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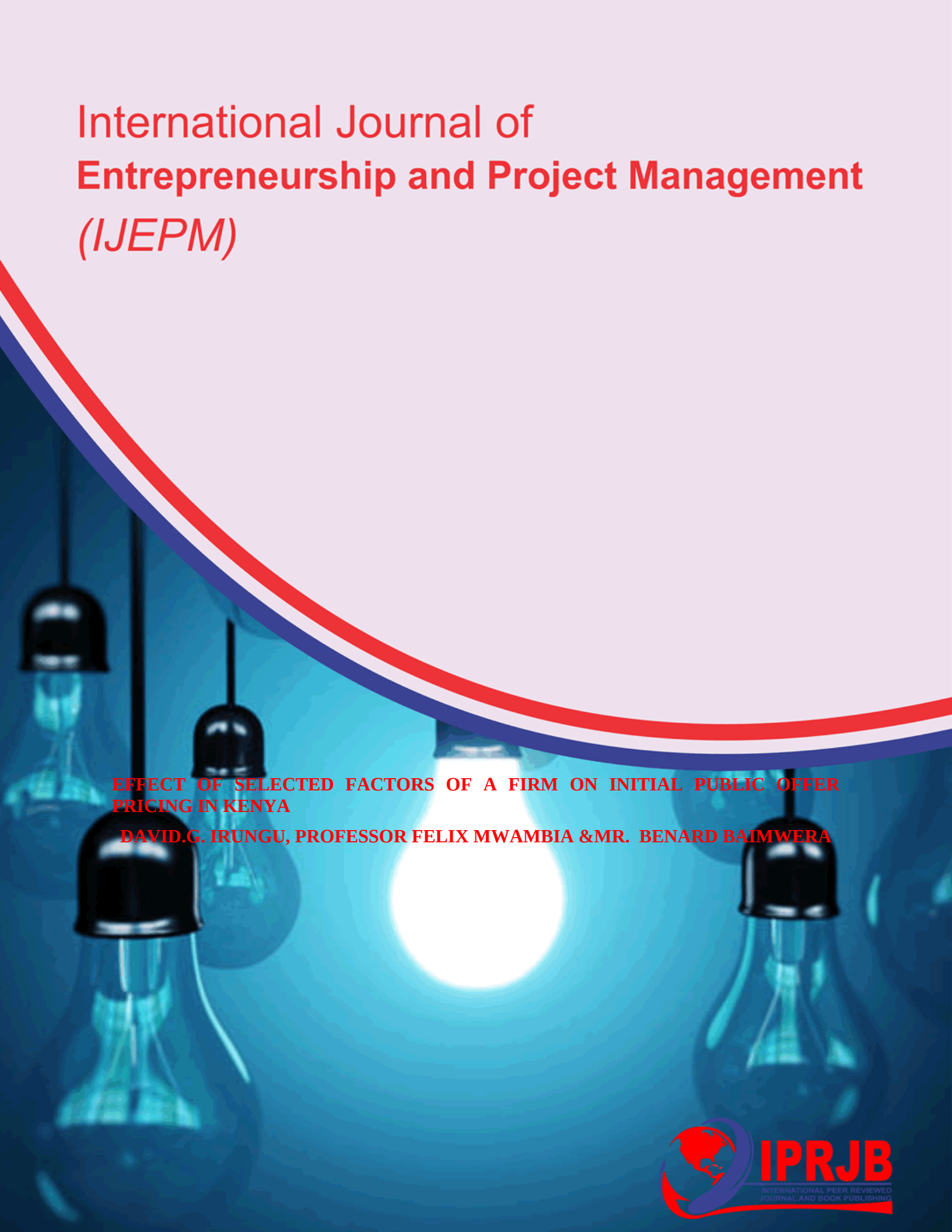

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ABSTRACT

Purpose: The purpose of this study was to analyse the effect of selected factors of a firm on IPO pricing in Kenya.

Methodology: This study adopted a descriptive design. This descriptive research design was preferred because the study needed to establish the effect of selected factors of a firm on IPO pricing in Kenya. The study targeted a population of all the 56 firms listed at the Nairobi Security Exchange as at 31.12.2011. A census methodology of the 56 firms was used. Secondary data relating to IPO pricing, post IPO ownership and retention, firm size, board composition and age of firm was also collected. SPSS version 17 was used to produce frequencies, descriptive and inferential statistics.

Results: Results indicated that Post-IPO ownership retention played a role in valuation process of IPO. Results revealed that firm size had a significant impact on IPO price. The findings also indicated that board composition positively affected the IPO price. In addition, both the age of the firm and past earnings have a positive effect on IPO price.

Unique contribution to theory, practice and policy: Results indicated that Post-IPO ownership retention played a role in valuation process of IPO. Results revealed that firm size had a significant impact on IPO price. The findings also indicated that board composition positively affected the IPO price. In addition, both the age of the firm and past earnings have a positive effect on IPO price.

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Keywords: *Initial Public Offering: Post IPO ownership retention, Age of the Firm, Firm size, Board Composition*

1.1 INTRODUCTION

An alternative for a short-term investment, IPO return is one of the most attractive investments in every stock market because IPO has a large portion to invest, the average of its return is quite high and there is no tax for the initial return of IPO. However, its risks are also there and that causes many researches go through IPO topics. Initial Public Offerings (IPO) involve problems regarding price discovery due to uncertainties regarding aggregate demand and the quality of the issuer. Bensveniste and Spindt (1989) posit that issuers can feign themselves to investors as high eminence than they are. Derrien (2005) agrees that pricing of IPOs is a daunting task due to obscurity of discovering an appropriate comparable firm.

The Initial Public Offering (IPO) literature has documented dramatic fluctuations in IPO activity over time (e.g. Ibbotson and Jaffe, 1975, Ritter 1984, and Lowry and Schwert 2002). A common explanation for the fluctuations is that firms time their offerings to take advantage of high market valuations, whether such valuations are rational or otherwise. A firm that decides to tap the public market for the first time faces significant uncertainty at the time of the decision regarding how investors will receive its offering. The firm files with the SEC and engages an underwriter to "discover" investor interest and determine the offer price. The firm then sells shares and goes public only if the price-discovery effort yields an acceptable offer price. The ability to "test the waters" or "roll the dice" and then conditionally sell shares is tantamount to the firm having a "call" option on the uncertain offer price. Filing for an IPO and engaging an underwriter creates this call option, while selling shares if price discovery yields a high offer price amounts to exercising the option (Busaba,2006).

The factors that have been identified in literature that affect IPO pricing include Post-IPO ownership retention. Ofek and Richardson (2001) show a positive relationship between IPO values and post-IPO ownership retention using a downward sloping demand curves for IPO shares. Firm Size also affects IPO pricing. Extant research shows that firm size has a significant impact on IPO pricing. Ritter (1984) argue that larger firms are easier to value because of ease of forecasting cash flows. Board Composition also affects IPO pricing. Following the bankruptcy of Enron in 2001, the effectiveness of board of directors has become a debatable issue. According to Gillan and Martin (2007) the bankruptcy of Enron was as a result of failure by the firm's board to understand risks associated with the firm's strategy coupled with conflicts of interests to execute their role as monitors. Age of the Firm affects IPO pricing. IPO firms are subject to uncertainties regarding quality of the firm because of missing track record and lack of public scrutiny. Past Earnings affect IPO pricing. A number of recent U.S. studies have documented an apparent tendency of IPOs to underperform in the long run. Ritter (1991) finds that over a three-year horizon after the offering, U.S. IPOs underperform on average by 29% relative to comparable firms

Tran & Jeon (2011), studying the US market, found that a relationship between IPO activities and macroeconomic conditions existed. Empirical studies show that stock market performance and volatility were the most crucial factors affecting the timing of IPOS. While the Fed funds rate and the 10-year US Treasury Bond (TB) yield play a significant role in determining the amount of proceeds raised in these IPOs. They found that stock market performance as a factor dominated all others in explaining the timing of going public. The reason was that when the stock market was performing well, there would be a higher probability of being able to attract investors and thus also lead to higher stock returns. Entrepreneurs took advantage of better stock market performance to bring their company public due to this fact. For example, a study by Daily (2005) shows that more than 773 firms went public in the United States between 1996 and 1997.

In the Stock Exchange of Thailand, after the post crisis period in 1997, the annual IPO volume dropped to almost zero issue for a few years. SET then implemented new regulation and procedure to control all listed and will be listed firms and also pursued them to enhance corporate governance. By 2004, the rate of stock listing increased to almost one in a week, with an average initial return of 14.91%. The Securities Exchange Commission (SEC) of Thailand in the past, before the year 2000, required the future performance and forecasts of a firm's future profits to be published in the IPO's prospectus mostly in the same way as other stock markets do. This information is one of the factors that affect the IPO initial return (Ravi and Michael, 2003).

The process of raising capital through Initial public offering in Kenya is regulated by the Capital Markets Authority, an independent agency established by an Act of Parliament Cap 485 under the ministry of Finance. The number of firms in Kenya seeking to use IPOs to raise capital has been on an increasing trend. Between 1980 and 1999 only twelve firms were listed in Nairobi Securities Exchange four of which were part of the government privatization process of the parastatals (Ngugi and Njiru, 2005).

1.2 Statement of the Problem

The environment of the stock market in Kenya changed considerably in the late 1970s and especially in the 1980s & 90s when it moved from over reliance on the T-bills as the only vehicle of investment to the stock market when the Kenyan Government realized and embraced the need to design and implement policy reforms to foster sustainable economic development with an efficient and stable financial system.

This spurred increased activity at the NSE leading to a dramatic increase towards more active stock portfolio management, encouraging substantially more dispersed performance by stock portfolio managers and investors. The dispersion in turn created a demand for techniques that would help investors evaluate the performance of investors and portfolio managers. The question now is what models is to be used for the above purpose? What are the factors for inclusion on estimating the IPO Pricing? And how will this model be subsequently used to evaluate IPO stocks performance in Kenya? Several Models have been advanced that can guide an investor to evaluate the determinants of IPO prices. Bhole and Mahakud, 2009, Chau, 2012) advocated for the use of the Capital Asset Pricing Model (CAPM). Fama and French, 2004; Artmann, Fitner and Kempf, 2010 suggest that the Inter Temporal Capital Asset Pricing Model (ICAMP) is superior to the Capital Asset Pricing Model (CAPM). Still, the debate on the best way to select

factors is not over as empirical studies (Jiranyakul, 2009; Wang, Meric, Liu, and Meric, 2010) have advanced the Abitrage Pricing Model (APT) as a superior approach to selecting the factors that influence IPO pricing. The large number of empirical studies that continue to experiment on factors in order to yield the most superior model indicates that the debate on the best approach is far from over. The research gap of this study is centred on the lack of conclusiveness of the debate on what factors should be included in a predictive model for IPO stocks. In addition, there is a paucity of studies in African economies and majority of studies seems to concentrate on stock markets in developed and emerging economies.

A solution in the form of a predictive model will come in handy to help investors, and investment managers, arrive at a decision on whether or not to invest in shares on offer through the IPO.This study therefore seeks to identify the extent to which the selected factors affect the IPO price and thus help all the stakeholders in identifying whether the stock is under priced or overpriced.

1.3 Specific Objectives

In order to achieve the above objective, the study was guided by the following specific objectives:

- **i)** To determine the effect of post IPO ownership retention of a firm on IPO pricing in Kenya.
- **ii)** To determine the effect of the size of the IPO firm on its pricing in Kenya.
- **iii)** To determine the effect of a firm's board composition on the pricing of IPO in Kenya.
- **iv)** To determine effect of age of the firm on IPO pricing in Kenya.
- **v)** To determine the effect of a firm's past earnings on IPO pricing in Kenya.

2.0 LITERATURE REVIEW

2.1 Theoretical Literature Review

2.2.1 The Prospect theory

The theory was developed by Kahneman and Tversky in 1979. It describes how people choose between probabilistic alternatives and evaluate potential losses and gains. The theory is a behavioural economic theory that describes decisions between alternatives that involve risk, where the probabilities of outcomes are known. The theory says that people make decisions based on the potential value of losses and gains rather than the final outcome, and that people evaluate these losses and gains using interesting heuristics. This theory is descriptive as it tries to model real-life choices, rather than optimal decisions.

The theory describes the decision processes in two stages, editing and evaluation. In the first stage, outcomes of the decision are ordered following some heuristic. In particular, people decide which outcomes they see as basically identical, set a reference point and then consider lesser outcomes as losses and greater ones as gains. In the evaluation phase, people behave as if they

would compute a value (utility), based on the potential outcomes and their respective probabilities, and then choose the alternative having a higher utility.

2.2.2 Signalling theory

The theory was developed in 1930's and 1940's in the field of evolutionary biology to explain sexual selection where by traits are selected via the pressure of mate selection. Signalling theory is a body of theoretical work examining communication between individuals. The theory was modified in 1973 and applied to behavioural finance field by Michael Spence's. In behavioural finance, Spence defined signalling as the idea that one party (termed the agent) credibly conveys some information about itself to another party (the principal). Michael Spence's developed a job-market signalling model, whereby (potential) employees send a signal about their ability level to the employer by acquiring certain education credentials. The informational value of the credential comes from the fact that the employer assumes it is positively correlated with having greater ability.

Rock (1986) argues that investors in the capital market possess differing levels of quality information, given the missing track record of the firm. Because of information unevenness, extant research has relied on signalling theory for investigating determinants of IPO firm performance (Certo 2001). Signalling theory postulates that IPO firm managers strive to reveal the firm's value to outsiders through favourable information so as to maximise the share price (Certo 2001). Firms reveal their value through prospectus to show their potential and growth opportunities

Later behavioural finance researchers among them Leland and Pyle (1977) analyzed the role of signals within the process of IPO. The authors show how companies with good future perspectives and higher possibilities of success "good companies" should always send clear signals to the market when going public (e.g. the owner should keep control of a significant percentage of the company). To be reliable, the signal must be too costly to be imitated by "bad companies". If no signal is sent to the market, asymmetric information will result in adverse selection in the IPO market.

2.2 Empirical Literature Review

2.2.1 Post IPO Ownership Retention

Post-IPO ownership retention may play a role in valuation process of IPO. Ofek and Richardson (2001) show a positive relationship between IPO values and post-IPO ownership retention using a downward sloping demand curves for IPO shares. Thus, a higher retention level means that fewer shares will be available for trading and hence IPO prices will increase. According to McBain and Krause (2006) higher valuations are experienced by firms whose pre-IPO shareholders maintain relatively larger ownership positions following the offer. Consistent with Ritter (1984). Bhagat and Rangan (2004) document a positive relation between IPO valuation and post-IPO ownership retention. The study focused on how the valuation function of IPO has changed over time and studied the signal effect of IPO retention for different classes of share holders instead of studying retention as an aggregate signal.

Habib and Ljngqvist (2001) posit that where owners sell fewer shares at the time of IPO, they are likely to be more tolerant to under-pricing (and hence higher offer price) because the benefit of costly monitoring is minimal. Bhagat and Rangan (2004) extending the work of Leland and Pyle (2005) argue that the entrepreneur taking the firm public retains shares only when he is optimistic regarding future cash flows of the firm. The signalling model of Leland and Pyle (2005) implies that greater ownership retention enhances IPO values.

2.2.2 Firm Size

Extant research shows that firm size has a significant impact on IPO pricing. Ritter (1984) argue that larger firms are easier to value because of ease of forecasting cash flows. The under pricing phenomenon in IPO literature which has been widely debated on in extant research is to a great extent hinged on information asymmetry among investors. According to Rock (1986), to lure relatively uninformed investors, investment bankers under price IPOs to cushion against potential losses experienced by uniformed investors due to Winner's curse. According to Dalton (2003), the size of the IPO firm has important implication for pricing as it is an important determinant of stability of the firm.

An and Chan (2008) posit that greater uncertainty of the firm's value encourage investors to demand for lower IPO price as an incentive for risk. Teker and Ekit (2003) posit that a firm with larger amount of total assets experience less uncertainty regarding its perpetuity, and hence commanding less under pricing, and hence higher offer price.

2.2.3 Board Composition

Following the bankruptcy of Enron in 2001, the effectiveness of board of directors has become a debatable issue. According to Gillan and Martin (2007) the bankruptcy of Enron was as a result of failure by the firm's board to understand risks associated with the firm's strategy coupled with conflicts of interests to execute their role as monitors. According to Daily (2005) outside board member is a prestigious assignment. Certo (2001) argue that IPO firm gains legitimacy through prestigious board of directors. According to Dalton (2003) directors holding additional board positions posses' exposure benefits. Korn and Baum (2007) argue that directors' association with other companies via board service enhance the prestige of the IPO firm.

Igor & Kate (2002) observe that IPO provides a unique opportunity to understand the interrelationship between governance and performance. They conclude that corporate governance factors can be used strategically to affect the short term performance of IPOs. However the study focused on small and young firm with an average age of 5.4 Years.

According to Shivdasani (2009) prestigious board is a signal of effective control and enhances the value of the firm going public. Davis and Mizruchi (2008) argue that board prestige is an important signal to potential investors. Jensen (2005) posits that board of directors play a crucial role in internal control systems of the firm. Effective control has the effect of enhancing value of the firm and hence higher offer price. Daily (2005) argue that where an IPO firm posses prestigious board, the underwriter is likely to offer a narrow offer price band and a higher offer price.

2.2.4 Age of the Firm

IPO firms are subject to uncertainties regarding quality of the firm because of missing track record and lack of public scrutiny. In order to compensate investors for value uncertainty, investment bankers discount IPO offer prices (Beatty and Ritter, 2006; Rock, 2006). According to Carter (2007), older firms have longer operating histories and face less uncertainty. This observation was also echoed by Ritter (1998) who argue that younger firms have shorter operating history and are subject to great deal of uncertainty.

According to Daily (2005), because of greater uncertainties surrounding the prospects of younger firms, underwriters apply greater offer price spread and lower offer prices as compared to older firms with larger operating history. According to Kim and Ritter (2004) it is difficult to forecast future cash flows of younger firms due to missing track records. Ritter (1984) observe older firms are subject to less uncertainty, and because under pricing is compensation to uncertainty, investment bankers attach higher value to IPOs of older firms.

2.4.5 Past Earnings

A number of recent U.S. studies have documented an apparent tendency of IPOs to underperform in the long run. Ritter (1991) finds that over a three-year horizon after the offering, U.S. IPOs underperform on average by 29% relative to comparable firms. In a study on U.S. IPOs and Seasoned Equity Offerings (SEOs), Loughran and Ritter (1995) find that "An investor would have had to invest 44% more money in the issuers than in non-issuers of the same size to have the same wealth five years after the offering date".

Several behavioral explanations have been advanced for these findings. Perhaps investors donot take into account fully the fact that the accounts of companies going public are managed upwards before the IPO (Teoh, Welch, and Wong 2006) and base their valuation of the IPO on a naïve extrapolation of the past. Perhaps investors do not fully disentangle IPO timing strategies: Degeorge and Zeckhauser (2007) argue that companies will choose to go public after unusually high earnings performance. Regression toward the mean predicts that post-IPO earnings performance will be inferior to the pre-IPO record. Failure to take into account this phenomenon would result in inflated IPO valuations. Underwriter incentives might also contribute to excessive IPO valuations. Michaely and Womack (2009) document that financial analysts linked to the underwriter try to push-up IPO prices through positive recommendations.

Conceptual Framework

Independent variables **Dependent Variables**

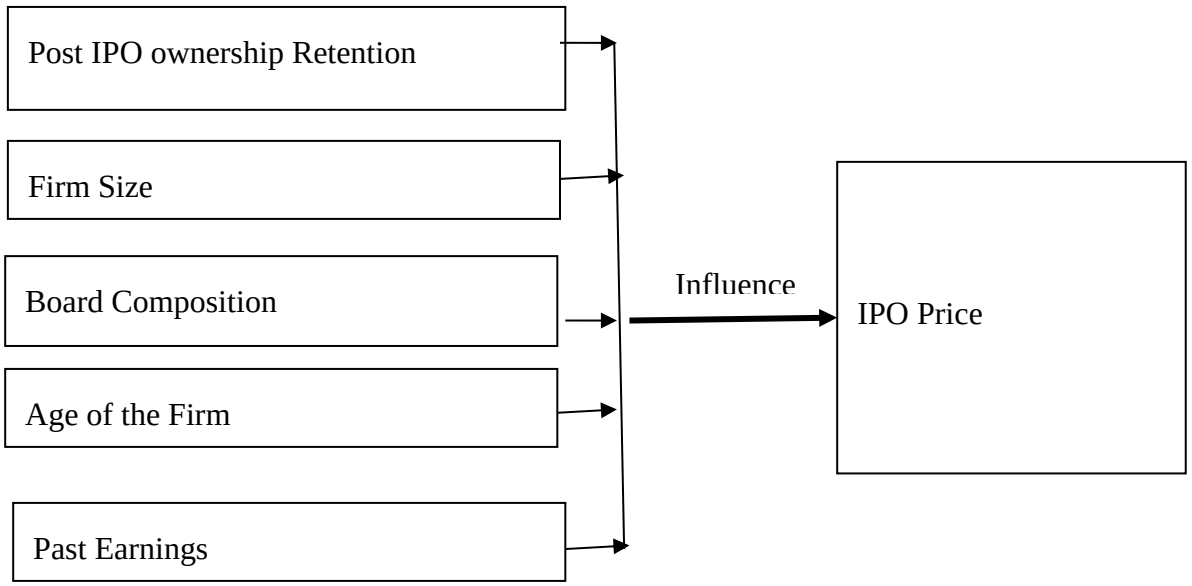

Figure 1: Conceptual Framework

3.0 RESEARCH METHODOLOGY

This study adopted a descriptive design. This descriptive research design was preferred because the study needed to establish the effect of selected factors of a firm on IPO pricing in Kenya. The study targeted a population of all the 56 firms listed at the Nairobi Security Exchange as at 31.12.2011. A census methodology of the 56 firms was used. Secondary data relating to IPO pricing, post IPO ownership and retention, firm size, board composition and age of firm was also collected. SPSS version 17 was used to produce frequencies, descriptive and inferential statistics.

4.0 RESULTS AND DISCUSSIONS

4.1.1: Response rate

The successful response rate was deemed to include all those responses that were returned. In addition, they had to be properly filled for them to be included in the data analysis. Hence the study had a successful response rate of 100% since all questionnaires were returned properly filled. According to Mugenda and Mugenda (2003) and also Kothari (2004) a response rate of 50 % or more is ideal for data analysis.

4.1.2 Reliability Test

Table 1 shows the results of reliability tests of the questionnaire. The test was done at two levels. It was first done for each variable and then for the overall questionnaire as shows on the Table 4.1. All the variables and the overall questionnaire achieved the benchmark of Cronbach alpha coefficient of 0.7. Cronbach (1951) recommends a coefficient of 0.7 for a newly developed

instrument like the one of this study. Based on the results the questionnaire is reliable of producing good reliability results.

Table 1: Questionnaire Reliability Test

Variable	Cronbach Alpha Coefficient
IPO Pricing	0.712
Post IPO retention	0.694
Board composition	0.879
Firm size	0.656
Age of firm	0.673
Past earning	0.561
Overall	**0.711**

4.1.3 Age of the Respondents

The respondents were asked to indicate their age bracket. Table 2 shows that majority 60% were aged between 36-65 years while 26.7% were aged 18 -35 years. The findings imply that the firms had mature staff and this may be a pointer towards more experience and to an extent it may influence the financial performance of an IPO firm. The findings concur with those of Watson Wyatt Worldwide Study (2006) which asserted that the aging workforce exists in many countries including the U.S. and many European countries. The study by Watson also found that by 2050, Asia Pacific will be home to most of the world's elderly with 998 million people aged 60 and over.

Table 2: Age of the Respondents

	Percent
18-35 years	26.7%
36-65 years	60%
Above 65yrs	13.3%
Total	100%

4.2 Quantitative Data Analysis

4.2.1 IPO Pricing

The study sought to establish the level and characteristics of IPO prices. Results in Table 3 indicated that 80% of the respondents agreed that the IPO prices are always over priced, 73% agreed the IPO prices reflects the correct valuation, 80% agreed that the IPO prices reflects the fundamentals of the issuing firm and 87% agreed that the post IPO prices are significantly lower that the IPO price. The mean score for this section was 3.70 which indicates that majority of the respondents agreed with the statements on IPO pricing.

Table 3: IPO Pricing

Statement	Strongly disagree	Disa gree	Neither agree not disagree	Agree	Strongly agree	Average likert mean
The IPO prices are always over priced	0%	20%	0%	67%	13%	3.73
The IPO prices reflects the correct valuation	13%	13%	0%	60%	13%	3.47
The IPO prices reflects the fundamentals of the issuing firm	0%	7%	13%	73%	7%	3.80
The post IPO prices are significantly lower that the IPO price	0%	13%	0%	80%	7%	3.80
Average likert Mean						3.70

4.2.2 Post IPO ownership retention and IPO pricing

One of the objectives of the study was to determine the effect of post IPO ownership retention on IPO pricing in Kenya. Results in Table 4 indicated that 74% of the respondents agreed that Post-IPO ownership retention may play a role in valuation process of IPO, 80% agreed that a higher retention level means that fewer shares will be available for trading and hence IPO prices will increase and 93% of the respondents agreed that there is a positive relationship between the IPO price and the number of shares retained by the founder shareholders. The mean score for the responses was 3.78 which indicates that majority of the respondents agreed with the statements regarding the effects of post IPO retention on IPO pricing in Kenya. These results imply that post IPO retention has a positive effect on IPO pricing.

The findings agree with those in Ofek and Richardson (2001) who showed a positive relationship between IPO values and post-IPO ownership retention using a downward sloping demand curves for IPO shares, thus, a higher retention level means that fewer shares will be available for trading and hence IPO prices will increase. The findings also agree with those in McBain and Krause

(2006) who asserted that higher valuations are experienced by firms whose pre-IPO shareholders maintain relatively larger ownership positions following the offer and consistent with Ritter (1984) and Bhagat and Rangan (2004) who documented a positive relation between IPO valuation and post-IPO ownership retention.

Table 4: Post IPO Ownership Retention and IPO Pricing

Statement	Strongly disagree	Disagree	Neither agree not disagree	Agree	Strongly agree	Average likert mean
Post-IPO ownership retention may play a role in valuation process of IPO.	13%	13%	0%	47%	27%	3.60
A higher retention level means that fewer shares will be available for trading and hence IPO prices will increase	7%	13%	0%	60%	20%	3.73
There is a positive relationship between the IPO price and the number of shares retained by the founder shareholders.	0%	7%	0%	80%	13%	4.00
Average likert Mean						**3.78**

4.2.3 Size of the Firm and IPO Pricing

The second objective of the study was to determine the effect of the size of the IPO firm on its pricing in Kenya. Results in Table 4.6 revealed that 80% of the respondents agreed that firm size had a significant impact on IPO price, 80% agreed that a firms share capital affects its IPO price and 93% of the respondents agreed that a firm with larger amount of total assets experience less uncertainty regarding its perpetuity, and hence commanding less under pricing, and hence higher offer price. The mean score for the responses was 4.07 which indicates that majority of the respondents agreed with the statements regarding the effects of firm size on IPO pricing in Kenya. These results imply that firm size has a positive effect on IPO pricing.

The findings agreed with those in Dalton (2003), who argued that the size of the IPO firm has important implication for pricing as it is an important determinant of stability of the firm. The findings also agree with those in An and Chan (2008) who posited that greater uncertainty of the firm's value encourage investors to demand for lower IPO price as an incentive for risk and Teker and Ekit (2003) posited that a firm with larger amount of total assets experience less uncertainty regarding its perpetuity, thus commanding less under-pricing, and hence higher offer price.

Table 5 : Size of the Firm and IPO Pricing

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Average likert mean
Firm size has a significant impact on IPO price	7%	13%	0%	53%	27%	3.80
A firms share capital affects its IPO price	0%	20%	0%	60%	20%	3.80
A firm with larger amount of total assets experience less uncertainty regarding its perpetuity, and hence commanding less under pricing, and hence higher offer price.	0%	7%	0%	20%	73%	4.60
Average likert Mean						**4.07**

4.2.4 Board Composition and IPO Pricing

The other objective of the study was to determine the effect of board composition on the pricing of IPO in Kenya. Results in Table 4.7 indicates that 67% of the respondents agreed that Firm gains legitimacy through prestigious board of directors, 73% agreed that Directors association with other companies via board membership enhances the value of the IPO firm, and 53% agreed that Board composition in terms of executive and non executive directors is an important signal to potential investors. Sixty seven percent (67%) of the respondents agreed that where an IPO firm posses prestigious board, the underwriter is likely to offer a narrow offer price band and a higher offer price, 60% agreed that the size of the board has a direct effect on the IPO price and 67% agreed that inclusion of foreign directors in the board enhances the IPO value of the firm. The mean score for the responses was 4.03 which indicates that majority of the respondents agreed with the statements regarding the effects of board composition on IPO pricing in Kenya. These results imply that board composition has a positive effect on IPO pricing.

The findings agree with those in Certo (2001) who argued that IPO firm gains legitimacy through prestigious board of directors and Korn and Baum (2007) who argued that directors association with other companies via board service enhance the prestige of the IPO firm.

The findings also agree with those in Shivdasani (2009) who asserted that prestigious board is a signal of effective control and enhances the value of the firm going public, Davis and Mizruchi (2008) who argued that board prestige is an important signal to potential investors and Jensen (2005) posited that board of directors play a crucial role in internal control systems of the firm thus effective control has the effect of enhancing value of the firm and hence higher offer price.

Table 6: Board Composition and IPO Pricing

Statement	Strongly disagree	Disagree	Neither agree not disagree	Agree	Strongly agree	Average likert mean
Firm gains legitimacy through prestigious board of directors.	0%	7%	7%	67%	20%	4.00
Directors association with other companies via board membership enhances the value of the IPO firm	7%	7%	0%	73%	13%	3.80
Board composition in terms of executive and non-executive directors is an important signal to potential investors.	7%	13%	0%	53%	27%	3.80
Where an IPO firm possess prestigious board, the underwriter is likely to offer a narrow offer price band and a higher offer price	0%	20%	0%	67%	13%	3.73
The size of the board has a direct effect on the IPO price	0%	0%	0%	60%	40%	4.40
Inclusion of foreign directors in the board enhances the IPO value of the firm.	0%	0%	0%	67%	33%	4.43
Average likert Mean						**4.03**

4.2.5 Age of the Firm and IPO Pricing

The other objective of the study was to determine effect of age of the firm on IPO pricing in Kenya. Table 4.8 shows that 87% agreed that IPO firms are subject to uncertainties regarding quality of the firm because of missing track record and lack of public scrutiny, 80% agreed that in order to compensate investors for value uncertainty, investment bankers discount IPO offer prices and 87% agreed that older firms have longer operating histories and face less uncertainty. Eighty percent of the respondents agreed that younger firms have shorter operating history and are subject to great deal of uncertainty, 80% agreed that because of greater uncertainties surrounding the prospects of younger firms, underwriters apply greater offer price spread and lower offer prices as compared to older firms with larger operating history and 86% agreed that older firms are subject to less uncertainty, and because under pricing is compensation to uncertainty, investment bankers attach higher value to IPOs of older firms. The mean score for the responses was 4.01 which indicates that majority of the respondents agreed with the statements regarding the effects of firm age on IPO pricing in Kenya. These results imply that age of the firm has a positive effect on IPO pricing

The findings agree with those in Carter (2007), who argued that older firms have longer operating histories and face less uncertainty. The findings further agree with those in Daily (2005), who posited because of greater uncertainties surrounding the prospects of younger firms, underwriters apply greater offer price spread and lower offer prices as compared to older firms with larger operating history. The findings concur with those in Ritter (1984) who observed older firms are subject to less uncertainty, and because underpricing is compensation to uncertainty, investment bankers attach higher value to IPOs of older firms.

Table 7: Age of the Firm and IPO Pricing

Statement	Strongly disagree	Disagree	Neither agree not disagree	Agree	Strongly agree	Average likert mean
IPO firms are subject to uncertainties regarding quality of the firm because of missing track record and lack of public scrutiny.	7%	7%	0%	60%	27%	3.93
In order to compensate investors for value uncertainty, investment bankers discount IPO offer prices	0%	13%	7%	60%	20%	3.87
Older firms have longer operating histories and face less uncertainty	0%	13%	0%	60%	27%	4.00
Younger firms have shorter operating history and are subject to great deal of uncertainty.	7%	13%	0%	33%	47%	4.00
Because of greater uncertainties surrounding the prospects of younger firms, underwriters apply greater offer price spread and lower offer prices as compared to older firms with larger operating history	0%	20%	0%	53%	27%	3.87
Older firms are subject to less uncertainty, and because under pricing is compensation to uncertainty, investment bankers attach higher value to IPOs of older firms	0%	13%	0%	53%	33%	4.07
Average likert Mean						**4.01**

4.2.6 Past Earnings and IPO Pricing

Another objective of the study was to determine the effect of past earnings on IPO pricing in Kenya. Results in Table 4.9 indicate that 80% of the respondents agreed that the profitability of IPO companies before listing influences its IPO price , 93% agreed that the cash flows of IPO companies before listing affects the IPO price and 86% agreed that the earnings per share of IPO companies before listing will have an effect on the IPO price. The mean score was 4.06 which indicates that majority of the respondents agreed with the statements regarding the effects of past earnings on IPO pricing in Kenya. These results imply that past earnings has a positive effect on IPO pricing

The findings agree with those in Degeorge and Zeckhauser (2007) who argued that companies will choose to go public after unusually high earnings performance. The findings also concur with those in Michaely and Womack (2009) who documented that financial analysts linked to the underwriter try to push-up IPO prices through positive recommendations.

Table 8: Past Earnings and IPO Pricing

Statement	Strongly disagree	Disagree	Neither agree not disagree	Agree	Strongly agree	Average likert mean
The Profitability of IPO companies before listing influences its IPO price	0%	13%	7%	53%	27%	3.93
The cash flows of IPO companies before listing affects the IPO price	7%	0%	0%	60%	33%	4.17
The earnings per share of IPO companies before listing will have an effect on the IPO price.	0%	13%	0%	53%	33%	4.07
Average likert Mean						**4.06**

4.3 Cross Tabulation Tables and Mean Scores

This section presented the mean score of the variables generated from both primary data and secondary data. Primary data mean scores were presented first. Ranking of the variables was also presented. The size of the firm was ranked highest on its influence of IPO price followed by past earning, board composition, age of the firm and lastly post IPO ownership retention. The results were presented in table 4.10.

Table 9: Cross Tabulation Tables and Mean Scores

Variable	Likert Mean score	Ranking
IPO price	3.7	Non Ranking
Size of the Firm	4.07	1
Past Earnings	4.06	2
Board Composition	4.03	3
Age of the Firm	4.01	4
Post IPO ownership retention	3.78	5

Mean scores were also computed from the secondary data. Results in table 4.11 revealed that the mean board composition for the 15 companies was 6.87 directors. The average size of the firm was 111.2 billion shillings. The average age of the 15 firms was 44.87 years. The average post IPO ownership was 69.55%. The average return on assets was 6.21%. The average IPO pricing was 11.57 Kenya shillings.

Table 10: Means Scores Of Secondary Data

	N	Minimum	Maximum	Mean	Std. Deviation
BOARD COMPOSITION	15	2	10	6.87	2.134

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SIZE OF THE FIRM	15	11.26	377.00	111.22	126.69671
AGE OF FIRM	15	38	48	44.87	3.314
POST IPO OWNERSHIP	15	52.30	80.70	69.5560	9.83989
Av ROA	15	2.37	14.57	6.2187	12.42981
IPO Pricing	15	5.00	35.50	11.5733	6.93655

4.4 Regression Analysis

4.4.1 Correlation Analysis and Multicollinearity

Correlation illustrates that the independent variables were highly and significantly correlated with each other, which implies the presence of multi collinearly among independent variables. Table 4.27 indicates that Age of the firm and board composition were highly correlated (R=0.896); Post IPO ownership and Board Composition (R=0.864); Post IPO ownership and age of the firm (R=0.947); past earnings is highly correlated with board composition (R= 0.844); Size of the firm (R=0.835); age of the firm (R=0.873) and Post IPO ownership (R=0.812). The high correlations indicate multicollinearity. The solution for multicollenearity is to drop all the affected variables but since this was not a choice in the study, bivarite regressions were conducted to supplement the multivariate regression model.

Table 11: Correlation Analysis and Multicollinearity

		IPO Pricing	BOARD COMPOSITION	SIZE OF THE FIRM	AGE OF FIRM	POST IPO OWNERSHIP	Av ROA(PAST EARNINGS)
IPO Pricing	Pearson Correlation	1					
	Sig. (2-tailed)						
BOARD COMPOSITION	Pearson Correlation	.651**	1				
	Sig. (2-tailed)	.009					
SIZE OF THE FIRM	Pearson Correlation	.733**	.758**	1			
	Sig. (2-tailed)	.002	.001				
AGE OF FIRM	Pearson Correlation	.515*	.896**	.666**	1		
	Sig. (2-tailed)	.049	.000	.007			

POST IPO OWNERSHIP	Pearson Correlation	.555*	.864**	.695**	.947**	1	
	Sig. (2-tailed)	.032	.000	.004	.000		
Av ROA(PAST EARNING)	Pearson Correlation	.615*	.844**	.835**	.873**	.812**	1
	Sig. (2-tailed)	.015	.000	.000	.000	.000	

Table 12 shows that the coefficient of determination also called the R square is 60.4%. This means that the combined effect of the predictor variables (Post IPO ownership retention, Size of the firm, Age of the firm, past earnings, Board Composition) explains 60.4% of the variations in IPO Pricing. The correlation coefficient of 77.7% indicates that the combined effect of the predictor variables has a strong and positive correlation with IPO pricing.

Table 13 : Multivariate Regression Model Fitness

Indicator	Coefficient
R	0.777
R Square	0.604
Std. Error of the Estimate	5.77287

Analysis of variance (ANOVA) on Table 13 shows that the combine effect of Post IPO ownership retention, Size of the firm, Age of the firm, past earnings, Board Composition was statistically significant in explaining changes in IPO pricing. This is demonstrated by a p value of 0.007 which is less than that the acceptance critical value of 0.05.

Table 14: ANOVA/ Overall model significance

Indicator	Sum of Squares	df	Mean Square	F	Sig.
Regression	407.011	6	67.835	5.98	0.007
Residual	90.608	8	11.326		
Total	673.619	14			

Table 14.30 displays the regression coefficients of the independent variables. The results reveal that Post IPO ownership retention, Size of the firm, Age of the firm, past earnings, Board Composition were not statistically significant in influencing IPO Pricing. The findings imply that all the independent variables were not strong determinants of IPO pricing. This may be because of multicollinearity problems between independent variables or because of the small sample size.

In conclusion, the study relied on the Anova statistics which showed overall model significance but dismissed the individual regression coefficient of the multivariate model due to multicollinearity and sample size problems. The interpretation of the results of the multivariate model was ignored since it is of no consequence to explain insignificant results. However, the study relied on the bivariate models to draw conclusion on the extent to which the factors (independent variables) affected IPO pricing.

Table 15:Regression Coefficients

Variable	Beta	Std. Error	t	Sig.
(Constant)	31.664	65.418	0.484	0.641
BOARD COMPOSITION	1.684	1.882	0.895	0.397
SIZE OF THE FIRM	0.027	0.028	0.949	0.37
AGE OF FIRM	-0.767	2.377	-0.323	0.755
POST IPO OWNERSHIP	0.176	0.555	0.317	0.759
PAST EARNINGS	0.306	0.584	0.524	0.615

5.0 DISCUSSION CONCLUSIONS AND RECOMMENDATIONS

5.1.1 Post IPO Ownership Retention and IPO Pricing

One of the objectives of the study was to determine the effect of post IPO ownership retention on IPO pricing in Kenya. Results indicated that Post-IPO ownership retention played a role in valuation process of IPO, a higher retention level meant that fewer shares were available for trading and hence IPO prices would increase and that there was a positive relationship between the IPO price and the number of shares retained by the founder shareholders. These results implied that post IPO retention has a positive effect on IPO pricing. This implies that an increase in the effectiveness of post IPO ownership retention by 1 unit leads to an increase in IPO pricing by 0.391 units. The findings agree with those in Ofek and Richardson (2001) who showed a positive relationship between IPO values and post-IPO ownership retention using a downward sloping demand curves for IPO shares, thus, a higher retention level means that fewer shares will be available for trading and hence IPO prices will increase.

5.1.2. Size of the Firm and IPO Pricing

The second objective of the study was to determine the effect of the size of the IPO firm on its pricing in Kenya. Results revealed that firm size had a significant impact on IPO price, firms share capital affects its IPO price and a firm with larger amount of total assets experience less uncertainty regarding its perpetuity, and hence commanding less under-pricing, and hence higher offer price. These results implied that firm size has a positive effect on IPO pricing. This implies that an increase in the effectiveness of firm size by 1 unit leads to an increase in IPO pricing by 0.04 units. The findings also agree with those in an and Chan (2008) who posited that greater uncertainty of the firm's value encourage investors to demand for lower IPO price as an incentive for risk and Teker and Ekit (2003) posited that a firm with larger amount of total assets experience less uncertainty regarding its perpetuity, thus commanding less underprizing, and hence higher offer price.

5.1.3 Board Composition and IPO Pricing

The other objective of the study was to determine the effect of board composition on the pricing of IPO in Kenya. Results indicated that firm gains legitimacy through prestigious board of directors, Directors association with other companies via board membership enhanced the value of the IPO firm, and Board composition in terms of executive and non executive directors is an important signal to potential investors.

Results also indicated that where an IPO firm posed prestigious board, the underwriter was likely to offer a narrow offer price band and a higher offer price, the size of the board had a direct effect on the IPO price and inclusion of foreign directors in the board enhanced the IPO value of the firm. These results implied that board composition had a positive effect on IPO pricing. This implies that an increase in the effectiveness of board composition by 1 unit leads to an increase in IPO pricing by 2.117 units. The findings agree with those in Certo (2001) who argued that IPO firm gains legitimacy through prestigious board of directors and Korn and Baum (2007) who argued that directors association with other companies via board service enhance the prestige of the IPO firm.

5.1.4 Age of the Firm and IPO Pricing

The other objective of the study was to determine effect of age of the firm on IPO pricing in Kenya. The study findings indicated that IPO firms were subject to uncertainties regarding quality of the firm because of missing track record and lack of public scrutiny. The results also indicated that younger firms have shorter operating history and are subject to great deal of uncertainty which attracts a lower offer price as compared to older firms with longer operating history. These results implied that age of the firm has a positive effect on IPO pricing. This implies that an increase in the effectiveness in age of the firm by 1 unit leads to an increase in IPO pricing by 1.078 units. The findings further agree with those in Daily (2005), who posited because of greater uncertainties surrounding the prospects of younger firms, underwriters apply greater offer price spread and lower offer prices as compared to older firms with larger operating history.

5.1.5 Past Earnings and IPO Pricing

Another objective of the study was to determine the effect of past earnings on IPO pricing in Kenya. Results indicated that the profitability of IPO companies before listing influenced its IPO price, the cash flows of IPO companies before listing affected the IPO price and the earnings per share of IPO companies before listing would have an effect on the IPO price. These results implied that past earnings has a positive effect on IPO pricing. This implies that an increase in the effectiveness of past earnings by 1 unit leads to an increase in IPO pricing by 0.343 units. The findings also concur with those in Michaely and Womack (2009) who documented that financial analysts linked to the underwriter try to push-up IPO prices through positive recommendations.

5. 2 Conclusions

Based on the objectives and the findings of the study the following conclusion can be made.

Post IPO ownership retention, Size of the firm, Age of the firm, past earnings, and Board Composition were strong determinants of IPO pricing. The study noted that, there was a

statistically positive and significant relationship between Post IPO ownership retention, Size of the firm, Age of the firm, past earnings, Board Composition and IPO pricing.

It was also possible to conclude that a higher retention level means that fewer shares will be available for trading and hence IPO prices will increase, greater uncertainty of the firm's value encourage investors to demand for lower IPO price as an incentive for risk. The study also concludes that corporate governance factors can be used strategically to affect the short term performance of IPOs, and in the case of young firms it is difficult to forecast future cash flows of younger firms due to missing track records hence older firms are subject to less uncertainty, and because under pricing is compensation to uncertainty, investment bankers attach higher value to IPOs of older firms

5.3: Recommendations

5.3.1 Recommendations on Research Findings

It is suggested that firms should improve their corporate governance practices as doing so would enhance the IPO price during listing. Specifically, they should have a large board with a set of independent, nonexecutive and executive directors.

The listing firm should also take time to grow as age may influence the IPO price. The firms would therefore fetch a better IPO price if their age is slightly more than the average industry age. In addition, it is recommended that firm should ensure that their intended post IPO retention is higher than the industry average as doing so would enable the firm to fetch a higher price during the IPO.

It is recommended that the firms which wish to list should only do so when the average return on assets is large enough to attract a significant interest from the IPO investors. Doing so would ensure that they fetch a higher IPO price.Larger firms in terms of asset base fetch higher IPO prices. Hence, it is recommended that firms with a lower asset base need to merge or acquire other firms before IPO in order to boost their asset base.

It is recommended that CMA needs to review the listing guidelines in order to enhance the disclosure requirements. However based on the findings the publicly available information as provided in the IPO prospectus is quite relevant in explaining the IPO price and Capital Market Authority has partially achieved its objective of safeguarding the interest of potential investors by issuing the listing guidelines.

5.3.2 Recommendations for Further Research

Arising from the findings and the gaps in the study a replica study is recommended in other stock markets within the East African region in order to test whether the conclusions of this study will hold true. There is also need to carry out a study for each of the five indentified factors in-depth and their effect on the IPO price. For instance, how do the various elements of corporate governance affect IPO prices? In addition, the set of factors influencing IPO price were not exhausted, the more the reason the r squared was not a 100%. A study to establish other factors is therefore suggested.

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