THE EFFECT OF DIVIDEND POLICY ON THE VALUE OF FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE

BY

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DECLARATION

I, the undersigned, declare that this is my own original work and has never been presented in any other University for an award of any academic award.

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

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DEDICATION

I dedicate this project to my wonderful family who believe in the pursuit of academic excellence. I also would like to thank all my classmates and friends who supported, encouraged and motivated me throughout my study. May God bless you all.

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ABBREVIATIONS & ACRONYMS

ATS	-	Automated Trading System
CAR	-	Cumulative Abnormal Returns
CMA	-	Capital Market Authority
CR	-	Current Ratio
DPR	-	Dividend Payout Ratio
DR	-	Debt Ratio
EPS	-	Earnings Per Share
FS	-	Firm Size
MAAR	-	Market Adjusted Abnormal Returns
MM	-	Modigliani and Miller
NSE	-	Nairobi Securities Exchange
OLS	-	Ordinary Least Square
SPSS	-	Statistical Package for Social Sciences
UK	-	United Kingdom

ABSTRACT

This study sought to examine effect of dividend policy on value of firms listed at NSE. The study reviewed the Modigliani and Miller dividend irrelevance model, the bird in hand theory, the signaling theory and the agency theory to explain the concepts of dividend policy and firm value. To answer the research question the study used a quantitative research design. Study population comprised of 65 firms listed at NSE as at 31/12/2015. This study used secondary data extracted from the listed firms financial statements for a period of 5 years from the 2011 – 2015. Data analysis was carried out using correlation and regression analysis using the Statistical Package for Social Sciences (SPSS) version 21. The study findings established that that dividend payout and firm size significantly and positively influences firm's value. The study also found that the timing of payment of dividends and the mode of dividend payment positively influences value of the firm while debt ratio negatively influences the value of the firm an indication that increase in debt levels reduces the value of the firm. The study concluded that dividend policy is relevant and affects firm's value positively such that an increase in dividends increases firm's value and vice versa. The study recommended that manager of listed firms should develop effective dividend payout policies to ensure that their firms pay out dividends to enhance the value of their companies.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Dividends entail the circulation of earnings in the real assets to the stockholders of the company in a fraction to their ownership (Modoran & Obreja, 2013). In most cases, dividends are paid within the current profits and at some point; they are paid from general services. They involve the payment with cash and is normally known as cash dividend. The other option that is always available to a form for earning circulation is by issue of bonus, which is additional to cash dividend (Adefila, Oladipo & Adeoti, 2010). Dividend payment is one of the main stock return component to shareholders, and through dividend payment, a company is able to send a signal to investors that its well complying with good practices of corporate governance (Lashgari & Ahmadi, 2014).

The distribution of the dividend by company management is the main duty to stockholders and in that case ranks as one of the significant company decisions (Inyiama & Ugah, 2015). Many businesses pay bonus to their stockholders as an income or return for the currency they invest in the corporation (Oswald, 2005). Dividend choice being the important monetary conclusions of a business is still a most discussed subject in the world. There are broad works, philosophies, as well as models for aiding dividend decisions. Discussions have concentrated on if 100% dividend disbursement proportion or 100% preservation percentage or the mixture of dividend disbursement as well as retention is optimal dividend verdict that influence the value of the company as well as shareholder's return (Al- Hasan, Asaduzzaman & Karim, 2013).

The dividend rule decisions of businesses are the main component of company policy. Dividend policy is the most multifaceted features in economics. The realism is that dividend policy is more usually a tool of prosperity circulation than it is a tool of wealth formation (Priya & Nimalathasan, 2013). Nevertheless, dividend policy is the most exciting subjects of modern monetary economics. Study in to dividend policy has indicated that not only that overall philosophy of dividend policy remains indefinable, but also company dividend practice varies overtime between companies as well as across countries (Botchwey, 2014). The dividend decisions are significant for the reason that they determine the disbursement received by shareholders as well as the funds reserved by the company for investment (Kibet et al., 2010).

Most firms do consider dividend policy as a crucial decision since it aids the firm in deciding what the firm should give to its shareholders and what the firm should re-invest in the business (Ilie, 2012). The difficult task is for a firm is actually to try to balance what it is going to pay to shareholders as the dividend and what the firm should retain and invest in other profitable projects. Conventional wisdom affirms that a dividend policy that is well managed has an impact on the firm's share price and shareholders' wealth (Inyiama, Okwo & Inyiama, 2015).

1.1.1 Dividend Policy

Dividend policy indicates the disbursement policy, which directors follow in making decision of the pattern as well as size of cash supply to stockholders over a particular time (Kapoor, 2009). Dividend policy is a company's policy focusing on paying out

salaries as dividend against retaining them for investment back in the company. It is the section of profit between expenditures to stockholders as well as reinvestment in the company (Lashgari & Ahmadi, 2014). A dividend policy is also defined as the strategy of action accepted by the company's managements every time there is a choice to be made (Aduda & Kimathi, 2011). The main concern of a dividend policy decision is about how much incomes can be paid as dividend by the company and how much could be reserved (Emeni & Ogbulu, 2015).

The determination of the dividends amount allocated is a significant decision that businesses assume because the aim of the company is to exploit the stockholders' capital as measured by the company's price on common stock (Waithaka et al., 2012). The optimum dividend policy to maximize the business's stock value, which leads to intensification of bondholders' capital (Kapoor, 2009). Most firms usually come up with policies, which are meant to assist them in achieving their various goals using different approaches including stable predictable, constant payout and so forth (Aduda & Kimathi, 2011).

1.1.2 Value of Firm

Value entails the quality that solidifies something wanted, valued, or advantageous; the amount of cash desired to acquire something; or what ought to be given, done, or experienced to get something (Oladele, 2013). A company's value can also be described as the all the values of all its monetary rights. The business value is based on the continuous concern anticipation in the current value of all the predictable future cash

flows to be produced by the assets, reduced at the corporation's weighted regular cost of wealth (Chowdhury & Chowdhury, 2010). Pandey (2005) argues that the value of the company is the total values of all its monetary securities. The money streams received by the required claims should add up to the entire cash flow that assets produce. In a diverse situation where the company's profits vary, the problem of exploiting becomes rather more complex. Value can be predicated on the dividends streams that the stockholder will receive during the firm's life, discounted back to the current (Parkinson & Waweru, 2010).

Companies exist in the market to make worth for their stockholders. Creation of value can be described as the upsurge in the monetary worth of stockholders, as measured by proportion of marketplace value of stocks to the book value of stocks, produced by the presentation of a company (Oladele, 2013). Creation of value takes place if the company produces more affluence for their bondholders that it could have not been easy to produce for themselves. To create worth, as a result, the organization needs to distinguish how to recognize, choose, as well as divide the marketplaces in which to contest; describe the kind of worth to be suggested on the market; as well as create and circulate such value (Oladele, 2013).

Firms' value plays a vital role in an investment criterion. Firm's value can be measured through different means such as net sales, paid-up-capital, total assets, capital employed and so on (Sharma, 2011). Firm's value is expected to reflect the value of both tangible assets and intangible assets. The common tool which is usually used in measuring the

firm's value is Tobin's Q. Tobin Q is usually a percentage of a market value of a firm to a firm's assets replacement cost (Taslim, 2013). Tobin Q measures firm value based on book vis-a-vis market based measures. Under q proposition, a firm is said to create more value if investment returns are greater than investment cost (Taslim, 2013).

1.1.3 Dividend Policy and Firm Value

Numerous theories as well as models have been recognized on the significance as well as insignificance of dividend policy. Furthermore, writers continue to develop conclusions with respect to dividend policy from their experiential researches (Thafani & Abdullah, 2014). For instance, Miller and Modigiliani (1961) under the dividend irrelevance theory show that under certain simplifying assumptions, a company's dividend rule does not influence its worth hence irrelevant. On the other hand, Gordon (1962), Lintner (1963), Ross (1977) and other scholars argue that dividend policy affect the value of the firm hence relevant.

According to Deeptee and Rosan (2009), the dividend policy choice for the company is very significant and therefore, the way bosses go about creating dividend policy choices as well as if or not they monitor a particular set of policies or precise plans to make these adoptions will influence the firm's value. Khan, (2012) also explains that in businesses' viewpoint, choosing an appropriate dividend policy is a significant choice for the firm due to suppleness to invest in forthcoming projects depends on the dividend amount that they pay to their stockholders. As such, companies in designing their dividend policies

consider certain significant features such as decision-making as well as behavioral environment, companies' productivity proportions, and the willingness of the company. Hashemijoo, Ardekani and Younesi (2012) assessed the relation between stock price volatility and dividend policy focusing mainly on consumer product of listed firms in Malaysian stock market and established a negative but significant relation between stock price volatility and dividend policy measured. Thafani and Abdullah (2014) discovered the effect of dividend disbursement on business effectiveness in the Industrial Corporations registered on Colombo Stock Exchange in Sri Lanka and discovered that there was a noteworthy association amid dividend disbursement and company productivity in terms of return on assets, return on equity and incomes per share.

A study by Oladele (2013) examined determinants of value creation in Nigerian banking industry and established that profitability of Nigerian banking industry and dividend policy have a significant relation with creation of value. In addition, Ozuomba, Okaro and Okoye (2013) examined how stock value as well as shareholders wealth is affected by dividend policies of firms in Nigeria stock exchange and established that dividend policies of public frirms influences shareholders' wealth.

Adefila et al. (2010) assessed possible effects of dividend policy on market price of firm's stock and revealed that internal factors and external factors together with other factors affect dividend policy. As such, a holistic way to dividend policy becomes inevitable. In Kenya, Aroni, Namusonge and Sakwa (2014) examined the effect of

dividend payout on investment in shares for Kenyan retail investors and revealed that dividend payout had a significant influence on decisions to invest in shares.

1.1.4 Nairobi Securities Exchange

NSE is the principal stock exchange of Kenya (Olang et al., 2015). NSE was established in the year 1954 (Aroni et al., 2014). NSE is a sole exchange that presently exists in Kenya with 65 listed companies by 2016. It is also among the most vibrant in Africa and the leading in Eastern Africa. However, N.S.E is relatively a small market as compared to other exchanges in United States and United Kingdom that have more than 5000 and 2000 companies listed respectively. NSE was initially registered as a private company in the year 1991 by shares with the floor - based open outcry system in place, it was later replaced by the central depository system that was commissioned in 2004.

The NSE is the leading exchange in East Africa and offers a platform for the issuance and trading of equity and debt securities. Various authors in Kenya have examined dividend policy decisions of firms listed at the NSE. For instance, Munyua (2014) examined the possible effects of dividends on the market price of common stocks for listed firms at NSE and established a strong positive relationship between dividend per share and the share prices and that share prices are affected by the dividends per share paid out.

There exist 2 indices that are used in measurement of the performance at NSE. NSE 20 share index is a yardstick that is used to track the best performing 20 companies in Kenya that are listed at the NSE. Although it is widely watched and cited since it is comprise of

select 20 large companies, it cannot gauge fluctuations in smaller companies. The Nairobi Securities Exchange all share index (^NASI) that is usually used to measure Market Capitalization other than the movements in price of few selected counters. NSE has experienced considerable growth with more companies listing oversubscribed Initial Public Offerings. NSE is therefore the best performing top ranked equity market in Africa (Olweny, 2012).

Firms listed at NSE are classified into different sectors such as; Agricultural, Banking, insurance, investment and investment services, allied and Construction, Commercial and service, Energy and Petroleum, Automobiles and Accessories, Manufacturing, Telecommunication and Technology and Real Estate Sector (NSE, 2016). As at December 2016, NSE had 65 listed companies in the different sectors. Financial firms at the NSE comprise of commercial banks and insurance firms, which provide financial intermediation functions while the Non-financial firms are those companies that are not involved in the provision of financial intermediary services. Financial services companies are excluded since they are the companies that provide leverage and other debt services to the non-financial firms. The NSE is at the time one of the most promising and attractive markets in Africa by which the bulwark of investors wants to invest and benefit more especially due to the high growth as well as the more promising Kenyan economic outlook (Muiruri, 2014).

The concept of stock split for firms listed at the NSE was approved by (CMA) in June 2004 and entrenched in NSE listing manual. Among the reasons for pushing for its adoption was as a result of stock boom in 2004 when stock prices rose by 100% (Kiuru, 2014; Olang et al., 2015). However, stock splits events are relatively new in the NSE and there are few studies in the Kenyan stock market done on stock splits (Koech, 2013). As such, Nkonge (2010) examined the effects of stock splits on securities returns of firms listed in NSE and concluded that stock split signals good information as returns are observed to increase significantly around the time of stock split announcement. Gachuhi (2013) also examined how risk factors associated with investing in stocks are affected by stock splits and concluded that there occurred a temporary increase in post-split return volatility following a stock split at the NSE.

1.2 Research Problem

Dividend policy is considered and still regarded as the significant monetary policies not only from the observation of the firm, but likewise from the once from stockholders, the regulatory firms, the consumers, the government and the company staffs. The choice if or not the dividend plans can help to contribute to the company value remains something to debate on (Priya & Nimalathasan, 2013). Additionally, dividend policy remains to be the main source of argument notwithstanding centuries of theoretic besides empirical study in both industrialized nations and developing economies (Modoran & Obreja, 2013). As such, the significance or insignificance of dividend as a factor of value formation has been contested deeply in review (Oladele, 2013). To date, dividend philosophies have

been progressive with leaders taking sides with insignificance of dividend polices to the firm's value on one hand and significance on the other hand (Kibet et al., 2010).

As things stands, in Kenya the stockholders have observed numerous quoted corporation's market price increasing and continually repaying dividends only for those firms to be endangered with monetary trials that have observed many of them being postponed from transaction in the security market. The question if the stockholders must depend on the dividend imbursement as a business's feasibility remains a worry of decision makers (Morara, 2015). In addition, amongst the necessities that businesses want to be registered at NSE should accomplish, is that they must have a perfect future dividend policy. This makes dividend policy commendable of serious organization consideration (Murekefu & Ochuodho, 2012). As such, numerous corporations cited at NSE, often pay little dividends (Chebii et al., 2011). Therefore, the need to inspect the outcome of dividend policy on the firm's value is registered at NSE.

In addition, several researches have been conducted with concern to dividend policy and company presentations and worth across the world as well as in Kenya. Globally, a study by Khan et al. (2015) explored the effects of dividend disbursement percentage on the firm effectiveness on the non-financial companies registered in Karachi Stock Exchange in Pakistan and established that dividend payout ratio has significant effects on profitability. Oyinlola and Ajeigbe (2014) examined the effect of dividend strategy on the stock values of cited companies in Nigeria and exposed that both dividend disbursement as well as retained incomes are pointedly applicable in the market value per share of the

businesses. However, the above studies examined influence of dividend policy on effectiveness as well as market worth per share and not the value of firm.

In Kenya, a study by Murekefu and Ochuodho (2012) investigated the connection amid dividend disbursement as well as company performance amongst registered companies in the Nairobi Securities Exchange as well as recognized that dividend disbursement was the main issue affecting company performance. However, the study focused on firm performance and dividend payout and did incorporate the timing and mode of dividend payment. Global and local studies on dividend policy concentrate on the effect of dividend disbursement percentage on corporate act leaving out the effect of dividend timing and the mode of dividend payment on the value of firms. Hence, the need for this study, which intends to examine: What is the effect of dividend plan on the firm's value registered at NSE?

1.3 Research Objective

To examine the effect of dividend policy on the firms' value of listed firms at NSE.

1.4 Value of the Study

This study will be of value to the following parties:

Management of firms listed at NSE will benefit from the study findings as they may use the study recommendation to develop police on dividend payout and dividend decisions. In addition, the study will provided added knowledge on whether dividend policies are relevant or irrelevant.

Policy Makers including the government of Kenya, the Kenyan CMA and NSE will benefit from the study findings, as they will help them in developing effective policies dividend payout and dividend policies.

Academicians and researchers will also benefit from the study as future researchers and scholars who may use the findings as basis for further research. As such, the study will add on to the existing knowledge on dividend policies and firm value.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Chapter 2 outlines relevant literature to subject under study. The chapter entails theoretical literature review and the determinants of firm value. The chapter also presents the empirical literature review comprising of local and international studies and finally literature review summary.

2.2 Theoretical Review

This study reviewed the Modigliani and Miller dividend irrelevance model, the bird in hand theory, signaling theory and agency theory to explain concepts of dividend policy and value of the firm.

2.2.1 Dividend Irrelevance Theory

This theory emanated from Modigliani & Miller (1961). It states that dividend policy used by a firm has no effect on the firm's value. MM argues that firm's value is dependent on earnings of the firm that results from the firm's investment policy. As such, payment of dividends to shareholders has no consequence (Olang et al., 2015). Miller & Modigliani (1961) explained that dividend policy is irrelevant as far as the value of the firm is concerned especially in a perfect market situation where investment is constant. MM theory is premised on the argument that payment of dividends to shareholders has no impact on firm's value.

Miller & Modigliani's (1961) supported the dividend irrelevance theory on the assumption that amount of dividends which is given the firm's shareholders is usually equal or greater than free cash flow which is generated by a fixed investment policy (Salih, 2010). The MM irrelevance theory also argues with a firm's optimal investment policy, a choice of a firm's dividend policy has no impact on the wealth of the firm's shareholders. This is meant to affirm that dividend policy is irrelevant (Modoran & Obreja, 2013).

According to this theory, dividend policy only affect the amount of external financing which is required in financing future projects. It means that any dollar that is given to shareholders as dividend represents a dollar loss of capital (Salih, 2010). The theory further states that only constraint on firm‘s market value is firm‘s investment policy, not the dividend policy firm follows since investment policy is responsible for the firm's future profits (Miller & Modigliani, 1961). As such, this theory concludes that the value of the firm is dependent on firm's current and future free cash flow and that the amount or level of dividends to be paid or paid has no effect on the value of the firm since firms usually maximize their value through investment (Deeptee & Rosan, 2009).

2.2.2 Bird in Hand Theory

Gordon (1962) developed this theory, stating dividends are relevant to firm value. The determinants of cost of equity according to the model developed by Gordon are future dividend, the growth rate and the current share price. Therefore, dividend yield and growth provide return to holders of equity. It purports dividend yield is more important in

measuring return on equity than cost and that dividends are more relevant in determination of firm's value.

Growth is not guaranteed thus capital gains cannot be estimated accurately and a stock could lose its entire market value and become bankrupt. A firm that does not pay dividends, its future market value is always clouded with uncertainty if investors will realize anticipated capital gains. This is based on a numbers of assumptions such as the company does not have access to external financing and therefore all financing has to come from retained earnings, there are constant returns which ignores the diminishing marginal efficiency and the cost of capital is constant (Salih, 2010).

This theory proposes a relation between value of the firm and dividend policy. The core of this theory is that equity holders are risk averse and prefer current dividends. Gordon (1962) argued that investors prefer current dividends compared to anticipated capital gains to their uncertainty. Dividend payment reduces uncertainty thus increasing share value. This is on the preference of the present than the future. A sure current dividend is desirable than a promised future dividend or capital gain despite it been larger. Hence, dividend policy is relevant (Kapoor, 2009).

2.2.3 Signaling Theory

This theory was suggested by Fama et al., (1969). Signaling hypothesis assumes that the firm's managers know a lot about their firm's value as such the firm's managers use dividend payout as a mean to convey favorable information to investors (Inyiama et al.,

2015). According to this hypothesis, a firm may opt to pay more dividends to convey to market that the firm is successful; this aims at improving the firm's prospects (Dionne & Ouederni, 2010).

The foundation of dividend signaling models stem from game theory (Kapoor, 2009). This theory anticipates that with dividends, the firm is likely to receive positive or abnormal returns on announcement thus a more dividend payout sends out a signal that can affect investor's opinion (Fairchild, 2010). According to the hypothesis, as a firm's action, dividend payout influences stock price and has an effect on the firm's returns from the stocks (Priya & Nimalathasan, 2013). This theory implies that any decrease or elimination of dividends is likely to be viewed with an extreme disfavor by financial markets (Hobbs, 2006).

Signaling hypothesis supports that analysts and investors and analysts can discern whether the film's managers are just signaling positive information to the market or misleading the market with an aim earning more profits in a short-term period (Salih, 2010). According to the signaling hypothesis, the main aim of paying dividends is to convey important information to the market and not to reach an optimal price level (Hobbs, 2006).

2.2.4 Agency Theory

The theory of agency exists when the principle who cannot manage his business on his/her own delegates the authority to an agent (Jensen & Meckling, 1976). The problem with agency arises immediately when the desires and the goals a principal and the agent conflict. It is very tough and difficult or rather expensive for a principal to always monitor the work of his/her agent to ensure that the agent works and makes some decisions on the best interest of the principle. Thus, the theory of agency is help in solving the principle and agent issues with an aim of ensuring a better relationship between them (Nwidobie, 2013).

This theory is based on the notion that the interests of shareholders and the managers are not aligned in a perfect away to enable them work for a common goal which is achieving the organizational set goals and objectives. The agency theory plays a crucial role in financing decisions because of the problems that arise be between the debt holders and the shareholders (Deepte & Roshan 2009).

The theory of Agency suggests that agents who in this case are the managers prefers to have a high level of cash flow even if there exists no profitable investment opportunity so that the funds can be used for managers own benefits other than for enhancing or increasing the firms value (Manos, 2002). The Jensen and Meckling (1976) agency theory explains that decisions on capital structure must aim at reducing the cost related to agency by reducing equity in capital structure. This is done be increasing the debt financing hence increasing the market value of the firm as well as reducing the conflicts

that may exist between managers of a firm and shareholders. The agency theory hypothesizes a positive relation between institutional ownership and dividend, as institutions demand dividends in order to reduce managerial discretionary funds and agency costs (Karami, Mehrani & Eskandar, 2010).

2.3 Empirical Review

A study by Odesa and Ekezie (2015) examined factors that determine dividend policy of quoted companies in Nigeria. The study used a descriptive and ex-post facto research design and regression analysis to test the relation between variables. The study revealed that investment opportunity has a negative relationship with dividend policy whereas debt, ROE, structure of shareholder, and last paid dividend have a significant positive relation with dividend policy. The study recommended among others that managers should pay more attention to profit, total debt, shareholder structure and last dividend paid in formulating dividend policy as this will help reduce principal-agent conflict and payment, which will enhance the value of the firm.

Anike (2014) examined effect of dividend policy and earnings on share prices of Nigeria banks. The study adopted the ex-post-facto research design and panel data covering 5-year period 2006-2010 was collected from banks annual reports. The study findings established that dividend yield had negative but significant effect on banks' share prices. In addition, earnings yield had negative but significant effect on banks' share prices and dividend payout ratio had negative and non-significant effect on banks' share prices. Further, the study revealed that dividend yield, earnings yield and payout ratio are not

factors that influences share prices rather the bank size was eztablished to have positive and significant effect on share prices.

Botchwey (2014) affirm that liquidity is important in determining a dividend policy. Liquid firms have a higher probability of paying dividends then those with liquidity problems. Dividend payment is dependent on actual cash flows thus reflecting on their ability to pay dividends. High liquidity means a cash surplus and low liquidity means less cash at hand thus the dividend level payable.

Fama and French (2001) year-to-year cross-sectional regression study from 1978 to 1998 to analyze the trend in the proportion of dividend payers. He documented a decrease from 67 to 21 percent in proportion of dividends and reports that dividend payers are more profitable have fewer growth opportunities and are large firms than those that do not pay dividends. He found out that changes in the firm's characteristics cannot fully explain the dramatic decrease in dividends. He concluded that firms must have a lower propensity to pay dividends today.

Muchiri (2006) studied the determinants of dividend payout for the listed companies in Kenya. Research findings identified the company's current and future profitability as the prime consideration in the dividend policy decision. Other factors also considered as significant were the cash flow position, the immediate financial needs and the availability investment opportunities. Further, the study indicated that the sector/industry, size of the company and age do not significantly influence a company's dividend payout decision as

these variables do not affect the factor rankings. However, smaller companies and young companies (less than 10 years old) tended to rate certain factors tied to their limited capital base highly, such as financial needs and availability of alternative finance.

Bulla (2013) carried out an empirical examination of selected dynamics affecting dividend policy of listed firms at NSE. The study sought to examine how current earnings, dividend yield and size of the firm affect dividend policy. Results indicated that earnings, dividend yield and sales explained 17%, earnings accounted for 15% representing 87% of the variation, dividend yield and size explained 2%. This concludes that only earnings was significant in influencing dividend policy, prior dividends and firm size were insignificant variables.

Ndirangu (2014) studied effect of dividend policy on future financial performance of listed firms at NSE. This study adopted a co-relational research design, a sample size was 43, and their annual financial reports for the years 2009-2013. It was established that the current operating accruals, non-current operating accruals and retained cash flows represent significant sources of variation in retained earnings.

Kiuru (2014) investigated the relation between dividend payout and performance of listed firms at NSE. The study used audited financial statements to determine the relationship between dividends and performance of firms and revealed exists of a relation between dividends and performance of firms. In addition, the study established a positive relation between net profit after tax and total assets, revenues and dividends.

Mundati (2013) sought to understand and test the effect of macroeconomic variables that included; inflation, exchange rates, money supply and interest rates on dividend policy of firms listed at the Nairobi Securities Exchange. The research concluded that inflation rates were having a significantly positive relationship with dividend payout. However, the significance was not very strong and in some industry sections, had a negative impact. The second finding was that, interest rates and exchange rates had affected dividend payouts differently with the interest rates having very little but noticeable impact on the dividend payout while exchange rates had a negative effect on the dividend payouts implying that investors on the stock exchange could be wary of the changes taking place in the exchange rate and interest rates market control areas. Finally, it was found that money supply had a very had a positive effect on the dividend payouts that was positive although relatively mild. This leads to the conclusion that the macroeconomic variables had an almost uniform impact across the market sectors.

Musiega et al. (2013) paper on determinants of dividend payout of non-financial firms listed on NSE established that business risk, profitability, current earnings, firm‘s size and growth opportunities were the main factors influencing of dividend payout.

King’wara (2015) study set forth to examine influence of dividend determinants on payout ratios in firms listed at NSE. He considered six variables: earnings, ratio of retained earnings to total assets, firm size, growth opportunities, debt ratio or leverage and market-to-book ratio. It is observed dividend payout ratio is impacted negatively by

the growth rate, debt ratios and firm size and positively by earnings, market-to-book ratio and retained earnings to total assets ratio.

2.4 Determinants of Value of Firms

This part examines the various determinants of firm value. They include liquidity, leverage and the size of the firm as the main determinants of value of firms listed at NSE.

2.4.1 Liquidity

Liquidity Liquidity refers to available funds that can be easily used for an investment and or expenditure. It is also an indicator of the ability of the firm meet its obligations as they become due (Alkhatib, 2012). Liquidity is a firm's ability to fulfill both expected and unexpected demands of cash on an ongoing basis. In order for a firm to sustain its activities and remain in existence for a long time, it must be liquid and able to meet its obligations at any time. Working capital management is crucial to any successful business. With poor management of working capital, the firm's funds are likely to be tied up in idle assets. This may reduce the firm's liquidity and the firm will not be able to invest in more profitable projects that may arise (Alkhatib, 2012).

Liquidity is measured using cash and cash equivalents divided by total average assets. Liquidity ratios compare the current assets of a business to the current liabilities. As such, the objective of focusing on a firm's liquidity is in order to determine how effectively an entity can pay its bills (Akhtar & Sadaqat, 2011). Liquidity is positively correlated with financial performance (Mwangi, 2014).

2.4.2 Leverage

Debt is a source of funding which is widely used by many firms to strengthen its capital so as to enhance their profits (Sudiyatno et al., 2012). Leverage also affects the financial performance of firms. Leverage in this research is described as total debts divided by total assets. It shows the extent to which a corporate is exploiting loaned money. It signifies the possible effect on capital as well as surplus of shortages in funds due to monetary claims (Aggarwal & Kyaw, 2006). Leverage has the potential of increasing the firm's profitability if the debt obtained is well spend. A profitable firm will mostly pay more dividends to shareholders of the firm.

2.4.3 Size of the Firm

The size of the firm determines the level of economics of scale enjoyed by a firm. When a firm becomes larger, it enjoys economics to scale and the average production cost is lower and operational activities are more efficient. Hence, larger firms generate larger returns on assets. However, larger firms can be less efficient if the top management lose their control over strategic and operational activities within the firm (Mule et al., 2015). Large firms are also more diversified than small ones and have greater market power and during good times may have relatively more organizational slack.

The size of the firm or enterprise also determines the cash flow sensibility to investments. In measuring the size of the firm size, total number of employees of the firm, volume of sales and amount of property are the main factors that are usually measured (Salman & Yazdanfar, 2012)

2.5 Conceptual Framework

Figure 2.1 shows the hypothesized conceptual framework guiding the study

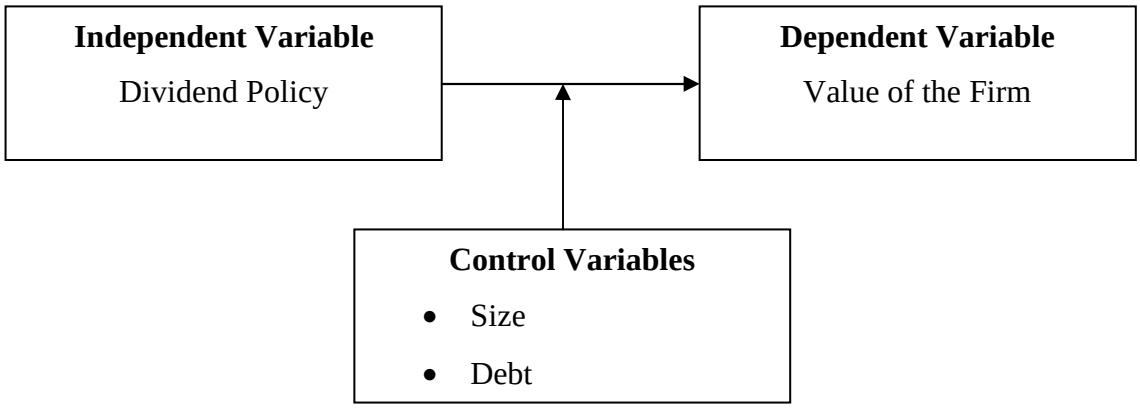

Figure 2.1 Conceptual Framework

2.5 Summary of Literature Review

This chapter has explored various theories on dividend policies and its effect on value of the firm. The theories are based on various explanations on whether dividend policy affects firm value. For instance MM dividend irrelevant policy is based on the premise that dividend policies are irrelevant and do not affect firm's value. On the other hand, bird in hand theory, signaling theory and agency theory support that dividend policies are relevant and they influence the value of the firms. In addition, the chapter has also explored various determinants of value of firms including liquidity, financial leverage and the size of the firm.

Additionally, several studies on the effect of dividend policies by various authors have been explored but most of the reviewed studies have examined dividend policy on other aspect with a few of the examining effect of dividend policy on firms' value hence need for this study.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter focuses on research design, population of the study, collection of data and data analysis.

3.2 Research Design

Research design is defined as a blue print of those procedures, which are adopted by a researcher for testing the relationship between dependent variables and independent variables (Khan, 2008). A research design presents a framework or arrangement of action for a study. The study adopted a quantitative research design. A quantitative research design helped to examine effect of dividend policy on firms' value at NSE.

3.3 Population of the Study

Population refers to all observations of interest in an entire collection like people or events as defined by a researcher (Burns & Burns, 2008). The population of the study comprised of the 65 firms listed at NSE as at 31/12/2015. Since the population was finite, a census of the 65 firms was undertaken for the study.

3.4 Data Collection Procedure

Secondary data extracted from the listed firms financial statements for a period of 5 years from the 2011 – 2015 was used.

3.5 Data Analysis

Data analysis was carried out using correlation and regression analysis using the Statistical Package for Social Sciences (SPSS) version 21. Correlation analysis studied joint variation of two or more variables to determine amount of correlation between two or more variables while regression analysis involved determination of a statistical relation between two or more variables (Kothari, 2004).

3.5.1 Analytical Model

To establish To establish the relation between dependent variables linear regression model was used. The linear regression equation was as follows

$$Y = \beta_0 + \beta_1(DPR) + \beta_2(TDP) + \beta_3(MDP) + \beta_4(DR) + \beta_5(FS) + \varepsilon$$

Where,

Y = Value of the firm

DPR = Dividend Payout Ratio

TDP = Timing of Dividend Payment

MDP = Mode of Dividend Payment

DR = Debt Ratio

FS = Firm Size

β_0 = Constant

β_1 - β_5 = Coefficients of the regression model

ε = Error term

3.5.2 Variables Description

The variables used for the study included the value of the firm as dependent variable while dividend payout ratio, timing of dividend payment and the mode of dividend payment was used as the independent variables. In addition, debt ratio and firm's size were used as control variables. Table 3.1 describes variables in detail.

Table 3.1 Variables Description

Variable	Description	Formula
Value of the Firm (Y)	Firm value is the sum of the values of all its financial claims and measured using Tobin Q	$Tobin\ Q = \frac{Market\ Value\ of\ Equity}{Book\ Value\ of\ Equity}$
Dividend Payout Ratio (DPR)	DPR indicates amount of dividends that the stockholders will receive for each share of stock held	$DPR = \frac{Total\ Dividends}{Net\ income}$
Timing of Dividend Payment (TDP)	Timing of payments may signal or convey reliable information at a particular time	TDP = Proportion of final dividend to total dividends
Mode of Dividend Payment (MDP)	The mode of dividend payment either cash or bonus convey valuable information about the firm	MDP = Proportion of cash dividends to total dividends
Debt Ratio (DR)	Debt ratio indicates the proportion of total assets that has been financed using long term and current liabilities	$DR = \frac{Total\ debt}{Total\ assets}$
Firm size (FS)	This is a proxy for the size of the firms listed at NSE	$Natural\ log\ of\ total\ assets$

3.5.3 Test of Significance

To test the statistical significance the F and the Students t – test was used at 95% confidence level. The F statistics was utilized to establish a statistical significance of regression equation while the t statistics was used to test statistical significance of study coefficients.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND INTERPRETATION

4.1 Introduction

The section presents results of analyzed data. This chapter outlines response rate, the descriptive statistics, correlation and regression analysis results and the interpretation of the research findings.

4.2 Response Rate

The study undertook a census of the 65 listed firms at NSE as at 31/12/2015 but obtained complete data from only 60 firms making up a response rate of 92.3% which was deemed adequate for the research.

4.3 Descriptive Statistics

Table 4.1 shows a summary of descriptive statistics which comprises of Tobin Q as a measure of size of the firm, Dividend Payout Ratio (DPR), Timing of Dividend Payment (TDP), the Mode of Dividend Payment (MDP), Debt ratio (DR) and Firm Size (FS). Table 4.1 shows the results obtained

Table 4.1 Summary Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
Tobin Q	.520	305.000	28.94233	43.460464
DPR	-27.270	99.360	23.66053	25.186110
TPD	.000	1.000	.65827	.428661
MDP	.000	17.638	.96084	1.388844
DR	.000	.654	.16634	.177178
FS	11.128	21.811	16.35551	2.196099

Source: Research Findings

The results on table 4.1 indicate that mean value of the listed firms is 28.94 with the minimum and maximum value of the firm being 0.52 and 305 respectively. The results also show that average dividend payment of the listed NSE firms is 23.66 with maximum payment of 99.36, which indicates some firms are close to paying a payout ratio of 100% with the minimum value being -27.27 an indication that some firms pay dividend even when earnings are negative. Such dividend is normally paid from retained earnings or through stock dividends and not in cash. The findings indicate that mean values of timing of dividend payment ratio is 0.65 with minimum value and maximum value of 0.000 and 1 which indicates that some firms do not pay dividends and most of the firms declare the first and the final dividend with very few of them paying interim and final dividends.

The findings also indicates that the mode of dividend payment ratio is 0.96 with minimum value and maximum value of 0.00 and 18.64 which indicates that some firms do not payment dividends and most of them pay cash dividends. The study also found that the average debt level is 0.166 with minimum value of 0.000 and 0.654, which indicates that some firms at the NSE do not use debt while other firms finance themselves with debt of more than 50%. Finally, the study shows that average size of NSE firms is 16.36 with minimum value and maximum value of 11.13 and 21.81 respectively.

4.4 Correlation Analysis

Correlation analysis was done to establish the joint variation of the research variables to determining the amount of correlation between the variables. Table 4.1 shows results of correlation analysis.

Table 4.2 Correlation Analysis

	Tobin Q	**DPR**	**TPD**	**MDP**	**DR**	**FS**
Tobin Q	1					
DPR	.263**	1				
TPD	.151**	.245**	1			
MDP	.079	.136*	.080	1		
DR	-.053	-.066	-.174**	-.099	1	
FS	.270**	.028	.231**	.001	-.016	1

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Source: Research Findings

The findings on table 4.2 indicate that firm value proxied using Tobin Q has a positive significant correlation with dividend payout, timing of dividend payments and firm size. The results also show that the mode of dividend payment has an insignificant positive correlation with value of the firm while debt ratio has a negative correlation with the value of the firms listed at NSE.

4.5 Regression Analysis

Regression analysis was carried out to determine the statistical relation between the research variables. Regression analysis comprises of the model summary, Analysis of Variance (ANOVA) and summary of the coefficients results.

4.5.1 Model Summary

Table 4.3 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.376[a]	.142	.127	40.6686842

a. Predictors: (Constant), FS, MDP, DR, DPR, TPD

Source: Research Findings

Table 4.3 indicates that the R – square value is 0.142 which shows that 14.2% of variation in dependent variable (Value of the firm proxied using Tobin Q) is explained by the independent and control variables. The other 85.5% is explained by other factors and the error term.

4.5.2 Analysis of Variance

Table 4.4 Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	80193.101	5	16038.620	9.697	.000[b]
	Residual	486258.911	294	1653.942		
	Total	566452.012	299			

a. Dependent Variable: Tobin Q
b. Predictors: (Constant), FS, MDP, DR, DPR, TPD
Source: Research Findings

The ANOVA findings on table 4.4 indicate that the regression model is significant and a good predictor of the relation between dividend policy and the value of firms. This is because the F statistics value of 9.697 is significant at 5% level of significance as P value 0.000<0.05.

4.5.3 Regression Coefficients

Table 4.5 Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-63.039	17.852		-3.531	.000
	DPR	.255	.059	.243	4.323	.000
	TPD	2.503	5.924	.025	.423	.673
	MDP	1.313	1.717	.042	.764	.445
	DR	-2.854	6.507	-.024	-.439	.661
	FS	5.095	1.102	.257	4.625	.000

a. Dependent Variable: Tobin Q
Source: Research Findings

The regression results on table 4.5 lead to the following equation

$$Y = -63.039 + 0.255(DPR) + 2.503(TDP) + 1.313(MDP) - 2.854(DR) + 5.095(FS) + \varepsilon$$

The regression equation shows that dividend payout (DPR) and firm's size (FS) have a significant and positive relation with firm's value. The findings also show that the timing of dividend payment (TPD) and the mode of dividend payment (MDP) have an insignificant positive relation with value of the firm while debt ratio (DR) has an insignificant negative relation with value of the firm. This indicate that dividend payout and size of the firm positively and significantly influences the firm's value whereas timing of dividend payment and the mode of dividend payment positively influences the value of the firm but have an insignificant effect while debt negatively influence value of the firm.

4.6 Interpretation of the Findings

The study to examine effect of dividend policy on firms' value at NSE. The study found that value of the firm proxied using Tobin Q has a positive significant correlation with dividend payout, timing of dividend payments and firm size whereas the mode of dividend payment has an insignificant positive correlation while debt ratio has a negative correlation with the value of firms listed at NSE. The study also found that dividend payout and firm size significantly and positively influences the firm's value which indicates that increase in dividend an large size of firms enhance the value of firms.

The study found that the timing of payment of dividends and the mode of dividend payment positively influences value of the firm hence an indication that payment of final and cash dividends enhances the value of firms while debt ratio negatively influences the value of the firm an indication that increase in debt levels reduces the firm's value.

As per the study findings the above finding support the dividend relevance theories which are advanced by Gordon (1962), Lintner (1963), Ross (1977) and other scholars who suggest that a firm' dividend policy is relevant and affects the firm's value. As such, Emeni and Ogbulu (2015) on the other hand found that cash dividends dot have a significant relation with the market value of firms but Priya & Nimalathasan (2013) revealed that cash dividend announcements convey valuable information, which investors or shareholders do not have. In Kenya, Aroni, Namusonge and Sakwa (2014) found that dividend payout had a significant influence on decisions to invest in shares.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Chapter five presents the summary of findings of this research, conclusions, recommendations, limitations of the study and suggestion of areas which may require further consideration as far as future research is concerned.

5.2 Summary

The aim of this research was to explore effect of dividend policy on value of firms listed at NSE. The study considered value of firm proxied using Tobin Q as dependent variable while dividend payout ratio, timing of dividend payment and the mode of dividend payment as the independent variables while debt and size of the firm were incorporated as control variables. Complete data was obtained from 60 firms from the 65 firms' sampled firms hence response rate of 92.3% and the data collected analyzed using correlation and regression analysis.

The summary descriptive results indicated that mean firm value of the listed firms was 28.94 and the average dividend payment of the listed NSE firms is 23.66 with some firms paying dividend even when earnings are negative from retained earnings or through stock dividends. The study found that the mean value of timing of dividend payment ratio was 0.65 where some firms did not pay dividends and most of the firms declare the first and the final dividend. The study also found that means value of the mode of dividend

payment ratio was 0.96 and that some firms do not payment dividends and most of them pay cash dividends. The study also revealed that some firms at the NSE do not use debt while other firms finance themselves with debt of more than 50% and that the average size of NSE firms was 16.36 respectively. Correlation results established a positive correlation between dividend payout, timing of dividend payments, firm size and the mode of dividend payment while debt ratio had a correlation with the firm's value.

Inferential statistics results established that the independent variable and the control variables explain 14.2% of the variation in the value of the firm. The study found that the F statistics value indicate that the regression model is significant as the p value of 0.00 is less that the significance level value of 0.05. The study revealed that a significant and positive relationship between dividend payout and the size of the firm and a positive but insignificant relation between the timing of dividend payment, the mode of dividend payment and firm value. The study also found that debt has an insignificant negative relationship with value of the firm.

5.3 Conclusion

The study has established that dividend payout significantly and positively influences value of a firm. The study also found that firm size has a positive significant relation with the value of the firm. Based on this finding, the study concludes that dividend policy is relevant and affects value of firm positively such that an increase in dividends increases the firm's value and vice versa. The study also concludes that firm size enhances firms'

value since large firms enjoys economies of large-scale production and may attract good management.

The study found that the timing of dividend payment and the mode of dividend payment positively influences the value of the firm but they have no significant effect. However, the study concludes that the payment of final dividends and cash dividends positively influences the value of the firm since they signal future prospects of the company on the ability to meet its dividend obligations. The study also found that debt has a negative but insignificant effect on firms' value hence the conclusion that high debt levels reduce the firm's value.

5.4 Recommendations for Policy and Practice

The study found out the dividend payment affect the firm's value hence payment of dividends is relevant. Based on this, the study recommends that manager of listed firms should develop effective dividend payout policies to ensure that their firms pay out dividends to enhance the value of their companies.

The study also recommends that regulatory and policy making organizations like the Capital Markets Authority of Kenya and NSE should come up with policies dividend payout by listed firms so that they can enhance their value.

The study also revealed that the timing of dividend payment and the mode of dividend payment positively affects firm value. Based on this finding, the study recommends that managers of listed firms should come up with effective policies on declaration of final and interim dividends and employ cash payment of dividends, as this would enhance the value of the listed firms.

The study also found that size of the firm significantly affects firm value. The study therefore recommends that managers should focus on growing their firms to enhance economies of large-scale production and to attract better management as this would enhance the value of the listed firms.

Finally, the study found that debt negatively affects the firm's value. In this regard the study, recommends that the management of listed firms in Kenya should employ optimal debt levels to ensure that high debt levels do not increase agency cost, which may in turn affect the value of their firms.

5.5 Limitations of the Study

The objective of this was to explore the relationship between dividend policy on the firms' value of listed firms at Nairobi Securities Exchange. Therefore, the findings of this study are limited to firms listed at the NSE. The study was also carried out for a period of 5 years therefore the study was limited to the 5 years study period. The study also used secondary data, which involved accounting ratios, which may be historical in nature hence may not be reflective of the current situation.

5.5 Suggestions for Further Research

This study focused on the relation between dividend policy and value of listed firms at NSE using dividend payout ratio as a measure of dividend policy. Hence, the study recommends additional research using other dividend ratios like dividend yield and dividend per share. The timing of dividend payment and the mode of dividend payment have also not been explored in most studies hence more studies need to examine their effects on profitability and cash flows of Kenyan listed firms. Further, the study variables only explained 14.2% of the variations in the dependent variables meaning there are other factors, which affect value of a firm, which may require further research.

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APPENDICES

Appendix I: List of Companies Listed at the Nairobi Securities Exchange

1. A.Baumann CO Ltd
2. Athi River Mining
3. Atlas Development and Support Services
4. B.O.C Kenya Ltd
5. Bamburi Cement Ltd
6. Barclays Bank Ltd
7. British American Tobacco Kenya Ltd
8. British-American Investments Company (Kenya) Ltd
9. Car and General (K) Ltd
10. Carbacid Investments Ltd
11. Centum Investment Co Ltd
12. CFC Stanbic Holdings Ltd
13. CIC Insurance Group Ltd
14. Crown Berger Ltd
15. Diamond Trust Bank Kenya Ltd
16. E.A.Cables Ltd
17. E.A.Portland Cement Ltd
18. Eaagads Ltd
19. East African Breweries Ltd
20. Equity Bank Ltd
21. Eveready East Africa Ltd
22. Express Ltd
23. Flame Tree Group Holdings Ltd
24. Home Afrika Ltd
25. Housing Finance Co Ltd
26. Hutchings Biemer Ltd
27. I&M Holdings Ltd
28. Jubilee Holdings Ltd
29. Kakuzi
30. Kapchorua Tea Co. Ltd
31. KenGen Ltd
32. KenolKobil Ltd
33. Kenya Airways Ltd
34. Kenya Commercial Bank Ltd
35. Kenya Orchards Ltd
36. Kenya Power & Lighting Co Ltd
37. Kenya Re-Insurance Corporation Ltd
38. Kurwitu Ventures
39. Liberty Kenya Holdings Ltd
40. Limuru Tea Co. Ltd
41. Longhorn Kenya Ltd
42. Marshalls (E.A.) Ltd
43. Mumias Sugar Co. Ltd
44. Nairobi Securities Exchange Ltd
45. Nation Media Group
46. National Bank of Kenya Ltd
47. NIC Bank Ltd
48. Olympia Capital Holdings ltd
49. Pan Africa Insurance Holdings Ltd
50. Rea Vipingo Plantations Ltd
51. Safaricom Ltd
52. Sameer Africa Ltd
53. Sasini Ltd
54. Scangroup Ltd
55. Standard Chartered Bank Ltd
56. Standard Group Ltd
57. Stanlib Fahari I-REIT
58. The Co-operative Bank of Kenya Ltd
59. Total Kenya Ltd
60. TPS Eastern Africa (Serena) Ltd
61. Trans-Century Ltd
62. Uchumi Supermarket Ltd
63. Umeme Ltd
64. Unga Group Ltd
65. Williamson Tea Kenya Ltd

Source: Nairobi Securities Exchange (2016)

Appendix II: Data

Firm	Year	Share price	Book value	Total dividends	Final dividend	Cash dividend	debt ratio	Firm size
Firm 1	2015	86.25	5.00	301,391	301,391	301,391	0.472	17.34
	2014	82.50	5.00	297,794	297,794	297,794	0.565	16.44
	2013	90.00	5.00	297,165	247,638	297,165	0.548	16.47
	2012	44.50	5.00	198,110	198,110	198,110	0.556	16.25
	2011	158.00	5.00	173,346	173,346	173,346	0.518	15.92
Firm 2	2015	156.00	5.00	4,718	4,356	4,718	0.00	18.27
	2014	139.00	5.00	4,356	3,993	4,356	0.00	17.40
	2013	210.00	5.00	3,267	2,178	3,267	0.026	17.34
	2012	185.00	5.00	726	726	726	0.024	17.44
	2011	125.00	5.00	3,086	2,094	3,086	0.042	17.40
Firm 3	2015	11.00	0.50	5,432	2,716	5,432	0.00	12.94
	2014	16.60	0.50	4,345	1,086	1,086	0.00	12.33
	2013	17.60	0.50	3,802	2,716	3,802	0.00	12.24
	2012	15.70	0.50	5,431	3,802	5,431	0.00	12.13
	2011	13.05	0.50	7,061	6,382	7,061	0.00	12.03
Firm 4	2015	936.00	10.00	4,600,000	4,050,000	4,600,000	0.075	17.53
	2014	900.00	10.00	3,900,000	3,550,000	3,900,000	0.083	17.35
	2013	595.00	10.00	3,350,000	2,900,000	3,350,000	0.043	17.37
	2012	493.00	10.00	2,900,000	2,700,000	2,900,000	0.048	17.23
	2011	246.00	10.00	2,700,000	1,250,000	2,700,000	0.076	16.82
Firm 5	2015	113.00	5.00	101,532	58,576	101,532	0.00	14.66
	2014	125.00	5.00	101,532	42,596	101,532	0.00	14.06
	2013	125.00	5.00	59,553	50,766	59,553	0.00	14.03
	2012	99.50	5.00	110,319	39,051	110,319	0.00	14.07
	2011	100.00	5.00	93,772	39,051	93,772	0.00	14.00
Firm 6	2015	14.30	10.00	581,500	108,637	581,500	0.008	18.17
	2014	15.15	10.00	581,525	108,662	581,525	0.003	18.10
	2013	6.00	10.00	472,863	189,145	472,863	0.002	17.85
	2012	5.20	10.00	472,863	94,573	472,863	0.002	17.66
	2011	5.20	10.00	283,718	13,860	283,718	0.003	17.39

Firm 7	2015	12.50	5.00	0.00	0.00	0.00	0.051	15.27
	2014	6.00	5.00	24,062	24,062	0.00	0.654	15.14
	2013	5.15	5.00	26,736	26,736	0.00	0.524	15.21
	2012	4.25	5.00	18,381	18,381	18,381	0.500	15.22
	2011	4.40	5.00	18,724	18,724	18,724	0.604	15.14
Firm 8	2015	125.00	5.00	178,397	76,456	178,397	0.00	14.30
	2014	149.00	5.00	101,941	101,941	101,941	0.00	13.63
	2013	140.00	5.00	101,941	67,961	101,941	0.00	13.77
	2012	125.00	5.00	101,941	101,941	101,941	0.00	13.73
	2011	91.50	5.00	101,941	101,941	101,941	0.00	13.26
Firm 9	2015	38.53	0.50	0.00	0.00	0.00	0.138	18.10
	2014	36.50	0.50	0.00	0.00	0.00	0.142	17.20
	2013	19.75	0.50	0.00	0.00	0.00	0.222	16.76
	2012	13.10	0.50	0.00	0.00	0.00	0.252	16.63
	2011	13.05	0.50	0.00	0.00	0.00	0.342	16.33
Firm 10	2015	130.25	5.00	213,475	205,600	213,474	0.020	19.16
	2014	125.00	5.00	205,567	197,660	205,567	0.023	19.01
	2013	89.00	5.00	376,000	249,000	376,000	0.023	19.01
	2012	41.50	5.00	849,942	600,889	600,889	0.029	18.78
	2011	40.00	5.00	0.00	0.00	0.00	0.028	18.83
Firm 11	2015	8.90	1.00	0.00	0.00	0.00	0.626	15.72
	2014	9.45	1.00	70,000	70,000	46,849	0.177	16.98
	2013	5.65	1.00	217,966	217,966	194,815	0.247	16.65
	2012	3.53	1.00	196,165	196,165	196,165	0.299	16.46
	2011	5.00	1.00	0.00	0.00	0.00	0.378	16.22
Firm 12	2015	28.00	1.00	3,911,453	3,911,453	3,911,453	0.012	19.65
	2014	28.06	1.00	2,444,658	2,444,658	2,444,658	0.015	19.47
	2013	17.80	1.00	2,095,422	2,095,422	2,095,422	0.018	19.26
	2012	13.30	1.00	1,396,948	1,396,948	1,396,948	0.021	19.12
	2011	9.60	1.00	1,396,948	1,396,948	1,396,948	0.025	18.94
Firm 13	2015	93.00	5.00	42,708,600	24,913,350	42,708,600	0.926	15.33
	2014	111.00	5.00	41,522,250	24,221,313	41,522,250	0.069	15.61
	2013	75.00	5.00	29,659,000	17,301,083	29,659,000	0.064	15.46
	2012	42.50	5.00	29,685,750	17,316,688	29,685,750	0.068	15.30

	2011	20.50	5.00	29,685,750	17,316,688	29,685,750	0.066	14.13
Firm 14	2015	123.50	4.00	605,275	378,297	605,275	0.096	19.42
	2014	235.00	4.00	581,064	363,165	581,064	0.058	19.17
	2013	192.00	4.00	462,210	288,881	462,210	0.074	18.93
	2012	115.00	4.00	418,190	261,369	418,190	0.091	18.72
	2011	90.50	4.00	332,596	207,873	332,596	0.114	18.50
Firm 15	2015	31.00	1.25	0.00	0.00	0.00	0.00	12.04
	2014	29.00	1.25	0.00	0.00	0.00	0.00	11.47
	2013	25.50	1.25	0.00	0.00	0.00	0.00	11.13
	2012	34.00	1.25	20,098	20,098	0.00	0.00	11.96
	2011	69.50	1.25	20,098	20,098	0.00	0.00	12.13
Firm 16	2015	16.50	0.50	253,125	151,875	101,250	0.437	15.75
	2014	16.20	0.50	32,015	16,008	32,015	0.428	15.44
	2013	16.75	0.50	151,875	75,938	151,875	0.490	15.32
	2012	11.70	0.50	101,250	50,625	101,250	0.323	15.27
	2011	10.55	0.50	126,563	63,282	126,563	0.399	15.42
Firm 17	2015	304.50	2.00	4,349	4,349	4,349	0.526	18.29
	2014	289.00	2.00	4,349	4,349	4,349	0.554	17.93
	2013	320.00	2.00	4,375	3,182	4,375	0.430	17.89
	2012	223.00	2.00	7,047	5,638	7,047	0.459	17.83
	2011	195.00	2.00	5,711	4,569	5,711	0.104	17.62
Firm 18	2015	68.50	5.00	0.00	0.00	0.00	0.168	16.34
	2014	80.00	5.00	0.00	0.00	0.00	0.165	16.02
	2013	57.50	5.00	0.00	0.00	0.00	0.171	16.04
	2012	60.00	5.00	0.00	0.00	0.00	0.256	15.96
	2011	80.00	5.00	117,000	117,000	117,000	0.272	16.14
Firm 19	2015	45.00	0.50	7,547,350	7,547,350	7,547,350	0.098	19.65
	2014	50.00	0.50	6,664,999	6,664,999	6,664,999	0.086	19.66
	2013	30.75	0.50	16,246	16,246	16,246	0.00	19.44
	2012	23.75	0.50	20,777	20,777	20,777	0.00	19.31
	2011	16.40	0.50	17,265	17,265	17,265	0.00	19.10
Firm 20	2015	3.20	1.00	0.00	0.00	0.00	0.023	14.23
	2014	3.65	1.00	0.00	0.00	0.00	0.416	14.01
	2013	2.70	1.00	0.00	0.00	0.00	0.250	14.17

	2012	2.00	1.00	0.00	0.00	0.00	2.248	14.13
	2011	1.75	1.00	0.00	0.00	0.00	5.092	14.13
Firm 21	2015	5.20	5.00	0.00	0.00	0.00	0.241	12.18
	2014	6.50	5.00	0.00	0.00	0.00	0.239	12.06
	2013	3.90	5.00	0.00	0.00	0.00	0.131	12.87
	2012	3.50	5.00	0.00	0.00	0.00	0.200	12.35
	2011	3.90	5.00	0.00	0.00	0.00	0.435	13.02
Firm 22	2015	38.40	5.00	242,624	193,947	242,624	0.141	17.95
	2014	45.50	5.00	231,070	184,711	231,070	0.213	17.86
	2013	31.25	5.00	231,070	183,360	231,070	0.255	17.67
	2012	15.50	5.00	161,240	137,128	161,240	0.295	17.53
	2011	12.40	5.00	161,298	161,298	161,298	0.380	17.28
Firm 23	2015	4.90	1.00	0.00	0.00	0.00	0.125	21.81
	2014	4.90	1.00	0.00	0.00	0.00	0.112	20.92
	2013	4.90	1.00	0.00	0.00	0.00	0.162	20.55
	2012	4.90	1.00	0.00	0.00	0.00	1.213	18.54
	2011	4.90	1.00	0.00	0.00	0.00	1.329	18.45
Firm 24	2015	127.00	1.00	1,296,110	1,296,110	1,296,110	0.055	18.92
	2014	123.00	1.00	1,008,086	1,008,086	1,008,086	0.080	18.56
	2013	120.00	1.00	748,863	748,863	748,863	0.065	18.77
	2012	120.00	1.00	747,425	747,425	747,425	0.080	18.79
	2011	120.00	1.00	527,213	527,213	527,213	0.107	18.50
Firm 25	2015	387.00	5.00	494,133	463,250	494,133	0.00	18.23
	2014	450.00	5.00	449,212	421,136	449,212	0.018	18.13
	2013	322.97	5.00	359,370	336,909	359,370	0.022	17.93
	2012	172.85	5.00	245,025	210,021	245,025	0.027	17.67
	2011	155.00	5.00	133,975	114,836	133,975	0.033	17.45
Firm 26	2015	135.00	5.00	98,000	98,000	0.00	0.00	15.27
	2014	137.00	5.00	0.00	0.00	0.00	0.00	14.34
	2013	125.00	5.00	73,500	73,500	73,500	0.00	14.14
	2012	95.00	5.00	73,500	73,500	73,500	0.00	14.53
	2011	69.50	5.00	73,500	73,500	73,500	0.00	14.68
Firm 27	2015	141.00	5.00	19,560	19,560	0.00	0.00	14.66
	2014	137.00	5.00	19,560	19,560	0.00	0.00	13.99

	2013	145.00	5.00	20,755	20,755	20,755	0.00	15.07
	2012	121.00	5.00	19,970	19,970	19,970	0.041	15.10
	2011	115.00	5.00	14,660	14,660	14,660	0.055	14.04
Firm 28	2015	52.50	1.00	6,050	6,050	3,025	0.038	19.96
	2014	57.00	1.00	6,050	6,050	3,025	0.024	20.01
	2013	47.25	1.00	5,969	5,969	2,984	0.018	19.78
	2012	29.75	1.00	5,644	5,644	5,644	0.023	19.72
	2011	16.85	1.00	5,492	5,492	5,492	0.026	19.62
Firm 29	2015	13.50	2.50	1,428,935	1,428,935	263,804	0.310	16.48
	2014	10.90	2.50	879,344	879,344	395,705	0.342	19.65
	2013	15.15	2.50	1,319,017	1,319,017	1,319,017	0.429	16.62
	2012	8.60	2.50	1,319,017	1,319,017	1,319,017	0.424	16.59
	2011	13.55	2.50	1,099,000	1,099,000	329,755	0.416	16.48
Firm 30	2015	9.50	0.05	367,940	128,779	367,940	0.544	16.67
	2014	8.80	0.05	294,352	103,023	294,352	0.439	18.33
	2013	9.45	0.05	147,176	51,512	147,176	0.547	18.51
	2012	13.50	0.05	0.00	0.00	0.00	0.508	19.08
	2011	9.95	0.05	7,441	2,604	7,441	0.411	19.22
Firm 31	2015	5.38	5.00	55,000	55,000	55,000	0.090	17.95
	2014	10.50	5.00	55,000	55,000	55,000	0.167	17.33
	2013	9.46	5.00	55,000	55,000	55,000	0.597	18.07
	2012	2.99	5.00	55,000	55,000	55,000	0.508	18.05
	2011	3.02	5.00	55,000	55,000	55,000	0.490	18.07
Firm 32	2015	15.50	2.50	525,000	525,000	525,000	0.386	17.63
	2014	17.20	2.50	489,964	489,964	489,964	0.379	17.29
	2013	13.80	2.50	419,959	419,959	419,959	0.385	17.13
	2012	10.85	2.50	280,000	280,000	280,000	0.397	16.96
	2011	7.30	2.50	210,000	210,000	210,000	0.396	16.77
Firm 33	2015	13.92	1.50	1,271,035	1,271,035	0.00	0.360	19.43
	2014	13.35	1.50	585,440	195,147	207,508	0.319	17.95
	2013	14.50	1.50	0.00	0.00	0.00	0.260	17.68
	2012	15.20	1.50	425,184	425,184	425,184	0.207	17.62
	2011	21.50	1.50	1,020,607	1,020,607	1,020,607	0.205	17.60
Firm 34	2015	12.45	5.00	0.00	0.00	0.00	0.611	18.85

	2014	12.40	5.00	0.00	0.00	0.00	0.599	18.48
	2013	12.50	5.00	0.00	0.00	0.00	0.505	18.41
	2012	13.95	5.00	374,000	374,000	374,000	0.347	18.50
	2011	32.25	5.00	693,000	693,000	693,000	0.323	18.27
Firm 35	2015	22.52	1.00	0.00	0.00	0.00	0.00	17.36
	2014	30.00	1.00	515,270	515,270	515,270	0.497	17.30
	2013	15.05	1.00	100,000	100,000	100,000	0.508	17.26
	2012	6.70	1.00	206,108	206,108	206,108	0.468	17.13
	2011	6.55	1.00	0.00	0.00	0.00	0.423	16.99
Firm 36	2015	635.50	20.00	0.00	0.00	0.00	0.00	11.66
	2014	771.00	20.00	1,200	1,200	1,200	0.00	11.43
	2013	500.00	20.00	9,000	9,000	9,000	0.00	11.55
	2012	430.00	20.00	9,000	9,000	9,000	0.00	11.66
	2011	335.00	20.00	9,000	9,000	9,000	0.00	11.54
Firm 37	2015	11.27	10.00	117,000	70,200	117,000	0.060	13.44
	2014	9.05	10.00	117,000	117,000	29,250	0.00	14.15
	2013	13.50	10.00	46,800	46,800	46,800	0.00	13.85
	2012	10.20	10.00	0.00	0.00	0.00	0.029	13.56
	2011	10.00	10.00	0.00	0.00	0.00	0.041	13.91
Firm 38	2015	11.22	5.00	0.00	0.00	0.00	0.00	12.43
	2014	10.00	5.00	0.00	0.00	0.00	0.369	12.31
	2013	12.40	5.00	0.00	0.00	0.00	0.380	12.35
	2012	12.00	5.00	0.00	0.00	0.00	0.399	12.36
	2011	10.00	5.00	0.00	0.00	0.00	0.465	12.48
Firm 39	2015	3.52	2.00	0.00	0.00	0.00	0.237	16.77
	2014	2.85	2.00	0.00	0.00	0.00	0.244	16.39
	2013	4.20	2.00	765,000	765,000	765,000	0.220	16.30
	2012	6.10	2.00	765,000	765,000	765,000	0.090	16.56
	2011	7.15	2.00	765,000	765,000	765,000	0.130	16.58
Firm 40	2015	26.75	5.00	0.00	0.00	0.00	0.00	18.81
	2014	24.75	5.00	0.00	0.00	0.00	0.088	18.63
	2013	28.75	5.00	28,629	28,629	28,629	0.115	18.34
	2012	17.25	5.00	21,728	21,728	21,728	0.249	18.02
	2011	20.25	5.00	10,515	10,515	10,515	0.265	18.04

Firm 41	2015	13.75	4.00	74,000	74,000	74,000	0.00	18.63
	2014	12.50	4.00	73,958	73,958	73,958	0.179	13.62
	2013	11.50	4.00	49,000	49,000	49,000	0.262	13.34
	2012	10.00	4.00	24,500	24,500	24,500	0.342	12.86
	2011	9.00	4.00	0.00	0.00	0.00	0.00	12.73
Firm 42	2015	288.50	2.50	1,414	1,414	1,414	0.039	16.33
	2014	263.00	2.50	1,414	1,414	1,414	0.006	16.41
	2013	314.00	2.50	1,414	1,414	1,414	0.008	16.41
	2012	263.00	2.50	1,178	1,178	1,178	0.010	16.33
	2011	140.00	2.50	1,021	1,021	1,021	0.017	16.24
Firm 43	2015	52.65	5.00	830,342	670,358	159,984	0.093	18.93
	2014	57.00	5.00	639,946	639,946	639,946	0.154	18.80
	2013	59.00	5.00	407,238	407,238	407,238	0.029	18.61
	2012	38.25	5.00	100,675	100,675	100,675	0.026	18.50
	2011	24.00	5.00	182,749	182,749	182,749	0.107	18.18
Firm 44	2015	4.45	5.00	5,224	5,224	12,035	0.051	13.92
	2014	5.00	5.00	25,462	15,462	1,560	0.074	13.12
	2013	4.00	5.00	8,819	500	8,819	0.057	13.62
	2012	4.00	5.00	9,319	999	9,319	0.046	13.56
	2011	5.00	5.00	0.00	0.00	0.00	0.074	13.41
Firm 45	2015	105.00	5.00	0.00	0.00	0.00	0.385	17.12
	2014	120.00	5.00	432,000	432,000	432,000	0.379	17.29
	2013	90.00	5.00	228,000	228,000	228,000	0.385	17.13
	2012	40.25	5.00	192,000	192,000	192,000	0.397	16.96
	2011	20.75	5.00	144,000	144,000	144,000	0.396	16.77
Firm 46	2015	27.50	5.00	0.00	0.00	0.00	0.001	14.97
	2014	27.50	5.00	0.00	0.00	0.00	0.009	14.81
	2013	27.50	5.00	0.00	0.00	0.00	0.021	14.76
	2012	17.00	5.00	66,000	66,000	66,000	0.064	14.76
	2011	14.75	5.00	48,000	48,000	48,000	0.120	14.56
Firm 47	2015	15.25	0.05	25,641,874	25,641,874	18,830,751	0.067	18.87
	2014	12.30	0.05	18,830,751	18,830,751	18,830,751	0.094	18.79
	2013	6.00	0.05	12,400,000	12,400,000	12,400,000	0.157	18.64
	2012	3.20	0.05	8,800,000	8,800,000	8,800,000	0.157	18.49

	2011	3.80	0.05	8,800,000	8,800,000	8,800,000	0.133	18.37
Firm 48	2015	5.75	5.00	0.00	0.00	0.00	0.145	15.14
	2014	6.00	5.00	85,803	85,803	0.00	0.158	15.14
	2013	5.15	5.00	85,803	85,803	85,803	0.156	15.21
	2012	4.25	5.00	69,586	69,586	55,668	0.141	15.22
	2011	4.40	5.00	55,668	55,668	55,668	0.144	15.14
Firm 49	2015	13.67	1.00	57,104	57,104	57,104	0.004	16.69
	2014	14.05	1.00	315,009	315,009	315,009	0.00	14.83
	2013	13.30	1.00	57,014	0.00	57,014	0.019	14.85
	2012	10.95	1.00	57,014	57,014	57,014	0.006	14.84
	2011	12.05	1.00	114,028	114,028	114,028	0.020	14.80
Firm 50	2015	47.00	1.00	151,546	151,546	137,522	0.014	16.34
	2014	45.75	1.00	0.00	0.00	0.00	0.00	14.83
	2013	48.25	1.00	14,024	14,024	14,024	0.019	14.85
	2012	68.50	1.00	9,772	9,772	9,772	0.006	14.84
	2011	41.50	1.00	199,352	199,352	199,352	0.020	14.80
Firm 51	2015	319.00	5.00	3,949,184	3,949,184	2,474,657	0.00	19.27
	2014	334.00	5.00	3,949,184	3,949,184	3,949,184	0.00	19.22
	2013	304.00	5.00	4,650,813	4,650,813	4,650,813	0.00	19.21
	2012	235.00	5.00	4,032,494	4,032,494	4,032,494	0.00	19.09
	2011	160.00	5.00	3,157,848	3,157,848	3,157,848	0.00	18.92
Firm 52	2015	30.38	5.00	0.00	0.00	0.00	0.258	15.29
	2014	34.75	5.00	0.00	0.00	0.00	0.253	15.38
	2013	26.00	5.00	37,107	37,107	0.00	0.257	15.39
	2012	21.80	5.00	0.00	0.00	0.00	0.189	15.10
	2011	25.00	5.00	0.00	0.00	0.00	0.230	14.97
Firm 53	2015	25.60	5.00	440,680	440,680	440,680	0.228	19.15
	2014	24.00	5.00	375,932	375,932	375,932	0.226	18.96
	2013	24.37	5.00	377,725	377,725	377,725	0.062	18.86
	2012	13.80	5.00	125,893	125,893	0.00	0.126	18.60
	2011	14.75	5.00	313,599	313,599	0.00	0.168	18.48
Firm 54	2015	40.75	1.00	44,554	44,554	44,554	0.153	15.69
	2014	36.00	1.00	245,935	245,935	245,935	0.142	15.66
	2013	45.50	1.00	192,674	192,674	192,674	0.108	15.73

	2012	40.00	1.00	192,674	192,674	192,674	0.156	15.49
	2011	55.00	1.00	192,674	192,674	192,674	0.162	15.51
Firm 55	2015	25.00	35.00	1,538,394	1,538,394	1,538,170	0.084	16.47
	2014	19.30	35.00	994,385	994,385	805,834	0.080	16.14
	2013	28.75	35.00	200,068	200,068	200,068	0.236	16.28
	2012	23.50	35.00	149,859	149,859	149,859	0.244	16.42
	2011	27.25	35.00	160,498	160,498	160,498	0.221	16.19
Firm 56	2015	15.34	5.00	19,627	19,627	19,627	0.135	15.63
	2014	12.75	5.00	0.00	0.00	0.00	0.350	16.49
	2013	17.93	5.00	79,627	79,627	79,627	0.321	16.47
	2012	18.04	5.00	0.00	0.00	0.00	0.411	16.44
	2011	11.40	5.00	0.00	0.00	0.00	0.565	16.19
Firm 57	2015	36.85	5.00	15	15	15	0.023	16.63
	2014	39.75	5.00	56,780	56,780	56,780	0.022	16.65
	2013	34.00	5.00	56,780	56,780	56,780	0.020	16.53
	2012	69.50	5.00	56,780	56,780	56,780	0.000	16.59
	2011	36.00	5.00	56,780	56,780	56,780	0.000	16.40
Firm 58	2015	13.50	0.50	49,204	27,425	49,204	0.357	14.15
	2014	13.00	0.50	42,546	23,714	42,546	0.354	14.01
	2013	13.00	0.50	37,349	37,349	37,349	0.251	13.70
	2012	10.00	0.50	0.00	0.00	0.00	0.281	13.54
	2011	10.00	0.50	0.00	0.00	0.00	0.281	13.54
Firm 59	2015	179.00	5.00	58,987	58,987	58,987	0.015	16.04
	2014	179.00	5.00	61,294	61,294	61,294	0.022	15.96
	2013	290.00	5.00	68,533	68,533	68,533	0.116	15.90
	2012	230.00	5.00	503,488	65,672	503,488	0.135	15.80
	2011	185.00	5.00	68,533	68,533	68,533	0.161	15.61
Firm 60	2015	1,500.00	100.00	0.00	0.00	0.00	0.00	18.72
	2014	1,250.00	100.00	0.00	0.00	0.00	0.00	18.53
	2013	0.00	100.00	0.00	0.00	0.00	0.00	18.49
	2012	0.00	100.00	0.00	0.00	0.00	0.00	15.17
	2011	0.00	100.00	0.00	0.00	0.00	0.00	15.29

Source: Researcher