries to establish the bearing of CS on FD of listed commercial and services on establishments registered in the NSE.

2.6 Conceptual Framework

It illustrates the link between variables in an investigation. Financial distress is the dependent variable which is affected by the independent variables; such as, Profitability, CS (financial leverage) as well as firm liquidity and business size.

Independent variables

- **Capital structure**
- Long term debt to Equity

Dependent variables

- **Financial distress**
- Shumway hazard model

Control variable

- Firm size
- Profitability
- Firm liquidity

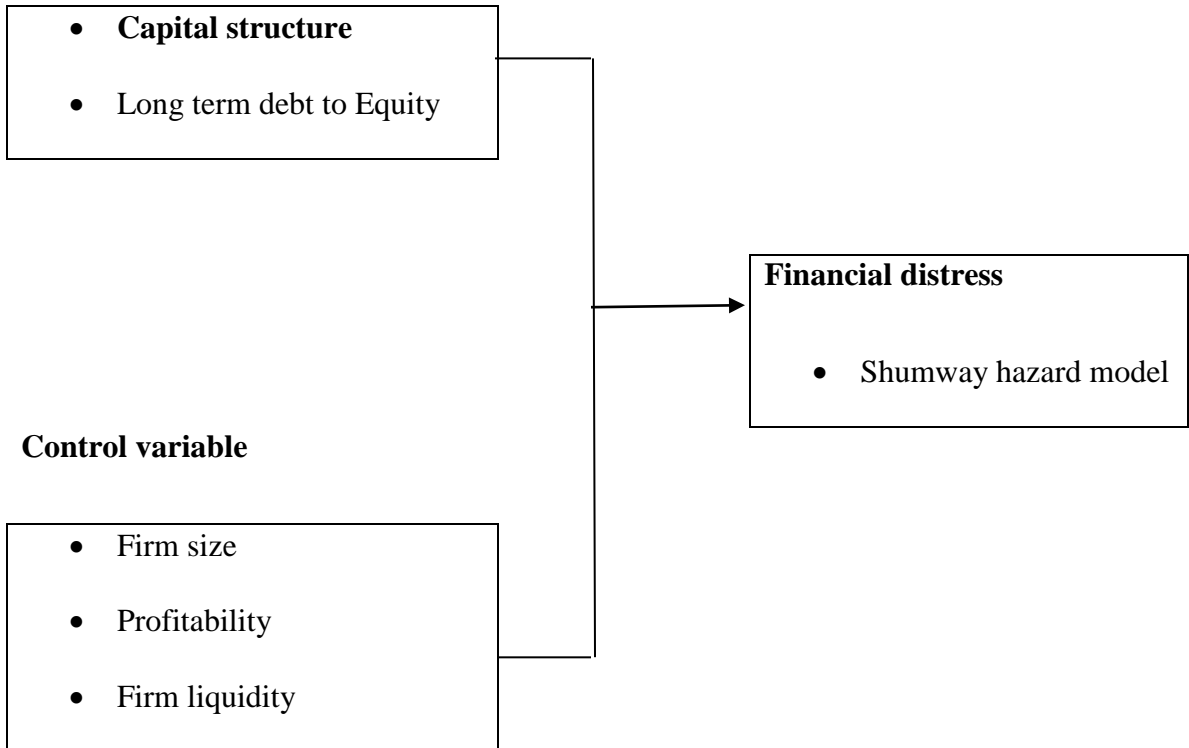


Figure 2.1: Conceptual Framework.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section lays out the investigation approach. It entails the research design which points out descriptive study design as the appropriate method of investigation; the study population will include all the listed commercial and service companies in Kenya. Data collection procedures, data analysis procedures to evaluate the bearing of CS on FD of listed commercial and service companies in Kenya.

3.2 Research Design

This investigation used a descriptive research design. Descriptive design involves a collection of approaches that illustrate the variables by amassing information that illustrate happenings as well as arranging, presenting and depicting the information (Maboe, 2009). Descriptive investigation was utilized to gather data pertaining to the current situation, describe what existed in respect to the study variables or conditions in particular occasions.

3.3 Population of the Study

The population of interest is composed of the eleven (11) firms listed under commercial and service category. Population constitutes the whole set of people or items from which the investigation seeks to take a broad view its outcomes (Fox & Bayat, 2007).

3.4 Data Collection

To comprehensively study the bearing of CS on FD of companies listed in the commercial and service category to make valid conclusions. Secondary data was sourced

from the NSE handbook of company returns for a period of 5 years, that is, 2014 – 2018 and cross checking done on published accounts.

3.5 Data Analysis

Data sourced has been presented by use of descriptive as well as inferential statistics. The data was also examined and checked for comprehensiveness and uniformity. The examined material has been summarized and analyzed by use of a statistical package for social sciences (SPSS) and data output analyzed using standard deviation and mean.

3.5.1 Analytical Model

A multiple regression model was adopted to establish the bearing of CS on financial distress. The model of this study was as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where;

γ = The Financial distress of companies as expressed using Shumways modified model

X_1 = Establishment size to be evaluated by natural log of total assets

X_2 = Profitability to be evaluated by ROA

X_4 = Firm liquidity to be measured by current ratio

X_5 = CS to be evaluated by debt to equity ratio

ε = Error term.

α = The constant of regression

Shumway **probability of financial distress modified formula**

$$P_{i,t} = \frac{1}{1 + e^{(-\alpha + \beta X_{i,t-1})}}$$

$P_{i,t}$ = probability that firm will enter financial distress

$$B^1 X_{i,t-1} = B_1 \text{REL SIZE}_{i,t-1} + B_2 \text{EX RET}_{i,t-1} + B_3 \sigma_{i,t-1}$$

REL SIZE= firms market capitalization/total market capitalization

EX RETS= firms previous return in excess of the market

The stock return volatility σ = given by doing a regression of each stocks monthly returns in a given year (t-1) on the value weighted NSE index in that year. The standard deviation of the residual of this regression is the σ

3.5.2 Diagnostic Tests

To verify the fitness of the panel data for statistical analysis a number tests were conducted e.g. normality test, homoscedacity, autocorrelation, linearity e.t.c

The normality tests are supplements to graphical assessments that compare the scores in the sample to a normally distributed set of results with similar 0mean and SD. For Normality test statistics Shapiro-Wilks test was used since sample elements is less than 50, to yield a probability value (p-Value. Abnormally distributed data was normalised by obtaining its natural logarithm, square root, cube root and related statistical options.

Homoscedasticity is a basic assumption in Linear regression. It asserts that the probability distribution of the disturbance term stays constant for all observations. Therefore to test for existence of heteroscedasticity problems Breusch-Pagan was used to obtain a p-value. If at 0.05 significance level p-value does not exceed 0.05 (i.e. P-value is material at 0.95 confidence interval), there are heteroscedasticity issues, if it exceeds the opposite is true.

Multicollinearity exists when a linear link exists between some or all independent variables (IVs) in the model (i.e. the IVs are correlating). This is because IVs share similar information when they are highly correlated with each another .

With assistance of SPSS, the study tested for existence of multicollinearity problem during regression analysis Multicollinearity is assumed to be present when variance inflation factor (VIF) is in excess of 10 while tolerance is lower than 0.1. Multicollinearity problem was corrected by removing highly correlated variables.

The study also checked for autocorrelation assumptions, which implies nil covariance of error terms through time. It indicates errors linked with each observation are uncorrelated with those of the others. This research adopted the Durbin Watson test which is one of the best tests for detecting serial correlation; Lack of autocorrelation issues means no correlation between the error terms. .

CHAPTER FOUR

RESEARCH FINDINGS, ANALYSIS AND PRESENTATION

4.1 Introduction

This investigation's general mission was to ascertain the impact of the CS on the FD of listed commercial and services concerns at the NSE. This section presents findings of the research, presentation, interpretations and explanations based on the findings. The section begins with a descriptive analysis of the study of independent variables; total assets i.e. business size, Profitability estimated in form of ROA, firm liquidity and capital structure. Thereafter multiple logistic regression analysis was carried out on time series analysis by use of information sourced from NSE covering five (5) years; 2014 to 2018. The multiple logistic regressions were done using binary regression analysis to ascertain the consequence of the CS on the FD of these business concerns.

4.2 Response Rate

This segment contains the response rate of the data over a period of 5 years, from 2014 to 2018 for the listed commercial and services companies. Target population was the eleven (11) listed commercial and services companies. However, it was only possible to collect data from 10 firms since NSE had not posted any financial records for Nairobi Business Ventures Ltd. It was not clear the reason behind this omission. Accordingly, the response rate was 10(90.91%), which was considered pretty high hence great for achieving precise results based on the words of Mugenda and Mugenda (2003). According to their study a

response percentage of more than 49% is adequate, higher than 59% good and more than 69% termed as being pretty good.

Although the study was able to collect most of the important data items, it was not possible to obtain financial records for 2018 on; Deacons (East Africa) Plc, Uchumi Supermarket, Kenya Airways, and Longhorn Publishers. Notably, the Capital Markets Authority (CMA) had suspended Deacons (East Africa) Plc shares from trading at the (NSE), for 40 working days effective 19 November, 2018. The issuer had notified the Authority of its Board's resolution to voluntarily appoint joint administrators in accordance with Insolvency Act No. 18 of 2015, which was granted by CMA. Further, Uchumi' had indicated that its shareholders had to wait a little while longer to access the audited financial statements for the period ended June 2018. The company had attributed the delay to litigation regarding the company's solvency.

4.4 Descriptive Statistics

This segment presents findings of quantitative analysis conducted to produce descriptive statistics on properties of the independent (IVs) and dependent variables (DV). The study used the financial distress of companies as expressed using Shumways modified model as the DV. The IVs were; corporation size to be estimated using natural log of aggregate assets, profitability computed by use of ROA, business liquidity measured by current ratio, CS expressed as debt to equity ratio

4.4.1 General Descriptive Statistics of all the firm

This analysis first produced descriptive statistics which outlined the findings of the analysis, featuring; frequencies, means, standard deviation and other properties as captured by Table 4.1

Table 4.1: Descriptive Statistics of independent and dependent variables

	Firm size	Profitability	Firm liquidity	Capital structure
N	50	50	50	50
Mean	19.550	0.273	1.142	0.393
Median	22.190	0.070	0.995	0.605
Mode	0.000	0.000	0.000	0.000
Std. Deviation	8.138	0.736	0.783	5.659
Minimum	0.000	0.000	0.000	-31.290
Maximum	27.620	4.940	2.760	15.370

According to table 4.1 there were 50 observations of the commercial and services companies listed on the NSE from the year 2014 to 2018 on capital structure factors; corporation size, profitability, business liquidity, and capital structure. These results show that business size computed by use of natural log of total assets was minimum at 0.00 and maximum of 27.620. It had an average of 19.550 and SD of 8.138, meaning the minimum deviation was (-11.142) from the average value of natural log of total assets.

Profitability indicates that these listed commercial and services companies earn on average 27.30%. This indicates that on average, from each Kshs 1. Employed in the asset a 2.73 cent return was received. The lowest rate of return on asset was 0.00% and the maximum rate of return on asset for a year was 19.06%. This means the most inefficient firms earn 0.00% profit and the most efficient firms earn 494.00% profits. The SD was

73.60% for profitability, where the maximum deviation from the mean was 46.30%. This means that the profitability variation from its mean was high. Despite high profitability signaling better performance in the utilization of present resources, these firms show poor performance with reference to return on assets during the research period.

Regarding Firm liquidity measured by current ratio, it had a low of 0.00%, a high of 276.00%, an average of 114.20% and SD of 78.30%. The greatest deviation from the average value was 35.90%.

The descriptive statistics for capital structure also showed that the accessibility of equivalent resources is averagely 39.30%. The highest and lowest values of capital structure are 1537.00% and (3129.0%) and 0.00% and also the SD was 565.90%, the furthest deviation from the average value was 526.60% which indicate that these deviations were high.

4.4.2 Analysis for IVs Trend

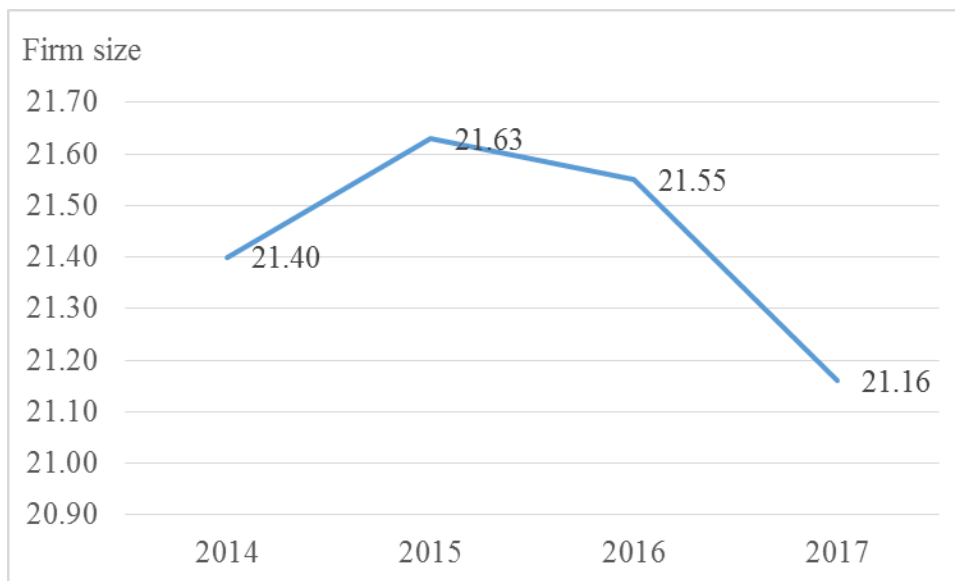


Figure 4.1: Deacons firm size trend

Firm size of Deacons (East Africa) initially had a gradual increase of 0.23 from 21.40 in 2014 to 21.63 in 2015. Then it started decreasing where it first dropped by 0.11 to 21.55 in 2016 and finally experiencing a steep decline to 21.16 in 2017.

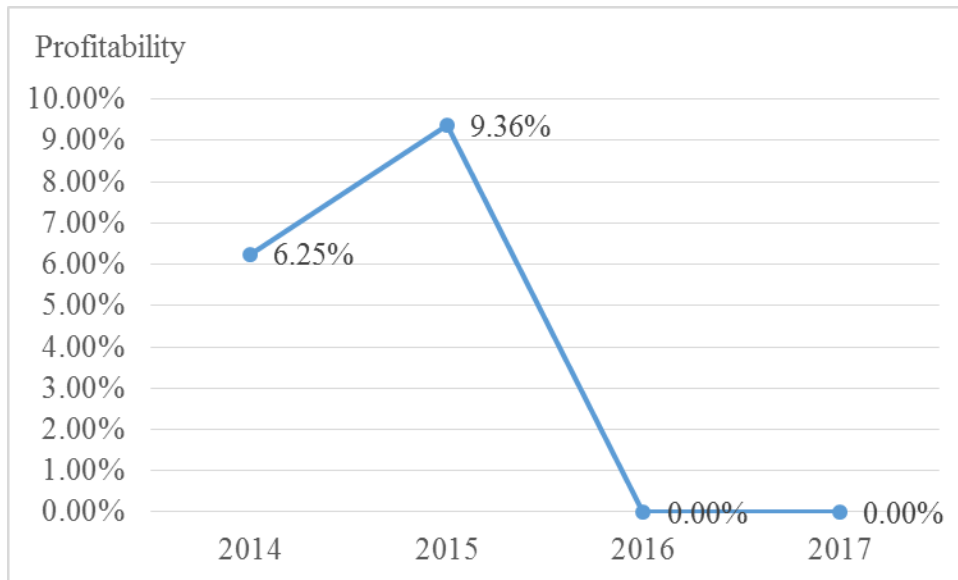


Figure 4.2 :Deacons profitability trend

Its profitability in 2014 which was at 6.2% increased by 3.11% to 9.36% in 2015 before experiencing a sharp decline to 0.00% in 2016 where it remained even in 2017. Thus through 2016 and 2017 there was no profit experienced by Deacons (East Africa)

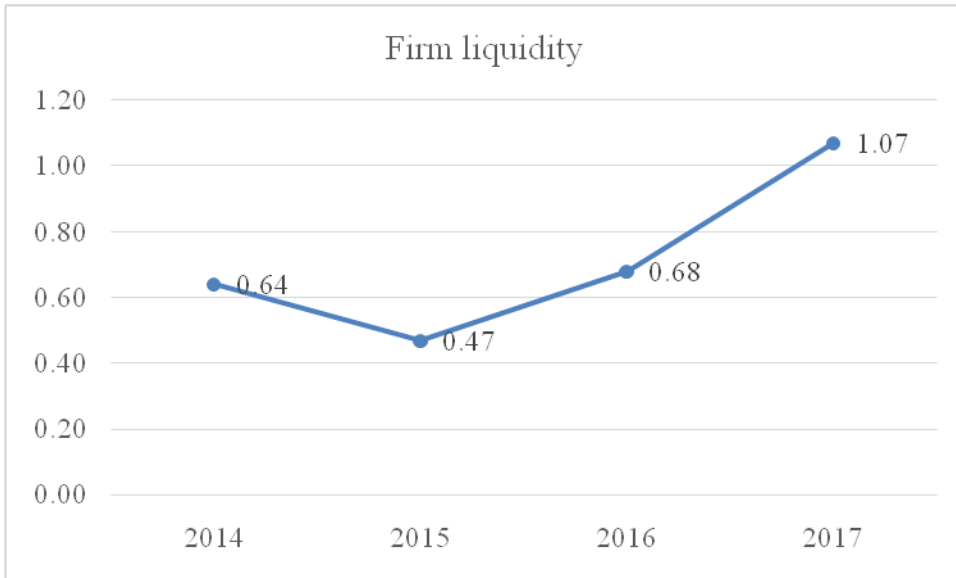


Figure 4.3: Deacons liquidity trend

Deacons (East Africa) firm liquidity in 2014 stood at 64.00% before reducing to 47.00% in 2015. This marked a significant decrease of 17%. However, it started increasing steadily from 47.00% in 2015 to 68.00% in 2016 then steadily increased to 107.00% in 2017.

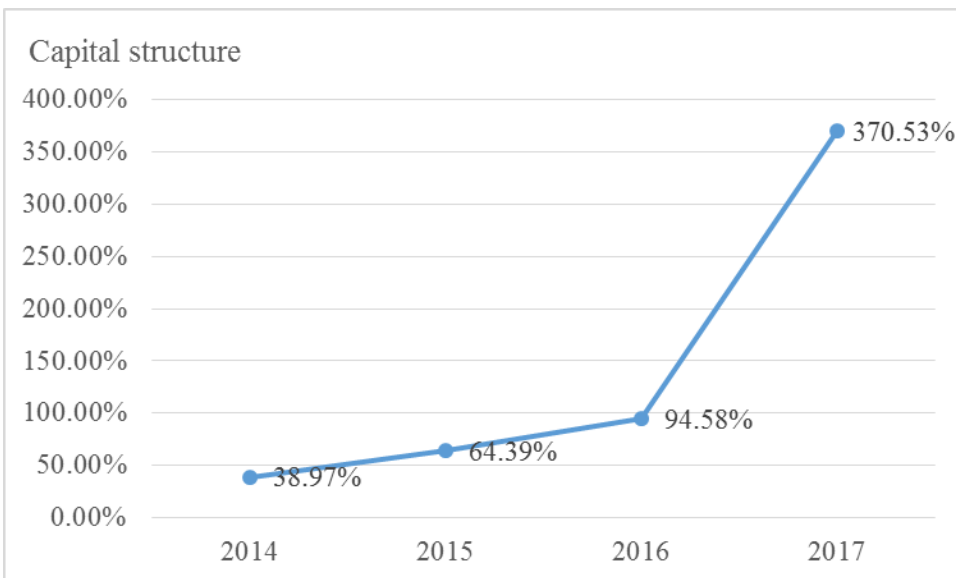


Figure 4.4: Deacons capital structure trend

The capital structures at Deacons (East Africa) showed a rising trend over the study period. In the year 2014 it stood at 38.97% increasing by 25.42% to 64.39% in the year 2015 and then by 30.19% to 94.58%. Thereafter it recorded a sharp increase of 275.95% from 94.58% in 2016 to 371% in 2017.

Express Kenya Ltd

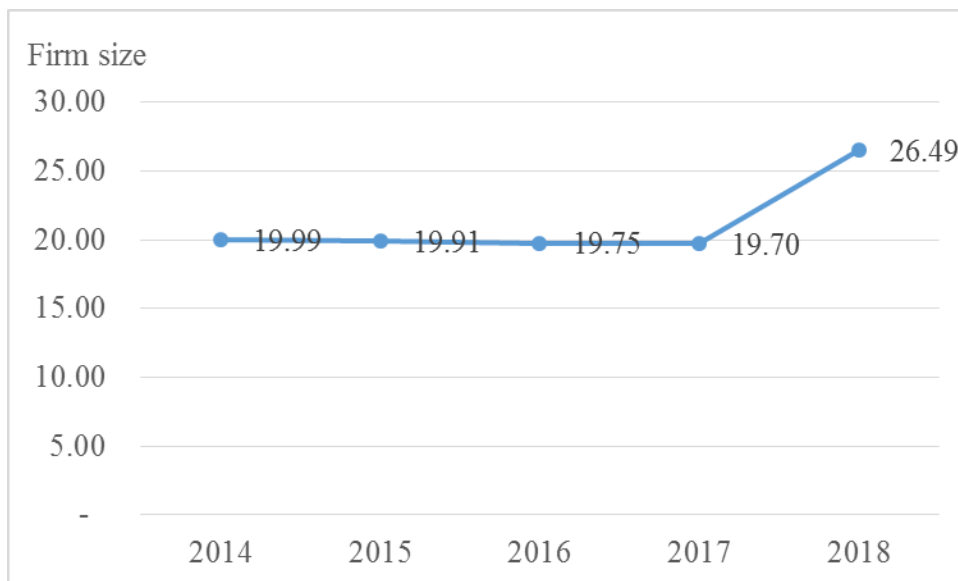
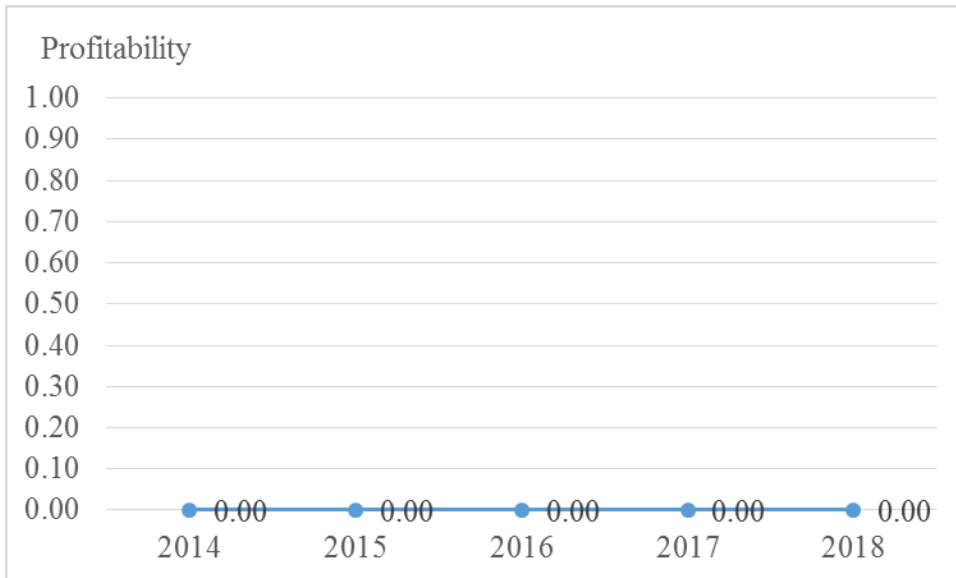


Figure 4.5: Express Kenya firm size trend

The firm size of Express Kenya Ltd was almost constant throughout most of the study period despite a very minor decline from 2014 to 2017; recording 19.99 in 2014, 19.91 in 2015, 19.75 in 2016 and 19.70 in 2017 before increasing steeply to 26.49 in 2018.



Express Kenya was shown not to have had experienced any profitability from 2014 to 2018. Throughout this period there no profits recorded

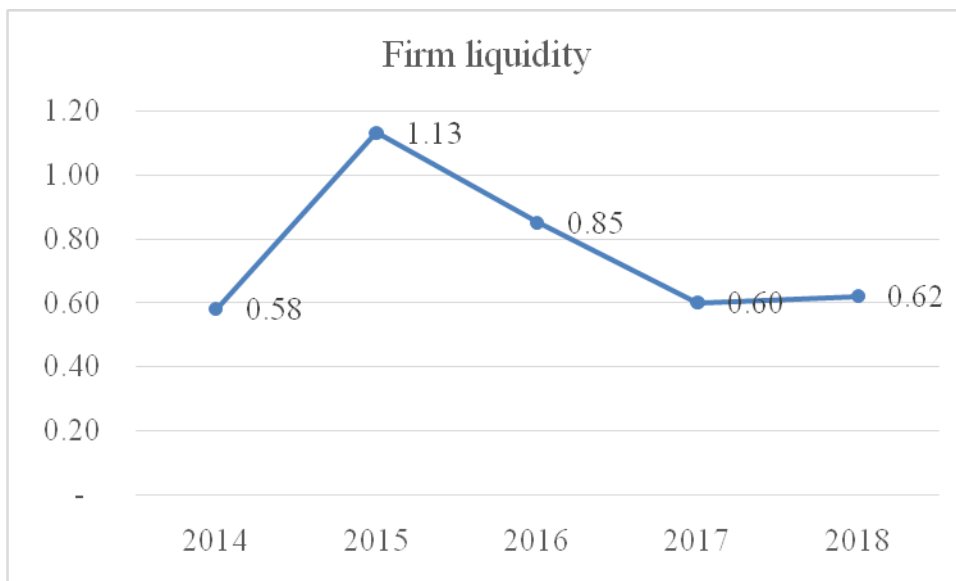


Figure 4.7: Express kenya firm liquidity trend

Firm liquidity of Express Kenya was at 58.00% in 2014 before steadily increasing by 54% to 113.00% in 2015. It then started decreasing; first steadily to 85.00% 2016 and then to 60.00% in 2017 and then a slight increase of 2.00% to 62% in 2018.

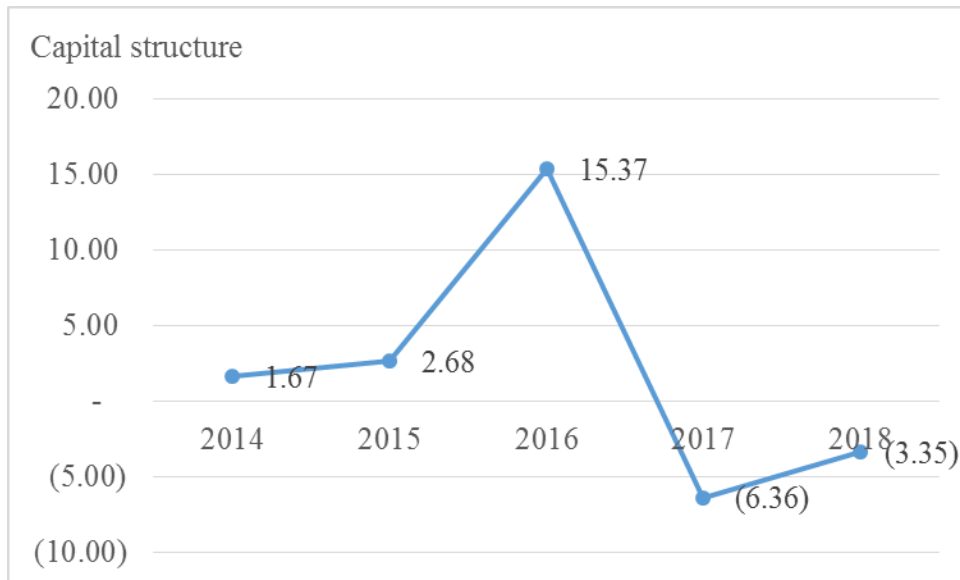


Figure 4.8: Express kenya capital structure trend

The capital structure has experienced a couple of ups and downs starting at 1.67 in 2014 then increasing to 2.68 in 2015 then experiencing a sharp increase to 15.37 in 2016 before declining sharply to -6.36 in 2017 and then increasing slightly to -3.35 in 2018.

Kenya Airways

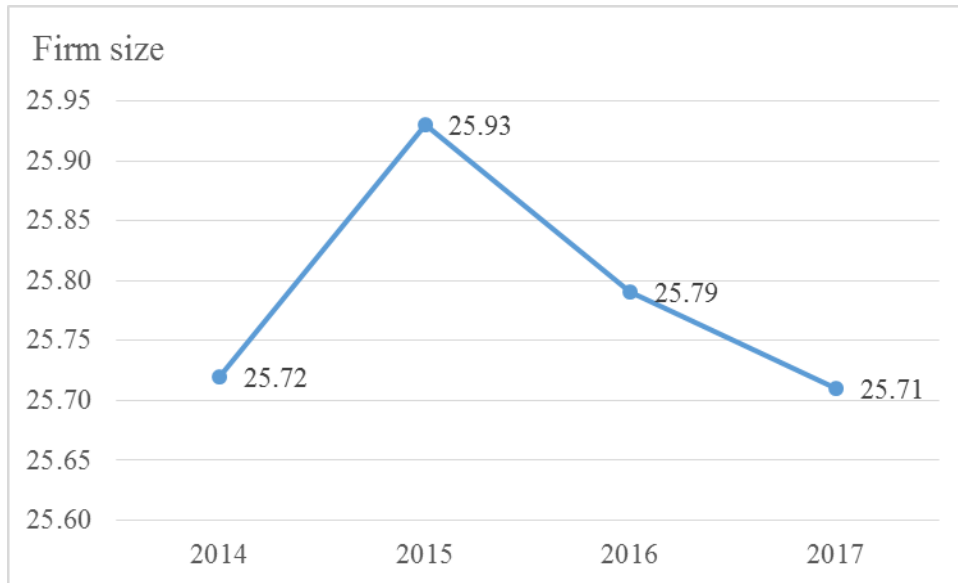


Figure 4.9: Kenya airways firm size trend

Kenya airways firm size has ranged between 25.70 to 25.93, from 2014 to 2017; in 2014 the firm size was 25.72 and then increased to 25.93 in 2015 before reducing slightly to 25.79 in 2016 and this decrease continued to 25.71 in 2017.

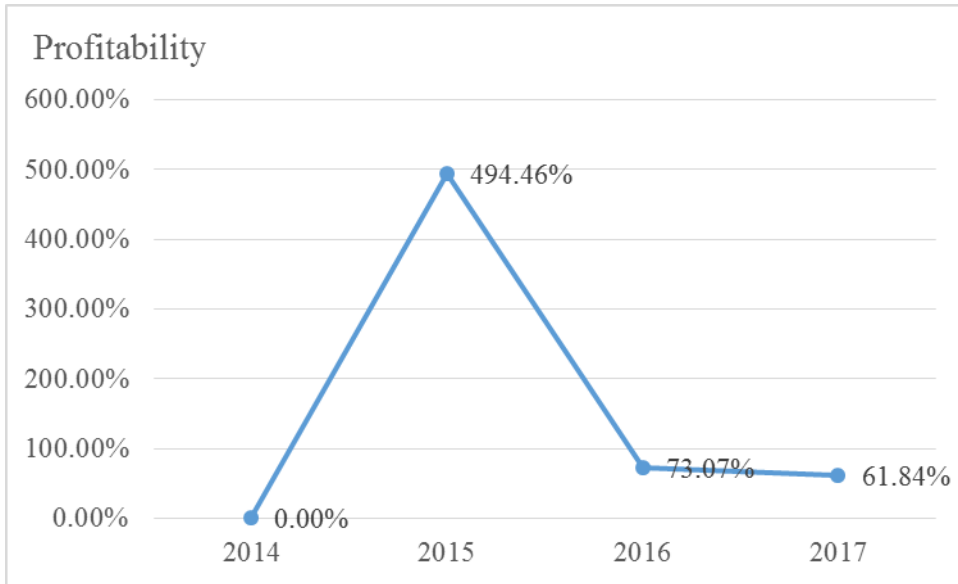


Figure 4.10 Kenya airways profitability trend

The profitability of Kenya airways which was registered as 0.00% in 2014 suddenly shot up to 494.46% in 2015 before drastically reducing to 72.07% in 2016 and then dropping to 61.84% in 2017.

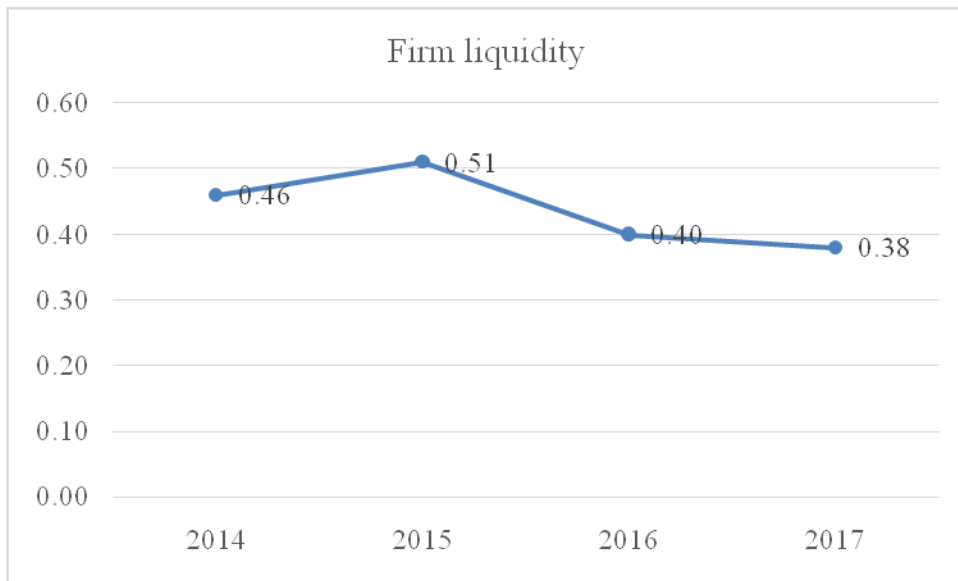


Figure 4.11: Kenya airways firm liquidity trend.

Firm liquidity of Kenya Airways was 46.00% in the year 2014 before slightly by 5% to 51.00% in 2015 after which it gradually decreased by 9% and then 8% to 40.00% and 38.00% in then year's 2016 to and 2017 respectively.

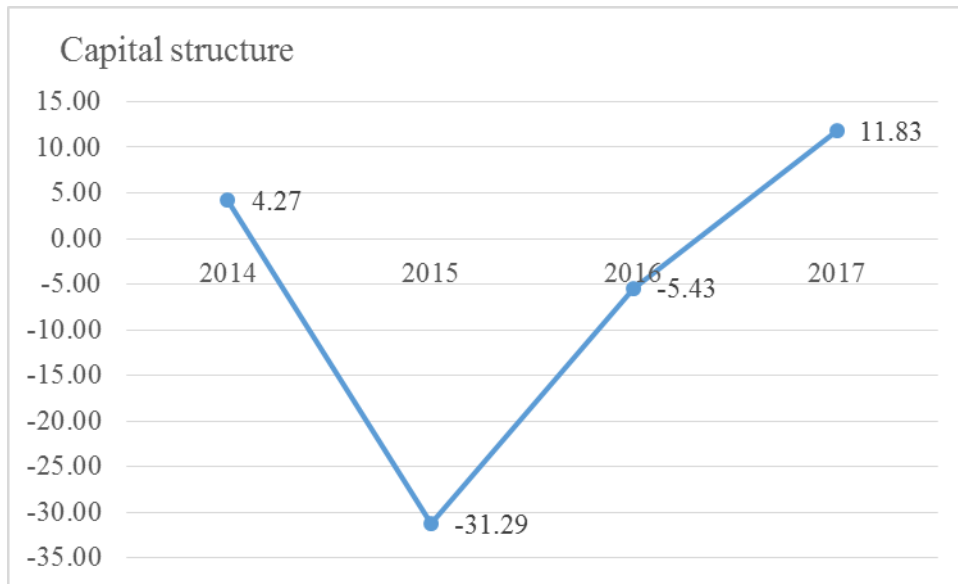


Figure 4.12: Kenya airways CS trend

CS of Kenya airways was oscillating between positive and negative status. In the years 2014 it was at 4.27 in 2014 and then decreasing sharply to -31.29 in 2015, gradually increasing to -5.43 in 2016 then increasing to 11.83 in 2017.

Longhorn Publishers

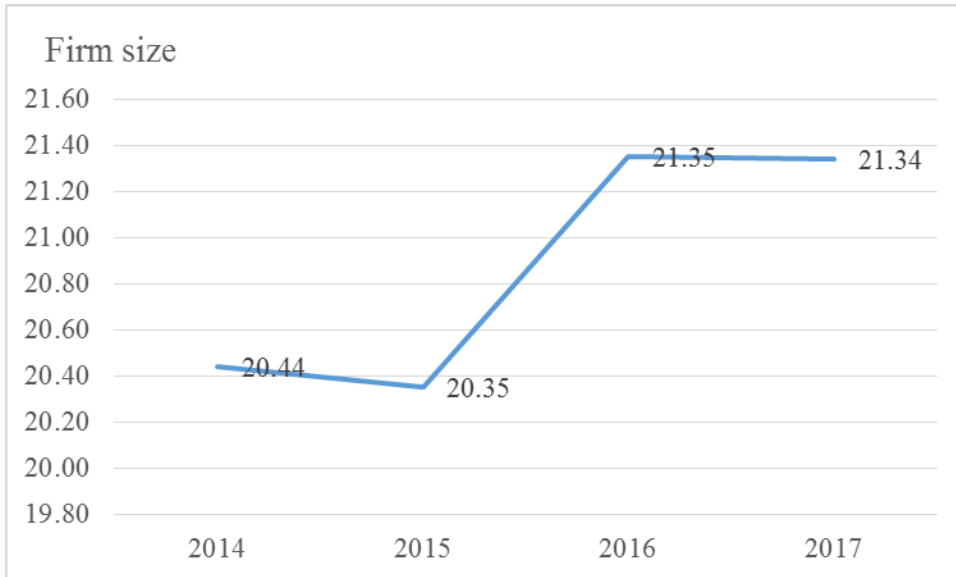
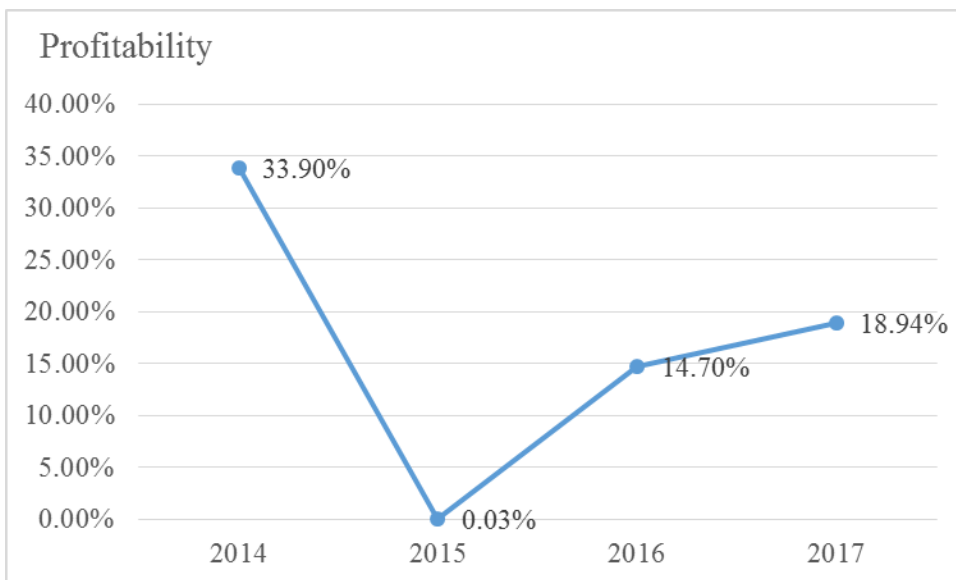


Figure 4.13: Longhorn publishers firm size trend.

The firm size of Longhorn publishers was at 20.44 in 2014 decreasing to 20.35 in 2015 then increasing to 21.35 in the year 2016 and then slightly decreasing to 21.34 in 2017.



The profitability of Longhorn publishers displayed V-shaped behaviors; starting at 33.90% in the year 2014 and sharply dropping .03% in the year 2015 before gaining momentum to 14.70% in the year 2015. Then it increased slightly to 18.94% in 2017.

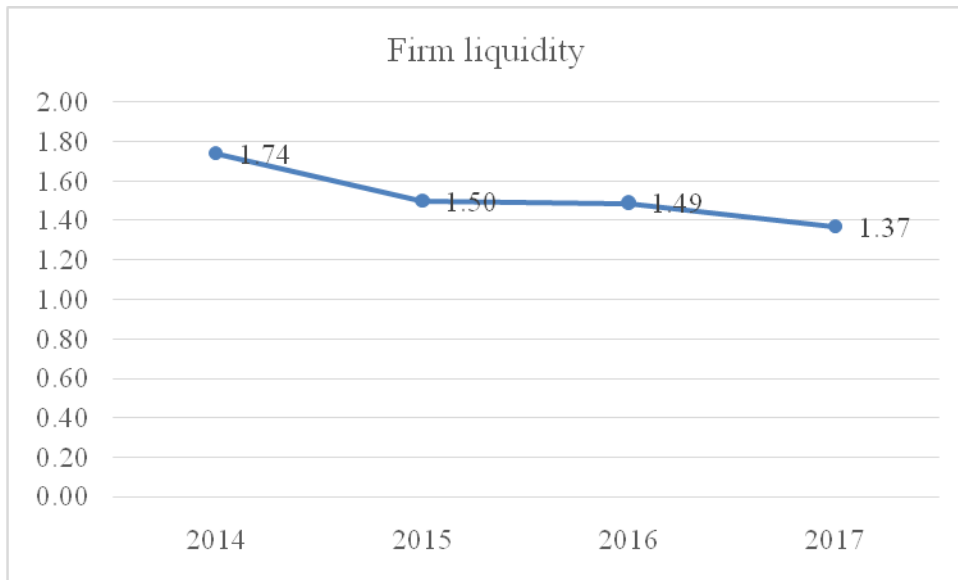


Figure 4.15: Longhorn publishers firm liquidity trend.

The liquidity of Longhorn publishers' experienced a gradual stepped declined from 2014 to 2017 from 174% to 137%, the firm efficiency was 174% in 2014, then declined to 150% in 2015 before falling to 149% in 2016 and then 137% in 2017.

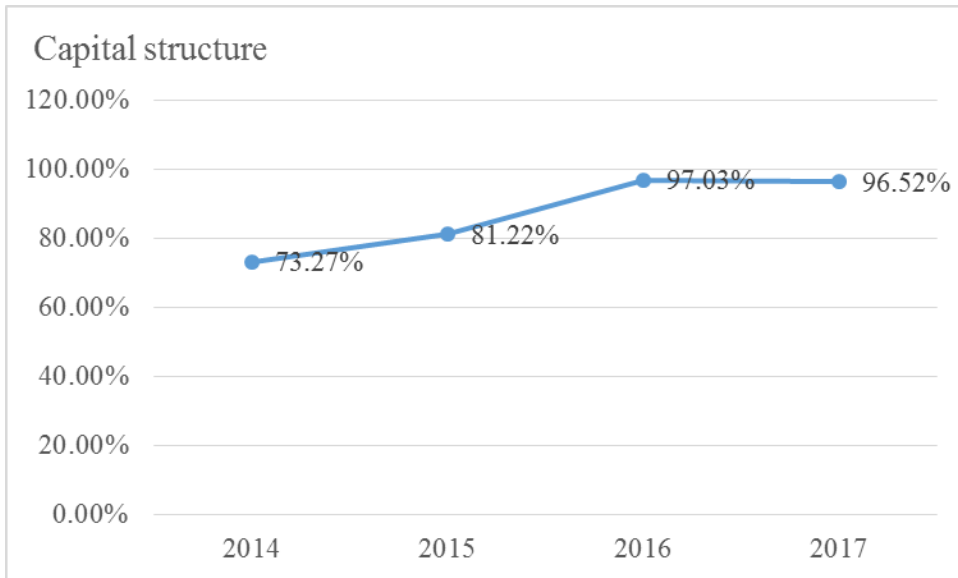


Figure 4.16: Longhorn publishers firm CS trend.

In 2014, the CS of Longhorn publishers stood at 73.27% which started to grow slowly to 81.22% in the year 2015 and the 97.03% in the year 2016 before slightly reduced to 96.25% in 2017.

Nation Media

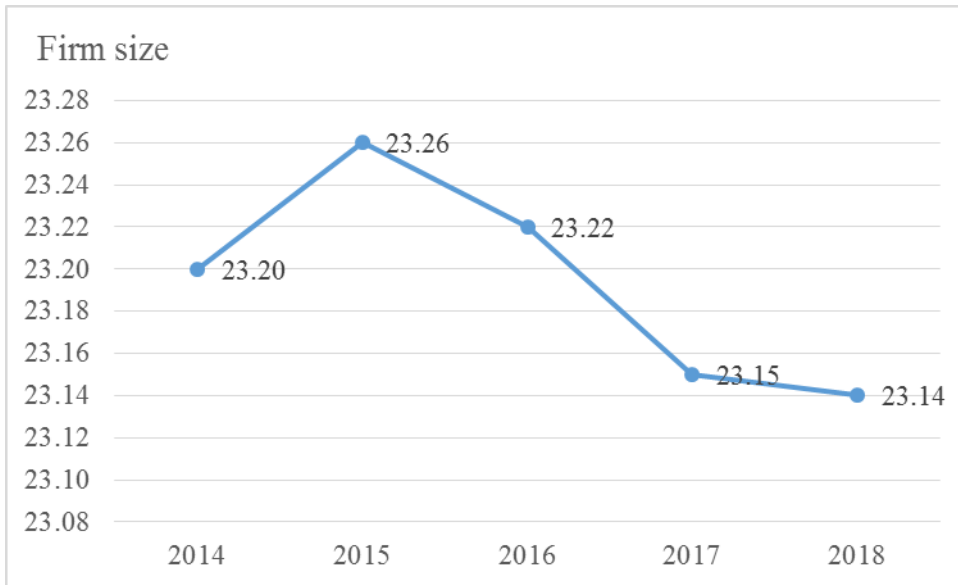


Figure 4.17: Nation media firm size trend

Nation Media recorded a stable and relatively consistent firm size value, which was between 23.14 and 23.26. The firm size was 23.20 in 2014 then slightly rose to 23.26 in the year 2015, declining gradually to 23.22 in 2016, and then 23.15 in 2017 and finally 23.14 in 2018.

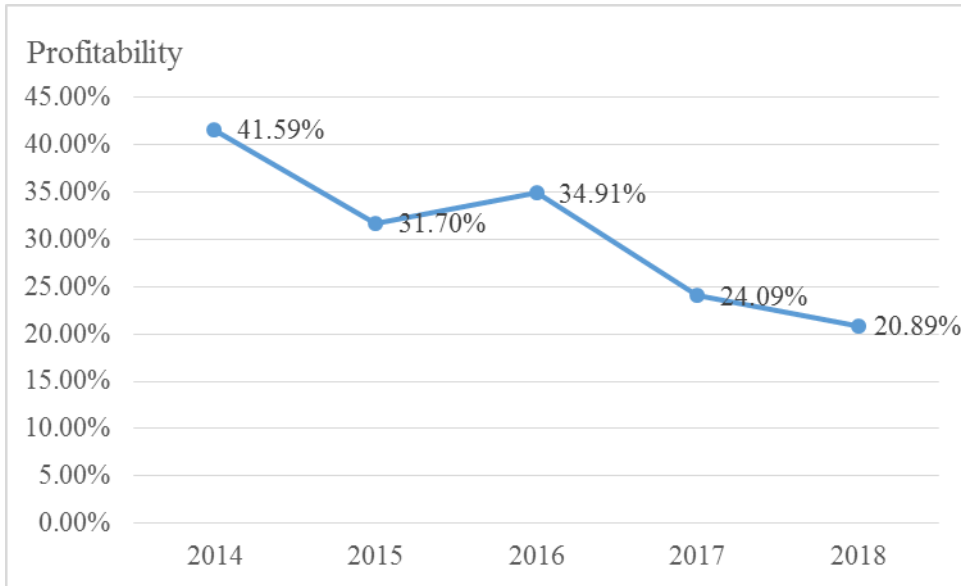


Figure 4.18: Nation media profitability trend

Although the profitability of Nation Media never reached 60%, it was most of the time proportionate to the firm size, The profitability was 41.59% in 2014 and then reduced to 31.70% in 2015 before increasing to 34.91% in 2016 then decreasing to 24.09 in 2017 and then 20.89% in 2018.

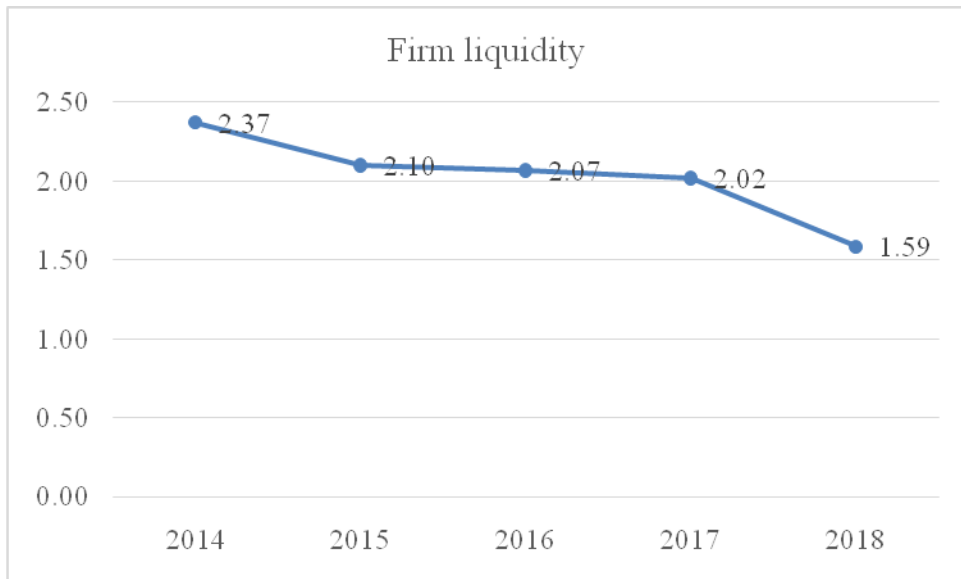


Figure 4.19: Nation media firm liquidity trend.

Firm liquidity of Nation Media was as well having more or less the same behavior as its profitability. It stood at 237.00% in 2014 before experiencing a gradual decrease to 210.00% in the year 2015 and a further significant drop to 207.00% in 2016 then to 202% in 2017 and the decrease by 43.00% to 159.00% in the year 2018.

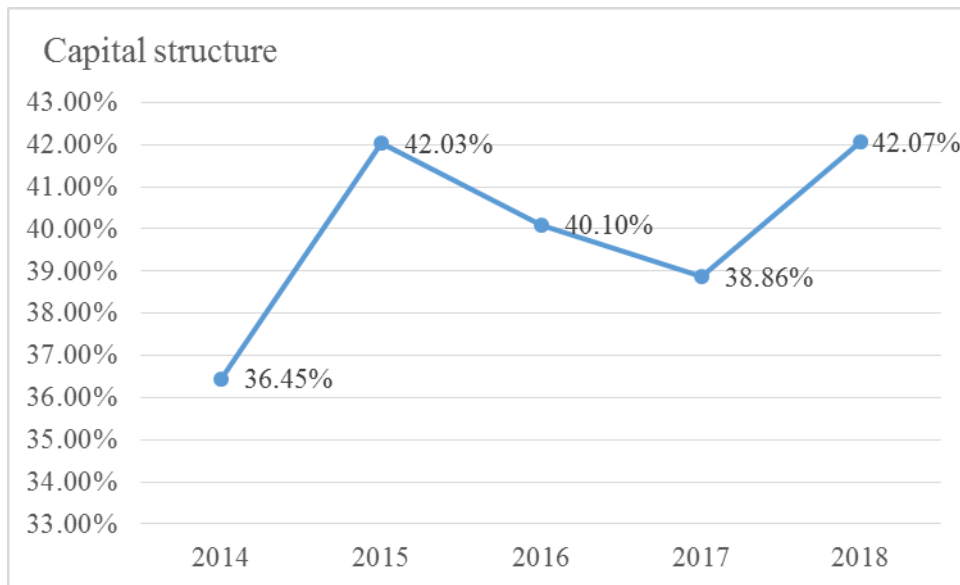


Figure 4.20: Nation media capital structure trend

The capital structure of Nation Media played between 36.45% and 42.07%; a difference margin of 5.62%. This was 36.45% in 2014 increasing to 42.03% in 2015, decreasing to 40.10% in 2016 and then to 38.86% in 2017 before increasing to 42.07% in 2018.

Sameer Africa

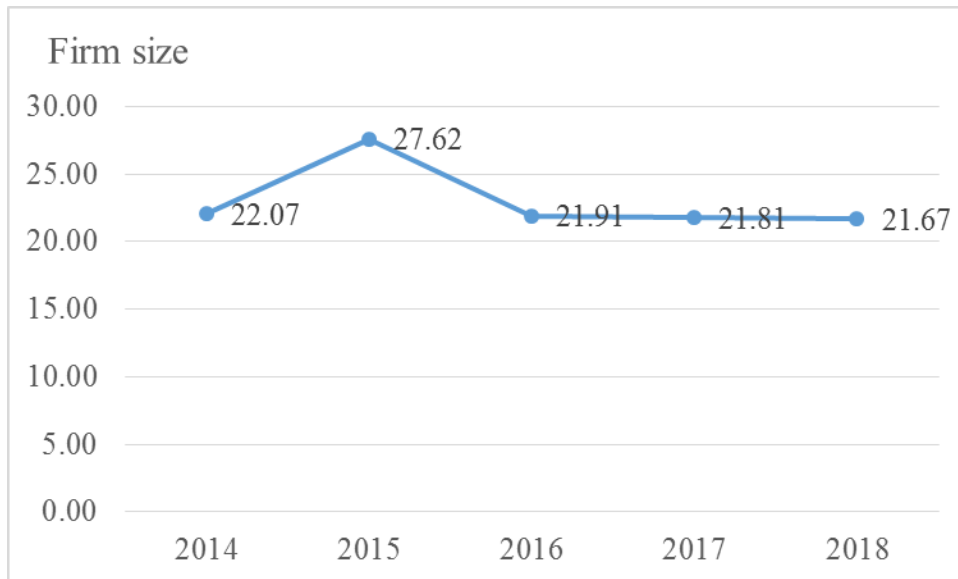


Figure 4.21: Sameer Africa firm size trend

The firm size at Sameer Africa started by up and down movement before stabilizing. In the year 2014 it was 22.07 increasing to 27.62 in 2015 then decreasing to 21.91 in 2016 and slightly decreasing to 21.81 to 2017 then 21.67 in 2018.

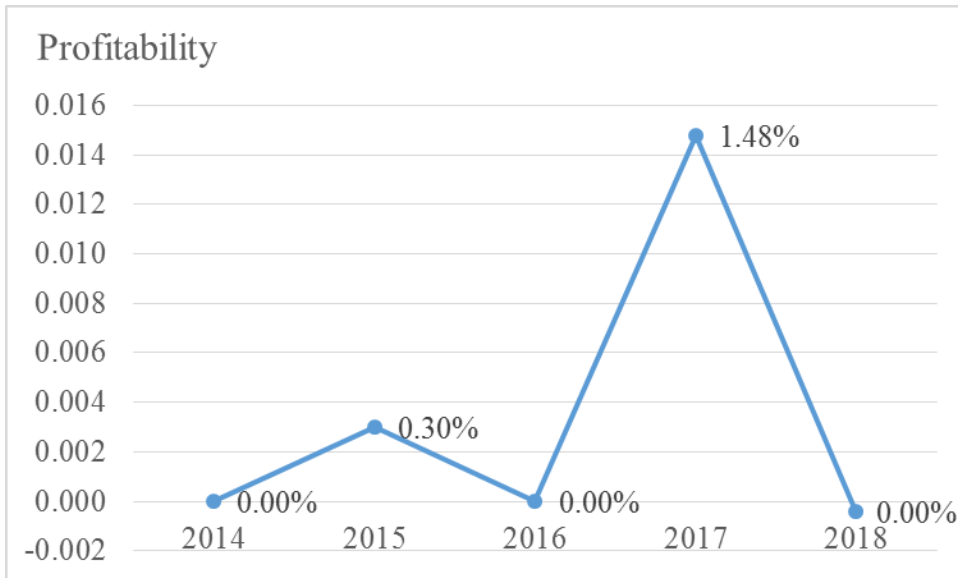
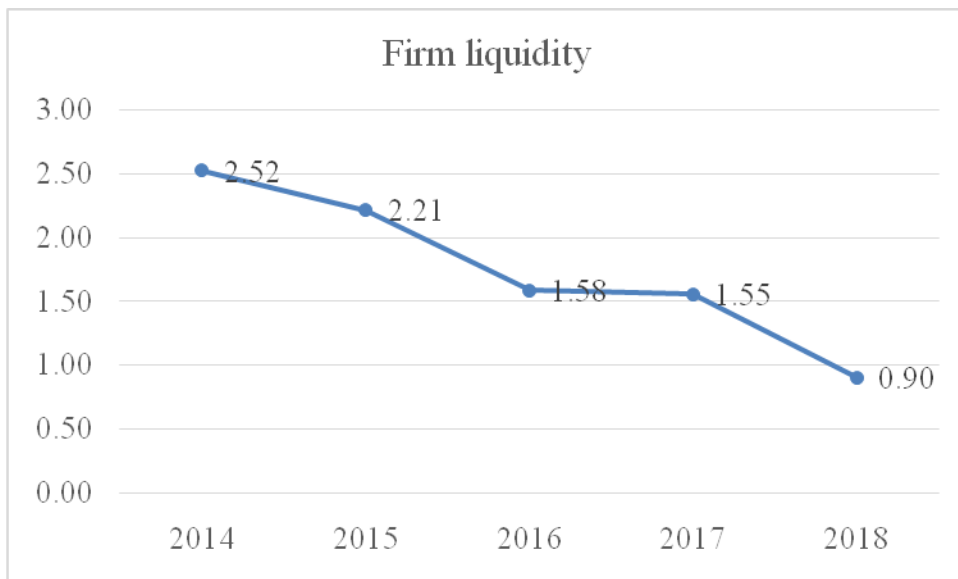


Figure 4.22: Sameer Africa firm profitability trend

Profitability of Sameer Africa, which oscillated between 0.00% and 1.48% was 0.00% in 2014 and then increased to 0.30% in 2015 going back to 0.00 in 2016 then increasing to 1.48% before reducing to 0.00 %in 2018. Most of the times Sameer Africa did not register any profitability.



Firm liquidity of Sameer Africa continuously dropped from 252.00% in the year 2014 to 221% in 2015 and then to 158% in 2016. This firm efficiency then dropped slightly to, 155% in 2017 before drastically reducing to 90% in 2018.

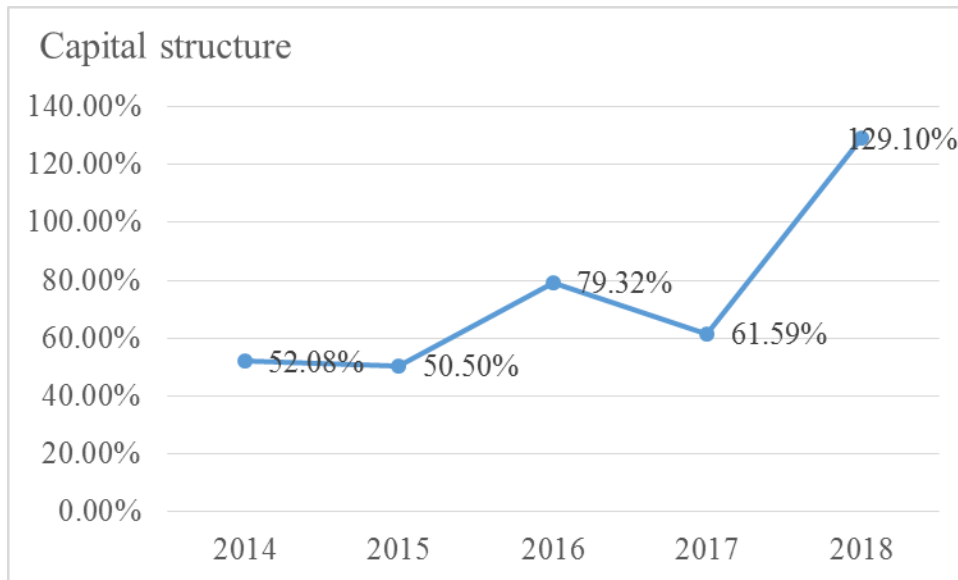


Figure 4.24: Sameer Africa capital structure trend.

Its capital structure has experienced an uneven trend from 52.08% in the year 2014 then slightly reduced to 50.505 in 2015 before increasing to 79.32% in 2016 then reducing to 61.59% in 2017. Then it short up to 29.10% in the year 2018.

Scangroup Ltd

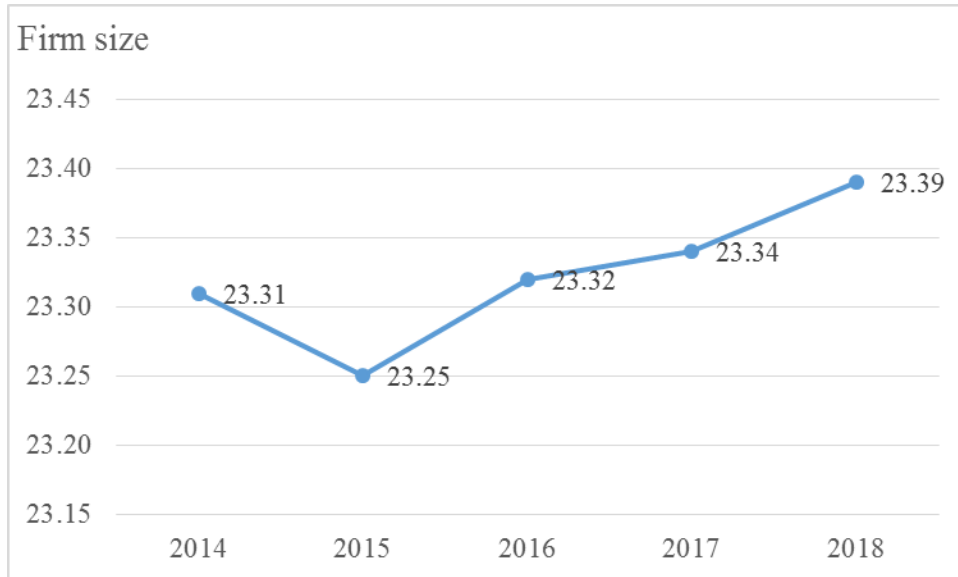
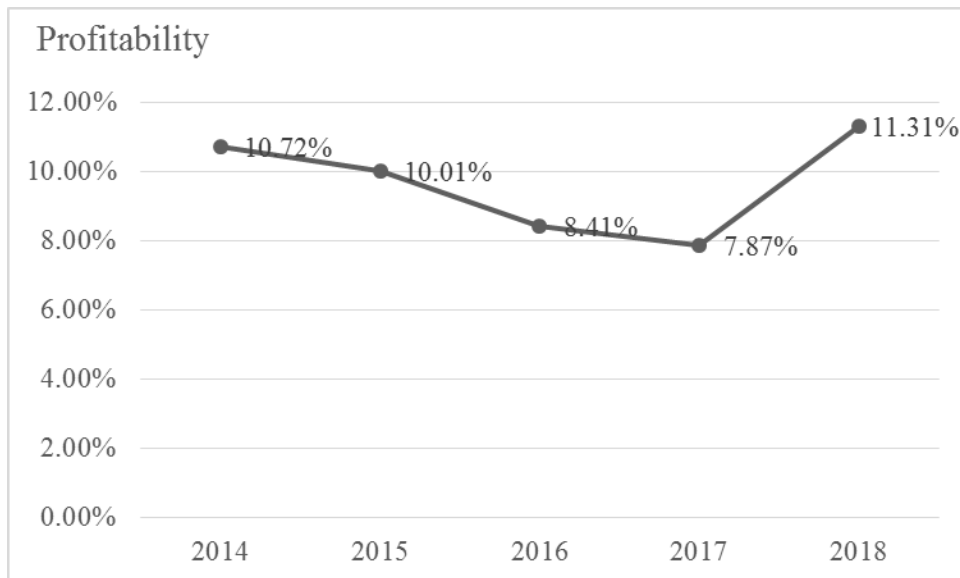


Figure 4.25: Scan group ltd Firm size trend

Firm size of Scangroup Ltd was 23.31 in 2014 then decreased to 23.25 in 2015 before increasing gradually to 23.32 in 2016, 23.34 in 2017 and finally 23.39 in 2018.



Scangroup Ltd's profitability was 10.72% in the year 2014 then steadily decreased to 1.01% in 2015 before decreasing to 8.41% and 7.87% in the years 2016 and 2017 in that order. Thereafter it increased to 11.31% in the year 2018.

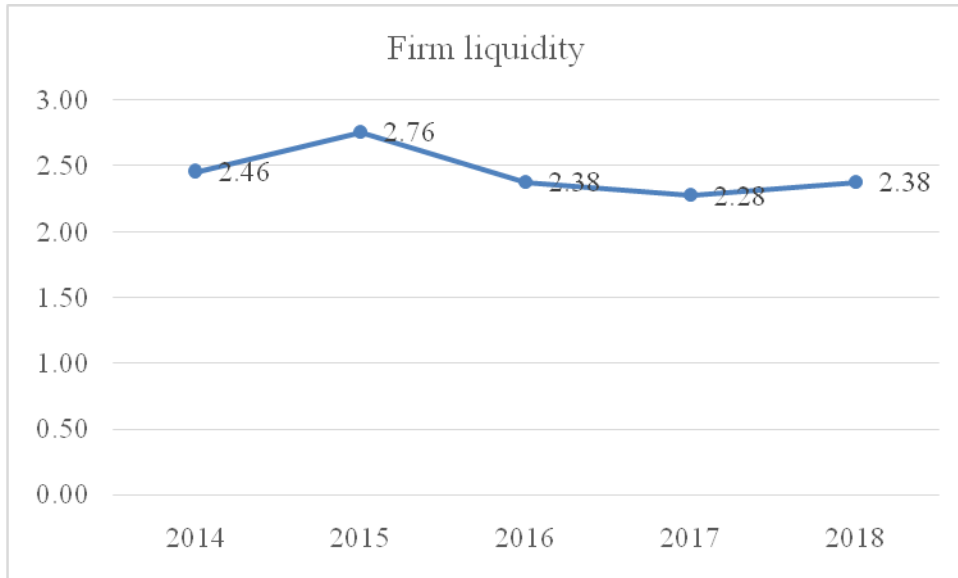


Figure 4.27: Scan group ltd Firm liquidity trend

Firm liquidity was 2.46 in 2014 increasing to 2.76 in 2015 then decreasing to 2.38 in 2016 and 2.28 in 2017 then returning to 2.38 in 2018.

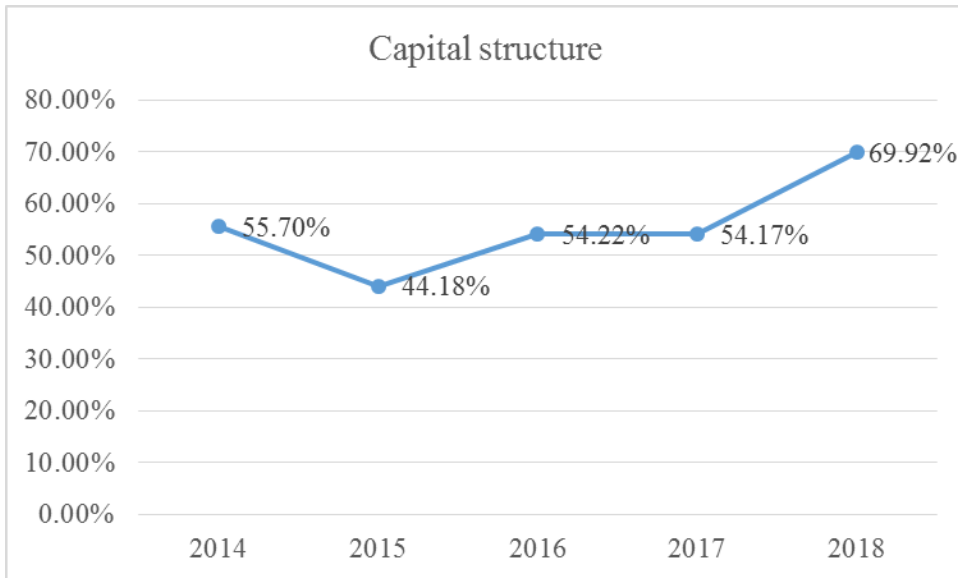


Figure 4.28: Scan group ltd Firm capital structure trend

The capital structure of Scangroup Ltd was 55.70% in 2014 before reducing to 44.18% in 2015 after which it increased to 54.22% in 2016 and then slightly reduced to 54.17% in 2017 before increasing to 69.92% in the year 2018.

Standard Group

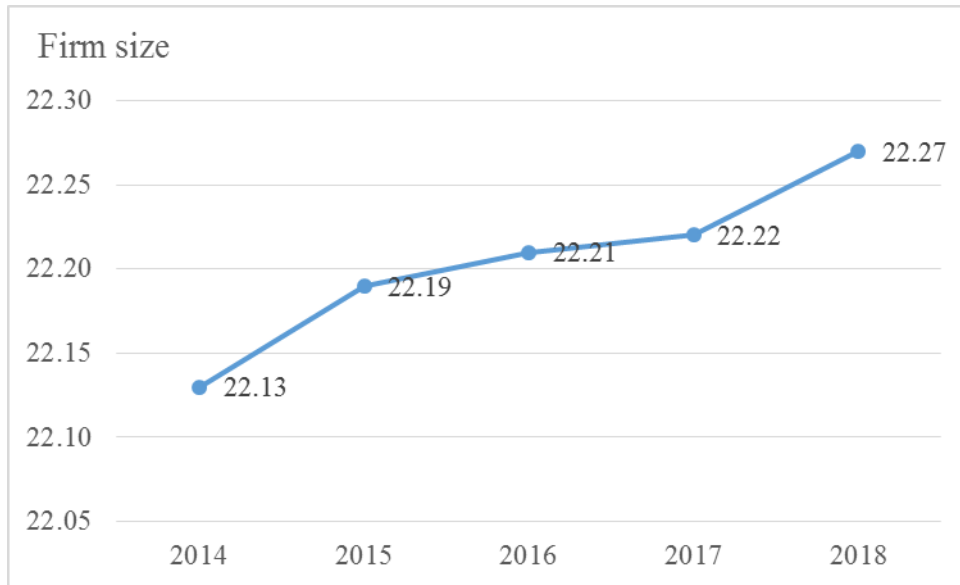


Figure 4.29: Standard group firm size trend.

The standard group firm size had been experiencing a gradual increase in firm size from 2014 to 2018. In 2014 it was 22.13 increasing to 22.19 in 2015, then 22.21 in 2016, then 22.22 in 2017 and finally 22.27 in 2018.

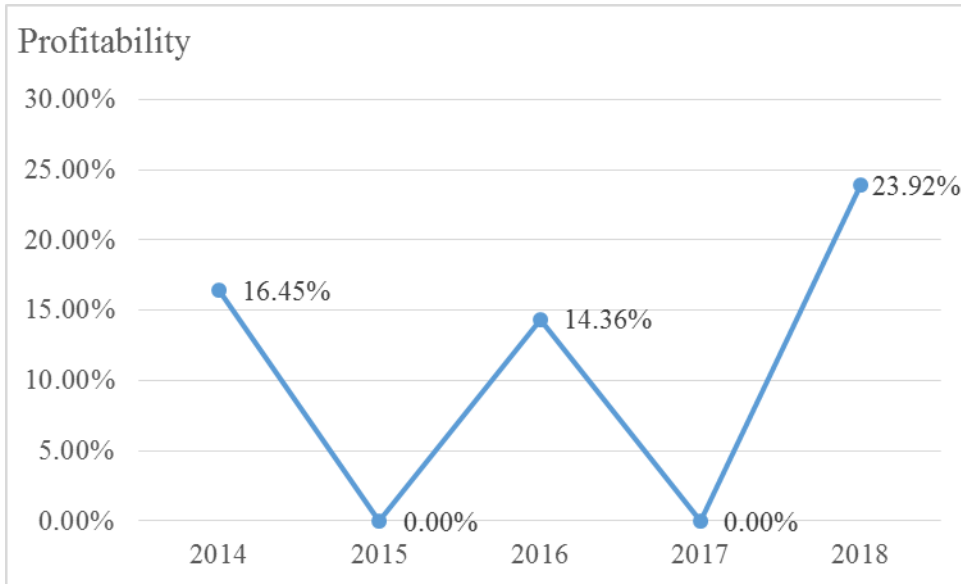
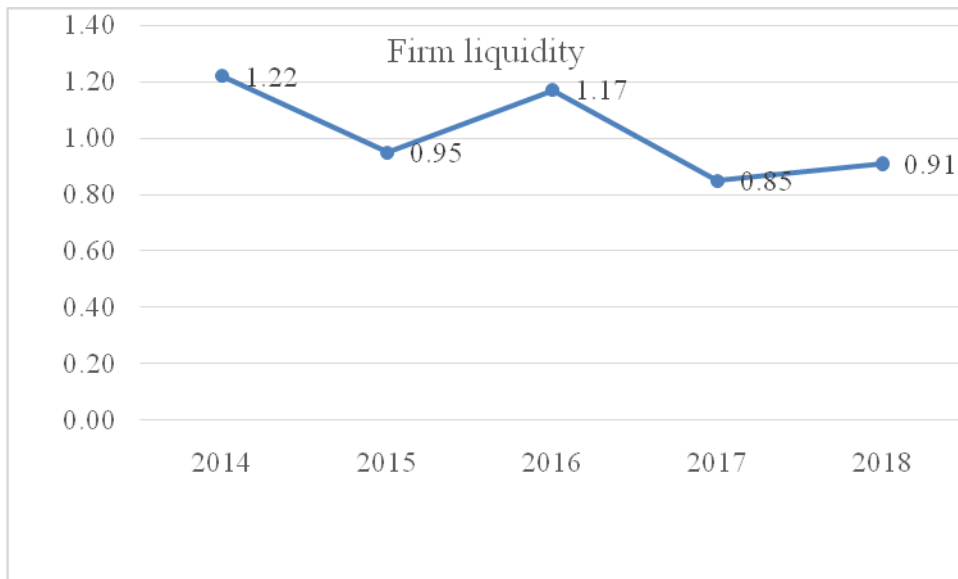


Figure 4.30: Standard group firm profitability trend.

Profitability of standard group showed a W-shaped behavior; bouncing at 0.00% (no profits). In the year 2014 it was 16.45% then drastically fell to 0.00% in 2015. Then it suddenly rose to 14.36% in the year 2016 before going back to 0.00% in the year 2017. Then it suddenly shot up to 23.92% in the year 2018.



Firm liquidity was 122% in the year 2014 and then decreased to 95.00% in 2015 before increasing to 117% in 2016 after which it reduced to 85.00% in 2017 and finally increased to 91.00% in 2018.

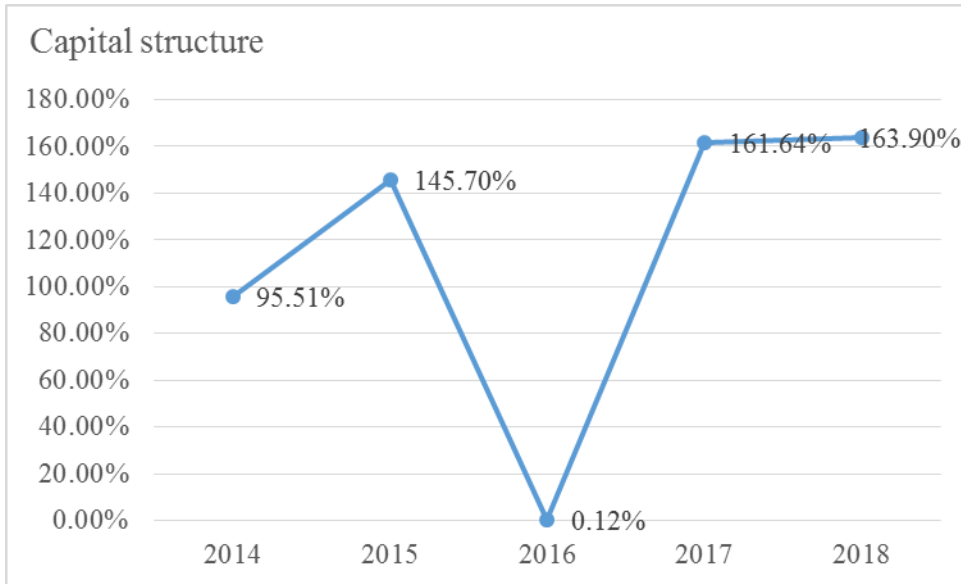


Figure 4.32: Standard group firm capital structure trend.

The capital structure of standard group started well at 95.51% in 2014 then rose to 145.70% in 2015 after which it drastically decreased to 0.12% in 2016. Then it immediately increased to 161.84% before slightly increasing to 163.90%.

TPS Eastern Africa

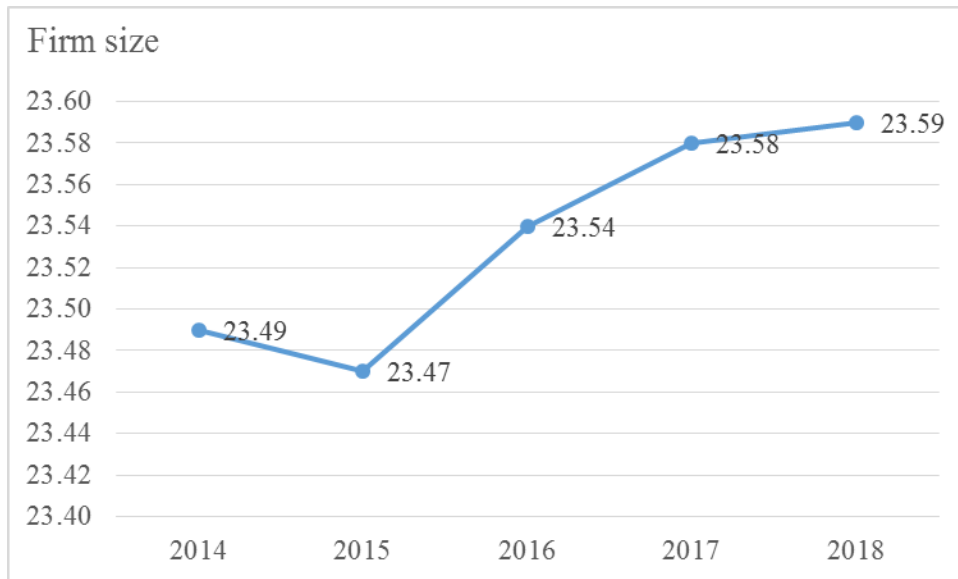


Figure 4.33: TPS Eastern Africa firm size trend

The firm size of TPS Eastern Africa was 23.49 in 2014, this reduced to 23.47 in 2015 before gently increasing to 23.54 in 2016, then 23.58 in 2017 and finally 23.59 in 2018. In fact the firm size of TPS Eastern Africa operated between 23.47 and 23.59%; a margin of 0.14.

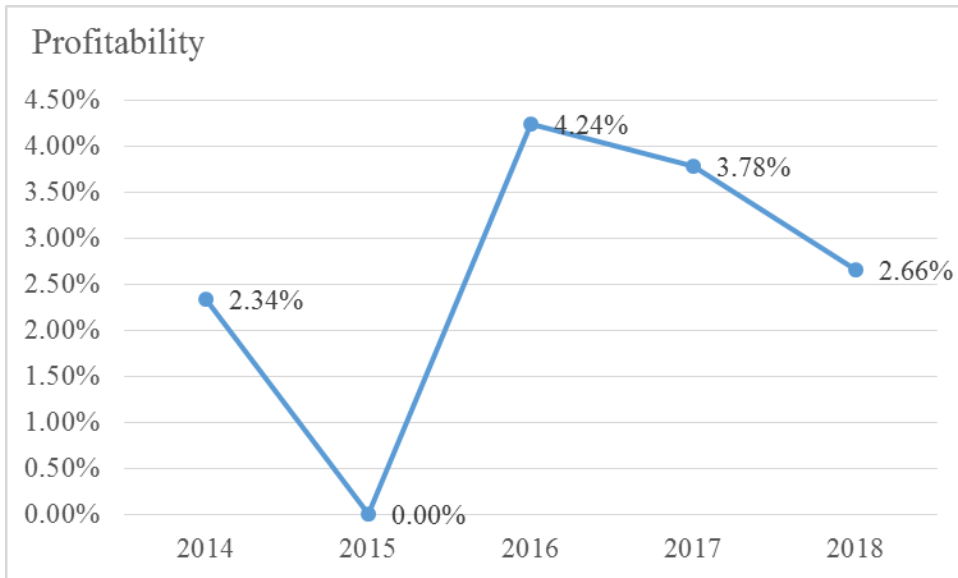
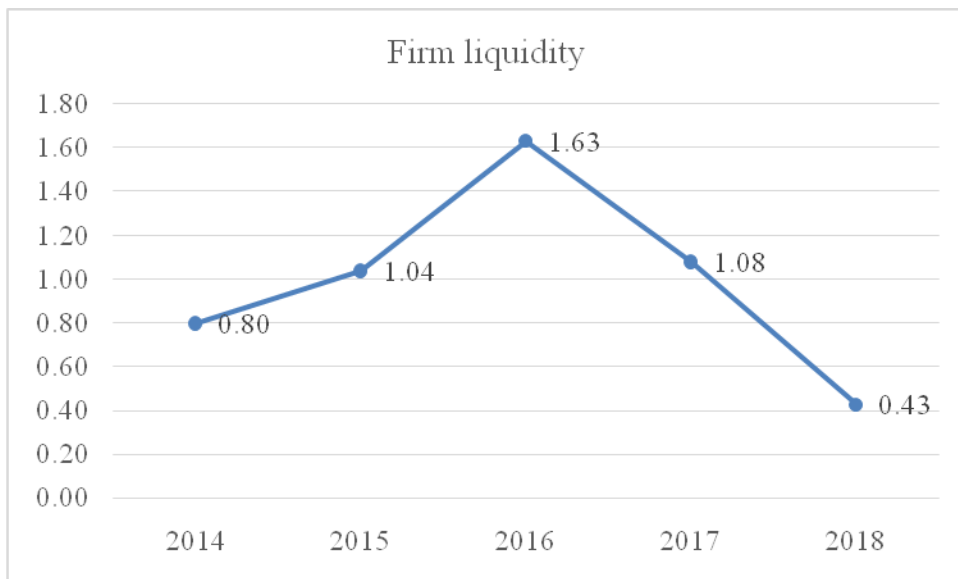


Figure 4.34: TPS Eastern Africa firm profitability trend

The profitability was 2.34% in 2014 going down to 0.00% in 2015 and then increased to 2.24% in 2016 and stood at 3.78% in 2017 before slightly decreasing to 2.66% in 2018.



The firm liquidity experienced a slight growth from 0.80 in 2014 to 1.04 in 2015 to 1.63 in 2015 and then gradually decreased to 1.08 in 2017 and 0.43 in 2018.

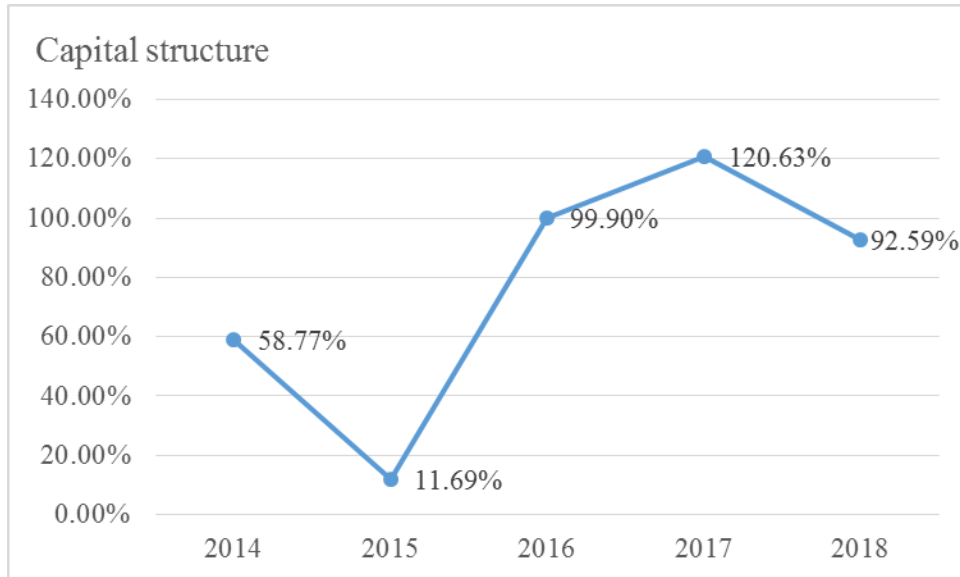


Figure 4.36: TPS Eastern Africa capital structure trend

The capital structure was 58.77% in 2014 and then decreased to 11.69% in 2015 before increasing to 99.90% in 2016 and then 120.63% in 2017 then gradually decreasing to 92.59% in 2018.

Uchumi Supermarket

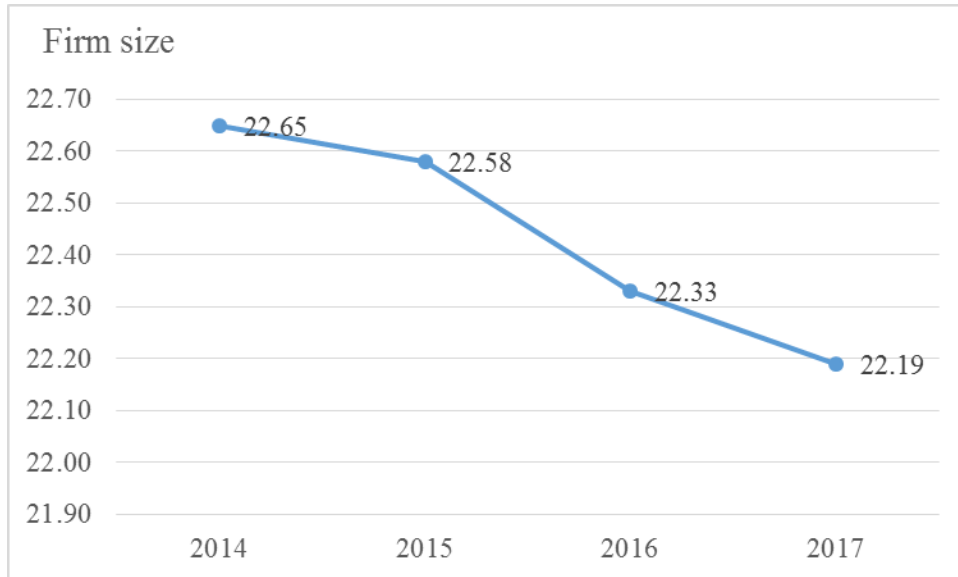
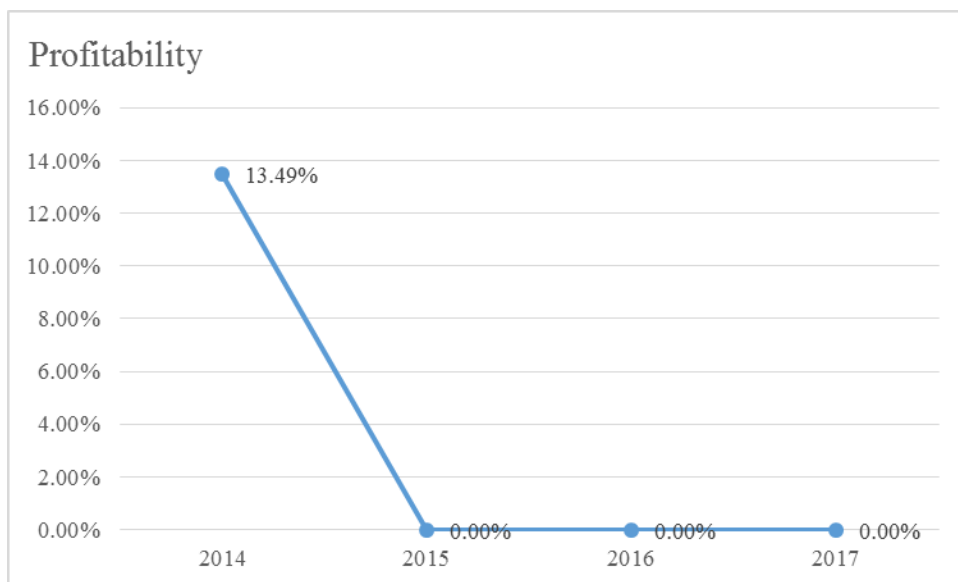


Figure 4.37: Uchumi supermarket firm size trend

The firm size of Uchumi Supermarket experienced a steady decline from 2014 to 2017. It was 22.65 in 2014 then decreased to 22.58 in 2015, 22.33 in 2016 and finally 22.19 in 2017.



Profitability at Uchumi which was 13.49% in the year 2014 drastically fell 0.00% (no profits) in 2015 where it stagnated for the following years; in 2016 and 2017.

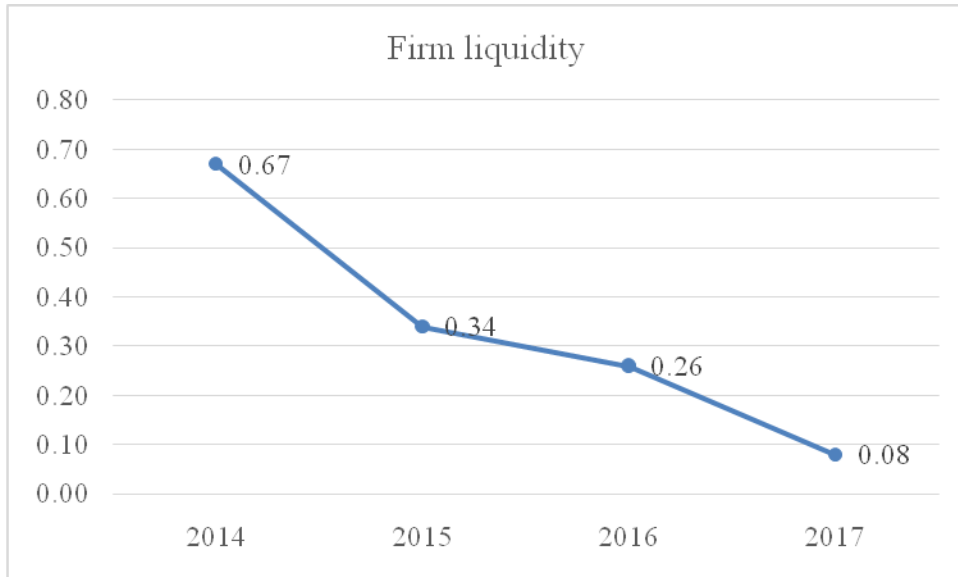


Figure 4.39: Uchumi supermarket firm liquidity trend

As with its firm size, the firm liquidity of Uchumi Supermarket also experienced a steady decline from 2014 to 2017. Firm efficiency was 0.67 in 2014, then decreased to 0.34 in 2015, 0.26 in 2016 and 0.08 in 2017.

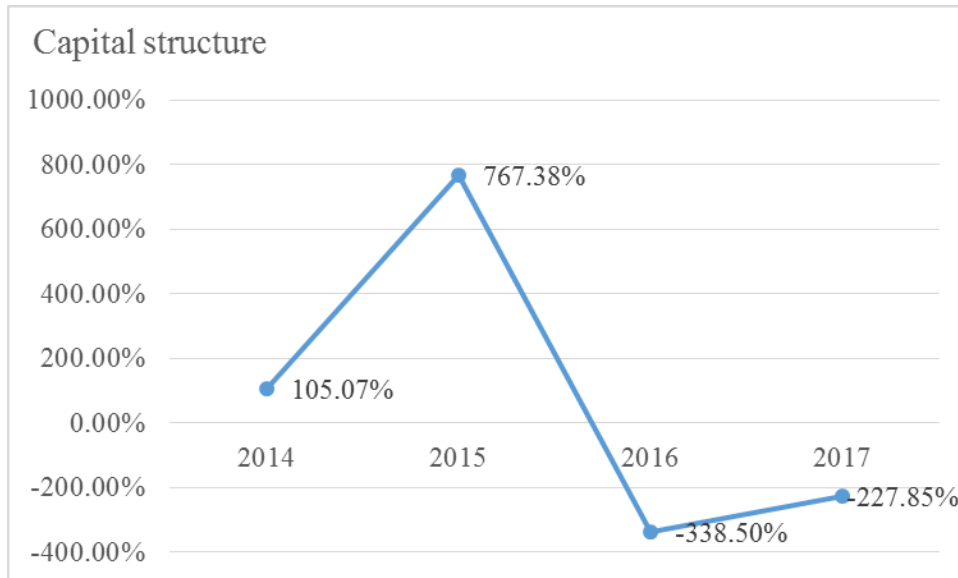


Figure 4.40: Uchumi supermarket capital structure trend.

Capital structure which was 105.00% in 2014 increased instantly to 767.00% in 2015 then decreasing sharply to the negative side (338.50%) in 2016 (228%) in 2017.

4.4.3 Financial Distress

For one to forecast financial distress it is appropriate to define those firms entering financial distress and when this occurs. Distressed firms are characterized by; having recently made losses, having high leverage, having had poor and volatile stock returns, and having had poor levels of cash holdings (Campbell, Hilscher & Szilagyi, 2011). Based on this, the study first constructed a measure of average profitability over the previous four quarters to find firms that were almost failing and were likely to have made losses and more specifically the more recent observations. These firms not only incurred losses over the previous quarter, but rather will have been making losses for a more extended period of time. Notably, firms that are about to fail differ by more than 1

standard deviation from this average. Companies that had been able to sort out the insolvency situation or have been involved in a merger or acquisition are classified as non-distressed concerns. By application of the above criteria for grouping unhealthy (bankrupt) and unhealthy firms, the study established that 4(40%) out of the 10 firms in the sample were unhealthy. These included; Deacons (East Africa) Plc, Express Ltd, Kenya Airways and Sameer Africa PLC. However, Uchumi Supermarket joined the list in 2017.

The probability of FD was modelled using a logit model (Shumway (2001)). The possibility of the firm failing over the following month according to Shumway (2001) includes market based information, for example a concerns market size, companie’s past returns, and the idiosyncratic SD of these returns as superior indicators of FD. Shumway (2001) shows that the dynamic Logit model gives stronger predictive power (Muya, 2017).

The formula for probability of financial distress using Shumway (2001) is

$$P_{t-1}(Y_{it} = 1) = \frac{1}{1 + \exp(-\alpha - \beta x_{i,t-1})}$$

In this case Y_{it} is equal to 1 if the firm fails and equal to 0 if the firm remains active $\beta x_{i,t-1}$ symbolises the linear combination of our explanatory factors. That is Y_{it} is a variable that equals one (1) if concern i suffers FD in year t , or it is zero (0). β and \mathbf{x} are as before. Each enterprise-year observation is treated as though its a different firm. Evaluation by use of standard logit deals with the model though it were static. The test statistics thus require to be scaled by the mean number of corporate years per corporation.

The legit model gives a result between 0 and 1, in case the estimated probability is more than 0.5, the research classified this result as FD, for a probabilistic result lower than 0.5, the firm was grouped as not-distressed (Gujarati & Porter, 2009). The various results on predicted probability of FD are laid out in the Table below:

Firm	2014	2015	2016	2017	2018
Deacons (East Africa) Plc Ord 2.50	1	1	1	1	1
Express Ltd Ord 5.00	1	0	1	1	1
Kenya Airways Ltd Ord 5.00	1	1	1	1	1
Longhorn Publishers Ltd	0	0	1	1	1
Nation Media Group Ord. 2.50	0	0	0	0	0
Sameer Africa PLC Ord 5.00	1	1	1	1	0
Scangroup Ltd Ord 1.00	0	0	0	0	0
Standard Group Ltd Ord 5.00	0	0	0	0	0
TPS Eastern Africa (Serena) Ltd Ord 1.00	0	0	0	0	0
Uchumi Supermarket Ltd Ord 5.00	0	0	0	1	1

Source: Research data (2019)

4.5 Correlation Analysis

The investigation aimed to establish the consequence of CS on FD of commercial and services entities listed on the NSE. It first examined the presence of statistically material relation between the independent and dependent variables through correlation analysis to present the findings shown in the table below.

Table 4.2: Correlations Results

		Correlations				
		Financial Distress	Firm size	Profitability	Firm liquidity	Capital structure
Financial Distress	Pearson	1				
	Correlation					
	Sig. (1-tailed)					
Firm size	N	50				
	Pearson	-.236*	1			
	Correlation					
Profitability	Sig. (1-tailed)	.049				
	N	50	50			
	Pearson	.162	.167	1		
Firm efficiency	Correlation					
	Sig. (1-tailed)	.130	.123			
	N	50	50	50		
Capital structure	Pearson	-.425**	.353**	-.164	1	
	Correlation					
	Sig. (1-tailed)	.001	.006	.127		
Capital structure	N	50	50	50	50	
	Pearson	-.104	-.066	-.834**	.072	1
	Correlation					
Capital structure	Sig. (1-tailed)	.236	.325	.000	.309	
	N	50	50	50	50	50

*. Correlation is significant at the 0.05 level (1-tailed).

**. Correlation is significant at the 0.01 level (1-tailed).

Based on these findings, there exists a material link between each of establishment size and firm liquidity and DV; financial distress; because the probability (p-value (for each comparison was less than 0.05. The results show in this case the absolute value of correlation coefficient (r) for relationship between firm liquidity (p-value = 0.001; r = -0.425) was less than 0.6 and greater than 0.3. This denotes the existence of a moderate negative material relationship between business liquidity and FD. Meanwhile for establishment size (p-value = 0.049; r = -0.236), the absolute value of correlation coefficient, was less than 0.3 which implied a low material relation between firm size and

FD. Each of profitability (p-value = 0.130; r = 0.163) and capital structure (p-value = 0.236, r= -0.104) did not have significant connection with FD of these listed establishments. Profitability was positive and low while that of capital structure was low and negative.

4.6 Regression Analysis

Multiple regression done on the IVs (establishment size, profitability, corporate liquidity, and capital structure) against the dependent variable (probability of FD among these listed commercial and services companies.

The IVs and DV were thus regressed to approximate the study model. The following regression equation was adopted by the model;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:-

Y = probability of financial distress among commercial and services companies listed on the Nairobi Stock Exchange

β_0 is the constant term (intercept),

$\beta_1 \dots \beta_4$ are the coefficients of the IVs of the study; X_1 , X_2 , X_3 , and X_4 respectively (that is firm size, profitability, firm liquidity, and capital structure respectively)

ε = error term.

This research undertook an Analysis of Variance (ANOVA) to determine suitability of the model, and the data is presented in the Table below.

Table 4. 3: ANOVA for probability of FD

ANOVA ^a					
	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2.538	4	.635	2.890	.033 ^b
Residual	9.882	45	.220		
Total	12.420	49			

a. Dependent Variable: Financial Distress

b. Predictors: (Constant), CS, Firm size, Firm liquidity , Profitability

Source: Research Data (2019)

In a quest to examine suitability of the research model the hypothesis; $H_0: \beta_1=\beta_2= \beta_3=\beta_4 = 0$ (assuming the beta values; coefficient of X_1, X_2, X_3 and X_4 , all equal nil) was Evaluation was at 0.05 significance level and H_0 was to be taken as true if (p-value) was more than 5% meaning that $p\text{-value} >.05$. Therefore the alternate hypothesis was not to be accepted. Where null hypothesis was lower or equal to 5% then alternate hypothesis was accepted and reject H_0 .

The findings ($p = 0.033, F = 2.890$), indicate that the $p\text{-value} < 0.05$. According to this information, then null hypothesis was rejected and H_a was taken to be true since $p\text{-value} < 0.05$. therefore the study can deduce that at $\alpha=5\%$, sufficient corroboration is present to confirm that at least one of the IVs; firm size, profitability, firm liquidity, and CS are useful in predicting the probability of FD among these firms and hence the study can be used to estimate the probability of FD in these firms in terms of; firm size, profitability, firm liquidity, and capital structure.

Table 4.3 indicates that the model is material having an F statistic of 2.890 and p-value (0.033) < 0.05 which means that the points are averagely near the line of best fit on the scatter diagram. It shows that the model is reasonably satisfactory to account for the differences in probability of FD among commercial and services companies listed as described by the variance in the capital structure attributes

Regression was done for the independent variables and dependant variables to approximate the study model. The results are as exhibited in Table 4.4.

Table 4.4: Regression Results of Dependent Variable against Predictor Variables

	Coefficients ^a				
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	.942	.259		3.630	.001
Firm size	-.012	.013	-.138	-.924	.360
Profitability	.122	.176	.179	.696	.490
Firm liquidity	-.226	.096	-.351	-2.354	.023
Capital structure	.005	.022	.062	.248	.805

a. Dependent Variable: Financial Distress

Source: Research Data (2019)

The research adopted these hypotheses to examine for impact of Establishment size;

H₀: Business size doesn't have significant impact on probability of FD among listed commercial and services companies on the NSE

H₁: Business size has significant impact on probability of FD among listed commercial and services companies on the NSE

The results in Table 4.4 reveal that at 5% level of significance, p-value= .360 and T= 0.924. Then the null is accepted and alternate hypothesis rejected because p > 0.05. Thus

the study deduces that at $\alpha = 5\%$ level of significance, there is ample corroboration that firm size is nil and thus firm size does not significantly influence on probability of FD among these group of companies..

The investigation applied the following hypotheses to examine for impact of profitability;

H₀: Profitability doesn't materially influence the probability of FD in commercial and services companies listed on the NSE

H₁: Profitability materially influences the probability of FD in commercial and services companies listed on the NSE

As per observed data in Table 4.4 exhibits that at 5% significance level, p-value= .490 and T= 0.696. In this case H₀ is accepted because $p > 0.05$. The examination asserts that at $\alpha = 5\%$ significance level, there is adequate corroboration that the profitability is nil hence profitability does not substantially influence probability of FD the firms.

The influence of Firm liquidity was evaluated by use of the following hypotheses;

H₀: Firm liquidity doesn't significantly impact probability of FD in commercial and services enterprisess listed on the NSE

H₁: Firm liquidity significantly impact probability of FD among commercial and services enterprises listed on the NSE

Table 4.4 shows that at 5% significance level, p-value= .023 and T= -2.354. Thus reject H₀ and H₁ taken to be true since $p < 0.05$. In this case, the analysis confirms that at $\alpha = 5\%$ significance level, there is sufficient corroboration that the business's liquidity is not nil thus Firm liquidity is important as an indicator of probability of FD among the firms.

Lastly, influence of CS was evaluated using these hypotheses;

H₀: CS doesn't substantially influence probability of FD in commercial and services firms listed on the NSE

H₁: CS substantially influences probability of FD among commercial and services firms listed on the NSE

The data in Table 4.4 indicate that at 5 percent significance level, p-value= .805 and T= 0.248. Hence the null hypothesis is accepted and reject *H₁* because $p > 0.05$. Therefore, the investigation finds that at $\alpha = 5\%$ significance level, there is sufficient corroboration that the Capital structure is nil and thus CS does not significantly influence probability of FD among these businesses..

From table 4.4, it is inferred that the constant probability of financial distress among these particular group of companies before incorporating the capital structure factors is 0.942. The table also shows that firm efficiency was a significant estimator of probability of FD among the firms following that the p-value for the predictor variable was lower than 5%. This is to say that of all the predictor variables firm liquidity is the better estimator of probability of FD among these companies.

The coefficient for firm size ($\beta_1 = -.012$), Profitability ($\beta_2 = .112$), Firm liquidity ($\beta_3 = -.226$), and Capital structure ($\beta_4 = .005$) were used in the estimated model fitted as;

$$Y = 0.942 - 0.012X_1 + 0.122X_2 - 0.226X_3 + 0.005X_4 \dots \dots \dots \text{(iii)}$$

The fitted regression equation is as follows: probability of FD among commercial and services concerns listed on the NSE = 0.942 - 0.012 (firm size) + 0.122 (Profitability) –

0.226 (Firm liquidity) + 0.005 (Capital structure). It is inferred that the constant probability of FD within these firms before incorporating the capital structure factors is 0.942. By carrying out the evaluation of coefficients for particular firm factors, Firm size and firm liquidity had negative impact on probability of distress among listed commercial and services companies having a coefficient of -0.012 and -0.226 consecutively. Which means that a single unit variation in Firm size and firm liquidity can cause a change in probability of FD among the firms by -0.012 and -0.226 units in reverse direction respectively. On the other hand, Profitability had positive influence on FD with a coefficient of 0.122 that means a single unit variation in profitability can lead changes in financial distress by 0.122 units in a similar direction. CS similarly showed a positive effect on probability of FD among these group of establishments listed on the NSE having a coefficient of 0.005 showing that a unit difference in capital structure can cause changes on probability distress among the firms by 0.005 units.

The coefficients of profitability and capital structure are positive, meaning that they move in the same direction as probability of FD among the commercial and services enterprises examined. So, a rise in any of these variables; profitability and CS leads to a rise in probability of FD among the firms and vice versa. These findings reveal that firm size and firm liquidity have negative coefficients. Therefore increase in any of firm size and enterprise liquidity leads to a lowering in FD possibility among the firms and a decrease in firm size and corporate liquidity has an opposite effect.

Finally, the research model summary was obtained as given in table 4.5.

Table 4. 5: Model Summary for probability of FD among listed commercial and services companies on the NSE

Model Summary			
R	R Square	Adjusted R Square	Std. Error of the Estimate
.452 ^a	.2044	.1336	.46861

a. Predictors: (Constant), CS, Firm size, Firm liquidity , Profitability

Source: Research Data (2019)

Table 4.5 reveals that the coefficient of determination was .2044, an sign that 20.44% of changes in probability of FD among them is explained by change in; firm size, profitability, corporate liquidity, and capital structure. Therefore they are strong determinants of probability of financial distress among these firms.

4.7 Discussion of study results

The following are discussions of findings and conclusions with regard to the study:

4.7.1 Discussion on Firm size

Firm size found to have negative insignificant consequence on probability of FD among commercial and services enterprises listed on the NSE. Although correlation results show firm size has (p-value = 0.049; r = -0.236) as having a negative insignificant consequence on probability of FD, the regression results showed an insignificant effect. However the bottom line is that there was negative insignificant effect of enterprise size on possibility of FD among the firms. These observations are supported by those in the study by Waqas and Rohani (2018) conducted among Pakistan’s listed firms. According to the results in the study by Waqas and Rohani (2018) firm size was relevant in predicting financial distress having a negative and material effect. Those findings assert

that the large business concerns are less prone to FD compared to smaller ones. Based on the results in my research, a greater firm size is equated to lower chances of the firm facing distress and vice versa.

The results in this study agree with those in the study by Ikpesu and Eboiyehi (2018) which proposed that firm's size impacts firms FD negatively indicating that big establishments experience lower levels of FD as opposed to smaller companies. The study by Muigai (2016) confirmed that business size has a substantial negative impact on FD of non-financial enterprises.

4.7.2 Discussion on Profitability

On analyzing the performance of Profitability, it is ascertained that Profitability has an affirmative insignificant influence on the probability of FD among commercial and services companies listed. This is supported by the study by Geng, Bose, and Chen (2015) which reveals a material negative link between net profit margin and financial distress, hence it lowers the possibility of FD in a company. The study reveals that the probability of failure is increased when profitability is poor. Poor profitability is a sign that a concern is unable to turn earnings into profits. The study by Cederburg and O'Doherty (2015) states the materiality of profitability ratios in forecasting FD. There is a substantial negative relationship of RE to aggregate assets ratio suggesting that as a firm's retained earnings increase its the possibility of FD decreases. Similarly, the fraction of income before interest and tax costs to aggregate assets has a significant negative link to possibility of FD. However, the coefficient's sign is positive in this study and it differs from the study by Cederburg and O'Doherty (2015). Such unanticipated

sign can arise because of some extraordinary patterns in the financial records of financially unstable enterprises as seen in Lane et al. (1986).

4.7.3 Discussion on Firm liquidity

The study came to a conclusion that the business liquidity had a negative material consequence on probability of FD among the listed firm commercial and services establishments in the NSE. These findings are similar to the opinion of (Amalia and Kristjadi, 2003) where high liquidity reduces probability of financial distress since the firms can meet their current obligations without incurring debt.

4.7.4 Discussion on Capital structure

It was found that the CS has a positive insignificant consequence on probability of FD among this group of concerns listed on the NSE. Results of research by Avramov, Chordia, Jostova, and Philipov (2013) indicate that the ratio of total internal financing to aggregate liabilities and working capital to long-term debt are not strong measures for possibility of FD in Pakistani firms as opposed to aggregate liabilities to aggregate assets ratio which was material and has a positive coefficient sign. Ogundipe et al. (2012) and Velnampy (2013) postulate a positive effect of capital structure on these indicators, which agrees with the present study

However, the results of this study by Bhattacharjee and Han (2014) show a consequential negative link between leverage ratio and FD (using Altman Z-score. The outcome of this study also negates those in the study by Muigai and Muriithi (2017). Their study revealed

that CS impacts FD in a negative manner. Kodongo, Mokoaleli-Mokoteli, and Maina (2014) concluded that CS has zero effect on indicators of FD. Kodongo et al. (2014) found that enterprises with higher sales growth rate have higher market value agree to Modigliani and Miller (1958) who asserted that how an entity funds its activities does not affect financial stability of a concern. This points to a positive link between sales growth and FD. Notably, total equity to external debt have a material role in mitigating FD in non-financial business concerns. However, the effect of CS has been debatable. The results of these studies differ with the findings of studies that showed that the utilization of debt mitigates distress in businesses. Study undertaken by Sharma (2014) provided evidence that use of debt makes a firm more susceptible to financial distress.

4.7.5 Probability of financial distress among listed commercial and services companies on the NSE

Using Shumway (2001) modified model, the study established that listed companies Deacons (East Africa) Plc, Express Ltd , Kenya Airways Ltd , Sameer Africa PLC and later Uchumi Supermarket Ltd had probability of facing financial distress. Based on the results on “Analysis for IVs trends”, the results of these firms in terms of profitability was pathetic. For instance, Express Ltd Ord 5.00 never registered any profits over the period on the study while other companies registered very low or fluctuating profit. Then it may be construed that the probability of facing FD is linked to performance as posed in the study by Kazemian, Shauri, Sanusi, Kamaluddin and Shuhidan (2017) that poor firm performance means a lower financial health of the enterprise. Thus, a higher probability of financial distress is related to low performance (Jahur & Quadir, 2012)

The present study relied on Shumway's (2001) hazard model which employs logistic regression to provide results consistent with other studies such as that by Chava and Jarrow (2004) which concluded that the relative execution of Shumway's model compared to other accounting models is outperforming. In the study by Abdullah *et al.* (2008) of companies registered on the Malaysian stock exchange revealed that an overall accuracy of Shumway's (2001) hazard model was 94.8 % as compared to other models where the highest overall accuracy of 85 % and other; 82.7 %, 80.8 %, 80 % 63.9 % (Abdullah, 2008,). Thus, the Shumway's (2001) hazard model is a more accurate model of estimation.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This segment lays out the deductions from the study results together with the recommendations on what can or should be done. It also brings to attention the research gaps that still exist that can be explored by future researchers and the constraints of the study.

5.2 Summary of Study Results

5.2.1 Firm size

This research confirmed that the size of a concern has negative immaterial influence on probability of FD among commercial and services firms listed on the NSE. in which case large businesses have lower probability of FD as compared to smaller firms. Thus, higher firm size leads to reduced chances of FD and vice versa. Accordingly, firm size is important when forecasting FD.

5.2.2 Profitability

The study found that profitability positively influences the probability of FD among this class of firms listed on the NSE. Which differs from other research findings as mentioned earlier and provides room for further research as to why that is the case.

5.2.3 Firm liquidity

The study established that liquidity of a concern has a negative substantial influence on probability of FD among these particular companies on the NSE. Observations were made that firm liquidity had a positive consequence on FP and if not monitored can lead to FD and therefore analyzing probability of FD requires considering the how the liquidity of the firm is.

5.2.4 Capital structure

As per the examination findings, CS has a positive insignificant influence on probability of FD among the firms which agrees with some researches done for instance Avramov *et al.* (2013) where aggregate debt to aggregate assets ratio is important and had a positive impact on FD. Alos Ogundipe et al. (2012) and Velnampy (2013) postulate positive consequence of CS on these indicators. However, most investigations done have established significant negative link between CS and FD Modigliani and Miller (1958) who asserted that how firms are funded has no influence on the FD. This study finds that the influence of CS on FD is debatable. However, use of leverage leads to higher chances of enterprise FD.

5.2.5 Probability of financial distress

The investigation found that 20.44% of variation in probability of FD among listed commercial and services enterprises is attributed to variations in; corporation size, profitability, liquidity of the business, and CS. Therefore, all afore mentioned variables are strong determinants of probability of FD among the listed commercial and services

concerns. Deductions were made that firm size has negative unsubstantial impact on possibility of FD among commercial and services businesses listed on the NSE; profitability has an affirmative insignificant influence on the probability of FD; firm liquidity has a negative substantial influence on probability of FD and CS has a positive insignificant impact on probability of FD among the firms.

5.3 Conclusions

The conclusions drawn are that the expense of a concern has negative unsubstantial impact on probability of FD among listed commercial and services companies on the NSE, profitability has an affirmative insignificant influence on the probability of FD of these firms where there is an insignificant association between net profit margin and FD which also provides a problem for further research as to why this is the case.

It also concludes that firm liquidity has a negative substantial influence on probability of FD among the firms. Liquidity of a firm had a positive effect to firm performance and if not monitored can lead to FD. Also analyzing corporate FD requires considering the how the firm operates.

Lastly, the study concludes that CS has a positive insignificant consequence on probability of FD among commercial and services enterprises listed on the NSE where total leverage to aggregate assets ratio is insignificant with a positive effect on FD.

5.3 Recommendations

Recommendations were made for both managerial and policy making to provide guidelines to managers of this group of firms being examined on how corporations ought

to configure their capital structures so as to mitigate instances of financial distress and subsequent bankruptcy and as well bring to light the need to institute appropriate regulatory mechanisms meant to cushion investors from losing their resources and hence restore trust in the capital markets.

The study found that some listed commercial and services companies suffer FD which can cause firm failure if the distress prolongs. These firms should therefore make sure they know the specific source of the FD since each firm is different in the way it operates and take measures to combat or reduce FD. Examples of restorative action they could pursue include disposing fixed assets, mergers, issuing new securities, using equity instead of debt, reducing capital spending as well as proper planning and use of funds.

The study recommends that the managers of listed commercial and services concerns are supposed to put in place policies that help to determine the right level of liquidity, external financing, profitability and revenue growth to be upheld by the firm in order to secure smooth running and sustainability of the company.

The study found that firm liquidity is a major factor and notably management has different interests from the shareholders leading to wrong decisions and the number one cause of FD is poor financial administration. The study recommends for improvement of strategic decision making implemented by skilled and experienced professionals which will result to positive outcomes due to sound and rational decision making for the firms. Focus should be placed on maximizing revenues and retaining as much earnings within their capability in order to reinvest and ensure they are in a good credit position.

It also recommends that these firms should ensure their debt levels are in line with the returns volatility. Those experiencing more return volatility should adopt lower external financing in their CS than companies with mostly constant earnings. Changing debt structure can have a substantially great impact on the concerns risk profile and cost of capital.

Further, these firms should seek to employ more internal financing and less debt to finance their operations since employment of borrowed capital is a major recipe for corporate financial distress. Based on assertions by Ariff, Hassan and Shamsher (2008) firms should hold an amount of debt that aids in lowering the cost of capital and also raises the value of the firm. Once the debt level passes this point then the possibility of FD and risk increases while the financial worth of the concern decreases.

5.4 Recommendations for further studies

The study was for commercial and services businesses registered on the NSE. A similar study can be done on similar firms not on unlisted companies to verify the results obtained.

This research revealed that 20.44% of variation in probability of FD among the firms studied is attributed to change in; firm size, profitability, liquidity of the business, and CS. This shows that other determinants contribute the other 79.56%. Therefore, studies should be done to ascertain factors determining the remaining 79.56% of probability of FD among these listed commercial and services firms.

The fact that profitability was found to be positively associated to FD in this group of firms is also an issue for further research.

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APPENDICES

Appendix I: Data Collection

Year	2018	2017	2016	2015	2014
Total assets					
Return on Assets					
Assets to Debt ratio					
Current Ratio					
Debt to Equity					
Firm capitalization rate					
Market capitalization rate					

Appendix II: Listed Commercial and Service Companies

COMMERCIAL AND SERVICES
1. Express Ltd Ord 5.00
2. Sameer Africa PLC Ord 5.00
3. Kenya Airways Ltd Ord 5.00
4. Nation Media Group Ord. 2.50
5. Standard Group Ltd Ord 5.00
6. TPS Eastern Africa (Serena) Ltd Ord 1.00
7. Scangroup Ltd Ord 1.00
8. Uchumi Supermarket Ltd Ord 5.00
9. Longhorn Publishers Ltd
10. Deacons (East Africa) Plc Ord 2.50
11. Nairobi Business Ventures Ltd

D EACONS

ASSETS EMPLOYED	2013	2014	2015	2016	2017
Total Assets		1,961,882,000.00	2,486,072,000.00	2,281,680,000.00	1,552,835,000.00
Share Capital		308,896,000.00	308,896,000.00	308,896,000.00	308,896,000.00
Share premium & Reserves*		541,671,000.00	528,489,000.00	526,918,000.00	525,732,000.00
Shareholders Funds		1,411,726,000.00	1,512,294,000.00	1,172,632,000.00	330,018,000.00
Liabilities		550,156,000.00	973,778,000.00	1,109,048,000.00	1,222,817,000.00
TURNOVER		1,927,669,000.00	2,383,297,000.00	2,309,091,000.00	2,005,767,000.00
Profit /loss Before Taxation		88,190,000.00	141,595,000.00	(385,057,000.00)	(823,200,000.00)
Taxation		(26,767,000.00)	(27,845,000.00)	108,712,000.00	(18,228,000.00)
Current Ratio		0.64	0.47	0.68	1.07
Number of Shares in Issue		123,558,228.00	123,558,228.00	123,558,228.00	123,558,228.00
Market Capitalization		-	-	747,527,279.40	432,453,798.00

	2014	2015	2016	2017	2018
Ln Assest	21.40	21.63	21.55	21.16	-
Equity	1,411,726,000.00	1,512,294,000.00	1,172,632,000.00	330,018,000.00	-
Debt	550,156,000.00	973,778,000.00	1,109,048,000.00	1,222,817,000.00	-
Current Ratio	0.64	0.47	0.68	1.07	-
Net Income	88,190,000.00	141,595,000.00	(385,057,000.00)	(823,200,000.00)	-
Market Capitalization (Kshs)	-	-	747,527,279.40	432,453,798.00	-

	2014	2015	2016	2017	2018
Firm size	21.40	21.63	21.55	21.16	-
Profitability	0.062469629	0.093629281	-0.328369855	-2.494409396	0
Firm liquidity	0.64	0.47	0.68	1.07	-
Capital structure	0.389704518	0.643907864	0.94577668	3.705303953	0
Market Capitalization (Kshs)	-	-	747,527,279.40	432,453,798.00	-

	2014	2015	2016	2017	2018
Firm size	21.40	21.63	21.55	21.16	-
Profitability	0.06	0.09	0.00	0.00	0.00

	2014	2015	2016	2017	2018
Firm liquidity	0.64	0.47	0.68	1.07	-
	2014	2015	2016	2017	2018
Capital structure	0.39	0.64	0.95	3.71	0.00
Market Capitalization (Kshs)	-	-	747,527,279.40	432,453,798.00	-

EXPRESS KENYA LTD

ASSETS EMPLOYED	2013	2014	2015	2016	2017
Total Assets	480,526,000.00	480,456,000.00	441,898,000.00	379,575,000.00	359,932,000.00
Share Capital	177,019,000.00	177,019,000.00	177,019,000.00	177,019,000.00	177,019,000.00
Share premium & Reserves*	95,563,000.00	152,891,000.00	143,024,000.00	133,157,000.00	123,290,000.00
Resrves	85,061,000.00	142,389,000.00	132,522,000.00	122,655,000.00	112,788,000.00
Shareholders' Funds (EQUITY)	198,517,000.00	180,208,000.00	120,119,000.00	23,181,000.00	(67,168,000.00)
Liabilities	282,009,000.00	300,299,000.00	321,779,000.00	356,395,000.00	427,101,000.00
TURNOVER	387,494.00	173,033.00	123,851.00	62,817.00	50,323.00
Profit/Loss Before Taxation	(1,695,000.00)	(81,239,000.00)	(75,734,000.00)	(112,007,000.00)	(94,310,000.00)
Taxation	1,924,000.00	(917,000.00)	15,645,000.00	15,068,000.00	3,961,000.00
Current Ratio	0.64	0.58	1.13	0.85	0.60
Number of Shares in Issue	35,403,790.00	35,403,790.00	35,403,790.00	35,403,790.00	35,403,790.00
Market Capitalization (Kshs)	138,074,781.00	230,124,635.00	159,317,055.00	159,317,055.00	132,764,212.50

102,920,726	245,485,855	335,836,985
10,501,719	75,455,915	121,964,440
113,422,445	320,941,770	457,801,425

	2014	2015	2016	2017	2018
Ln Assest	19.99	19.91	19.75	19.70	26.49
Equity	180,208,000.00	120,119,000.00	23,181,000.00	- 67,168,000.00	- 136,859,655.00
Debt	300,299,000.00	321,779,000.00	356,395,000.00	427,101,000.00	457,801,425.00
Current Ratio	0.58	1.13	0.85	0.60	0.62
Net Income	(81,239,000.00)	(75,734,000.00)	(112,007,000.00)	(94,310,000.00)	(75,793,578.00)
Market Capitalization (Kshs)	230,124,635.00	159,317,055.00	159,317,055.00	132,764,212.50	35,403,790.00

	2014	2015	2016	2017	2018
Firm size	19.99	19.91	19.75	19.70	26.49
Profitability	-0.450806845	-0.630491429	-4.831845046	1.404091234	0.553805122
Firm liquidity	0.58	1.13	0.85	0.60	0.62
Capital structure	1.666402158	2.678835155	15.37444459	-6.358697594	-3.345042957
Market Capitalization (Kshs)	230,124,635.00	159,317,055.00	159,317,055.00	132,764,212.50	35,403,790.00

	2014	2015	2016	2017	2018
Firm size	19.99	19.91	19.75	19.70	26.49
	2014	2015	2016	2017	2018
Profitability	0.00	0.00	0.00	0.00	0.00
	2014	2015	2016	2017	2018
Firm liquidity	0.58	1.13	0.85	0.60	0.62
	2014	2015	2016	2017	2018
Capital structure	1.67	2.68	15.37	(6.36)	(3.35)
Market Capitalization (Kshs)	230,124,635.00	159,317,055.00	159,317,055.00	132,764,212.50	35,403,790.00

KENYA AIRWAYS					
ASSETS EMPLOYED	2013	2014	2015	2016	2017
Total Assets	122,696,000,000.00	148,657,000,000.00	182,063,000,000.00	158,415,000,000.00	146,144,000,000.00
Share capital	7,482,000,000.00	7,482,000,000.00	7,482,000,000.00	7,482,000,000.00	7,482,000,000.00
Share premium & Reserves*	20,116,000,000.00	17,147,000,000.00	(17,048,000,000.00)	(48,697,000,000.00)	8,670,000,000.00
Shareholders funds	31,155,000,000.00	28,186,000,000.00	(6,009,000,000.00)	(35,718,000,000.00)	16,152,000,000.00
Liabilities	91,487,000,000.00	120,428,000,000.00	188,026,000,000.00	194,082,000,000.00	191,059,000,000.00

Number of Shares in Issue	1,496,496,034.00	1,496,496,035.00	1,496,469,035.00	1,496,469,035.00	1,496,469,035.00
Market Capitalization (Ksh)	18,706,200,425.00	18,556,550,834.00	12,271,046,087.00	6,734,110,657.50	8,978,814,210.00

	2014	2015	2016	2017	2018
Ln Asset	25.72	25.93	25.79	25.71	#NUM!
Equity	28,186,000,000.00	- 6,009,000,000.00	- 35,718,000,000.00	16,152,000,000.00	-
Debt	120,428,000,000.00	188,026,000,000.00	194,082,000,000.00	191,059,000,000.00	-
Current Ratio	-	-	-	-	-
Net Income	-	-	-	-	-
Market Capitalization (Kshs)	18,556,550,834.00	12,271,046,087.00	6,734,110,657.50	8,978,814,210.00	-

	2014	2015	2016	2017	2018
Firm size	25.72	25.93	25.79	25.71	#NUM!
Profitability	0	0	0	0	0
Firm liquidity					

	-	-	-	-	-
Capital structure	4.272617612	-31.29073057	-5.433730892	11.82881377	0
Market Capitalization (Kshs)	18,556,550,834.00	12,271,046,087.00	6,734,110,657.50	8,978,814,210.00	-

	2014	2015	2016	2017	2018
Firm size	25.72	25.93	25.79	25.71	25.64
	2014	2015	2016	2017	2018
Profitability	0.00	4.94	0.73	0.62	0.00
	2014	2015	2016	2017	2018
Firm liquidity	0.46	0.51	0.40	0.38	-
	2014	2015	2016	2017	2018
Capital structure	4.27	-31.29	-5.43	11.83	0.00
Market Capitalization (Kshs)	18,556,550,834.00	12,271,046,087.00	6,734,110,657.50	8,978,814,210.00	-

LONGHORN PUBLISHERS

ASSETS EMPLOYED	2013	2014	2015	2016	2017
Total Assets	685,019,000.00	752,559,000.00	689,320,000.00	1,866,944,000.00	1,858,734,000.00
Share Capital	58,500,000.00	58,500,000.00	146,250,000.00	272,440,000.00	272,440,000.00
Share premium & Reserves*	5,039,000.00	5,039,000.00	5,039,000.00	368,289,000.00	368,289,000.00
Shareholders' Funds	385,866,000.00	434,320,000.00	380,378,000.00	947,567,000.00	945,936,000.00
Liabilities	299,153,000.00	318,239,000.00	308,942,000.00	919,377,000.00	913,028,000.00
TURNOVER	1,033,295,000.00	1,396,834,000.00	848,377,000.00	1,503,770,000.00	1,451,774,000.00
Profit/Loss Before Taxation	151,327,000.00	147,226,000.00	96,916.00	139,277,000.00	179,147,000.00
Taxation	(57,409,000.00)	(52,293,000.00)	(25,190,000.00)	(35,214,000.00)	(45,271,000.00)
Current Ratio	1.62	1.74	1.50	1.49	1.37
Number of Shares in Issue	58,500,000.00	58,500,000.00	243,750,000.00	369,940,476.00	272,440,473.00
Market Capitalization (Kshs)	1,033,110,000.00	1,003,275,000.00	1,791,562,500.00	2,108,660,713.20	1,375,824,388.65

	2014	2015	2016	2017	2018
Ln Assest	20.44	20.35	21.35	21.34	-
Equity	434,320,000.00	380,378,000.00	947,567,000.00	945,936,000.00	-
Debt	318,239,000.00	308,942,000.00	919,377,000.00	913,028,000.00	-
Current Ratio	1.74	1.50	1.49	1.37	-
Net Income	147,226,000.00	96,916.00	139,277,000.00	179,147,000.00	-
Market Capitalization (Kshs)	1,003,275,000.00	1,791,562,500.00	2,108,660,713.20	1,375,824,388.65	-

	2014	2015	2016	2017	2018
Firm size	20.44	20.35	21.35	21.34	-
Profitability	0.338980475	0.000254789	0.146983802	0.189385963	0
Firm liquidity	1.74	1.50	1.49	1.37	-
Capital structure	0.732729324	0.812197341	0.970250125	0.965211177	0
Market Capitalization (Kshs)	1,003,275,000.00	1,791,562,500.00	2,108,660,713.20	1,375,824,388.65	-

	2014	2015	2016	2017
Firm size	20.44	20.35	21.35	21.34
Profitability	0.34	0.00	0.15	0.19
Firm liquidity	1.74	1.50	1.49	1.37
Capital structure	0.73	0.81	0.97	0.97
Market Capitalization (Kshs)	1,003,275,000.00	1,791,562,500.00	2,108,660,713.20	1,375,824,388.65

SAMEER AFRICA

ASSETS EMPLOYED	2013	2014	2015	2016	2017
Total Assets	3,668,487,000.00	3,857,392,000.00	988,445,545,000.00	3,290,867,000.00	2,969,868,000.00
Share Capital	1,391,712,000.00	1,391,712,000.00	1,391,712,000.00	1,391,712,000.00	1,391,712,000.00
Share premium & Reserves*	(120,482,000.00)	(107,975.00)	(147,717,000.00)	(154,540,000.00)	(164,909,000.00)
Shareholders fund	1,324,883,000.00	1,252,707.00	1,248,452,000.00	598,022,000.00	611,051,000.00
Liabilities	2,679,616,000.00	2,536,444,000.00	2,492,447,000.00	1,835,194,000.00	1,837,854,000.00
TURNOVER	988,874,000.00	1,320,948,000.00	1,258,778,000.00	1,455,673,000.00	1,132,014,000.00
Profit / (loss) Before Taxation	4,029,841,000.00	3,777,146,000.00	277,710,500.00	2,882,230,000.00	2,626,975,000.00
Taxation	456,521.00	(67,453,000.00)	7,896,000.00	(865,056,000.00)	27,164,000.00
Current Ratio	(55,332,000.00)	(21,644,000.00)	(23,645,000.00)	212,955,000.00	(14,135,000.00)
Number of shares in Issue	3.37	2.52	2.21	1.58	1.55
Market Capitalization Kshs)	278,342,393.00	278,342,393.00	278,342,393.00	278,342,393.00	278,342,393.00
	1,433,463,323.95	1,670,054,358.00	1,043,783,973.75	779,358,700.40	779,358,700.40

	2014	2015	2016	2017	2018
Ln Assest	22.07	27.62	21.91	21.81	21.67
Equity	2,536,444,000.00	2,492,447,000.00	1,835,194,000.00	1,837,854,000.00	1,129,578,000.00
Debt	1,320,948,000.00	1,258,778,000.00	1,455,673,000.00	1,132,014,000.00	1,458,246,000.00
Current Ratio	2.52	2.21	1.58	1.55	0.90
Net Income	(67,453,000.00)	7,896,000.00	(865,056,000.00)	27,164,000.00	(478,114.00)

Market Capitalization (Kshs)	1,670,054,358.00	1,043,783,973.75	779,358,700.40	779,358,700.40	278,342,393.00
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	2014	2015	2016	2017	2018
Firm size	22.07	27.62	21.91	21.81	21.67
Profitability	-0.02659353	0.003167971	-0.471370329	0.014780282	-0.000423268
Firm liquidity	2.52	2.21	1.58	1.55	0.90
Capital structure	0.52078737	0.505037018	0.79319843	0.615943377	1.290965299
Market Capitalization (Kshs)	1,670,054,358.00	1,043,783,973.75	779,358,700.40	779,358,700.40	278,342,393.00

	2014	2015	2016	2017	2018
Firm size	22.07	27.62	21.91	21.81	21.67
	2014	2015	2016	2017	2018
Profitability	0.000	0.003	0.000	0.015	0.00
	2014	2015	2016	2017	2018
Firm liquidity	2.52	2.21	1.58	1.55	0.90
	2014	2015	2016	2017	2018
Capital structure	0.52	0.51	0.79	0.62	1.29
Market Capitalization (Kshs)	1,670,054,358.00	1,043,783,973.75	779,358,700.40	779,358,700.40	278,342,393.00

SCAN GROUP

ASSETS EMPLOYED	2013	2014	2015	2016	2017
Total Assets	12,744,583,000.00	13,284,104,000.00	12,468,479,000.00	13,486,398,000.00	13,758,912,000.00
Share Capital	378,865,000.00	378,865,000.00	378,865,000.00	378,865,000.00	378,865,000.00
Share premium & Reserves*	7,685,744,000.00	8,134,272,000.00	8,368,415,000.00	8,248,533,000.00	8,469,927,000.00
Shareholders Funds	8,064,609,000.00	8,513,137,000.00	8,747,280,000.00	8,627,398,000.00	8,848,792,000.00
Liabilities	4,618,133,000.00	4,741,473,000.00	3,864,219,000.00	4,677,759,000.00	4,793,743,000.00
TURNOVER	3,838,912,000.00	5,125,162,000.00	5,022,408,000.00	4,835,073,000.00	4,122,869,000.00
Profit Before Taxation	963,093,000.00	912,277,000.00	875,271,000.00	725,925,000.00	696,414,000.00
Taxation	(131,766,000.00)	(286,801,000.00)	(396,599,000.00)	(265,545,000.00)	(218,471,000.00)
Current Ratio	2.46	2.46	2.76	2.38	2.28
Number of Shares in Issue	378,865,102.00	378,865,102.00	378,865,102.00	378,865,102.00	378,865,102.00
Market Capitalization (Kshs)	18,280,241,171.50	17,333,078,416.50	11,365,953,060.00	6,876,401,601.30	7,198,436,938.00

505,080
5,430,739
5,935,819

	2014	2015	2016	2017	2018
Ln Assest	23.31	23.25	23.32	23.34	23.39
Equity	8,513,137,000.00	8,747,280,000.00	8,627,398,000.00	8,848,792,000.00	8,489,379,000.00

Debt	4,741,473,000.00	3,864,219,000.00	4,677,759,000.00	4,793,743,000.00	5,935,819,000.00
Current Ratio	2.46	2.76	2.38	2.28	2.38
Net Income	912,277,000.00	875,271,000.00	725,925,000.00	696,414,000.00	959,888,000.00
Market Capitalization (Kshs)	17,333,078,416.50	11,365,953,060.00	6,876,401,601.30	7,198,436,938.00	

	2014	2015	2016	2017	2018
Firm size	23.31	23.25	23.32	23.34	23.39
Profitability	0.107161085	0.100062076	0.084141824	0.07870159	0.113069283
Firm liquidity	2.46	2.76	2.38	2.28	2.38
Capital structure	0.556959556	0.441762354	0.542198123	0.541739822	0.699205325
Market Capitalization (Kshs)	17,333,078,416.50	11,365,953,060.00	6,876,401,601.30	7,198,436,938.00	-

	2014	2015	2016	2017	2018
Firm size	23.31	23.25	23.32	23.34	23.39
Profitability	0.11	0.10	0.08	0.08	0.11
Firm liquidity	2.46	2.76	2.38	2.28	2.38
Capital structure	0.56	0.44	0.54	0.54	0.70
Market Capitalization (Kshs)	17,333,078,416.50	11,365,953,060.00	6,876,401,601.30	7,198,436,938.00	378,865,102.00

STANDARD GROUP

ASSETS EMPLOYED	2013	2014	2015	2016	2017
Total Assets	4,136,762,000.00	4,101,749,000.00	4,355,614,000.00	4,404,931,000.00	4,459,637,000.00
Share Capital	408,654,000.00	408,654,000.00	408,654,000.00	408,654,000.00	408,654,000.00
Share premium & Reserves*	1,404,969,000.00	1,573,973,000.00	1,292,101,000.00	1,467,496,000.00	1,196,404,000.00
Shareholders Funds	1,813,623,000.00	1,982,627,000.00	1,700,755,000.00	1,876,150,000.00	1,605,058,000.00
Liabilities	2,108,367,000.00	1,893,706,000.00	2,478,041,000.00	2,328,837.00	2,594,381,000.00
TURNOVER	4,818,808,000.00	4,782,649,000.00	4,488,399,000.00	4,815,327,000.00	4,657,488,000.00
Profit/(Loss) Before Taxation	300,680,000.00	326,083,000.00	(395,801,000.00)	269,475,000.00	(282,186,000.00)
Taxation	(111,187,000.00)	(105,569,000.00)	106,198,000.00	(70,954,000.00)	71,348,000.00
Current Ratio	1.16	1.22	0.95	1.17	0.85
Number of Shares in Issue	81,730,854.00	81,730,854.00	81,730,854.00	81,731,808.00	81,731,808.00
Market Capitalization (Kshs)	2,125,002,204.00	2,840,147,176.50	2,288,463,912.00	1,348,574,832.00	3,024,076,896.00

		39,380	538,136
	1,991,597,000	1,212,482	2,183,681
	2,183,681,000	1,251,862	2,721,817

	2014	2015	2016	2017	2018
Ln Assest	22.13	22.19	22.21	22.22	22.27
Equity	1,982,627,000.00	1,700,755,000.00	1,876,150,000.00	1,605,058,000.00	1,660,618,000.00
Debt	1,893,706,000.00	2,478,041,000.00	2,328,837.00	2,594,381,000.00	2,721,817,000.00
Current Ratio	1.22	0.95	1.17	0.85	0.91
Net Income	326,083,000.00	(395,801,000.00)	269,475,000.00	(282,186,000.00)	397,225,000.00
Market Capitalization (Kshs)	2,840,147,176.50	2,288,463,912.00	1,348,574,832.00	3,024,076,896.00	-

	2014	2015	2016	2017	2018
Firm size	22.13	22.19	22.21	22.22	22.27
Profitability	0.16447017	-0.232720762	0.143631906	-0.175810469	0.239203116
Firm liquidity	1.22	0.95	1.17	0.85	0.91
Capital structure	0.95514991	1.457024086	0.001241285	1.616378349	1.639038599
Market Capitalization (Kshs)	2,840,147,176.50	2,288,463,912.00	1,348,574,832.00	3,024,076,896.00	-

	2014	2015	2016	2017	2018
Firm size	22.13	22.19	22.21	22.22	22.27
	2014	2015	2016	2017	2018
Profitability	0.16	0.00	0.14	0.00	0.24
	2014	2015	2016	2017	2018
Firm liquidity	1.22	0.95	1.17	0.85	0.91
	2014	2015	2016	2017	2018
Capital structure	0.96	1.46	0.00	1.62	1.64
Market Capitalization (Kshs)	2,840,147,176.50	2,288,463,912.00	1,348,574,832.00	3,024,076,896.00	-

TPS EASTERN AFRICA

ASSETS EMPLOYED	2013	2014	2015	2016	2017
Total Assets	16,136,097,000.00	15,939,177,000.00	15,628,520,000.00	16,785,011,000.00	17,486,823,000.00
Share Capital	182,174,000.00	182,174,000.00	182,174,000.00	182,174,000.00	182,174,000.00
Share premium & Reserves*	6,573,489,000.00	6,372,503,000.00	4,392,668,000.00	4,392,668,000.00	4,392,668,000.00
Shareholders Funds	9,576,662,000.00	9,404,567,000.00	52,427,803,000.00	7,424,732,000.00	6,899,059,000.00
Liabilities	5,580,022,000.00	5,526,688,000.00	6,130,449,000.00	7,417,494,000.00	8,322,206,000.00
TURNOVER	6,814,334,000.00	6,337,210,000.00	6,189,360,000.00	6,468,803,000.00	6,408,206,000.00
Profit Before Taxation	755,717,000.00	220,101,000.00	(210,976,000.00)	315,148,000.00	260,747,000.00
Taxation credit/(expense)	(304,706,000.00)	(54,318,000.00)	(69,637,000.00)	(195,973,000.00)	(141,282,000.00)
Current ratio	0.87	0.80	1.04	1.63	1.08

Number of Shares in Issue	182,174,000.00	182,174,000.00	182,174,000.00	182,174,000.00	182,174,108.00
Market Capitalization (Kshs)	8,288,917,000.00	6,558,264,000.00	4,554,350,000.00	3,734,567,000.00	5,920,658,510.00

3,585,478 2,115,014
4,875,071 15,483,109
8,460,549 17,598,123

	2014	2015	2016	2017	2018
Ln Assest	23.49	23.47	23.54	23.58	23.59
Equity	9,404,567,000.00	52,427,803,000.00	7,424,732,000.00	6,899,059,000.00	9,137,574,000.00
Debt	5,526,688,000.00	6,130,449,000.00	7,417,494,000.00	8,322,206,000.00	8,460,549,000.00
Current Ratio	0.80	1.04	1.63	1.08	0.43
Net Income	220,101,000.00	(210,976,000.00)	315,148,000.00	260,747,000.00	243,449,000.00
Market Capitalization (Kshs)	6,558,264,000.00	4,554,350,000.00	3,734,567,000.00	5,920,658,510.00	182,174,108.00

	2014	2015	2016	2017	2018
Firm size	23.49	23.47	23.54	23.58	23.59
Profitability	0.023403629	-0.004024124	0.042445707	0.037794575	0.02664263
Firm liquidity	0.80	1.04	1.63	1.08	0.43
Capital structure	0.587660017	0.116931259	0.99902515	1.20628132	0.925907577
Market Capitalization (Kshs)	6,558,264,000.00	4,554,350,000.00	3,734,567,000.00	5,920,658,510.00	182,174,108.00

	2014	2015	2016	2017	2018
Firm size	23.49	23.47	23.54	23.58	23.59
	2014	2015	2016	2017	2018
Profitability	0.02	0.00	0.04	0.04	0.03
	2014	2015	2016	2017	2018
Firm liquidity	0.80	1.04	1.63	1.08	0.43
	2014	2015	2016	2017	2018
Capital structure	0.59	0.12	1.00	1.21	0.93
Market Capitalization (Kshs)	6,558,264,000.00	4,554,350,000.00	3,734,567,000.00	5,920,658,510.00	182,174,108.00

UCHUMI SUPERMARKET

ASSETS EMPLOYED	2013	2014	2015	2016	2017
Total Assets	5,573,533,000.00	6,884,853,000.00	6,412,996,000.00	5,002,216,000.00	4,327,281,000.00
Share Capital	1,327,133,000.00	1,327,133,000.00	1,824,808,000.00	1,824,808,000.00	1,824,808,000.00
Share premium & Reserves*	1,598,279,000.00	2,030,181,000.00	(1,085,453,000.00)	(3,922,185,000.00)	(5,209,486,000.00)
Shareholders Funds	2,925,412,000.00	3,357,314,000.00	739,355,000.00	(2,097,377,000.00)	(3,384,678,000.00)
Liabilities	2,648,121,000.00	3,527,539,000.00	5,673,641,000.00	7,099,593,000.00	7,711,959,000.00
TURNOVER	14,270,598,000.00	14,457,687,000.00	12,888,974,000.00	6,402,937,000.00	2,587,239,000.00

Profit /Loss Before Taxation	485,902,000.00	452,749,000.00	(3,513,064,000.00)	(2,671,497,000.00)	(1,663,697,000.00)
Tax credit/(charge)	(128,892,000.00)	(68,461,000.00)	91,704,000.00	(165,235,000.00)	(17,231,000.00)
Current Ratio	0.70	0.67	0.34	0.26	0.08
Number of Shares in Issue	265,426,614.00	265,426,614.00	364,959,616.00	364,959,616.00	364,959,616.00
Market Capitalization (Kshs)	4,758,943,300.00	3,384,189,328.50	3,266,388,563.20	1,058,382,886.40	437,951,539.20

	2014	2015	2016	2017	2018
Ln Asset	22.65	22.58	22.33	22.19	-
Equity	3,357,314,000.00	739,355,000.00	- 2,097,377,000.00	- 3,384,678,000.00	-
Debt	3,527,539,000.00	5,673,641,000.00	7,099,593,000.00	7,711,959,000.00	-
Current Ratio	0.67	0.34	0.26	0.08	-
Net Income	452,749,000.00	(3,513,064,000.00)	(2,671,497,000.00)	(1,663,697,000.00)	-
Market Capitalization (Kshs)	3,384,189,328.50	3,266,388,563.20	1,058,382,886.40	437,951,539.20	-

	2014	2015	2016	2017	2018
Firm size	22.65	22.58	22.33	22.19	-
Profitability	0.13485453	-4.751525316	1.273732381	0.491537747	0
Firm liquidity	0.67	0.34	0.26	0.08	-
Capital structure	1.050702734	7.673771057	-3.384986581	-2.278491189	0
Market Capitalization (Kshs)	3,384,189,328.50	3,266,388,563.20	1,058,382,886.40	437,951,539.20	-

	2014	2015	2016	2017	2018
Firm size	22.65	22.58	22.33	22.19	-
Profitability	0.13	0.00	0.00	0.00	0
Firm liquidity	0.67	0.34	0.26	0.08	-
Capital structure	1.05	7.67	-3.38	-2.28	0
Market Capitalization (Kshs)	3,384,189,328.50	3,266,388,563.20	1,058,382,886.40	437,951,539.20	-

ALL

Firm size	2014	2015	2016	2017	2018
Deacons (East Africa) Plc Ord 2.50	0.00	0.00	0.00	0.00	0.00
Express Ltd Ord 5.00	0.00	0.00	0.00	0.00	0.00
Kenya Airways Ltd Ord 5.00	0.00	0.00	0.00	0.00	0.00
Longhorn Publishers Ltd	0.00	0.00	0.00	0.00	0.00
Nation Media Group Ord. 2.50	0.00	0.00	0.00	0.00	0.00
Sameer Africa PLC Ord 5.00	0.00	0.00	0.00	0.00	0.00
Scangroup Ltd Ord 1.00	0.00	0.00	0.00	0.00	0.00

Standard Group Ltd Ord 5.00	0.00	0.00	0.00	0.00	0.00
TPS Eastern Africa (Serena) Ltd Ord 1.00	0.00	0.00	0.00	0.00	0.00
Uchumi Supermarket Ltd Ord 5.00	0.00	0.00	0.00	0.00	0.00
Nairobi Business Ventures Ltd	0				
	0.00	0.00	0.00	183.36	183.45

Profitability	2014	2015	2016	2017	2018
Deacons (East Africa) Plc Ord 2.50	0.00	0.00	0.00	0.00	0.00
Express Ltd Ord 5.00	0.00	0.00	0.00	0.00	0.00
Kenya Airways Ltd Ord 5.00	0.00	0.00	0.00	0.00	0.00
Longhorn Publishers Ltd	0.00	0.00	0.00	0.00	0.00
Nation Media Group Ord. 2.50	0.00	0.00	0.00	0.00	0.00
Sameer Africa PLC Ord 5.00	0.00	0.00	0.00	0.00	0.00
Scangroup Ltd Ord 1.00	0.00	0.00	0.00	0.00	0.00
Standard Group Ltd Ord 5.00	0.00	0.00	0.00	0.00	0.00
TPS Eastern Africa (Serena) Ltd Ord 1.00	0.00	0.00	0.00	0.00	0.00
Uchumi Supermarket Ltd Ord 5.00	0.00	0.00	0.00	0.00	0.00
Nairobi Business Ventures Ltd					

Firm efficiency	2014	2015	2016	2017	2018
Deacons (East Africa) Plc Ord 2.50	0.00	0.00	0.00	0.00	0.00
Express Ltd Ord 5.00	0.00	0.00	0.00	0.00	0.00
Kenya Airways Ltd Ord 5.00	0.00	0.00	0.00	0.00	0.00
Longhorn Publishers Ltd	0.00	0.00	0.00	0.00	0.00
Nation Media Group Ord. 2.50	0.00	0.00	0.00	0.00	0.00
Sameer Africa PLC Ord 5.00	0.00	0.00	0.00	0.00	0.00
Scangroup Ltd Ord 1.00	0.00	0.00	0.00	0.00	0.00
Standard Group Ltd Ord 5.00	0.00	0.00	0.00	0.00	0.00
TPS Eastern Africa (Serena) Ltd Ord 1.00	0.00	0.00	0.00	0.00	0.00
Uchumi Supermarket Ltd Ord 5.00	0.00	0.00	0.00	0.00	0.00
Nairobi Business Ventures Ltd					
	0.00	0.00	0.00	0.00	0.00

Capital structure	2014	2015	2016	2017	2018
Deacons (East Africa) Plc Ord 2.50	0.00	0.00	0.00	0.00	0.00
Express Ltd Ord 5.00	0.00	0.00	0.00	0.00	0.00
Kenya Airways Ltd Ord 5.00	0.00	0.00	0.00	0.00	0.00
Longhorn Publishers Ltd	0.00	0.00	0.00	0.00	0.00
Nation Media Group Ord. 2.50	0.00	0.00	0.00	0.00	0.00
Sameer Africa PLC Ord 5.00	0.00	0.00	0.00	0.00	0.00
Scangroup Ltd Ord 1.00	0.00	0.00	0.00	0.00	0.00
Standard Group Ltd Ord 5.00	0.00	0.00	0.00	0.00	0.00
TPS Eastern Africa (Serena) Ltd Ord 1.00	0.00	0.00	0.00	0.00	0.00

Uchumi Supermarket Ltd Ord 5.00	0.00	0.00	0.00	0.00	0.00
Nairobi Business Ventures Ltd					
	0.00	0.00	0.00	0.00	0.00

Firm	Firm size	Profitability	Firm efficiency	Capital structure
Deacons (East Africa) Plc Ord 2.50	21.4	0.06	0.64	0.39
Express Ltd Ord 5.00	19.99	-0.45	0.58	1.67
Kenya Airways Ltd Ord 5.00	25.72	-0.17	0.46	4.27
Longhorn Publishers Ltd	20.44	0.34	1.74	0.73
Nation Media Group Ord. 2.50	23.2	0.42	2.37	0.36
Sameer Africa PLC Ord 5.00	22.07	-0.03	2.52	0.52
Scangroup Ltd Ord 1.00	23.31	0.11	2.46	0.56
Standard Group Ltd Ord 5.00	22.13	0.16	1.22	0.96
TPS Eastern Africa (Serena) Ltd Ord 1.00	23.49	0.02	0.8	0.59
Uchumi Supermarket Ltd Ord 5.00	22.65	0.13	0.67	1.05
Deacons (East Africa) Plc Ord 2.50	21.63	0.09	0.47	0.64
Express Ltd Ord 5.00	19.91	-0.63	1.13	2.68
Kenya Airways Ltd Ord 5.00	25.93	4.94	0.51	-31.29
Longhorn Publishers Ltd	20.35	0	1.5	0.81
Nation Media Group Ord. 2.50	0	0.32	2.1	0.42
Sameer Africa PLC Ord 5.00	27.62	0	2.21	0.51
Scangroup Ltd Ord 1.00	23.25	0.1	2.76	0.44
Standard Group Ltd Ord 5.00	22.19	-0.23	0.95	1.46
TPS Eastern Africa (Serena) Ltd Ord 1.00	23.47	0	1.04	0.12
Uchumi Supermarket Ltd Ord 5.00	22.58	-4.75	0.34	7.67
Deacons (East Africa) Plc Ord 2.50	21.55	-0.33	0.68	0.95
Express Ltd Ord 5.00	19.75	-4.83	0.85	15.37
Kenya Airways Ltd Ord 5.00	25.79	0.73	0.4	-5.43
Longhorn Publishers Ltd	21.35	0.15	1.49	0.97
Nation Media Group Ord. 2.50	0.15	0.35	2.07	0.4
Sameer Africa PLC Ord 5.00	21.91	-0.47	1.58	0.79
Scangroup Ltd Ord 1.00	23.32	0.08	2.38	0.54
Standard Group Ltd Ord 5.00	22.21	0.14	1.17	0
TPS Eastern Africa (Serena) Ltd Ord 1.00	23.54	0.04	1.63	1
Uchumi Supermarket Ltd Ord 5.00	22.33	1.27	0.26	-3.38
Deacons (East Africa) Plc Ord 2.50	21.16	-2.49	1.07	3.71
Express Ltd Ord 5.00	19.7	1.4	0.6	-6.36
Kenya Airways Ltd Ord 5.00	25.71	0.62	0.38	11.83
Longhorn Publishers Ltd	21.34	0.19	1.37	0.97
Nation Media Group Ord. 2.50	0.19	0.24	2.02	0.39
Sameer Africa PLC Ord 5.00	21.81	0.01	1.55	0.62
Scangroup Ltd Ord 1.00	23.34	0.08	2.28	0.54
Standard Group Ltd Ord 5.00	22.22	-0.18	0.85	1.62
TPS Eastern Africa (Serena) Ltd Ord 1.00	23.58	0.04	1.08	1.21
Uchumi Supermarket Ltd Ord 5.00	22.19	0.49	0.08	-2.28
Deacons (East Africa) Plc Ord 2.50	0	0	0	0
Express Ltd Ord 5.00	26.49	0.55	0.62	-3.35
Kenya Airways Ltd Ord 5.00	25.64	0	0	0

Longhorn Publishers Ltd	0	0	0	0
Nation Media Group Ord. 2.50	0	0.21	1.59	0.42
Sameer Africa PLC Ord 5.00	21.67	0	0.9	1.29
Scangroup Ltd Ord 1.00	23.39	0.11	2.38	0.7
Standard Group Ltd Ord 5.00	22.27	0.24	0.91	1.64
TPS Eastern Africa (Serena) Ltd Ord 1.00	23.59	0.03	0.43	0.93
Uchumi Supermarket Ltd Ord 5.00	0	0	0	0

NSE MARKET DATA ON SHARES FROM 2014 TO 2018

2014

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Share prices	2013 DEC	JAN	FEBRUAR Y	MARC H	APRI L	MA Y	JUN E	JUL Y	AU G	SEP T	OC T	NOV	DEC
Eveready	2.7	2.85	3.35	3.45	3.55	3.7	3.5	3.4	3.1	4.9	3.95	3.65	3.7
EXPRESS LTD	3.9	4.15	4.55	4.5	4.75	7	6.95	7	5.7	7.8	6.45	6	6.2
KENYA AIRWAYS	13.05	11.95	12.05	12.5	12.45	11.55	10.35	10.25	10	9.25	9.1	8.25	8.7
LONGHORN	13.5	14.95	13.5	13	13	14	17.15	16	15.95	25.5	26.5	26	9.25
NATION MEDIA	314	316	314	310	307	314	310	308	311	314	298	295	263
SAMEER AFRICA	5.25	6.15	6.65	6.85	6.95	8.5	7.5	7.8	6.75	6.8	6.5	6.25	6
STANDARD GROUP	26	27.75	34.5	29.75	30	34	32.25	35.25	32	33.75	39.5	38.25	34.75
TPS EAST AFRICA	45.5	44.5	48.75	43.75	40.25	36.75	34.5	36.75	34.5	35.25	39	36.5	37
UCHUMI SUPERMARKET	19.45	17.95	18.05	14.55	14.2	12.8	12.3	12.1	12.45	10.4	8.5	9.1	10.05
WPP SCAN GROUP	48.25	51	49.5	48	61.5	47.75	45.75	46	45	40.75	42.75	44	45.25

2015

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Share prices	DEC 2014	JAN	FEBRUAR Y	MARC H	APRI L	MA Y	JUN E	JUL Y	AU G	SEP T	OC T	NOV	DEC
Eveready	3.7	3.95	4.5	3.95	4.15	4.45	4.05	3.9	3.3	3.05	2.65	2.9	2.7
EXPRESS LTD	6.2	6.1	6.35	5.6	5.75	5.6	5	5	4.3	4.2	4.3	4.4	4.5
KENYA AIRWAYS	8.7	10.95	9.9	8.2	7.05	7.05	7.35	5.7	5.65	5.5	5.35	4.8	4.9
LONGHORN	9.25	9.95	9.05	8.65	8	6.95	7.35	7	6.55	6.25	4.8	4.7	4.5
NATION MEDIA	263	276	261	248	234	195	199	187	165	144	135	155	191
SAMEER AFRICA	6	6.3	6.2	5.55	5.55	5.1	5.05	4.9	4.05	4.1	3.55	3.5	3.75
STANDARD GROUP	34.75	37	44.75	37.75	35	33.25	40	39	38	34	29.25	31.5	28
TPS EAST AFRICA	37	36.25	34.75	33.5	34.5	33.5	35	35	31.5	29.5	25.5	27.5	25
UCHUMI SUPERMARKET	10.05	12.65	10.95	10.75	10.1	10.75	8.95	7.25	8.5	10.05	9.2	7.85	10.95
WPP SCAN GROUP	45.25	44.25	49.75	45.75	43.75	39	42.75	38.75	33.25	30	23.75	29.75	30

2016

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6

Share prices	DEC 2015	JAN	FEBRUAR Y	MARC H	APRI L	MA Y	JUN E	JUL Y	AU G	SEP T	OC T	NOV	DEC
Eveready	2.7	3.05	2.75	2.7	2.45	2.15	2	2.05	2.15	1.95	2.5	2.45	2.35
EXPRESS LTD	4.5	4	4.45	4	3.85	3.55	3.05	3.15	3.55	3	3.5	3.25	3.55
KENYA AIRWAYS	4.9	4.7	4.5	4.45	4.25	3.8	4.35	3.95	3.5	3.95	6.7	6.6	5.85
LONGHORN	4.5	4.95	5.65	5.3	4.55	5.2	5.7	5.75	4.75	5.1	5.15	5.05	4.8
NATION MEDIA	191	174	181	174	174	164	150	120	115	114	105	94.5	93
SAMEER AFRICA	3.75	3.85	3.45	3.6	3.15	3	2.75	3.1	3.1	2.95	2.8	2.8	2.8
STANDARD GROUP	28	29	28.5	30.5	29	26.75	26.75	27	23.75	19.5	22.25	22	16.5
TPS EAST AFRICA	25	24.75	26	25.25	23.5	21.25	21	19.8	16.95	17.55	18	19.1	20.5
UCHUMI SUPERMARKET	10.95	7.55	6.3	5.1	4	3.9	2.9	2.9	3.35	3.35	3.4	3.15	3.95
WPP SCAN GROUP	30	26	26.5	29.25	24	22.75	20	16.25	16.6	18.35	18.55	18.75	18.1
NAIROBI BUSINESS V										7	7.5	7.5	7.9
DEACONS									11.9	9.95	5.45	5.95	6.05

2017

Share prices	DEC 2016	JAN	FEBRUAR Y	MARC H	APRI L	MA Y	JUN E	JUL Y	AU G	SEP T	OC T	NOV	DEC
Eveready	2.35	2.35	2.4	2.5	2.65	2.35	2.35	2.4	2.45	2.3	2.25	2.35	2.4
EXPRESS LTD	3.55	3.05	3.25	3.1	3.2	3.3	3.55	4	4.2	3.3	3.25	3.7	3.75
KENYA AIRWAYS	5.85	4.7	5.95	5.95	5.9	6.8	5	4.35	4.65	4.8	5.7	11.35	17.15
LONGHORN	4.8	4.1	4.3	4.65	4.45	4.75	5.05	5.1	4.9	5.25	5.8	5.9	5.35
NATION MEDIA	93	75.5	87	96	95.5	115	108	108	114	111	114	115	116
SAMEER AFRICA	2.8	2.65	2.8	3	2.7	2.7	2.5	2.65	2.8	2.7	2.9	2.7	2.8
STANDARD GROUP	16.5	19.3	18.75	19.5	23	33	39.25	35	35	38.5	36	36.25	37
TPS EAST AFRICA	20.5	20.5	22	24	23	23	22.25	24	27.5	26.75	28	28	32.5
UCHUMI SUPERMARKET	3.95	2.85	2.6	2.35	2.9	2.45	2.15	3.6	3.85	3.15	3.6	4	4.6
WPP SCAN GROUP	18.1	16.2	18.05	18.05	18.5	18.8	20	23.5	23.2	5	18.7	5	18
NAIROBI BUSINESS V	7.9	7.9	8	8	7.9	7	6.2	4.5	3.65	2.5	1.9	3.35	3.35
deacons	6.05	5.25	4.6	4.2	4.4	3.6	3.6	3.85	4.15	4.05	3.4	3.5	3.5

2017

Share prices	DEC 2017	JAN	FEBRUAR Y	MARC H	APRI L	MA Y	JUN E	JUL Y	AU G	SEP T	OC T	NOV	DEC
Eveready	2.4	2.3	2.1	2	1.9	1.65	1.5	1.35	1.25	1	1.4	1.14	1
EXPRESS LTD	3.75	3.75	3.75	4.85	4.95	5.95	5.95	5.4	5	4.25	5.05	5	5
KENYA AIRWAYS	17.15	16.15	14.15	10.85	11.8	9.25	10.65	10.1	10.7	10	11.6	9.56	8.9
LONGHORN	5.35	5.45	5.15	4.65	4.5	4.55	4.2	4.3	4.5	4.95	4.7	4.4	4.61
NATION MEDIA	116	103	104	111	109	104	90	89.5	82.5	69	70	68.5	68.5
SAMEER AFRICA	2.8	2.5	2.5	2.3	2.5	2.5	2.7	2.8	2.45	2.25	2.35	2.11	1.85
STANDARD GROUP	37	33	33	30.5	33.5	31.25	26.5	27.5	30	28	30.5	30	29.5
TPS EAST AFRICA	32.5	37.25	35	33.5	34	30.75	30	30	25	25	23.2	21.15	23
UCHUMI SUPERMARKET	4.6	3.5	3	2.45	2.05	1.6	1.45	1.6	1.4	0.9	0.55	0.68	0.8
WPP SCAN GROUP	19	17.1	16.7	17	19.2	17.45	15.5	16	15.3	5	15.7	14	13.55
NAIROBI BUSINESS V	3.35	2.6	2.7	2.5	2.35	2.1	1.7	2.25	1.85	1.6	1.4	1.35	1.15
deacons	3.5	2.85	2.9	2.85	2.35	1.55	1.25	1.25	0.8	0.45	0.45	0.45	0.45

2018

YEAR	NSE WEIGHTED INDEX
2014	162.06
2015	144.24
2016	132.85
2017	172.33
2018	142.57

2,840,147,176.50	2,288,463,912.00	1,348,574,832.00	3,024,076,896.00
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MARKET CAPITALIZATION	2014	2015	2016	2017	2018
EXPRESS LTD	230,124,635.00	159,317,055.00	159,317,055.00	132,764,212.50	35,403,790.00
KENYA AIRWAYS	18,556,550,834.00	12,271,046,087.00	6,734,110,657.50	8,978,814,210.00	
LONGHORN	1,003,275,000.00	1,791,562,500.00	2,108,660,713.20	1,375,824,388.65	
NATION MEDIA	49,575,500,000.00	36,011,576,626.00	17,534,432,598.00	21,870,905,176.00	188,542,286.00
SAMEER AFRICA	1,670,054,358.00	1,043,783,973.75	779,358,700.40	779,358,700.40	278,342,393.00
STANDARD GROUP	17,333,078,416.50	11,365,953,060.00	6,876,401,601.30	7,198,436,938.00	
TPS EAST AFRICA	6,558,264,000.00	4,554,350,000.00	3,734,567,000.00	5,920,658,510.00	182,174,108.00
UCHUMI SUPERMARKET	4,758,943,300.00	3,384,189,328.50	3,266,388,563.20	1,058,382,886.40	437,951,539.20
WPP SCAN GROUP	2,840,147,176.50	2,288,463,912.00	1,348,574,832.00	3,024,076,896.00	
NAIROBI BUSINESS V					
DEACONS			747,527,279.40	432,453,798.00	

	2014	2015	2016	2017	2018
Total Market Capitalization (Kshs)	2,182,733,733,774.50	2,081,159,969,538.50	1,880,609,506,401.35	2,059,071,236,574.56	4,546,210,500.00