

Secrecy in Pricing of Initial Public Offering. An Empirical Review of Nairobi Securities Exchange

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Abstract: Extant literature allude that IPOs are have positive return in the short run, but long run performance is depressed. Consequently, IPO shares are sold at discount in the primary market. Furthermore, literature reveal that the book building and the fixed methods of establishing the offer price are imprecise. In spite of the weaknesses in the determination of the offer price, price earnings ratio is applied, together with earning per share, as an estimator of the offer price. The empirical review of the Kenyan case reveals that earnings per share has a positive relationship with offer price, though it was statistically insignificant. The study conclude that earnings per share has no predictive power to estimate the offer price.

Key Words: Book building, earnings per share, offer price, price earnings ratio, pricing of Initial Public offerings,

I. Introduction

An initial public offering is the unseasoned offering whose secondary market does not exist. Consequently secondary market price is lacking. The determination of the offer price, in an initial public offering, is shrouded in secrecy in Kenya. The offer price is the monetary offer of ordinary shares that a private firm make to the public for the first time. Lowry and Schwert (2001) state that pricing of initial public offering start before the setting of offer price. The issuer and the underwriter make the setting of the offer price, in an Initial public offering. The issuer and the underwriter maintain secrecy is setting the offer price. Busaba and Chang (2009) posit that the most applied methods of arriving at an offer price, in an initial public offering, were book building and fixed price. In the fixed price, the offer price is made without soliciting information from investors, unlike in the book building. This study explore the theories that explain the method used to determine the offer price in the Kenyan equity market. Extant literature on initial public offerings in Kenya focus on the initial and long run returns. This study explore the period before initial public offering filing.

Ghosh, Petrova, Feng, and Pattananchai (2012) state that partial adjustment theory alludes that initial return of IPOs is determined by private information since public information is available to all market actors. In contrast, they posit that prospect theory assume that both private and public information is not fully incorporated in the offer price. Benveniste and Spindt (1989) conclude that companies with greater price uncertainty and risk prefer fixed price while companies with greater need for funds apply book building. The same writers aver that when markets are pessimistic, fixed IPO offer prices are used. However, when markets are optimistic, auction is used.

The overriding question in this study was why is the pricing of IPO in Kenya made in secrecy?

II. Literature Review

Pollock and Rindova (2003) state that media provided information affects prices of firms going public. They conclude that intermediaries enhance investor exposure to information through framing the information positively or negatively, leading to endowment and disposition effects. However, Booth and Smith (1986) posit that underwriters are influenced by certification hypothesis in setting the offer price. In the same vein, to undertake their marketing role of IPOs, underwriters set low prices to induce demand for the shares offered. Furthermore, Tinic (1988) underwriters set prices to avoid legal suits due to overpricing. This view was supported by Ibbotson(1975). This explains why IPOs are sold at a discount. Baron (1986) state that informed investors crowd out the other investors when good issues are priced at the expected values. However, informed investors keep away from bad issues. To ensure that less informed investors stay in the market, the IPOs are priced at a discount. According to Bikhchandani, Hirshleifer, and Welch (1992) investors who buy shares first set the stage for subsequent investors. Therefore underwriters price IPO at a discount so as to attract more investors.

Ritter (1984) connects pricing with ex ante uncertainty on the value of the shares. Due to this uncertainty on the value of the shares, underwriters compensate investors for bearing risk. But Mauer and Senbet (1992) aver that incomplete spanning of the primary issues in the secondary market and limited investor access influence pricing. The pricing differences of IPOs is a result of two distinct markets. The offer price being determined in the primary market while the closing price being created in the secondary market.

Wolfgang Aussenegg and Stomper (2006) state that auctions begin with potential investors submitting bids ,thereafter shares are priced and allocated according to preset rules. But, in the book building, underwriters solicit investors interest and then shares are priced and allocated. Wilhelm (2005) posits that institutional investors present non-binding bids to an underwriter of IPO shares. The underwriter apply the bids to estimate the size of demand of IPO shares and on the strength od edemand set the offer price. Therefore bookbuilding is a process of creating the IPO market through discovering demand of the IPO shares. Sherman(2005) contends that bookbuilding reduces the risk of both issuers and investors due to direct control by the underwriters. The underwriters use the bookbuilding to create incetives to potential investors. Consequently, bookbuilding minimize overpricing of IPOs. Irrespective of whether IPO pricing is an auction or bookbuilding, it results into a fixed price. Benveniste(1989) posits that investment bankers set offer prices to induce asymmetrically informed investors to bid for the IPO offer.

In Germany, Aussenegg, Pichler, and Stomper (2006) opine that the grey market or the when issued trading occur before the first day of trading. The grey market reveals information on the offer price in the same way as the bookbuilt initial public offering. Such trading take place in the off market through the brokers. In kenya, such market does not exist due to institutional framework created by the regulator.

III. Kenyan Case

Kaaria and Moronge (2013) found that pricing factors that influence firms going public were offer price, efficient capital markets and market performance. However they proposed that to succeed, IPO firms should consider timing, governance issues, offer price and cost of going public. IPO firms listed in Nairobi Securities Exchange use the fixed price approach. The offer price is the product of the earnings per share and the price earnings ratio of the industry. Determination of the offer price has been held in secrecy causing Capital Markets Authority to institute a legal framework to support the pricing of IPOs in Kenya. Based on schedule 1, it is apparent that these prices were determined through multiplying the earnings per share against the price earnings ratio for each IPO. The researcher obtained the Earnings Per Share from the financial statements located in capital markets Authority library. There was no organized price earnings ratio. The result of the multiplication of the EPS and P/ER would reveal the estimated IPO offer price. The absence of the price earnings ratio means that various IPO firms applied mechanisms unique to themselves. Hence the existence of secrecy in the determination of the offer price in initial public offerings in kenya.is compared with the offer prices, derived from the prospectuses.

IV. Methodology

The study adopted an explanatory and causal design. The study reveal whether earnings per share of an IPO firm explains the offer price of its IPO. The offer prices of the targeted population were obtained from IPO prospectuses filed at Capital Markets Authority library, the regulator of capital markets in Kenya. The earnings per share data was obtained from the published financial statements of the IPO firms. The financial statements were, also, filled in the CMA library. Both the offer prices and the earnings per share were measured in Kenya shillings. Thus, complying with the ratio measurement scales. The offer prices were regressed against the earnings per share. The adjusted R2 and the P-values were obtained and interpreted.

V. Results And Findings

5.1 Descriptive statistics

Table 1: Summary Table for offer price (PO) and Earning per Share (EPS)

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Offer price(PO)	18	5.00	70.00	17.2444	17.92108	321.165
Earnings per share(EPS)	18	-.38	12.36	1.7217	3.16114	9.993

Table 1 shows descriptive statistics of offer price and earnings per share. The mean of offer price and earnings per share was ksh 17.24 and ksh 1.72, respectively.

5.2 Normality test for Offer price (PO) – dependent variable.

The dependent variable violated normality assumption as seen in the normality test Tab 2 and figure 1.

Table 2: Kolmogorov Smirnov test of normality

	Kolmogorov-Smirnov ^a		
	Statistic	Df	Sig.
Offer price	.328	18	.000

Table 2 shows Kolmogorov Smirnov normality test for the offer price. The findings reveal that offer price was significant at 0.05 level of significance, thus violating normality assumption for a parametric test. Consequently, log transformation was applied to lead to normality of the offer price.

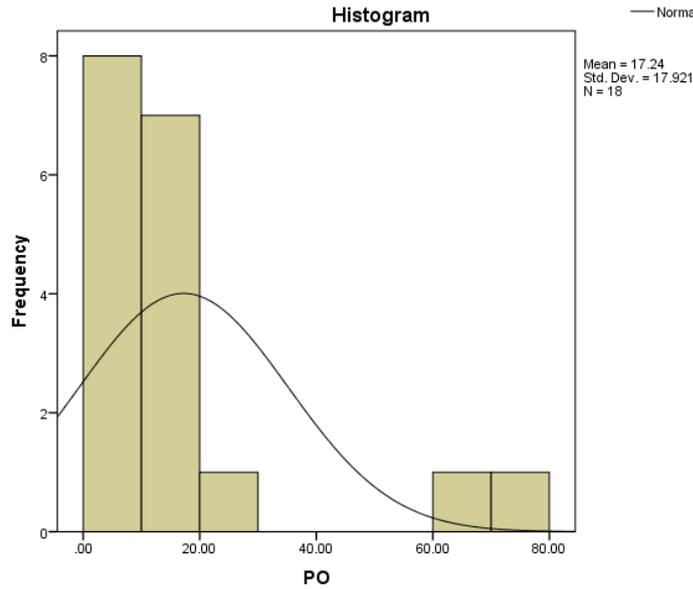


Figure 1: Histogram and normality plot for Offer price

Figure 1 shows a histogram and a normality plot for the offer price. It reveals that the offer price was not normally distributed. Hence the need to transform the data, using logarithms.

Table 3: Kolmogorov Smirnov test of normality for log offer price

	Kolmogorov-Smirnov ^a		
	Statistic	Df	Sig.
Log offer price	.174	18	.154

Table 3 shows Kolmogorov Smirnov test of normality for log offer price. The findings was that log offer price fitted a normal distribution thus correcting for the violation of normality assumption.

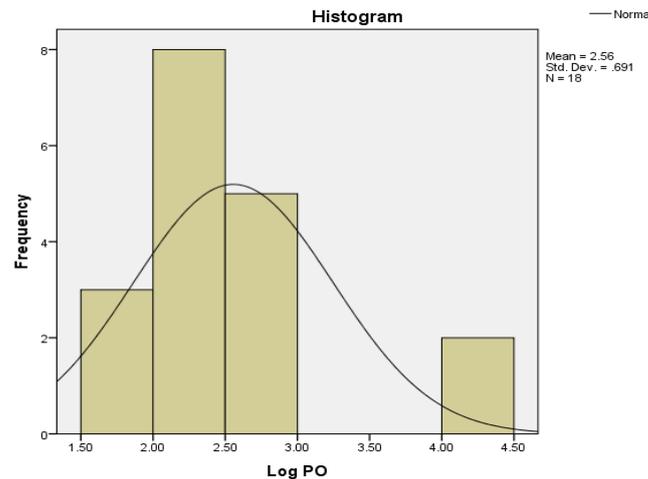


Figure 2: Histogram and normality plot for Offer Price

Figure 2 shows a histogram and a normality plot for the log offer price. It reveals that Log offer price was normally distributed.

Table 4: Pearson Correlation Analysis

		Log PO	Log eps
Log PO	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	18	
Log eps	Pearson Correlation	.008	1
	Sig. (2-tailed)	.975	
	N	17	17

Table 4 shows Pearson correlation coefficient to assess a linear relationship between log earning per share (EPS) and log offer price (PO). The findings reveal that there is a positive but statistically insignificant relationship between log offer price and log earning per share.

Table 5: Regression Analysis

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R ²	F (1,15)
	B	Std. Error	Beta				
(Constant)	2.553	.187		13.623	.000	0.00	0.001
Log eps	.004	.119	.008	.031	.975		

A simple linear regression analysis was performed with Offer Price (PO) as the dependent variable and the earning per share (EPS) as the independent variable. The findings reveal that coefficient of determination was zero. Therefore, the earnings per share explain none of the change in the offer price. Furthermore, there was a statistically insignificant relationship at 0.05 level of significance between log of offer price and log of earning per share, $t=0.031$; $p=0.975$. The resultant regression equation was as follows:

Log offer price (PO) = 2.553 + 0.004* log EPS

VI. Conclusion

The study concludes that earnings per share fail to predict the offer price of initial public offerings. It is, further, concluded that the application of price earnings ratio to estimate the offer price is equally flawed because earnings per share is an input in the price earnings ratio.

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APPENDIX 1: OFFER PRICES (P₀)

S/N	FIRM	1	2	3
		YEAR	PO(based on prospectus)	EPS (t-1)
1	MUMIAS LTD	2001	6.25	12.36
2	WPP SCAN GRP LTD	2006	20.00	0.13
3	KENGEN LTD	2006	11.9	0.80
4	EVEREADY LTD	2006	9.50	0.89
5	ACCESS KENYA LTD	2007	10.00	0.31
6	KENYA RE LTD	2007	9.50	3.59
7	SAFARICOM LTD	2008	5.00	0.27
8	EQUITY BANK LTD	2008	70.00	6.88
9	COOPERATIVE BANK LTD	2008	9.50	0.54
10	CFC (INSURANCE) LTD	2011	17.00	0.54

11	TRACENTURY LTD	2011	60.00	0.20
12	BRITAM LTD	2011	9.00	1.81
13	LONGHORN LTD	2012	14.00	-0.38
14	CIC LTD	2012	7.00	0.40
15	HOMES AFRICA LTD	2013	12.00	0.07
16	NSE LTD	2014	18.00	2.04
17	FLAME TREE GROUP LTD	2014	8.00	0.50
18	ATLAS LTD	2014	13.75	0.04
	TOTAL			
	AVERAGE			

Source: Researcher, 2017

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