

FIRM FUNDAMENTALS AND SEASONED EQUITY OFFERING DECISION

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ABSTRACT

Introduction: Firms' demand for additional funds is mostly to be invested in capital demand, leverage repayment, and other related transactions. These firms, therefore, require the knowledge of firm fundamentals in order to understand factors that drive their seasoned equity issuance decision. This study examines firm fundamentals as motivations for seasoned equity offering decisions in Nigeria.

Methods: The study uses data from 26 non-financial firms between 2010 and 2022 and analyzes them using descriptive and logit regression.

Results: The descriptive results find that the annual average probability of seasoned equity offering is 11.53 per cent, while there is a negative capital expenditure growth rate of 2.91 per cent. The average floatation cost per share of these firms is ₦0.48k; the issue proceeds relative to the firm's market capitalization is 78.63 ratio and these firms sell shares higher than their historical price. The logit model shows that return on operating assets, cash and short-term investments, and property, plant, and equipment are negatively related, while capital demand is positively related to the seasoned equity offering decision.

Conclusion and suggestion: This study concludes that firms with high operating performance, cash, and short-term investment and asset tangibility avoid seasoned equity issuance, while firms with capital demand make seasoned equity offering decisions. This study finds support for the agency theory and the demand for capital theory.

INTRODUCTION

The study of determinants of seasoned equity offering (SEO) decision is not new in the literature, especially in developed economies. Early studies on the subject focus on the price-earnings ratio, the ratio of current assets to total assets (CATA) (Martin & Scott, 1974), market condition, and past share prices (Marsh, 1982). Modern studies in developed, emerging, and developing economies on managers' motivations abound in the

literature. Although these determinants may not be peculiar to a particular economy, as each of these studies examines certain distinctive motivating factors, hence a consensus in finance literature that SEOs are motivated by certain factors that negatively or positively impact seasoned equity offering decisions.

Thus, following the market for lemon argument, the ability of managers to increase the flow of information into the capital market and bridge the information gap between firms and investors increases the probability of SEO (Sony & Bhaduri, 2021; Li & Wang, 2022). Jensen and Meckling (1976), relying on the agency conflict between managers and investors, established that there is a tendency for managers to pursue self-interest and issue SEO for their pecuniary interest or in order to enjoy perquisites (Tuli, 2016). This enjoyment of perquisites may be a determinant of SEO and be borne out of free cash flow when there is weak corporate governance to inculcate strict discipline on the judicious use of funds by managers.

In addition, creditor control may also be a determinant of managers' SEO motive in order to free the firm from the shackles of overbearing creditors or to avoid obnoxious covenants that may preclude managers from exercising self-discretion in pursuing the objective of their interest, which may result in losses for their firms. This is part of the argument of the debt overhang hypothesis of Myers (1977) as supported by the optimality of the debt-equity ratio in order to save a firm from high finance interest charges or litigation costs of corporate debt default. Thus, debt recapitalization may become the motivating factor for SEO (Kisser & Rapushi, 2022). Another determinant of SEO is the anchoring or referencing of a new price on the historical high price or on the previous equity issue price (Hovakimian & Hu, 2016a; 2020). Huang (2012); Hovakimian and Hu (2016b), examining institutional investors and the likelihood of SEO market timing, find that long-term shareholders prevail on managers not to time SEO against short-term managers due to the long-run operating and stock underperformance of market timers. While the short-term shareholders are more concerned about the immediate profit, they prefer to time the market during a period of high stock overvaluation.

Managers may because the new equity price has surpassed the historical high price, or the previous equity issue price may decide to raise SEO in order to receive higher issue proceeds for fewer stocks issued. Also, new management may decide to issue SEO once the firm earns higher returns than the previous management (Baker & Xuan, 2016). The new management may propose to the shareholders and convince them of the need to raise more funds for expansion in order to increase earnings by attributing the increasing earnings to their performance. This is similar to the work of Dittmar and Thakor (2007) about the consensus between managers and shareholders in equity issue decisions. This consensus, according to the authors, is underpinned by the managerial investment

autonomy and is more pronounced in SEO decisions than in market timing and the adverse selection model.

Firms whose executive compensation is equity-based may have a higher incentive to make SEO when the firms' shares are overvalued in order to increase the value of their shareholdings and also benefit the existing shareholders (Brisker et al., 2014). Teoh et al. (2008) explore a different dimension by arguing that SEO issuers may have been engaging in earnings management using the discretionary accrual method to overstate profit and use investors' positive sentiment as motivation for SEO. Lerskullawat (2018) later agrees to this by stating that SEO firms engage in the use of accrual-based accounting methods during a fiscal year before SEO, which consequently resulted in long-run stock and operating underperformance of issuers. Abraham and Harrington (2011) examine the firm characteristics of SEO issuers and affirm that firms that are fundamentally strong have a higher probability of issuing SEO. In the study of Australian real estate investment trust (A-REIT), Chikolwa (2009) finds that operating risk, growth opportunities, leverage, and profitability are motivating factors of SEO.

DeAngelo et al. (2007) also find investment financing, debt recapitalization, and dividends as motivations for SEO. Huang (2012) states that firms with growth opportunities and high leverage have a higher probability of making SEO. Le et al. (2020) assert that information asymmetry, profitability, growth opportunities, and dividends determine SEO motives in Vietnam. From the foregoing, one can see that motivations for SEO decisions can be identified as firm characteristics (Abraham & Harrington, 2011; Hovakimian & Hu, 2016a; 2020); general motivation for SEO (Dittmar & Thakor, 2007; Chikolwa, 2009; Huang, 2012; Le et al., 2020; Sony & Bhaduri, 2021); firm and issue characteristics (Autore et al., 2014; Johnson et al., 2018; Li & Wang, 2022).

DeAngelo et al. (2007) examine motivations for SEO as firm fundamentals, but an examination of these motivations will find that the proxies for firm fundamentals are too scanty, as they contain fewer variables, such as measures of leverage, dividend, issue proceeds, capital expenditure, and cash. This leaves a gap in the literature for a study that will consider firm fundamentals in the context of broader motivating factors that will be more encompassing, including firm characteristics and offer characteristics. Firm characteristics entail leverage, profitability, growth opportunity, information asymmetry, liquidity, ownership structure, corporate governance, dividend, demand for capital, and operating performance. On the other hand, issue characteristics are floatation cost, underwriters' reputation, issue size, and issue price, which are proxies for information asymmetry. This study will therefore fill this vacuum in the literature by examining motivation for SEO in the broader context of firm and issue characteristics. This study is related to Johnson et al. (2018) and Li and Wang (2022).

The remainders of this paper are section two, three, four, and five, which treat a review of relevant literature, methodology, results, summary, and conclusion, respectively.

LITERATURE REVIEW

Earliest economists like David Ricardo, Karl Marx, John S.M., and Alfred Marshall viewed financial resources as a means of investment in factors of production for investment purposes to earn returns. However, in modern days, [Jorgenson \(1963\)](#) argues that managers seek funds to be invested into profitable projects that can bring returns on shareholders' investment and satisfy the other objectives of other stakeholders in the firm. This is premised on the neoclassical models of maximizing firm value by investing with consideration for the cost of financing, depreciation, and corporate tax. Thus, the basis for investment is to create value, satisfy utility, and maximize wealth. This theory is therefore named the demand for capital theory. The theory is supported in theoretical literature by [Akerlof \(1970\)](#), [Jensen and Meckling \(1976\)](#), [Leary & Robert \(2005\)](#). The theory is also supported empirically by [Chikolwa \(2009\)](#), [Virolainen \(2009\)](#), and [Ilo \(2012\)](#).

One of the most relevant theories in finance is the information asymmetry theory, that is separately developed by [Akerlof \(1970\)](#), [Spence \(1973\)](#), and [Stiglitz \(2002\)](#) argue that the heterogeneous distribution of information with different perspectives is called information asymmetry. Most other theories (agency, market timing, signalling, windows of opportunity, rent seeking) are premised on this theory. [Akerlof \(1970\)](#) states that bad cars drive away good cars in his market for lemon argument; [Spence \(1973\)](#) argues that employees may use private information about their capacity to potential employers; [Stiglitz \(2002\)](#) opines that health risk individuals are the reasons for high insurance premiums, hence a higher average premium that makes insurance more daring to an average insured.

The central argument of these authors is that adverse selection and moral hazard exist between two parties. Relating this to share issuance, the availability of different information to investors, managers, and firms impacts share marketing. That is, the theory pertains to quality assurance of shares as presented by overvalued, undervalued, and optimally valued firms. Sharp practices in security markets are borne out of information asymmetry, in which an overambitious party takes advantage of the other party. [Myers and Majluf \(1984\)](#), in support of the theory, argue that managers act in the interest of existing shareholders to sell overvalued shares, which leads to the transfer of wealth from new investors to existing investors. Hence, announcement effects, long-run stock or operating underperformance of firms ([Asquith & Mullins, 1986](#); [Loughran & Ritter, 1995, 1997](#); [Kohonen, 2019](#)).

Such underperformance may lead to investors' apathy towards the capital market and consequent collapse of the market (Jensen & Meckling, 1976). Robichek and Myers (1965); Hirshleifer (1966); Kraus and Litzenberger (1973) state that firms should balance the tax shield benefit from the use of debt with the bankruptcy cost that may result from excessive use of debt. Jensen and Meckling (1976), in support of this theory, argue that a firm cannot be fully debt financed and therefore necessitates the need to mix equity with debt. Hence, several empirical studies find that firms' leverage fluctuates around an optimal leverage ratio. A deviation from the optimal capital structure is the hierarchical finance theory of Myers and Majluf (1984), which argues that due to information asymmetry pertaining to share issuance, managers in need of funds should first consider internal earnings, as this contains the minimum amount of adverse selection. Firms that have exhausted their internal earnings with a need for additional funds are expected to raise corporate debt; however, the modified version argues that such firms may first exploit free debt before using collateralized debt, as the former contains a lesser amount of adverse selection. Equity is the last option according to this theory, as it has the highest adverse selection cost of underpricing and discounting as indirect floatation cost, while bid-ask spread is the direct floatation cost.

Other adverse selection costs are free cashflow cost of managers investing SEO proceeds in negative NPV projects, engaging in perquisites, related party transactions, indulging in self-interest project that did not add value to shareholders' wealth, expropriation of shareholders wealth, financial slack, and value destroying hypothesis (Jensen & Meckling, 1976; Kim et al., 2010; Lorenz, 2020). Firms that have already reached their debt capacity or where huge capital is involved, or firms with low tangible assets that can be used as collateral for a loan, will have no choice but to raise additional funds using equity.

RESEARCH METHODS

This study uses secondary panel data extracted from the website of the Security Exchange Commission (SEC, 2021), where the names of firms listed on the Nigerian Exchange (NGX) Limited that have issued SEO were extracted. Financial data of these firms is taken from their annual report. Data from 2010 to 2022 of SEOs were analyzed using the maximum likelihood estimate of logit models, following Le et al. (2020), who use the logit model due to the importance of the logistic distribution of the error term. This is similar to the work of Hovakimian (2004), who used both probit and multinomial logistic regression to examine the probability of SEO.

The Levin-Lin-Chu (LLC) test is used to purge the data of the presence of a unit root. Descriptive statistics and correlation analysis are carried out on the data. A static logit model is used to analyze data. The variance inflation factor and the Shapiro-Wilk test are

carried out to test for multicollinearity and normality of data, respectively. The strength of the relationship between motivating factors of SEO and SEO decisions is measured using the z-statistic and pseudo-R-squared.

Model Specification

The functional model is denoted as:

$$Y_{it} = F(\text{ROOA}, \text{DPS}, \text{EPS}, \text{CSI}, \text{PPE}, \text{SGR}, \text{LTD}, \text{CAPEX}, \text{IPR}, \text{FC}, \text{IP})$$

A static logit model is employed in the data analysis, where it is assumed that the error term follows a logistic distribution as stated below:

$$P(\text{SEO}_{it} = 1) = \Lambda [\beta_0 + \beta_1 \text{ROOA}_{it} + \beta_2 \text{DPS}_{it} + \beta_3 \text{EPS}_{it} + \beta_4 \text{CSI}_{it} + \beta_5 \text{PPE}_{it} + \beta_6 \text{SGR}_{it} + \beta_7 \text{LTD}_{it} + \beta_8 \text{CE}_{it} + \beta_9 \text{IPR}_{it} + \beta_{10} \text{FC}_{it} + \beta_{11} \text{IP}_{it} + \epsilon_{it}]$$

Where:

Y_{it} ; $P(\text{SEO}_{it} = 1)$ is a dummy variable that equals one when a firm issues SEO and zero otherwise, Λ represents the logistic cumulative distribution function. ROOA is returns on operating assets (proxy for operating performance); DPS is dividend per share (proxy for dividend); EPS is earnings per share (proxy for profitability); CSI is cash and short term investment (proxy for firm liquidity); PPE is property, plant and equipment (proxy for asset tangibility); SGR is sales growth rate (proxy for growth opportunity); LTD is long-term debt (proxy for leverage); CS is capital expenditure (proxy for capital demand); IPR is issue proceeds; FC is floatation cost per share (proxy for floatation cost); and IP is issue price (investor sentiment).

Table 1. Descriptive Variables

S/N	Parameter Measured	Variables	Symbols	Measurement of Variables	Variable Descriptions	Justifications
Dependent Variable						
1	Probability of SEO	SEO	P (SEO =1,0)	This is a dummy variable that equals one when SEO is conducted, or zero otherwise.	The decision to issue SEO is measured by this variable when the beta value is greater than zero.	Gad et al. (2024) show that when the beta of any variable is greater than zero, the variable influences SEO decisions.
Independent Variables						
a) Firm Fundamentals						
2	Operating Performance	Returns on operating assets	ROOA	Operating Income (EBIT) divided by the book value of assets.	The variable measures the operating performance of the SEO issuer. A firm may, due to lower operating performance may decide to raise SEO. This measure is used in order to examine the earnings management of firms.	Barber and Lyon (1996) used this variable as a proxy for the operating performance measure of SEO issuers
3	Profitability	Earnings per share	EPS	Ratio of net profit to total assets.	Firms that intend to maximize shareholders' wealth through profitability will raise an issue for business expansion.	Sony and Bhaduri (2021) find a negative relation between profitability and SEO decision.
4	Dividend	Dividend per share	DPS	Ratio of dividend paid to total assets.	Firms that issue dividends prior to SEO may have depleted cash for working capital, and this may necessitate SEO.	Bhaduri (2015) finds a positive relation between SEO and dividends.
b) Financial Ratios						
5	Liquidity	Cash and short-term investment	CSI	Cash and bank balance plus other short-term investments divided by total assets.	The variable measures the liquidity of a firm. Low liquidity may increase the probability of SEO when there are rising administrative expenses.	Bhaduri (2015); Abraham and Harrington (2011) argue that firms with low liquidity and high debt interest will have a higher inclination for SEO
6	Asset Tangibility	Property, plant and equipment	PPE	Ratio of fixed assets to total assets.	Firms with high tangibility will appeal to investors to subscribe to their shares.	These firms may have lower flotation cost, be easier to value, lower information asymmetry (Li & Wang, 2022)

7	Growth Opportunity	Sales growth rate	SGR	Ratio of Current period sales less previous period sales to previous period sales.	The variable measures growth opportunity as firms with an increasing growth ratio will raise more SEO to increase market share.	Gao et al. (2022) argue that this variable increases SEO probability.
8	Leverage	Long-term debt to book value of assets	LTD	Ratio of long-term debt to the book value of assets.	Firms with high leverage will have a higher inclination to raise equity to prevent liquidation or bankruptcy risk.	Frank and Goyal (2009); Li and Wang (2022) argue that this variable may be a sign of financial distress and a positive relation with SEO
9	Capital demand	Capital Expenditure	CAPEX	Ratio of capital expenditure to total assets.	Firms that are spending additional funds on a new project will have a high incentive for SEO	Sony and Bhaduri (2021) show that this has a positive relation with SEO
ii Offer Characteristics						
10	Offer Size	Issue proceeds	IPR	ratio of issue size to market size of equity (firms' market capitalisation).	Firms with high issue proceeds to market capitalization may engage in agency costs	There is a negative relation between SEO and issue size (Virolainen, 2009); a positive relation between SEO and issue proceeds (Lorenz, 2020; Li & Wang, 2022).
11	Floatation Cost	Floatation cost per share	FCPS	Ratio of total floatation cost to total number of shares.	Firms with low floatation cost per share can issue SEO and will have positive investor sentiment.	Firms followed by analysts have positive investor sentiment and may raise SEO (Li & Wang, 2022).
12	Investor sentiment	Issue price	IP	Ratio of issue price divided by historical price	When this value is greater than one, this signifies overvaluation; otherwise, undervaluation	This measures investors' sentiment (Hovakimian & Hu, 2020)

Source: Author's Compilation (2025)

RESULT AND ANALYSIS**Descriptive Analysis of SEOs and the Firm**

Table 2 reveals the firm fundamentals of non-financial firms in Nigeria. The mean value of SEO is 0.1153, implying that on average, there is 11.53 per cent that a firm will issue a seasoned equity offering. The mean value of returns on operating assets (ROOA) is 0.1145, signifying an 11.45 per cent average of ROOA to total assets. The mean value of dividend per share (DPS) is 1.4053, signifying ₦1.40k dividend per share on average. The mean value of earnings per share is 7.8577, indicating ₦7.85k earnings per share in the average. The mean average of cash and short-term investment is 0.1018, signifying that the average cash and short-term investment is 10.18 per cent of total assets. The mean value of property, plant, and equipment is 0.4273, indicating that on average, PPE is 42.73 per cent of total assets. The mean value of the sales growth rate is 0.2416, implying that on average, the growth rate of these firms is 24.16 per cent.

The mean value of long-term debt is 0.1136, indicating that the average LTD is 11.36 of total assets. The mean value of capital expenditure is -0.0291, implying that, on average, the growth rate of capital expenditure is declining by 2.91 per cent. The mean value of issue proceeds to market capitalization is 0.7863, indicating that 78.63 per cent of market capitalization is the issue proceeds on average. The average floatation cost per share is 0.4868, indicating that on average, the floatation cost is ₦0.48k per share. The mean value of issue price is 1.0702, indicating that on average, firms sell shares price 107.02 per cent higher than the historical share price.

Table 2. Descriptive Analysis of Seos and Firm Fundamentals

Variables	Mean	Standard Deviation	Coefficient of Variation	Minimum	Maximum	Skewness	Kurtosis	Number of Observations
SEO	0.1153	0.3199	2.774501	0	1	2.4077	6.7971	312
ROOA	0.1145	0.5233	4.570306	-2.1129	7.5404	10.1796	141.1259	312
DPS	1.4053	5.4368	3.868782	0	49.6233	6.1920	44.0347	312
EPS	7.8577	69.5643	8.85301	-240	1076.4	12.2439	183.5701	312
CSI	0.1018	0.1395	1.370334	0.001	0.8942	2.4009	9.4741	312
PPE	0.4273	0.3645	0.853031	0.0004	2.8623	2.3132	16.0455	312
SGR	0.2416	0.8058	3.335265	-0.9244	6.161	4.2307	25.7350	312
LTD	0.1136	0.2418	2.128521	0	2.4621	6.3977	56.1901	312
CE	-0.0291	1.2108	-41.6082	-19.6135	6.3319	-13.1398	223.3576	312
IPR	0.7863	2.1493	2.733435	0.0053	28.0073	9.1149	102.0845	312
FC	0.4868	1.7990	3.695563	0.001	10.7365	5.0027	26.9852	312
IP	1.0702	1.5660	1.463278	0.0037	23.9466	10.3521	147.7763	312

Source: Author's Compilation (2025)

Note: The dependent variable = SEO issue is binary, taking the value of 1 if a firm raised an SEO or zero otherwise. The independent variables are returns on operating asset (ROOA); dividend per share (DPS); earnings per share (EPS); cash and short-term investment (CSI); sales growth rate (SGR); long-term debt (LTD); capital expenditure (CE); issue proceeds (IPR); floatation cost per share (FC); issue price (IP).

Correlation Analysis

This section shows the correlation analysis among firm fundamentals and SEO decisions. Returns on operating assets, dividend per share, earnings per share, and property, plant, and equipment are -0.0095, -0.0149, -0.0092, and -0.0571, respectively, representing very low and negative relations with SEO decision. Furthermore, cash and short-term investment, sales growth rate, and capital expenditure are 0.0218, 0.0375, and 0.0755, respectively, showing low and positive relations with SEO decision. Long-term debt, issue proceeds, floatation cost per share, and issue price are -0.0705, -0.0318, -0.0131, and -0.0459, respectively, indicating low and negative relations with SEO decision.

Table 3. Correlation Analysis of SEO Firms

	SEO	ROOA	DPS	EPS	CSI	PPE	SGR	LTD	CE	IPR	FC
SEO	1.0000										
ROOA	-0.0095	1.0000									
DPS	-0.0149	-0.0008	1.0000								
EPS	-0.0092	0.0042	0.1357	1.0000							
CSI	0.0218	0.0015	0.0198	0.0158	1.000						
PPE	-0.0571	0.0695	-0.1264	-0.0989	-0.251	1.0000					
SGR	0.0375	0.4356	-0.0308	0.0293	0.033	-0.0350	1.000				
LTD	-0.0705	-0.2204	0.0712	-0.0049	-0.090	-0.0167	0.083	1.0000			
CE	0.0755	0.2512	0.0103	0.0255	-0.005	-0.0615	0.169	-0.033	1.000		
IPR	-0.0318	-0.0119	-0.0615	-0.0320	-0.117	-0.0461	-0.055	0.0784	-0.004	1.0000	
FC	-0.0131	-0.0162	0.8188	0.2343	0.038	-0.1800	0.029	0.0943	0.006	-0.0296	1.0000
IP	-0.0459	-0.0802	-0.0273	-0.0082	-0.053	-0.0904	-0.048	0.1176	0.035	-0.0575	0.0063

Author's Compilation (2025)

Note: The dependent variable = SEO issue is binary, taking the value of 1 if a firm raised an SEO issue or zero otherwise. The independent variables are returns on operating asset (ROOA); dividend per share (DPS); earnings per share (EPS); cash and short-term investment (CSI); sales growth rate (SGR); long-term debt (LTD); capital expenditure (CE); issue proceeds (IPR); floatation cost per share (FC); issue price (IP).

Pre-Estimation Test

Table 4 reveals that the issue proceeds alone is stationary at first differencing, that is, I(1), while seasoned equity offerings, returns on operating assets, dividend per share, earnings

per share, and cash and short-term investment are stationary at level $I(0)$. Other variables stationary at zero level $I(0)$ are property, plant, and equipment, sales growth rate, long-term debt, capital expenditure, issue proceeds, and flotation cost.

Table 4. Levin-Lin-Chin Unit Root Test

Variables	Level		Order of Integration	
	Unadjusted t	Adjusted t*	P-Value	
Seasoned equity offerings	-13.0839	-6.5048	0.0000	$I(0)$
Returns on operating assets	-14.4232	-10.4828	0.0000	$I(0)$
Dividend per share	-9.1585	-3.8353	0.0001	$I(0)$
Earnings per Share	-9.5513	-3.8128	0.0001	$I(0)$
Cash & Short-term Investment	-21.4169	-13.3710	0.0000	$I(0)$
Property, plants & Equipment	-2.7e+02	-2.9e+02	0.0000	$I(0)$
Sales Growth Rate	-16.7242	-10.4770	0.0000	$I(0)$
Long-term Debt	-64.8548	-66.9858	0.0000	$I(0)$
Capital Expenditure	-13.4900	-2.3963	0.0083	$I(0)$
Issue Proceeds	-12.7390	-8.2846	0.0000	$I(0)$
Floatation Cost	-9.1849	-5.6948	0.0000	$I(0)$
Issue proceeds	-9.4828	104.2924	1.0000	$I(1)$

Author's Compilation (2025)

Logit Model, Odds Ratio, and Marginal Effect of Seasoned Equity Offerings Decision in Nigeria

Dependent variable: SEO

Table 5 reveals the pooled logit model, odds ratio, and marginal effects of firm fundamentals and seasoned equity offering decision. Table 4.4 shows that proxy for operating performance (returns on operating assets) using a pooled logit model is negatively significant at 1 per cent (coefficient = -4.8061; probability = 0.000); an odd ratio is positively significant at 1 per cent (coefficient = 0.0081; probability = 0.000); and marginal effect is negatively significant at 1 per cent (coefficient = -0.4162; probability = 0.000). The proxy for firm liquidity (cash and short-term investment) derived using a pooled logit model is negatively significant at 5 per cent (coefficient = -3.9901; probability = 0.040); an odd ratio is positively significant at 5 per cent (coefficient = 0.0202; probability = 0.040); and marginal effect is negatively significant at 5 per cent (coefficient = -0.3378; probability = 0.039).

The proxy for asset tangibility (property, plant and equipment) using a pooled logit model is marginally negatively significant at 10 per cent (coefficient = -1.2642; probability = 0.096); an odd ratio is positively significant at 10 per cent (coefficient = 0.2824; probability = 0.096); and marginal effect is negatively significant at 10 per cent (coefficient = -0.1094; probability = 0.097). The proxy for capital demand (capital expenditure) using a pooled logit model is positively significant at 1 per cent (coefficient = 5.6184; probability

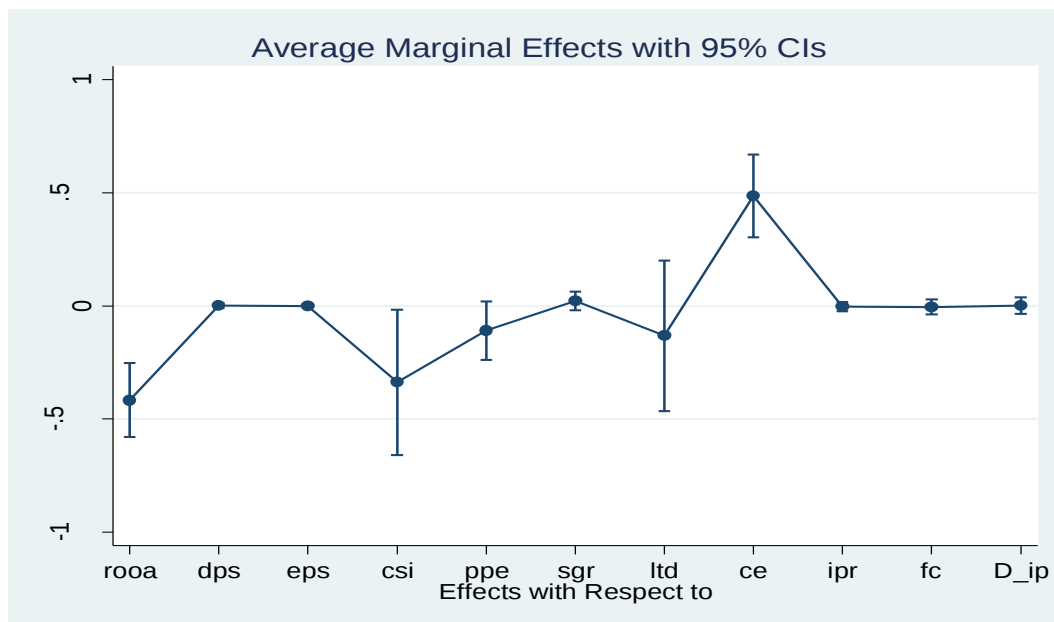
= 0.000); an odd ratio is positively significant at 1 per cent (coefficient = 275.45; probability = 0.000); and marginal effect is positively significant at 1 per cent (coefficient = 0.4865; probability = 0.000).

Table 5. Pooled Logit Model, Odds Ratio, and Marginal Effects of SEO Decision

Variables	Pooled Logit Model			Odd Ratio Estimate			Marginal Effects		
	Coef.	z	P>z	Coef.	z	P>z	Coef.	z	P>z
ROOA	-4.8061*	-4.64	0.000	0.0081*	-4.64	0.000	-0.4162*	-4.98	0.000
DPS	0.0098	0.15	0.879	1.0099	0.15	0.879	0.0008	0.15	0.879
EPS	-0.0022	-0.84	0.399	0.9977	-0.84	0.399	-0.0001	-0.84	0.398
CSI	-3.9901**	-2.05	0.040	0.0202**	-2.05	0.040	-0.3378**	-2.06	0.039
PPE	-1.2642***	-1.66	0.096	0.2824***	-1.66	0.096	-0.1094***	-1.66	0.097
SGR	0.2484	1.02	0.305	1.2820	1.02	0.305	0.0215	1.03	0.305
LTD	-1.5266	-0.78	0.435	0.2172	-0.78	0.435	-0.1322	-0.78	0.435
CE	5.6184*	4.81	0.000	275.45*	4.81	0.000	0.4865*	5.20	0.000
IPR	-0.0406	-0.34	0.731	0.9601	-0.34	0.731	-0.0035	-0.34	0.731
FC	-0.0596	-0.31	0.758	0.9420	-0.31	0.758	-0.0051	-0.31	0.758
IP	0.0212	0.10	0.922	1.0214	0.10	0.922	0.0018	0.10	0.922
Constant	-1.0585	-2.21	0.027	0.3469	-2.21	0.027			
Pseudo R ²		0.1835		0.1835					
LR		39.11		39.11					
Log Likelihood		-86.9912		-86.9912					
Probability		0.0001		0.0001					

Author's Compilation (2025)

Figure 1. Marginal Effect of Firm Fundamentals and SEO Decision



Author's Compilation (2025)

Figure 1 shows the great negative relation between returns on operating assets, cash, and short-term investment, property, plant, and equipment, with seasoned equity offering decision, with the first showing a greater effect on the seasoned equity offering decision. Figure 1 also reveals that capital demand has the greatest positive relation with the seasoned equity offering decision.

Predicted Probability of SEO Decision when Some Firm Fundamentals are given Predicted Values

Table 6 reveals the predicted probability of seasoned equity offering when returns on operating assets, cash, short-term investments, and capital expenditure are given 0.1 each.

Table 6. Predicted Probability of SEOs when Selected Firm Fundamentals are Pre-Determined

Description	Margin	Z	P>z
coefficient	0.1235 *	3.38	0.000
Predicted variable	ROOA = 0.1; CSI = 0.1; CE = 0.1		

Author's Compilation (2025)

Predicted Probability of SEO Decision when Firm Fundamentals are Set to their Mean Values

Table 7 shows the predicted probability of an SEO decision to be positively significant at 1 per cent (coefficient = 0.0540; probability = 0.000).

Table 7. The Predicted Probability of SEOs when Firm Characteristics are Set to their Mean Values

Variables	Mean Value
Returns on operating assets	0.1222
Dividend per share	1.4545
Earnings per Share	8.3251
Cash & Short-term Investment	0.0993
Property, plants & Equipment	0.4186
Sales Growth Rate	0.2428
Long-term Debt	0.1030
Capital Expenditure	-0.0237
Issue Proceeds	0.8034
Floatation Cost	0.4945
Issue proceeds	-0.0868
Coefficient	0.0540
Z	3.64
Probability	0.000

Author's Compilation (2025)

Discussion of Findings

The main objective of this study is to examine firm fundamentals as motivations for seasoned equity offering decisions among non-financial firms in Nigeria. The descriptive result shows that firms, on average, have a low probability of a seasoned equity offering decision. This result shows that these firms have low operating performance relative to their earnings per share and dividend per share. The liquidity of these firms is relatively low. These firms show a declining growth in capital expenditure. The high issue proceeds relative to firm market capitalization show that these firms engage in agency costs due to the high proportion of issue proceeds to market capitalization. The high issue proceeds and declining capital expenditure growth show that these firms do not properly utilize the issue proceeds. Comparing these variables relative to the low operating performance shows that these firms are not optimally managed. The issue price relative to the historical price shows that these firms sell their shares above the historical price. The high issue price relative to the historical price shows that managers sell shares when the market values their shares highly, that is, market timing of equity issuance.

The result from the logit regression reveals that a proxy for operating performance has a significantly negative effect on SEO decision, positive odds ratio, and negative marginal effect, implying that firms with lower returns on operating assets will desist from making SEO decisions. This is consistent with the findings of [Brisker et al. \(2014\)](#), as underpinned by the demand for capital theory that firms with low operating performance will be reluctant to make a seasoned equity offering decision. The proxy for firm liquidity has a negative effect on seasoned equity offering decisions, implying that highly liquid firms will desist from making SEO decisions, consistent with the finding of [Nnadi et al. \(2021\)](#), as underpinned by the demand for capital theory that firms with adequate liquidity will have no motive to raise seasoned equity offerings. The proxy for asset tangibility shows a weak negative relation with seasoned equity offering decision, consistent with the findings of [Le et al. \(2020\)](#) that firms with asset tangibility will be reluctant to make a seasoned equity offering decision.

This finding is also consistent with the demand for capital theory that firms with adequate asset tangibility will have no motive to raise a seasoned equity offering except where the firms want to embark on business expansion. In addition, the proxy for capital demand (capital expenditure) has a significant positive impact on seasoned equity offering decisions in Nigeria. This is consistent with the findings of [Kim and Song \(2020\)](#), as underpinned by the demand for capital theory. This finding suggests that firms that are demanding capital will have a higher inclination to make a seasoned equity offering decision. The predicted probability shows that when firms are concerned about capital

demand, firm liquidity, and operating performance, firms can determine whether to make the SEO decision. In addition, when firms set their firm fundamentals to their mean values, firms can also raise seasoned equity offerings.

Table 8. Summary of Results

Variables	Pooled Logit Model			Odd Ratio Estimate			Marginal Effects		
	Coef.	Z	P>z	Coef.	z	P>z	Coef.	Z	P>z
ROOA	-4.8061	-4.64	0.000	0.0081	-4.64	0.000	-0.4162	-4.98	0.000
CSI	-3.9901	-2.05	0.040	0.0202	-2.05	0.040	-0.3378	-2.06	0.039
PPE	-1.2642	-1.66	0.096	0.2824	-1.66	0.096	-0.1094	-1.66	0.097
CAPEX	5.6184	4.51	0.000	275.45*	4.81	0.000	0.4865*	5.20	0.000
Constant	-1.0585	-2.21	0.027	0.3469	-2.21	0.027			
Pseudo R²			0.1835			0.1835			
LR			39.11			39.11			
Log Likelihood			-86.9912			-86.9912			
Probability			0.0001			0.0001			
<i>Predicted Probability of SEOs when some Firm Fundamentals are Pre-determined</i>									
Description		Margin			Z			P > z	
Coefficient		0.1235			3.38			0.000	
<i>Predicted Probability of SEOs when Firm Fundamentals are set to Mean Values</i>									
Coefficient		0.0540							
Z		3.64							
Probability		0.000							

Author's Compilation (2025)

Note: *P<0.01; ** P< 0.05; *** P<0.1

CONCLUSION

This study examines firm fundamentals and seasoned equity offering decisions of non-financial firms in Nigeria. The descriptive analysis of firm fundamentals and seasoned equity offering decision finds support for the free cash flow hypothesis of Jensen (1986) and the agency theory of Jensen and Meckling (1976), similar to the work of Huang (2012). The regression results show that firms with low operating performance desist from issuing seasoned equity offerings, as underpinned by the demand for capital theory. In addition, highly liquid firms desist from making seasoned equity offerings as premised on the demand for capital theory. Furthermore, firms with asset tangibility have a weak inclination to raise a seasoned equity offering decisions. Finally, firms with capital demand have a high inclination to issue seasoned equity offerings, conforming to the demand for capital theory.

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