DETERMINANTS OF FIRM VALUE OF SECURITIES FOR COMPANIES THAT HAD ISSUED INITIAL PUBLIC OFFERING AT THE NAIROBI SECURITIES EXCHANGE

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ABSTRACT

Firms are mostly faced with choices to make while sourcing short term, medium term and long term sources of finance. Listings in securities have advantages and mostly firms are initially listed through initial public offers. The current study sought to determine determinants of firm value among firms which had initial public offering in 2006 to 2016 in Nairobi securities exchange. The study covered research design, target population, sample size, sampling technique, data collection procedure, data analysis and presentation and test of regression assumptions. It also discussed the statistical measurement model used in the analysis and the tests for hypothesis. The study adopted descriptive research design. Secondary data was gathered from past published financial statements of targeted companies. Descriptive, correlation and regression analysis were adopted to analyse the data. Results of the study revealed positive and significant relationship between profitability, investment decision, financing decision and firm size on firm value. It was recommended that firms should adopt measures to increase their profitability. Invest on opportunities which give positive net present value. Seek financing from cheapest sources and intensify their sales operations.

Key Words: *Profitability, Investment Decision, Financing, Firm Size, Company Value*

INTRODUCTION

The conflict between management and other stakeholders is a recipe for conflict in any investment. All investment decisions are geared towards maximization of shareholders wealth and profitability within a firm (Ndili & Muturi, 2015). According to Jensen and Meckling (1976), there is need to separate ownership from management and devise measures to evaluate performance in listed companies. In most cases management is supposed to advice stakeholders on four main financing decisions which include investment, financing, working capital and dividend decision (Ndili & Muturi, 2016). Although, financing can be raised from short, medium and long term sources there is need to strike a balance. Raising finances from capital market can be achieved through alternative mediums which may include corporate bond, stock listing and share repurchases. Stock listing for the first time can be achieved through initial public offerings.

Initial public offering (IPO) is where shares of stock in a company are sold to the general public, on a securities exchange, for the first time. Through this process, a private company transforms into a public company, Edmonston (2009). Most studies in literature are generally focused on the reasons of the abnormal returns and performances of IPOs after trading. Findings, which had been found in different markets, sometimes conflict each other. This makes public offerings "a kind of puzzle" in the finance arena. In literature, finding of empirical studies declare that IPOs provide abnormal returns in the short term. In other words, it is concluded that the stocks which will be offered in the market have been underpriced. On the other hand, it is difficult to determine the exact price of the stock which is not trading in stock exchanges yet. The agencies which ensure the sales of stocks want IPOs underpriced. By the way, Investors who buys IPO in determined lower price have the chance to obtain abnormal returns. However, the price of the valued

stocks is expected to be balanced immediately in an efficient market (La Porta, 2000).

An initial public offering (IPO) is generally perceived as one of the most important milestones in a firm's lifecycle. It allows the firm to access the public equity markets for additional capital necessary to fund future growth; while simultaneously providing a venue for the initial shareholders to sell their ownership stake. Kim and Weisbach (2005), Grundvall, Jakobsson and Thorell (2004) discussed additional motives that include: gaining of publicity and status, employee ownership and liquidity of shares. Edmonston (2009) defined initial public offering (IPO) or stock market launches as a type of public offering where shares of stock in a company are sold to the general public, on a securities exchange, for the first time. Through this process, a private company transforms into a public company. Initial public offerings are used by companies to raise expansion capital, to possibly monetize the investments of early private investors, and to become publicly traded enterprises.

Involvement in corporate finance practices calls for an understanding of valuation approaches which can be adopted for any corporation either before or after participation in an initial public offering. This knowledge is not only paramount for valuation during IPOs but also for in depth understanding of company's operation and to estate it have value creation or it dwindles corporation resources (Edmonston, 2009). Business valuation approaches can be broadly classified into: balance sheet approach, income statement approach, discount cash flow approach, good will approach, value creation and option approach (Sucuachi & Cambarihan, 2016). The dominant approach has been balance sheet approach and it applies any of the following: book value, adjusted book value, liquidation value and substantive value.

In African securities exchanges there has been intensified debate on the ability of accounting information to be true representative of corporate

valuation. This anchored on the fact that financial statements are expected to create some value relevance once there are prepared. Therefore, equity prices have continuously been adopted as true measures of corporate value. Therefore, in most cases corporate valuation is executed to evaluate its value as per equity investors need (Beisland, 2009).

Adoption of accounting information value methods have been pegged on the fact that accounting statements are prepared according to stipulated guidelines providing by accounting bodies (Soewarno & Utami, 2010). Indeed, firm value is assumed to mimic accounting information since it is truthful and reliable. Although, empirical studies have documented positive and significant relationship between accounting information such as profitability, leverage, dividend policy. There are some questions which are yet to be addressed on which impact this information has on those companies which have participated in IPOs. Furthermore there are glaring methodological challenges associated with past empirical enquiries in Africa mainly because some have relied with primary data and those based on panel secondary data they have not tested panel diagnostic tests.

Although, there has been limited enquiry on the determinants of firm value in Kenya, (Ayako & Wamalwa, 2015), investigated the determinants of firm value on commercial banks in Kenya. Through fixed regression analysis the study found that commercial banks value was significantly determined by market capitalization while firm size, dividend policy, capital structure had no significant influence on commercial bank value.

Kiprop (2014) investigated the nexus between capital structure and firm value of listed companies in NSE. Through regression analysis the study revealed that there was positive and not significant relationship between capital structure, profitability, growth and firm value. Even though, secondary data was used in this study there were no diagnostic tests which were carried out. This created possibilities of drawing biased conclusions Kiranga (2014) reported positive and significant relationship between intrinsic and extrinsic value of companies listed in NSE.

Initial public offering (IPO) is where shares of stock in a company are sold to the general public, on a securities exchange, for the first time. Through this process, a private company transforms into a public company, Edmonston (2009). Most studies in literature are generally focused on the reasons of the abnormal returns and performances of IPOs after trading. Findings, which had been found in different markets, sometimes conflict each other. This makes public offerings "a kind of puzzle" in the finance arena. In literature, finding of empirical studies declare that IPOs provide abnormal returns in the short term. In other words, it is concluded that the stocks which will be offered in the market have been underpriced. On the other hand, it is difficult to determine the exact price of the stock which is not trading in stock exchanges yet. The agencies which ensure the sales of stocks want IPOs underpriced. By the way, Investors who buys IPO in determined lower price have the chance to obtain abnormal returns. However, the price of the valued stocks is expected to be balanced immediately in an efficient market (La Porta, 2000).

The stock market in Kenya is known as the Nairobi Securities Exchange (NSE).Constituting a voluntary association of stockbrokers, the NSE was formed in 1954. It has had a remarkable development to become amongst the most vibrant stock markets in Africa. According to the NSE website, its market capitalization saw tremendous improvement hitting Ksh.1.3 Trillion after the listing of Safaricom Ltd. Turnover at the NSE grew phenomenally from Ksh.2.9 billion in 2002 to Sh95 billion in 2006 while the number of CDSC accounts that were opened increased from 80,000 in 2005 to over 1,000,000 investors to date (www.nse.co.ke). Currently, there are 62 stocks listed in the NSE.

Statement of the Problem

Over the last few years, there has been an upsurge of IPO activity at the NSE. The reason for this popularity is because of the worldwide trend towards privatization. The IPOs at the NSE have been successful and have been characterized by oversubscriptions and under subscription indicating their potential as well as the popularity. Most studies analyze the performance of companies around their Initial Public Offerings (IPOs). Braun and Larrain (2007) affirm that IPOs do not go unnoticed in emerging markets. They add that IPOs are focal points, particularly if they are listed alone and they can stir the whole market. A single large IPO can have a significant effect in a less developed market. The sheer size of these transactions attracts the attention of all big investors such as pension funds and international funds. Studies conducted in different countries have shown that share prices normally react to the arrival of news in the market such as announcement of earnings and dividends. Other researchers have found that both political and economic events usually have an impact on the share prices of companies listed in the Stock Exchanges.

From the below findings, it's evident how recently issued IPOs from different industries of the economy performed, the Co-operative Bank of Kenya listed the entire 3.6 billion issued shares as it sought to raise Sh6.5 billion from the public. Each share retailed at Sh9.50, with each investor required to put in at least Sh9500 to purchase the 1000 minimum number of shares required. The IPO registered an 81 per cent subscription. NSE (2008), The NSE reported Britam's share hit its highest level since listing on the Nairobi bourse in July 2011, The firm's shares stood at Sh14.75 at the close of trading at the Nairobi Securities Exchange (NSE), compared to closing price of Sh13.20 and its IPO price of Sh9. This pushed the value of its share by Sh3 billion up from Sh24.9 billion (NSE 2013). Five years since Safaricom was listed at the Nairobi Securities Exchange after selling 10 billion shares to the public, the initial public offering (IPO) was historic for its sheer scale, oversubscribed by 532 percent by both local and international investors (NSE, 2013). Kengen Initial Public Offering (IPO) attracted an estimated 280,000 applicants committing over Sh26 billion investment capitals, the Government announced. Although processing of the data is yet to be finalized, the figure represents an oversubscription of Sh18.2 billion (NSE 2006). The I-REIT which was issued by StanlibFahari in 22nd October 2015 was highly undersubscribed. Kenya's first Income-Real Estate Investment Trust (I-REIT) issued by Stanlib Investments was only able to raise Sh3.6 billion of the targeted Sh12.5 billion. Fusion Capital failed to raise Sh2.3 billion it targeted from its Development Real Estate Investment Trust (D-REIT), the firm only achieved a 38 per cent subscription collecting Sh873 million with only four investors against the requirement of seven (NSE 2013).

Most Kenyan studies have focused on underpricing and performance of IPOs such as Ngahu (2006) on book value per share issue price and first trading day prices of IPOs at NSE, Cheluget (2008) on investor's demand for IPOs and first day performance: evidence from NSE, Ndatimama (2008) on performance of IPOs, Leshore (2008) on medium-term performance of IPOs, Simiyu (2008) on pricing and performance of initial public offering: a comparison between state owned enterprises and privately owned enterprises at NSE, Thuo (2009) on the short-run performance of IPOs, Karitie (2010) on long-run performance of IPOs, Wachira (2010) on the determinants of the success of IPOs among listed companies and Kipngetich et al (2011) on determinants of IPO pricing in Kenya. Although, these studies have registered conflicting contextual differences most of them are short run in nature. Therefore, due to these inconsistencies, an evaluation on determinants of firm value after IPO

in NSE was examined and panel data approach was applied to breach the existing gap.

Objectives of the Study

The general objective of this study was to analyze the determinants of firm value of securities for companies which had issued IPO from 2006 to 2016. The specific objectives were:-

- To assess how profitability affects firms value of companies listed in NSE and had issued IPO from 2006 to 2016.
- To determine how investment decision affects firms value of companies listed in NSE and had issued IPO from 2006 to 2016.
- To examine how financing decision affects firms value of companies listed in NSE and had issued IPO from 2006 to 2016.
- To establish how firm size affects firms value of companies listed in NSE and had issued IPO from 2006 to 2016.

Hypotheses of the Study

- H_{01}: There is no significant relationship between profitability and firm value of companies listed in NSE and had issued an IPO from 2006 to 2016.
- H_{01}: There is no significant relationship between investment decision and firm value of companies listed in NSE and had issued an IPO from 2006 to 2016.
- H_{01}: There is no significant relationship between financing decision and firm value of companies listed in NSE and had issued an IPO from 2006 to 2016.
- H_{01}: There is no significant relationship between firm size and firm value of companies listed in NSE and had issued an IPO from 2006 to 2016.

LITERATURE REVIEW

Theoretical Review
Random Walk Theory
This theory collaborates profitability, the Efficient Markets Hypothesis (EMH), popularly known as the Random Walk Theory by Fama (1970), is the proposition that current stock prices fully reflect available information about the value of the firm, and there is no way to earn excess profits, more than the market over all, by using this information (Fama, 1970).

The primary purpose of EMH is to demonstrate that stock prices accurately and quickly reflect all available information in such a way that no one can earn abnormal returns. The time for adjusting any information is considered a critical factor. If the markets adjust more rapidly and accurately, it is considered more efficient. Dyckman and Morse (2006) states that a security market is generally defined as efficient on condition that the prices of securities traded in the market act as though they fully reflect all available information, these prices react instantaneously, or nearly so and in an unbiased fashion to new information. Market efficiency does not imply that no investor can be at the market at any time period or that stock prices cannot deviate from true value and also that no group of investors will be able to beat the market in the long run. However, market efficiency should mean that no investor should beat the market consistently but if this occurs, then it should be as a result of luck and not investment strategies.

The theory asserts that the stock market context does not mean, neither should it be taken to imply, that the price movements are whimsical and chaotic Mlambo (2003). All it means is that period-to-period price changes should be statistically independent and unforecastable if they are properly anticipated. Price movements are a perfectly rational response to information but since there is no reason to expect new information to be

non-random, price changes based on this information is supposed to be random and uncorrelated to any observable trend (Fama, 1970) The theory argues that the share price movements are independent of one another and unrelated.

This happens in an efficient market where the current prices of securities represent unbiased estimates of their intrinsic values. The random walk theory holds that the prices move in a random manner hence, it is not possible to predict future prices. The price movement, whether up or down, occurs as a result of new information and since investors cannot predict the kind of new information (whether good or bad), it is not possible to predict future price movement. The random walk theory clearly conflicts with technical analysis. The theory says that previous price changes or changes in returns are useless in predicting future prices, which implies that the work of a technical analyst is unnecessary. According to Fisher & Jordan (1995); Mlambo (2003) the random walk theory is a special case of a more general efficient market hypothesis and the two positions complement each other.

Lumby (1994) asserts that the theory of market efficiency and stock prices behavior is inseparable. In Lumby (1994), the efficient market has been defined as a market where prices of a company's shares (or other financial securities) rapidly and correctly reflect all relevant information as it becomes available. No undervalued securities exist in such a market hence, the share prices can be relied upon to correctly reflect the true economic worth of the shares. Jensen (1978) points out that a market is efficient with respect to information if it is impossible to make abnormal economic profits by trading on the basis of that information. In an efficient market, competition among the many intelligent participants leads to a situation where, at any point in time, actual prices of individual securities already reflect the effects of information based both on events that have already occurred and on events which as of now the market expects to take place in the future. In other words, in an efficient market at any point in time the actual price of a security will be a good estimate of its intrinsic value.

Trade off Theory

According to Kraus and Litzenberger (1973), trade-off theory of capital structure is the idea that a company chooses how much debt finance and how much equity finance to use by balancing the costs and benefits. The classical version of the hypothesis goes back to Kraus and Litzenberger who considered a balance between the dead-weight costs of bankruptcy and the tax saving benefits of debt. Often agency costs are also included in the balance. This theory is often set up as a competitor theory to the pecking order theory of capital structure. Market capitalization measures what a company is worth on the open market, as well as the market's perception of its future prospects, because it reflects what investors are willing to pay for its stock. Investments in large-cap stocks may be considered more conservative than investments in small-cap or midcap stocks, potentially posing less risk in exchange for less aggressive growth potential. Small-cap companies are vulnerable to the intense competition and uncertainties characteristic of untried, burgeoning markets Murray and Vidhan (2005) did a study on trade-off theory where it is used by different authors to describe a family of related theories and in all of these theories, a decision maker running a firm evaluates the various costs and benefits of alternative leverage plans. The trade-off theory assumes that there are benefits to leverage within a capital structure up until the optimal capital structure is reached.

The theory is relevant in the study since listed companies must adopt alternative sources of financing. Debt financing may be in different hierarchies which and each level may have different debt covenant. Owing to these differences net asset

value to achieve may differ from company to company. In the current study there are anticipated financing approaches adopted by different companies.

Modern Portfolio Theory of Investment

This theory collaborate investment, according to Markowitz (1959), the portfolio theory is an investment approach in which the investor balances risk against expected return to maximize earnings from an entire portfolio. Portfolios are an effective way of increasing returns while decreasing risk in investment. For this reason, portfolio selection strategies have received quite some attention in financial literature. The modern portfolio theory introduces approximate 'mean-variance' analysis to simplify the portfolio selection problem. Markowitz (1959) attempted to quantify risk and quantitatively demonstrate why and how portfolio diversification works to reduce risk for investors. The 'risk' of a portfolio is quantified as a standard deviation of return from period to period, and the portfolio selection problem is reduced to computing an 'efficient' portfolio, that is, one that minimizes the risk for a fixed level of return in a single period. According to the portfolio theory, the larger the expected return the better the investment, and the smaller the standard deviation of the return the more attractive the investment. Furthermore, the theory shows that we can reduce the standard deviation of the return or risk by combining anti-covariant securities. However, each asset class generally has different levels of return and risk and also behaves uniquely so that one asset may be increasing in value as another is decreasing or at least not increasing as much, and vice versa. This theory, however, has a shortcoming; it cannot allow both more and less risk adverse investors to find their optimal portfolio, a problem surmounted by the capital asset pricing model (CAPM) (Sharpe, 1964).

Classical Valuation Theory

This theory collaborate firm size of listed companies, according to Modigliani and Miller. (1961), classical valuation is a method of evaluating a security in an attempt to measure its intrinsic value, by examining related economic, financial and other qualitative and quantitative factors. Analysts study anything that can affect the security's value, including macroeconomic factors such as the overall economy and industry conditions, and microeconomic factors such as financial conditions and company management. The end goal of classical valuation is to produce a quantitative value that an investor can compare with a security's current price, thus indicating whether the security is undervalued or overvalued. Classical valuation uses real, public data in the evaluation of a security's value. Although most analysts use classical valuation to value stocks, this method of valuation can be used for just about any type of security.

Conceptual Framework
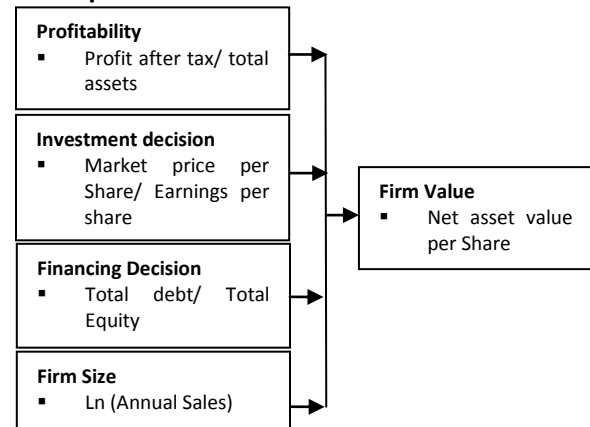
Independent Variables   Dependent Variable

Figure 1: Conceptual Framework

Empirical Review
Profitability and Firm Value

Firms usually follow the goal of maximizing shareholder wealth. This solely cannot be achieved without ensuring that the returns or profits made are sufficient to meet the companies' operation and

other obligations. In this regard, Sucuachi and Cambarihan (2016) documented the influence of profitability to the value of the companies found in Philippines. Assessing firm value using Tobin Q model and profitability using return on assets, they choose a sample of 86 well-diversified companies listed in Philippines Stock Exchange (PSE) to study. Analyzing their annual financial reports in year 2014 using multiple regression methods, it was established that profitability exhibits a positive and significant influence on the firm value. Methodology applied was okay although use of a single time period to showcase the role of profitability on firm value was wrong. Enhanced coverage would have been shown using a time series data.

Elsewhere, Sabrin, Sarita, Takdir abd Sujono (2016) sought to know the impact created by firm's profitability on the value of manufacturing companies in Indonesia stock market. Secondary data was gathered from the publication in the Indonesia Stock Exchange (ISE) from year 2009 to 2014 where the many manufacturing companies were group as per sectors they serve. Return on assets (ROA), return on capital employed (ROCE), growth per earning ratio (GPER) as metrics for the profitability and Tobin's Q s, Price per Earning Ratio (PER) and market to book value (MTBV) as measures for firm value. Sampling was done purposively by selecting all manufacturing companies that researchers deemed fit for inclusivity. Path analysis for the data revealed that profitability indeed has a role on the firm value. This could be said to be coming as result of regularity and signals sent by the act of paying dividend. The use of purposive sampling methods may be put into question due to subjectivity of the scholars that may results into a bias. This result mirrors Yang et al., (2010) and Kusuma et al., (2012).

Following assertion from the pecking order theory that highly profitable companies rarely depend on external funding, Chen and Chen (2011) researched on the influence of profitability on the firms listed in

Taiwan. Return on assets was used as metric for profitability while firm value was taken to mean the market price per share at the end of the year. Taking financial data from year 2005 to 2009, 647 companies were selected for study after deleting incomplete data. Using multiple regression analysis, it was confirmed that profitability indeed has a positive effect on firm value. Together with this study also found that leverage negatively influence market value per stock, however, the researchers did not check model significance which this study will do.

Further Andawasatya, Indrawati and Aisjah (2017) investigated importance of profitability to the firm value through capital structure for the manufacturing companies in Indonesia stock market. Through the use of determined criteria, a total of 67 companies were selected for analysis. The results of mediating test showed that the capital structure is able to mediate the relationship between the profitability and firm size to firm value; beside that, it may not able to mediate the relationship between the growth opportunities for firm value.

Yang et al. (2010) proved that the greater is firm profitability, the more distributable earnings there are for shareholders, and thus the expected firm value will be higher. ROA shows the management efficiency of the enterprise's assets and is also a positive measure of firm value. Based on this, thus it can be hypothesis that profitability has a positive effect on firm value.

Investment Decision and Firm Value

Efni (2017) sought to find the mediating effect of investment decision on corporate risk and value using companies listed in Indonesia. Data was gathered from analysis in company property and real estate sectors listed in Indonesia Stock Exchange for a period of 9 consecutive years starting 2001 and ending 2008 that have a complete financial report on the study period. This research study used descriptive analysis and inferential to

prove examine the relationship between the study variables with the five structural models. Analyzing the patterns of relationships between variables, the company's risk and investment decisions it was found that they are able to increase the value of the company, while the dividend policy and funding decisions are not able to increase the value of the company. Originality from this research was from the use of companies in the property and real estate sector with specific criteria Indonesia and the data used in this study were secondary data in the form of financial statements. This information cannot then be applied in Kenyan situation thus need for further studies.

Chen and Chen (2011) investigated the influence of profitability on firm value and the moderating effect of firm size and capital structure. Panel research design was adopted and secondary data collected from annual financial statements of Taiwanese listed companies in 2005 to 2009. In this study firm size was operationalized as natural logarithms of total assets, profitability as return on assets, leverage as debt to equity ratio, and firm size as market price per share. Results of the study revealed that there was a positive and significant relationship between profitability and firm value. Leverage had inverse and significant influence on firm value. Firm size had positive and significant influence on firm value.

Financing Decision and Firm Value

An investigation on the relationship between capital structure and firm value of companies listed in NSE from 2009 to 2013 was brought forth by Kulati (2014). The study adopted descriptive research design and secondary data was collected from annual financial statements of 38 listed companies. Multiple regression analysis was applied to analyse the data. Results of the study revealed positive and significant relationship between firm value and capital structure. Moreover, 65.4% of changes in firm value were accounted for by capital structure

and firm size. Although, panel data was applied in the study, panel diagnostic tests were excluded from the study.

Bangladeshi evidence on the impact of capital structure on firm value was brought forth by Chowdhury and Chowdhury (2010). Panel research design was adopted and purposive sampling was applied to select 77 companies from four main dominant sectors in Dhaka securities exchanges. Secondary data was collected from annual financial statements for periods 1994 to 2003. In this study firm value was measures as share price while financing decision was measured as debt to equity ratio. Results of the study revealed positive and significant relationship between financing decision and firm value.

Kausar, Nazir and Butt (2014) investigated the relationship between capital structure and firm value of companies listed in Pakistan. Panel research design was adopted. Simple random sampling was used to select 197 companies which were listed in Karachi securities exchange from 2004 to 2011. Multiple regression analysis was applied to analyse the data. Results of the study revealed that financing decision operationalized as long term debt to equity, short term debt to equity and total debt to total assets, all had negative and significant relationship with firm value measured using earnings per share.

Lawal (2014) investigated the nexus between firm value and capital structure in Nigerian banking sector. Panel research design was applied and secondary data collected from annual financial statement of listed commercial banks from 2007 to 2012. Ordinary least squares method was applied to analyse the data. Results of the study revealed positive and significant relationship between financing decision and firm value.

An Indian study to investigate the impact of capital structure on firm value in hospitality industry was put forth by (Aggarwal, & Padhan, 2017). In this study panel data was adopted and secondary data

collected from annual financial statements from 2001 to 2015. Panel regression modelling approach was adopted. Results of the study revealed positive and significant relationship between firm value and financing decision.

Firm Size and Firm Value

Setiadharma & Machali (2017) investigated the influence of asset structure, firm size on firm value of companies listed in Indonesia. Panel research design was applied and panel data was collected from annual financial statements of listed real estate and property companies. Asset structure was operationalized as ratio of fixed assets to total assets, firm value as ratio of market value to book value of equity, firm size as natural logarithms of total assets and capital structure as ratio of debt to equity. Regression analysis was applied to analyse the data. Results of the study revealed positive and significant relationship between firm size and firm value.

Purwohandoko (2017) investigated the effect of asset structure, firm size on firm value of listed agricultural companies in Indonesia. Panel research design was applied in the study. Purposive sampling was applied to select 14 agricultural listed companies in 2011 to 2014. Results of the study revealed that capital structure was not significantly influenced by firm size and growth. Further, there was a significant relationship between capital structure and firm value.

Rizky, Indrawati and Aisjah (2017) investigated the influence of growth opportunity, profitability and firm size on firm value of listed manufacturing companies in Malaysia. Panel research design was adopted. Purposive sampling was applied to select 30 manufacturing companies listed in 2011 to 2015. Firm value was measured using Tobin's Q. Regression analysis was applied to analyse the data. Results of the study revealed positive and significant relationship between firm size and firm value.

RESEARCH METHODOLOGY

According to Mathew et al. (2012) research design is a set of decision that makes up the master plan specifying the methods and procedures for collecting and analyzing the needed information. Currently descriptive research design was adopted. A descriptive study defines a subject by constructing a profile of people, groups or events through tabulation and the collection of data on the frequencies on study variables (Cooper & Schindler, 2007). A descriptive explore design also ensures absolute explanation of the state of affairs and makes sure that there is no bias in data collection, and enables data collection from a significant target population at a cost effective manner. Therefore, the design was the most appropriate since the study sought to examine the determinants of firm's value amongst listed companies which had IPOs from 2006 to 2016. Population of this study comprised most recent IPOs in the NSE since 2006 to 2016. This included but not limited to Co-operative bank of Kenya, Britam, Kengen, Safaricom and StalibFahari I-REIT. This population had the potential to provide the relevant information on determinants of securities uptake. Multiple regression was used to test the combined influence of the variables using the following model:

$$Y_{i,t} = \beta_0 + \beta_1 X_{1i,t} + \beta_2 X_{2i,t} + \beta_3 X_{3i,t} + \beta_4 X_{4i,t} + \acute{\epsilon}_{i,t}$$

Y= Firm Value

X_1= Profitability

X_2= Investment Decision

X_3= Financing decision

X_4= Firm size

$\acute{\epsilon}_{i,t}$= Error term.

β_0= Constant

$\{\beta_i; i=1,2,3,4\}$ = The coefficients representing the various independent variables.

FINDINGS AND DISCUSSIONS

Descriptive Analysis

As shown in Table 1, descriptive analysis was carried out using minimum, maximum, mean and standard deviation. The average firm value was 3.49, with minimum of -1.29 and maximum of 12.28. The average profitability was 16% with minimum loss of 12%. Thirdly, the average investment decision was 3.69 with minimum of -1.84. The average ratio of debt to equity was 59%, with the highly leveraged firm being at 80%. The average firm sales were differed most amongst study variables under investigation since it had an average deviation of 2.23 units.

Table 1: Descriptive Analysis

	N	Minimum	Maximum	Mean	Std. Deviation	Jarque Berra	P value
Firm Value	39	-1.29	12.28	3.49	0.53	23.12	0.85
Profitability	39	-0.12	0.23	0.16	0.29	18.52	0.72
Investment Decision	39	-1.84	8.93	3.69	1.36	16.28	0.69
Financing Decision	39	0.35	0.80	0.59	0.23	22.03	0.63
Firm size	39	2.7	12.59	8.29	2.23	17.89	0.64

Panel Diagnostic Tests

The choice between fitting pooled least squares model against random effects models was determined through use of Lagrangian multiplier test (LM). The test hypothesis that there is uniform variance across all entities under consideration against an alternative hypothesis of non-uniform variance. As shown in Table 2 the p value was less than 0.05, hence null hypothesis could not be rejected and consequently the pooled effects regression model was not appropriate to be fitted in the data.

Secondly, test- parm a test was carried out to investigate fixed across entities under investigation. The test was appropriate to examine whether an introduction of dummy variables was appropriate prior to fitting hypothesized model. Since, p value was greater than 0.05, it was not appropriate to introduce dummy variables or carry out two way analysis.

Further, heteroskedasticity and serial correlation were carried. Results shown in Table 2 revealed that none of the study variables had p value less than 0.05. Therefore, there was uniform variance across variables and there were not serially correlated.

Table 2: Panel Diagnostic Tests

Breusch –Pagan LM Test	χ^2-value	p-value
	2.411	0.003
Test Results for Time Fixed Effects	F-value	p-value
	0.65	0.783
Heteroskedasticity test	χ^2-value	p-value
	22.74	0.061
Serial correlation	F-value	p-value
	1.135	0.792

Further, Product Moment correlation coefficient was carried out as shown in Table 3. Results of the study revealed that there was a positive and significant relationship between firm value and profitability (rho =0.576, p value <0.05). Secondly, there was a positive and significant relationship between investment decision and firm value (rho = 0.653, p value <0.05). Thirdly, there was a positive and significant relationship between financing decision and firm value (rho = 0.612, p value <0.05). Further, there was a positive and significant relationship between firm value and firm size (rho = 0.543, p value <0.05). A close scrutiny of the relationship between independent variables revealed that there was no multicollinearity since none of those variables had correlation coefficient greater than 0.7.

Table 3: Correlation Analysis

	Firm value	Profitability	Investment decision	Financing decision	Firm size
Firm value	1				
Profitability	.576**	1			
Investment decision	0.653**	0.192*	1		
Financing decision	.612**	0.286*	0.005	1	
Firm size	.543**	.252**	0.023	0.016	1

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Since it was not appropriate to fit pooled effect model, then either random or fixed effects had to be fitted. The choice from them can be easily made using Hausman Tests. Results shown in Table 4.4 supported use of fixed effects since the p value was less than 0.05.

Table 4: Hausman Test

Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Hausman Test		17.07	4	0.007
Variable	**Fixed**	**Random**	**Var (Diff.)**	**Prob.**
Profitability	0.026	0.023	0.003	0.07
Investment decision	0.017	0.018	-0.001	0.08
Financing decision	0.013	0.012	0.001	0.74
Firm size	0.011	0.012	-0.001	0.26

Regression Analysis

Table 5: Fixed Effects Regression Analysis on the Determinants of Firm Value Amongst Listed Firms in NSE which had IPOs.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Profitability	0.026	0.009	2.888	0.000
Investment decision	0.017	0.007	2.429	0.000
Financing decision	0.013	0.006	2.167	0.000
Firm size	0.011	0.005	2.211	0.002
C	0.042	0.024	1.752	0.065

R-squared	0.531	Mean dependent variable	3.49
Adjusted R-squared	0.522	S.D. dependent variable	0.053
S.E. of regression	0.023	Akaike info criterion	-3.215
Sum squared residuals	0.032	Schwarz criterion	-3.215
Log likelihood	142.26	Hannan-Quinn criterion.	-3.06
F-statistic	34.58	Durbin-Watson stat	1.832
Prob (F-statistic)	0.000		

Regression analysis in Table 5 revealed that profitability, investment decision, financing decision and firm size all jointly had influence on firm value since (F= 34.58, P value = 0.000). An R squared of 0.531 (53.1%) shows that changes in firm value amongst listed companies which had issued IPOs from 2006 to 2016 could be explained by profitability, investment decision, financing decision and firm size. The remaining percentage could be accounted for by other factors which were excluded from the model.

The first hypotheses of the study stated that profitability had no significant influence on firm value of listed companies in NSE which had issued IPOs. Results of the study revealed positive and significant relationship between profitability and firm value (β = 0.026, p value <0.05). This shows that a unit change in profitability increased firm value by 0.026 units while holding investment decision, financing decision and firm size constant.

The second hypotheses of the study stated that investment decision had no significant influence on firm value amongst listed companies which had IPOs. The findings revealed positive and significant relationship between investment decision and firm value (β = 0.017, p value <0.05). This implies that a unit change in investment decision leads to an increase in firm value by 0.17 units while holding profitability, financing decision and firm size constant.

The third hypotheses stated that financing decision had no significant influence on firm value amongst listed companies which had issued IPOs between 2006-2016. The study findings depicted that there was a positive and significant relationship between financing decision and firm value (β = 0.013, p value <0.05). This implies that a unit change in financing decision while holding profitability, investment decision and firm size constant increases firm value by 0.013 units. These findings were in support of (Kulati, 2014; Chowdhury & Chowdhury, 2010; Aggarwal, & Padhan, 2017), who found positive and significant relationship between financing decision and firm value.

The fourth hypotheses stated that there firm size had no significant influence on firm value amongst listed companies which had issued IPOs from 2006 to 2016. Results of the study revealed that there was a positive and significant relationship between firm size and firm value (β= 0.011, p value <0.05). This implies that a unit change in firm value increases firm size by 0.011 units while holding profitability, financing decision and investment decision. These findings were in agreement with (Setiadharma & Machali, 2017; Rizky et al., 2017) who reported positive and significant influence of firm size on firm value of listed companies.

CONCLUSION AND RECOMMENDATIONS

The current study sought to examine the determinants of firm value amongst listed companies which had issued an IPO in 2006 to 2016. Descriptive research was adopted and census sampling of listed in 2006 to 2016 and had an IPO. From both correlation and regression analysis there was evidence of positive and significant relationship between profitability and firm value for companies which had issued IPO from 2006 to 2016.

Results of the study revealed positive and significant relationship between investment decision and firm value for companies which had issued IPO from 2006 to 2016. These results were from regression and correlation analysis.

Thirdly, regression analysis revealed positive and significant effect of financing decision and firm value. Moreover, correlation analysis revealed positive and significant between financing decisions and firm value.

Finally, regression analysis revealed a positive and significant influence of firm size and firm value. Moreover, their correlation analysis revealed a positive and significant relationship between firm size and firm value.

Conclusion of the Study

Based on the study findings it can be concluded that, firm value of listed companies can be jointly explained by profitability, investment decision, financing decision and firm size. From the study findings all these four factors explained more than 50% of the variations in their firm value. This calls for management to continuously evaluate these four facets so as to improve firm value.

First, profitability had positive and significant relationship with firm value. There is need for listed companies to develop measures geared towards enhancement of assets utilization. Listed companies should strive to maximize shareholders wealth.

Whenever investors make investment decisions they strive to maximize their wealth. Therefore, there is need for companies to develop measures geared towards increasing market price of its shares. Although, the market price is controlled by forces of demand and supply dissemination of information to the public would influence stock prices depending on its positivity and negativity. IPOs should be widely marketed and any query regarding the offer should be clarified to eliminate biased opinions from investors.

Thirdly, listed companies are mostly financed using alternative financing modes. The amount of debt capital deployed by a firm should have superior returns as compared to its cost. Since there was a positive and significant relationship it implies that borrowed capital is invested into investments which have positive net present value. Caution should be exercised when borrowing to avoid excessive borrowing which may negatively affect the performance of listed companies.

There was a positive and significant relationship between firm size and firm value. There is need to develop strategic measures which are geared towards promoting sales performance within listed companies. Market penetration and customer outreach programs ought to be developed so as to increase annual revenue. This would impact positively on net asset value of a firm.

Recommendations of the Study

There is need for listed companies to continuously evaluate their business models. This would necessitate adoption of corrective measures which are geared towards improvement of firms' profitability. Furthermore, listed companies should seek measures aimed at curbing operational costs as such to increase profit.

There is need for listed companies to develop measures which are geared towards minimizing agency conflict with their shareholders. Minimization of agency for example through information disclosure would enhance investment decision making upon boosting investors' confidence.

Thirdly, listed companies ought to examine alternative sources of financing and adopt the cheapest source of finance. This would enhance firm performance and consequently maximize shareholders wealth.

There is need for listed companies to continuously develop products and services which will enhance their market penetration. This can only be achieved through continuous research and development as well as adoption of innovative approaches on product distribution.

Suggestions for Further Studies

The current study investigated determinants of firm value amongst listed companies in NSE which had issued IPOs in 2006 to 2016. There were only seven companies which had issued IPOs with the period under consideration. There is need to evaluate qualitative benefits associated with IPOs. Further, the consideration of only a ten year period would have created biasness associated with small sample size. There is need to carry out an event study to evaluate the announcement effect especially for those companies which had held more than one IPO. Since there are steps toward creation of East African securities exchange. There is need to carry out a study which can draw respondents from East Africa securities exchange in their respective countries.

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